



Kammavari Sangham(R)-1952

# K. S. INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to VTU, Belagavi, Karnataka., Accredited by NACC & NBA (Dept. of CSE, ECE, ME)

#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-560109

Tel : 28435722 / 724 E-mail : principal@ksit.edu.in Web : www.ksit.edu.in

## C. 1.1.1: The Institution ensures effective curriculum delivery through a well-planned and documented process:

Supporting Documents:

Index

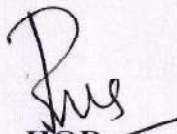
Sl No.	Academic Year	Particulars
1	2022-23 (Even Sem)	Course file 1. Lesson Plan 2. Assignment Questions with Scheme 3. IA question Paper with Scheme (both sets) 4. All IA marks and final AVG marks 5. Slow Learners and Remedial class 6. Advanced Learners Challenging Questions 7. Pedagogy Report and Proofs (Proof of usage of ICT Tools) 8. Question Bank for each Module 9. Previous year VTU Question papers, Scheme for evaluation 10. VTU Results (Detailed Analysis: Max Marks, Min Marks, Avg Marks, No. of FCD, FC, SC, Fail) 11. CO PO PSO Attainment 12. Course End Survey
2		Academic Calendar, Internal Assessment Schedule
3		Lesson Plan



**KSIT BANGLORE**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION**  
**ENGINEERING**  
**COURSE FILE**

NAME OF THE STAFF : Dr. SUREKHA BORRA  
SUBJECT CODE/NAME : 18EC646/ PYTHON APPLICATION  
PROGRAMMING  
SEMESTER/YEAR : VI/III  
ACADEMIC YEAR : 2022 – 2023  
BRANCH : ECE (A & B SECTIONS)

  
COURSE IN-CHARGE

  
HOD




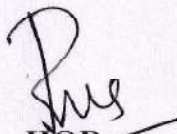
**KSIT BANGLORE**

**DEPARTMENT OF ELECTRONICS & COMMUNICATION  
ENGINEERING**

**COURSE FILE**

**NAME OF THE STAFF : Dr. SUREKHA BORRA**  
**SUBJECT CODE/NAME : 18EC646/ PYTHON APPLICATION  
PROGRAMMING**  
**SEMESTER/YEAR : VI/III**  
**ACADEMIC YEAR : 2022 - 2023**  
**BRANCH : ECE (A & B SECTIONS)**

  
**COURSE IN-CHARGE**

  
**HOD**



# **K. S. INSTITUTE OF TECHNOLOGY**

## **VISION**

**“To impart quality technical education with ethical values, employable skills and research to achieve excellence”.**

## **MISSION**

- **To attract and retain highly qualified, experienced & committed faculty.**
- **To create relevant infrastructure.**
- **Network with industry & premier institutions to encourage emergence of new ideas by providing research & development facilities to strive for academic excellence.**
- **To inculcate the professional & ethical values among young students with employable skills & knowledge acquired to transform the society.**

**DEPARTMENT OF ELECTRONICS & COMMUNICATION**  
**ENGINEERING**

**VISION**

**“To achieve excellence in academics and research in Electronics & Communication Engineering to meet societal need”.**

**MISSION**

- **To impart quality technical education with the relevant technologies to produce industry ready engineers with ethical values.**
- **To enrich experiential learning through active involvement in professional clubs & societies.**
- **To promote industry-institute collaborations for research & development.**



**K.S. INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT: ELECTRONICS AND COMMUNICATION ENGG.**

**PROGRAM EDUCATIONAL OBJECTIVES (PEO'S)**

PEO1: Excel in professional career by acquiring domain knowledge.

PEO2: Motivation to pursue higher Education and research by adopting technological innovations by continuous learning through professional bodies and clubs.

PEO3: To inculcate effective communication skills, teamwork, ethics and leadership qualities.

**PROGRAM SPECIFIC OUTCOMES (PSO'S)**

PSO1: Graduate should be able to understand the fundamentals in the field of Electronics and Communication and apply the same to various areas like Signal processing, embedded systems, Communication & Semiconductor technology.

PSO2: Graduate will demonstrate the ability to design, develop solutions for Problems in Electronics and Communication Engineering using hardware and software tools with social concerns.

## **PO: PROGRAM OUTCOMES**

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and engg. specialization to the solution of complex engineering problems.
2. Problem analysis: Identify, formulate, research literature, and analyze engineering problems to arrive at substantiated conclusions using first principles of mathematics, natural, and engineering sciences.
3. Design/development of solutions: Design solutions for complex engineering problems and design system components, processes to meet the specifications with consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. Conduct investigations of complex problems: Use research-based knowledge including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Individual and team work: Function effectively as an individual, and as a member or leader in teams, and in multidisciplinary settings.
10. Communication: Communicate effectively with the engineering community and with society at large. Be able to comprehend and write effective reports documentation. Make effective presentations, and give and receive clear instructions.
11. Project management and finance: Demonstrate knowledge and understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team. Manage projects in multidisciplinary environments.
12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



# K. S. INSTITUTE OF TECHNOLOGY

#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-560109

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Course: Python Application Programming

Academic year: 2022-23

Batch: 2020-24

Course In Charge: Dr. B. Surekha

Type: Elective

Course Code: 18EC646

		No of Hours per week		Total teaching hours
Theory (Lecture Class)	Practical/Field Work/Allied Activities	Total/Week		
4	0	4		50
		Marks		Credits
Internal Assessment	Examination		Total	
40	60		100	3

### Aim/Objective of the Course:

This Course will enable students to:

1. Learn Syntax and Semantics and create Functions in Python.
2. Handle Strings and Files in Python.
3. Understand Lists, Dictionaries and Regular expressions in Python.
4. Implement Object Oriented Programming concepts in Python
5. Build Web Services and introduction to Network and Database Programming in python

**Course Learning Outcomes:** At the end of the course, the student will be able to,

<b>CO1</b>	<b>Make use of</b> Python syntax and semantics, and <b>build</b> functions with variables, expressions, and statements.	Applying(K3)
<b>CO2</b>	<b>Utilize</b> the concepts of Iterations and Strings to <b>model</b> File Systems.	Applying(K3)
<b>CO3</b>	<b>Make use of</b> core data structures like Lists, Dictionaries and Regular Expressions to <b>build</b> Python programs.	Applying(K3)
<b>CO4</b>	<b>Apply</b> classes, objects, and functions to <b>develop</b> Object-Oriented Programs in Python.	Applying(K3)
<b>CO5</b>	<b>Make use of</b> Network Programming, Web Services and Databases to <b>construct</b> exemplary applications related to Python.	Applying(K3)

### Syllabus Content:

<p><b>Module 1</b></p> <p>Why should you learn to write programs, Variables, expressions and statements? Conditional execution, Functions</p> <p>LO: At the end of this session the student will be able to,</p> <ol style="list-style-type: none"> <li>1. Understand the concepts of statements and conditional execution.</li> <li>2. Understand the concepts of functions.</li> <li>3. Write programs using Python with Variables, expressions and statements</li> </ol>	<p><b>CO1</b></p> <p>10 Hours PO1 - 3 PO2 - 3 PO3 - 1 PO4 - 1 PO12 - 2 PSO1 - 3 PSO2 - 2</p>
<p><b>Module 2:</b></p> <p>Iteration, Strings, Files</p> <p>LO: At the end of this session the student will be able to,</p> <ol style="list-style-type: none"> <li>1. Understand the concepts of Iteration.</li> <li>2. Understand the concepts of Strings.</li> <li>3. Understand the concepts of Files</li> <li>4. Write programs using Python handling loops, Strings and Files</li> </ol>	<p><b>CO2</b></p> <p>10 Hours PO1 - 3 PO2 - 3 PO3 - 1 PO4 - 1 PO12 - 2 PSO1 - 3 PSO2 - 2</p>



<p><b>Module 3:</b> Lists, Dictionaries, Tuples, Regular Expressions LO: At the end of this session the student will be able to, 1. Understand the concepts of Lists. 2. Understand the concepts of Dictionaries. 3. Understand the concepts of Tuples and Regular Expressions. 4. Write programs using Python data structures.</p>	<p><b>C03</b> 10 Hours PO1 - 3 PO2 - 2 PO3 - 1 PO4 - 1 PO12 - 1 PSO1 - 2 PSO2 - 2</p>
<p><b>Module 4:</b> Classes and objects, Classes and functions, Classes and methods LO: At the end of this session the student will be able to, 1. Understand the concepts of Classes and Objects. 2. Understand the concepts of Classes and functions. 3. Understand the concepts of Classes and methods. 4. Write Object-Oriented Python Programs.</p>	<p><b>C04</b> 10 Hours PO1 - 3 PO2 - 2 PO3 - 1 PO4 - 1 PO12 - 1 PSO1 - 2 PSO2 - 2</p>
<p><b>Module 5:</b> Networked programs, Using Web Services, Using databases and SQL LO: At the end of this session the student will be able to, 1. Understand the concepts of Network Programs 2. Understand the concepts of Web services. 3. Develop Programs for exemplary applications</p>	<p><b>C05</b> 10 Hours PO1 - 3 PO2 - 2 PO3 - 2 PO4 - 2 P12 - 2 PSO1 - 3 PSO2 - 2</p>
<p><b>Textbooks: -</b></p> <ol style="list-style-type: none"> <li>1. Charles R. Severance, "Python for Everybody: Exploring Data Using Python 3", 1 Edition, Create Space Independent Publishing Platform, 2016 (Chapters 1 — 13, 15).</li> <li>2. Allen B. Downey, "Think Python: How to Think Like a Computer Scientist", 2n Edition, Green Tea Press, 2015 (Chapters 15,16,17)</li> </ol>	
<p><b>Reference Books:</b></p> <ol style="list-style-type: none"> <li>1. Mark Lutz, "Programming Python", 4th Edition, O'Reilly Media, 2011.ISBN-13z978-9350232873.</li> <li>2. Wesley J Chun, "Core Python Applications Programming", 3rd Edition, Pearson Education India, 2015. ISBN—13: 978—9332555365.</li> <li>3. Reema Thareja, "Python Programming using problem solving approach", Oxford university press, 2017</li> </ol>	
<p><b>Useful Websites</b></p> <ol style="list-style-type: none"> <li>1. <a href="https://nptel.ac.in/courses/106106145/">https://nptel.ac.in/courses/106106145/</a></li> <li>2. <a href="https://nptel.ac.in/courses/117106113/34">https://nptel.ac.in/courses/117106113/34</a></li> <li>3. <a href="https://nptel.ac.in/courses/106105166/26">https://nptel.ac.in/courses/106105166/26</a></li> </ol>	
<p><b>Useful Journals</b></p> <ol style="list-style-type: none"> <li>1. <i>Journal of Computing Sciences in Colleges</i></li> <li>2. <i>Journal of Computational Science</i></li> <li>3. <i>International Journal of Computing Science and Mathematics</i></li> </ol>	
<p><b>Teaching and Learning Methods:</b></p> <ol style="list-style-type: none"> <li>1. Lecture class: 40 hrs.</li> <li>2. Self-study: 5hrs.</li> <li>3. Mini Projects-Seminars: 10hrs.</li> </ol>	

## Justification for CO-PO /PSO mapping

CO-PO MAPPING Justification Table				
Sl No.	CO	PO	Number of Key Elements of PO Mapped To CO	Justification
<b>CO1:</b> Make use of Python syntax and semantics, and build functions with variables, expressions, and statements.				
<b>CO2:</b> Utilize the concepts of Iterations and Strings to model File Systems.				
1	CO1, CO2	1	<b>The students will be able to apply the knowledge of</b> <ul style="list-style-type: none"> <li>Mathematics</li> <li>Science,</li> <li>Engineering fundamentals</li> </ul> to the solution of complex engineering problems	3 Keywords are mapped. Hence strength is 3
2		2	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Identify</li> <li>Formulate</li> <li>Analyse</li> </ul> using first principles of mathematics and engineering sciences.	3 Keywords are mapped. Hence strength is 3
3		3	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Design solutions for complex engineering problems</li> </ul>	1 Keyword mapped. Hence strength is 1
4		4	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Use research-based knowledge for analysis and interpretation of data</li> </ul>	1 Keyword mapped. Hence strength is 1
5		5	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Select</li> <li>Apply</li> </ul> appropriate Python library tools to complex engineering activities	2 Keywords are mapped. Hence strength is 2
6		6	<b>The students will be able to apply reasoning to assess issues</b> <ul style="list-style-type: none"> <li>Societal</li> <li>Health</li> <li>Safety</li> </ul>	3 Keywords are mapped. Hence Strength is 3
7		7	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>understand the impact of the professional engineering solutions in societal and environmental contexts</li> </ul>	3 Keywords are mapped. Hence strength is 3
8		9	<b>The students will be able to work effectively in</b> <ul style="list-style-type: none"> <li>Multidisciplinary settings</li> <li>As an Individual</li> <li>As a team member</li> </ul>	3 keywords are mapped. Hence strength is 3
9		10	<b>The students will be able to communicate effectively by</b> <ul style="list-style-type: none"> <li>Comprehending</li> <li>Write Reports</li> <li>Presentations</li> </ul>	3 Keywords are mapped. Hence strength is 3
10		11	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Demonstrate knowledge and understanding of engineering</li> </ul>	1 Keyword mapped. Hence strength is 1
11		12	<b>The students will be able to engage in knowledge upgradation through</b> <ul style="list-style-type: none"> <li>Independent learning</li> <li>Lifelong learning</li> </ul>	2 Keywords are mapped. Hence strength is 2
12		PSO1	<b>The students will be able to understand and apply the fundamentals of ECE in</b> <ul style="list-style-type: none"> <li>Signal Processing</li> <li>Embedded systems</li> <li>Communication</li> </ul>	3 Keywords are mapped. Hence strength is 3
13	PSO2	<b>The students will have the ability to</b> <ul style="list-style-type: none"> <li>Design and develop solutions</li> <li>use modern tools for societal concern</li> </ul>	2 Keywords are mapped. Hence strength is 2	
<b>CO3:</b> Make use of core data structures like Lists, Dictionaries and Regular Expressions to build Python programs.				
<b>CO4:</b> Apply classes, objects, and functions to develop Object-Oriented Programs in Python.				
14	CO3, CO4	1	<b>The students will be able to apply the knowledge of</b> <ul style="list-style-type: none"> <li>mathematics</li> <li>science</li> <li>engineering fundamentals</li> </ul>	3 Keywords are mapped. Hence Strength is 3

**Assessment:**

Type of test/examination: Written examination

**Continuous Internal Evaluation (CIE):** 40 marks (30 Marks IA+10 Marks Assignment: Average of 3 tests will be considered)**Semester End Exam (SEE):** 60 marks (students have to answer all main questions)

Test duration: 1 :30 hr

Examination duration: 3 hrs

**CO to PO Mapping**

<b>PO1:</b> Science and engineering Knowledge	<b>PO7:</b> Environment and Society
<b>PO2:</b> Problem Analysis	<b>PO8:</b> Ethics
<b>PO3:</b> Design & Development	<b>PO9:</b> Individual & Teamwork
<b>PO4:</b> Investigations of Complex Problems	<b>PO10:</b> Communication
<b>PO5:</b> Modern Tool Usage	<b>PO11:</b> Project Mgmt. & Finance
<b>PO6:</b> Engineer & Society	<b>PO12:</b> Lifelong Learning

**PSO1:** Graduate should be able to understand the fundamentals in the field of Electronics & Communication and apply the same to various areas like Signal processing, Embedded systems, Communication & Semiconductor technology.

**PSO2:** Graduate will demonstrate the ability to design, develop solutions for problems in Electronics & Communication Engineering using hardware and software tools with social concerns.

CO	Bloom's Level	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	K3	3	3	1	1	2	3	3	-	3	3	1	2	3	2
CO2	K3	3	3	1	1	2	3	3	-	3	3	1	2	3	2
CO3	K3	3	2	1	1	2	1	1	-	1	1	1	1	2	2
CO4	K3	3	2	1	1	2	1	1	-	1	1	1	1	2	2
CO5	K3	3	3	3	2	2	1	1	-	1	1	1	2	3	2
18EC53 before CBS		3	2	2	1.2	-	-	-	-	-	-	-	-	3	2
Strength for Content Beyond Syllabus activity: Power Point Presentation		-	-	-	-	2	1.8	1.8	-	1.8	1.8	1	1.6	-	-
18EC53 after CBS		3	2.6	1.4	1.2	2	1.8	1.8	-	1.8	1.8	1	1.6	2.6	2

**CO PO mapping for the events conducted after gap identification.**

Sl. No.	Gap Identification	Activity Planned to fill the gap	CO	Relevant PO Mapping
1	PO5- PO12	Mini-Project	CO1, CO2, CO3, CO4, CO5	PO5-PO7, PO9-PO12

15		2	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Identify</li> <li>Formulate</li> </ul> using first principles of mathematics and engineering sciences.	2 Keywords are mapped. Hence strength is 2
16		3	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Design solutions for complex engineering problems</li> </ul>	1 keyword mapped. Hence strength is 1
17		4	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Use research-based knowledge for analysis and interpretation of data</li> </ul>	1 keyword mapped. Hence strength is 1
18		5	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Select</li> <li>Apply</li> </ul> appropriate Python library tools to complex engineering activities	2 keywords are mapped. Hence strength is 2
19		6	<b>The students will be able to apply reasoning to assess issues:</b> <ul style="list-style-type: none"> <li>Societal</li> </ul>	1 keyword mapped. Hence strength is 1
20		7	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>understand the impact of the professional engineering solutions in societal contexts</li> </ul>	1 keyword mapped. Hence strength is 1
21		9	<b>The students will be able to work effectively in</b> <ul style="list-style-type: none"> <li>As an Individual</li> </ul>	1 keyword mapped. Hence strength is 1
22		10	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Make effective presentations</li> </ul>	1 keyword mapped. Hence strength is 1
23		11	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Demonstrate knowledge and understanding of engineering</li> </ul>	1 Keyword mapped. Hence strength is 1
24		12	<b>The students will be able to engage in knowledge upgradation through</b> <ul style="list-style-type: none"> <li>Independent learning</li> </ul>	1 keyword mapped. Hence strength is 1
25		PSO1	<b>The students will be able to understand and apply the fundamentals of ECE in</b> <ul style="list-style-type: none"> <li>Signal Processing</li> <li>Embedded systems</li> </ul>	2 Keywords are mapped. Hence strength is 2
26		PSO2	<b>The students will have the ability to</b> <ul style="list-style-type: none"> <li>Design and develop solutions</li> <li>use modern tools for societal concern</li> </ul>	2 Keywords are mapped. Hence strength is 2
<b>CO5: Make use of Network Programming, Web Services and Databases to construct exemplary applications related to Python..</b>				
27	<b>CO5</b>	1	<b>The students will be able to apply the knowledge of</b> <ul style="list-style-type: none"> <li>Mathematics</li> <li>Science,</li> <li>Engineering fundamentals</li> <li>to the solution of complex engineering problems</li> </ul>	3 Keywords are mapped. Hence strength is 3
28		2	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Identify</li> <li>Formulate</li> <li>Analyse</li> </ul> using first principles of mathematics and engineering sciences.	3 Keywords are mapped. Hence strength is 3
29		3	<b>The students will be able to design solutions for complex engineering problems with consideration for the</b> <ul style="list-style-type: none"> <li>public health and safety</li> <li>cultural, societal</li> <li>Environmental considerations.</li> </ul>	3 Keywords are mapped. Hence strength is 3
30		4	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Design experiments</li> <li>Use research-based knowledge for analysis and interpretation of data</li> </ul>	2 Keywords are mapped. Hence strength is 2
31		5	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>Select</li> <li>Apply</li> </ul> appropriate Python library tools to complex engineering activities	2 Keywords are mapped. Hence strength is 2
32		6	<b>The students will be able to apply reasoning to assess issues</b> <ul style="list-style-type: none"> <li>Societal</li> </ul>	1 keyword mapped. Hence strength is 1
33		7	<b>The students will be able to</b> <ul style="list-style-type: none"> <li>understand the impact of the professional engineering solutions in societal contexts</li> </ul>	1 keyword mapped. Hence strength is 1

34	9	<b>The students will be able to work effectively in</b> • As an Individual	1 keyword mapped. Hence strength is 1
35	10	<b>The students will be able to</b> • Make effective presentations	1 keyword mapped. Hence strength is 1
36	11	<b>The students will be able to</b> • Demonstrate knowledge and understanding of engineering	1 Keyword mapped. Hence strength is 1
37	12	<b>The students will be able to engage in knowledge upgradation through</b> • Independent learning Lifelong learning	2 Keywords are mapped. Hence strength is 2
38	PSO1	<b>The students will be able to understand and apply the fundamentals of ECE in</b> • Signal Processing • Embedded systems • Communication	3 Keywords are mapped. Hence strength is 3
39	PSO2	<b>The students will have the ability to</b> • Design and develop solutions • use modern tools for societal concern	2 Keywords are mapped. Hence strength is 2



Signature of Course In charge



Signature of Module Coordinator



Signature of HOD ECE



# K. S. INSTITUTE OF TECHNOLOGY, BENGALURU-560109

TENTATIVE CALENDAR OF EVENTS: VI EVEN SEMESTER (2022-2023)

SESSION: MARCH TO JULY 2023

Week No.	Month	Day						Days	Activities
		Mon	Tue	Wed	Thu	Fri	Sat		
1	MAR	20*	21	22 H	23	24	25	5	20* - Commencement of VI Sem 22- Ugadi 25-Monday Time Table
2	MAR/APR	27	28	29	30	31	1	6	1-Monday Time Table
3	APR	3H	4	5	6	7H	8DH	3	3-Mahaveera Jayanathi 7-Good Friday
4	APR	10	11	12	13	14H	15 TA	5	14-Dr. B R Ambedkar Jayanathi 15-Monday Time Table
5	APR	17T1	18T1	19T1	20	21	22DH	5	
6	APR	24BV	25* FFB1	26 ASD	27	28	29	6	25* - First Faculty Feed Back 29-Friday Time Table
7	MAY	1H	2	3	4	5	6DH	4	1-May Day
8	MAY	8	9	10	11	12	13	6	13-Friday Time Table
9	MAY	15	16	17	18	19	20DH	5	
10	MAY	22 LT1	23 LT1	24 LT1	25	26 TA	27	6	27-Tuesday Time Table
11	MAY/JUN	29T2	30 T2	31 T2	1	2	3DH	4	
12	JUN	5 BV	6* FFB2	7 ASD	8	9	10	6	6 - Second Faculty Feed Back 10-Wednesday Time Table
13	JUN	12	13	14	15	16	17DH	5	
14	JUN	19	20	21	22	23	24	6	24-Tuesday Time Table
15	JUN/JULY	26 LT2	27 LT2	28 LT2	29H	30	1DH	5	29 - Bakrid
16	JULY	3 T3	4 T3	5 T3	6	7	8	6	8-Wednesday Time Table
17	JULY	10*						1	10* - Last Working day

**Total No of Working Days : 84**

Total Number of working days ( Excluding holidays and Tests)-69

H	Holiday
BV	Blue Book Verification
T1,T2,T3	Tests 1,2,3
ASD	Attendance & Sessional Display
DH	Declared Holiday
LT1	Lab Test 1
TA	Test attendance

Monday	13
Tuesday	13
Wednesday	12
Thursday	15
Friday	16
<b>Total</b>	<b>69</b>

6/3/23  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.



**K. S. INSTITUTE OF TECHNOLOGY, BENGALURU-560109**  
**TENTATIVE CALENDAR OF EVENTS: VIII EVEN SEMESTER (2022-2023)**  
**SESSION: FEB 2023 – MAY 2023**

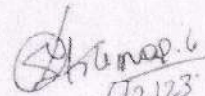
Week No.	Month	Day						Days	Activities
		Mon	Tue	Wed	Thu	Fri	Sat		
1	FEB	13	14	15	16	17	18 DH	5	18- Maha Shivaratri
2	FEB	20	21	22	23	24	25	6	25- Wednesday Time Table
3	FEB/MAR	27	28	1	2 BV	3 ASD	4 DH	5	
4	MAR	6	7	8	9	10	11TA	6	11 - Tuesday Time Table
5	MAR	13T1	14T1	15	16	17	18 DH	5	
6	MAR	20BV	21* FFB1	22 H	23ASD	24	25	5	21* - First Faculty Feed Back 22- Ugadi 25-Monday Time Table
7	MAR/APR	27	28	29	30	31	1	6	1-Monday Time Table
8	APR	3H	4	5	6	7H	8DH	3	3-Mahaveera Jayanthi 7-Good Friday 8-Friday Time Table
9	APR	10	11	12	13TA	14H	15	5	14-Dr. B R Ambedkar Jayanthi 15-Monday Time Table
10	APR	17T2	18T2	19	20	21	22DH	5	
11	APR	24BV	25* FFB2	26ASD	27	28	29	6	25* - Second Faculty Feed Back 29-Friday Time Table
12	MAY	1H	2	3	4	5	6DH	4	1-May Day
13	MAY	8	9	10	11T3	12T3	13*	6	13-Friday Time Table 13* - Last Working day

**Total No of Working Days : 67**

Total Number of working days ( Excluding holidays and Tests)=61

H	Holiday
BV	Blue Book
T1,T2,T3	Tests 1,2,3
ASD	Attendance & Sessional Display
DH	Declared Holiday
LT1	Lab Test 1
TA	Test attendance

Monday	12
Tuesday	12
Wednesday	13
Thursday	12
Friday	12
<b>Total</b>	<b>61</b>

  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.

**K.S.INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGG.**  
**LIST OF STUDENTS STUDYING IN VI SEMESTER (A & B SECTIONS)**  
**FOR THE ACADEMIC YEAR 2023 (EVEN SEMESTER)**

SL. NO	USN	NAME OF THE STUDENT	Gender	Date of Birth	EMAIL_ID	Student Phone No	NAME OF THE FATHER	Father Phone No	Mother	Mother Phone No	SEC
1	1KS19EC026	ERAM FATHIMA	Female	14.02.2001	eramfathima17@gmail.com	8618120829	AMEER IAN	9632031105	MISHKATH UNISSA	7829390337	A
2	1KS19EC034	HIMA SWETHA S	Female	24/6/2001	Himaswetha2406@gmail.com	8431083655	Srinivas reddy	9731375998	Jayalakshmi	9845979327	A
3	1KS20EC001	ABHISHEK J	MALE	3/1/2002	abhig7999@gmail.com	9148909784	JAYAVEEREGOWDA	8546850616	KAMALA	6361110465	A
4	1KS20EC002	Aditi dubey	Female	16-03-2002	Aditidubey2002@gmail.com	9483670316	Rakesh dubey	9901768702	Prarthana dubey	9916143291	A
5	1KS20EC003	AFEEFA SHARIEFF	Female	20/10/2002	afeefa.mms@gmail.com	8722100935	MOHAMED MUSHTAQ	-	RAZIA SULTANA	7848078518	A
6	1KS20EC004	Ajay B G	Male	26/02/2002	ajaybg2002@gmail.com	9916973063	B.K Gururaj	9535128057	Srivalli	9663870637	A
7	1KS20EC006	Akash M	Male	03/08/2001	akashtorotto@gmail.com	0911 364 3268	Muniswamy	9538482446	Jyothi	9980491696	A
8	1KS20EC008	B.S.HEMASHREE	Female	24/03/2002	hemashreekadam@gmail.com	8553847390	B.V.SHASHIDHAR	8762265058	B.S.MADHAVI	9449204361/8073662293	A
9	1KS20EC009	BHARATH M	MALE	9/2/2002	bharath3292@gmail.com	6366325889	MALLIKARJUNA G	7090600434	SUJATHA N	7619212525	A
10	1KS20EC010	Bhavitha. B	Female	19-08-2002	bhavithapriya02@gmail.com	7676182692	Banappa. N	8762182437	Savithram ma. M	8762182437	A
11	1KS20EC011	Bhuvaneshwari k	Female	23/4/2002	bhuvik108@gmail.com	79753 83231	Balakrishna reddy k	9845978879	Sudha	7022608518	A
12	1KS20EC012	Chaitanya k	Male	16/3/2002	reddychaitanya401@gmail.com	7204977937	K Dayananda reddy	9343776218	K Kavitha	6362534647	A
13	1KS20EC013	CHAITHRA K	Female	06-04-2002	chaithrasomayaji2002@gmail.com	6360927396	Nagaraj Somayaji	9964411457	Jayalakshmi Somayaji	9686610271	A
14	1KS20EC014	C. Sai Srujitha	Female	18/01/2002	saisrujitha18@gmail.com	7815834446	C. Muthyalappa	9000558141	C. Radha	93904 91542	A
15	1KS20EC015	C.Umadevi	Female	20/11/2002	challagundlaumadevi14@gmail.com	6302775314	C Nagaraju	9505737070	C.Sridevi	6303475858	A
16	1KS20EC016	Chaya. S	Female	23/3/2002	chayas2002@gmail.com	8147025259	D. Sundaraiah	9448561585	Umadevi. S	9845198388	A
17	1KS20EC017	Chethan G	Male	30-04-2003	gchethan866@gmail.com	8310415628	Gangadhar	8971800934	Gowri	8971800934	A
18	1KS20EC018	Chethankumar J	Male	20/07/2002	chethankumarchethu9916@gmail.com	9916319428	Jayanna K	8792319219	Prema H	9916319428	A
19	1KS20EC019	CETHAN KUMAR T	Male	24/09/2002	chethankumar2420@gmail.com	8971023827	Thippeswamy	-	Savitha H C	7019722049	A
20	1KS20EC020	DARSHAN K	MALE	22/04/2003	darshan2243k@gmail.com	9148379478 9535250529	KESHAVAMURTHY K R	6363852337	SHEELA S	9535250529	A



SL. NO	USN	NAME OF THE STUDENT	Gender	Date of Birth	EMAIL_ID	Student Phone No	NAME OF THE FATHER	Father Phone No	Mother	Mother Phone No	SEC
21	1KS20EC021	DARSHAN KUMAR S	MALE	6/12/2002	darshu061202@gmail.com	9902618252	SATHYANARAYAN D		N SUMA	8861840262	A
22	1KS20EC023	Dhamini. J	Female	02/07/2002	dhaminjt0289@gmail.com	9513680207	Jagannath s k	7760916277	Chitra	7760916277	A
23	1KS20EC024	Dhruva Kumar S	Male	15/02/2002	dhruvakumar26190@email.com	8073976871	Shivakumar M	9448212050	Geetha M	9886280175	A
24	1KS20EC025	Divya .N	Female	09/05/2002	divyanmurthy09@gmail.com	8310365659	Narasimha Murthy. R	9945977171	Rashmi .J	9972629197	A
25	1KS20EC026	Eshwar Biradar	Male	03/01/2003	eshwarbb2003@gmail.com	7588247068	Basavaraj Biradar	9108697635	Sridevi Biradar	9108697635	A
26	1KS20EC027	G BHAVANA PRIYADARSHINI	Female	14/10/2002	bhavanagorthi@gmail.com	8296196955	G JAYA PRAKASH	9481269256	G SREEDEVI	8073709003	A
27	1KS20EC028	Gagan.H.C	Male	01/06/2002	gagan888.hc@gmail.com	6364769333	Chandrashekhhar.H.C	9845440151	G.Latha	9880883234	A
28	1KS20EC029	Gagana B S	Female	18-09-2002	gagana8904604388@gmail.com	6360024748	Shivaramu	6362954628	RaInnamma	8904604388	A
29	1KS20EC030	Gandhamani C M	Female	07/04/2002	cmgandhamani@gmail.com	9741398268	Mohanraju C	9448233568	Jayanthi C	8892243982	A
30	1KS20EC031	Gomitha R C	Female	02-06-2002	rcgomitha@gmail.com	8618246907	Chowdareddy R. N	8762134121	R. V Vani	7897682264	A
31	1KS20EC032	Harini k	Female	24-03-2002	khanni810@gmail.com	9900704653	Krishna Murthy	7259806961	Latha	7259806961	A
32	1KS20EC033	Harshith gowda AR	Male	04/09/2002	harshithgowdaa04@gmail.com	8123266819	Revanna M	9008273087	Amrutha P	8197111238	A
33	1KS20EC034	Harshitha.B.L	Female	15/6/2002	harshithabl15@gmail.com	7892192846	B.A. Lakshmisha	9845757201	K.V.chandrakala	9740154601	A
34	1KS20EC035	Harshitha.J	Female	23-09-2002	gowdaharshithaj@gmail.com	9113684507	Jayaram	9980381766	Sukanya	9113684507	A
35	1KS20EC036	HARSHITHA N	Female	22/12/2002	harshithan392@gmail.com	8884395624	R NANJUNDA	8884951994	LAKSHMI DEVI	9448617364	A
36	1KS20EC037	Inchara. P	Female	24-01-2002	tejupc182@gmail.com	6361694403	Poorna chandra thejaswi	9738746898	Veena. B	81055444866	A
37	1KS20EC038	Chaithanya krishna.J	Male	30/04/2003	chaithanyajampula1@gmail.com	7780665993	Ramamurthy.J	7780665993	Sukanya.J	9705377583	A
38	1KS20EC039	Jamuna s g	Female	16-02-2002	Jamunasg123@gmail.com	9353868269	Gangadharaiah	8123309095	Susheela	7259836059	A
39	1KS20EC040	Janhavi r	Female	13-02-2003	Janvirejjanviraj042@gmail.com	8073864130	Rajanna N	8073864130	Mangala A S	6366086700	A
40	1KS20EC041	JAYANTH. H	Male	09/02/2002	jayanth.h6174@gmail.com	9637619829	HANUMESH. M	9880767316	LAKSHMIDEVI	9141073697	A
41	1KS20EC042	K Jeevitha	Female	21-08-2002	jeevitha020821@gmail.com	7899532686	Krishna Murthy V	9740682084	Jyothi K N	7795122078	A
42	1KS20EC043	K.M.Amshumant h	Male	24.04.2002	amshu.cr7@gmail.com	9742095512	K.Mahantesh	9880280939	Nanda.J	9900656170	A
43	1KS20EC045	Kavana.G.S	Female	13/06/2002	kavanags10@gmail.com	9148137238	Shivakumar.G.K	7829221728	Kalavathi.M .B	9611439411	A

SL. NO	USN	NAME OF THE STUDENT	Gender	Date of Birth	EMAIL_ID	Student Phone No	NAME OF THE FATHER	Father Phone No	Mother	Mother Phone No	SEC
44	1KS20EC046	Kavya S M	Female	20/02/2002	kavyasm12345@gmail.com	7795924125	S R MURALI KRISHNA	9019615633	VARALAKS HMI B	9844856115	A
45	1KS20FC047	Keerthana BS	Female	16/1/2003	keerthanabspvg2003@gmail.com	8431466578	Srinivasa	9972262282	Anitha	9980070610	A
46	1KS20EC048	Kiran Dev D	Male	24/11/2002	devkiran8049@gmail.com	7411158049	Devaraj S	9845548049	Kokila G	9341448049	A
47	1KS20EC049	KIRAN V NARAYAN	Male	9/7/2002	kirannarayan0@gmail.com	6366955248	VIJAY KUMAR B N	9945944229	PADMINI B V	9945337238	A
48	1KS20EC050	KODIDELA. PRATHIMA	Female	05-01-2002	kodidelaprathima2002@gmail.com	9392399402	K. Sudharsan	7989193663	K. Adilakshmi	8897279908	A
49	1KS20EC051	KUMAR K G	Male	02/09/2002	ganeshkumar9035@gmail.com	9071942191	GANESH K A	9035415059	SHEELA K S	8217863402	A
50	1KS20EC052	Kusuma VR	Female	27-10-2002	kusumavr2710@gmail.com	8792008538	YR Ramesh	9945357476	Shashikala KN	8861356613	A
51	1KS20EC053	M.Archana	Female	18/12/2002	archanamohan8073@gmail.com	7619661372	P.Mohan	9480155110	P.Latha	9739885584	A
52	1KS20EC054	MADIHA	Female	23/04/2002	mazharmadiha/86@gmail.com	9845357377	Mazhar-Ul-Huq	9980778851	Rizwana Begum	8660026800	A
53	1KS20EC055	MAHESH BIRADAR	MALE	5/10/2002	maheshbiradar8762@gmail.com	8088718524	Sriivaputra Biradar	8762779748	Mahadevi	9606619067	A
54	1KS20EC056	MANASWINI KM	Female	15/07/2002	manaswigowda0@gmail.com	9148691462	MAHESH MS	9008739026	CHANDRAK ALA. TR	9008739026	A
55	1KS20EC057	Meghashree.M	Female	23-04-2002	roopamegha2002@gmail.com	9206532206	Manjunatha B N	9206532206	Roopa M V	9742171972	A
56	1KS20EC058	MOHAN KRISHINA K	Male	09/03/2001	mohankrishnak931@gmail.com	9380891045	KRISHNA MURTHY D	9686225657	LAKSHMI DEVI T	7892926138	A
57	1KS20EC059	N.shreya	Female	25-11-2002	Shreyasrivatsa25@gmail.com	8147128278	S.Nagaraja	9980028278	S .janhavi	9900411278	B
58	1KS20EC060	NALI ANI GOWIHAMI	Female	6/6/2002	nallanigowthami2002@gmail.com	7032681854	n SRINIVASULU	9959669329	PUSHPAVATHI	6303344071	B
59	1KS20EC061	NEHA CR	Female	01/01/2003	ramegowdam1971@gmail.com	9108573852	Ramegowda	8892596410	Sheela	7795116382	B
60	1KS20EC062	NEHA NAGARAJ AIRANI	Female	11/5/2002	airani.neha11@gmail.com	9886248430	Nagraj S Airani	9535685226	Madhuri N Airani	9449184581	B
61	1KS20EC063	VASANTH Kumar	Male	16-04-2002	vasanthkumar44881@gmail.com	7483506301	P. Balakrishnareddy	7483506301	P. Revathi	9844127112	B
62	1KS20EC064	PAVAN.C	MALE	15/7/2002	pavanreddy6896@gmail.com	8317411141	C. SHIVA REDDY	9740367773	C. ARUNA	9740798050	B
63	1KS20EC065	Pavani TS	Female	20/03/2003	talluripavani76@gmail.com	7619183036	T V Sathish Dabu	9972693036	Shobha Rani T	9591713501	B
64	1KS20EC066	Pradhyumna S Kashyap	Male	27-02-2002	pradhyumnakashyap7842@gmail.com	9740736084	Srinath C	9980412184	K N Malini	8861476084	B
65	1ks20ec067	Praveen D B	Male	17-07-2002	bpraveen.1707@gmail.com	8618964201	Basavaraju D P	-	Sujatha C.	9886926255	B
66	1KS20EC068	Prema G	Female	13/05/2003	gopalsusheelareddy@gmail.com	8951273603	Gopal reddy	9611329572	Susheela	8971472513	B

SL. NO	USN	NAME OF THE STUDENT	Gender	Date of Birth	EMAIL_ID	Student Phone No	NAME OF THE FATHER	Father Phone No	Mother	Mother Phone No	SEC
67	1KS20EC069	PRIYANKA.H C	Female	15/7/2002	priyanka.hc792@gmail.com	9663826792	CHANDRA KANTH H S	9902296912	PAVITHRA K R	8861758718	B
68	1KS20EC070	PRIYANKA K	Female	1/2/2002	kpriyanka93033@gmail.com	6362989867	Krishna K J	9535047009	Rathnamma	7019023020	B
69	1KS20EC071	Priyanka.M	Female	07-05-2002	priyankamathi07@gmail.com	8217659122	R.Mariyappan	9448784807	M.Mathiselvi	7975224734	B
70	1KS20EC072	Pushpa DT	Female	01-04-2002	pushpadt65@gmail.com	7483778566	Thiramma reddy DA	9535135687	Sridevamma KR	9964160640	B
71	1KS20EC073	RAHUL KRISHNAN V	Male	12/4/2001	rkv122001@gmail.com	9480123426	VINOD KUMAR K	9449444403	BHARATHI G H	9449444520	B
72	1KS20EC074	RAHUL R	MALE	8/9/2001	rahulrhm@gmail.com	8431011477	RAMJI PANDITH	9845904555	SUMA	9535510733	B
73	1KS20EC075	RAJATH K ACHAR	MALE	14/8/2002	rajathkachar143@gmail.com	9380682309	KRISHNA MURTHY K G	9740123471	VASANTHA K R	9448959949	B
74	1KS20EC076	Rakshith NM	Male	17/01/2002	nmrakshith049@gmail.com	09632115351	Maregowda	8296142734	Bhagya	8296142734	B
75	1KS20EC077	RAKSHITH.R	Male	05/01/2002	r49862303@gmail.com	7892065979	RAJASHEKHAR H.S	9980601937	SAROJA. R	7892065979	B
76	1KS20EC078	Rakshitha A	Female	31-12-2002	rakshithaanthony1@gmail.com	8147257648	Anthony Raj C	9880036569	Vandhana Mary	8073485262	B
77	1KS20EC079	RAMESHWAR	MALE	22/7/2001	makrerameshwar6@gmail.com	7411390961	UMAKANTH	9972331377	SATHYABHAMA		B
78	1KS20EC080	Ramya T	Female	1/12/2002	ramyatramyat3@gmail.com	6363683042	Thulasi rama. C	9886672905	Chinnapapa	7259443133	B
79	1KS20EC082	Rohit A.k	Male	24/09/2002	rohitkanni24@gmail.com	9663921545	Ashok	9880418356	Nagamma	9110463042	B
80	1KS20EC083	S Arun Kumar	Male	13/01/2003	rahularunkumar5@gmail.com	9686776425	SATHYA MURTHY A	9108820145	Bharathi S	9480515998	B
81	1KS20EC084	Sachin NM	Male	13/07/2002	sachinmnagol@gmail.com	8431949810	Manjunath N	9972077572	Manjula	9742958936	B
82	1KS20EC085	SADHANA.SRINI VAS	Female	06/05/2002	sadhana.srinivas6@gmail.com	6361916229	SRINIVAS.B.S	9108587382	UMA SRINI VAS	9108287469	B
83	1KS20EC087	Sandeep Y H	Male	1-7-2002	deepuyhdeepuyh@gmail.com	9741435215	Hanumantharayappa Y N	9901889154	Umadevi R	9880711052	B
84	1KS20EC089	Sanjana.G	Female	28-08-2002	sanjana.gurunaths@gmail.com	9686474373	Gurunath.S	9686474373	Priyadarshini.G	8277201905	D
85	1KS20EC091	Sanjana T Gadikar	Female	14-09-2002	sanjanatgadikar@gmail.com	7411745647	Tippanna B gadikar	9900137102	Rajashni T Gadikar	7411724316	B
86	1KS20EC092	Shakthi Anbazhagan M	Male	25/09/2002	anbumuniyappa@gmail.com	6363195088	Muniyappa K	9980122908	Selvi C M	9844201698	B
87	1KS20EC093	Sharath M	Male	18/09/2002	Sharathm5684@gmail.com	8050032264	Mahadeva S	9480075656	Leelavathi B M	9900237258	B
88	1KS20EC094	SHASHANK S	Male	4/5/2002	shashanksiddaraj2002@gmail.com	8867116224	Siddaraju K	9535220016	Vasantha	7975633792	B
89	1KS20EC095	SHIVAREDDY B A	MALE	10/1/2001	shivareddyba567@gmail.com	9686526103	AMARANATH	9731055616	SUJATHA	7349134651	B

SL. NO	USN	NAME OF THE STUDENT	Gender	Date of Birth	EMAIL_ID	Student Phone No	NAME OF THE FATHER	Father Phone No	Mother	Mother Phone No	SEC
90	1KS20EC096	Shreya H Padmanabha	Female	01/06/2002	shreyah532@gmail.com	7676869258	PADMANABHAIAH K	9902308548	HEMALATH A K R	9743042590	B
91	1KS20EC097	Shreyas M S	Male	21/08/2002	shrems08@gmail.com	8050289057	Shankarappa M R	9845447704	Sowbhagya G S	9900379104	B
92	1KS20EC098	Shreyas p s rao	Male	27/09/2002	sshreyas578@gmail.com	+916364557803	Sudhakar m p	9343835454	Suma b s	9341229890	B
93	1KS20EC099	SHWETA DEEPAK K	Female	20/10/2002	shwetakunichi20@gmail.com	9482046205	DEEPAK K S	984527786	VANI M	9945218760	B
94	1KS20EC101	SONIKA.R	Female	11/12/2002	Sonikajk1@gmail.com	9980733590	Rajesh.K	9916897160	Sumathi.T	9986849682	B
95	1KS20EC102	SUMANA N	Female	20/6/2002	sumanaravan20@gmail.com	8884199651	K Narayana	9663342083	Leelavathi M	9738722600	B
96	1KS20EC103	SUMUKHA.S	Male	04/01/2003	sumukha4012003@gmail.com	09380204638	SUBRAMANYA.JS	9741191725	USHA.H	9591248708	B
97	1KS20EC104	SURAKSHA.N	Female	06-05-2002	suraksha.nagaraj@gmail.com	9108675849	NAGARA1.M	9845809413	SHIVARATHNA	9632459970	B
98	1KS20EC105	Tarun Prasanna	Male	24/05/2002	tarunp2405@gmail.com	08660233065	S Prasanna Kumar	8805236881	Govardhini B S	7722007910	B
99	1KS20EC106	TEJAS N REDDY	Male	18/07/2002	reddytejas18@gmail.com	9606559319	B narayanaswamy	9880178585	B bhuvanavat	6364743051	B
100	1KS20EC107	T.GIRISHCHOWDARY	Male	13/08/2003	thummalagirishchowdary2003@gmail.com	6304887699	T.SRINIVASULU	9502022945	T.SUDHA	6304887699	B
101	1KS20EC108	Uday C H	Male	16/04/2002	udaych810@gmail.com	8660434249	Nagesh C H	9900138435	Sharada	9513820966	B
102	1KS20EC109	UJJWAL NAIDU	Male	13-05 -2001	kandrajjjwalaaidu16@gmail.com	9353513629	K H NARAYANA REDDY	9663574352	LAKSHMI DEVI	7259488464	B
103	1KS20EC110	VAISHNAVI A	Female	26/12/2001	vaishnavibharadwaj1817@gmail.com	7975440553	Ajay H A	8217586332	Suma A	9886957673	B
104	1KS20EC111	Vaishnavi.V.H	Female	1/09/2002	vaishnavivadagoor@gmail.com	8660383450	Harish.V.S	9663878282	Gayahtiri.K.R	8904275341	B
105	1KS20EC112	N Varsha	Female	16-04-2002	varshanachar@gmail.com	9740644194	R S Natashekara	9980465195	Mangala Madhumath	9440792744	B
106	1KS20EC113	Vijayalakshmi K	Female	05/04/2002	vijayalakshmi025@gmail.com	7349262315	Kumaraswamy R	9448169331	Annapurna N S	9481037802	B
107	1KS20EC114	VINAY S P	Male	06-05-2002	Vinaysp6522@gmail.com	8904305025	S M PUTTEGOWDA	9972225344	BHAGYA JYOTHI	6361875036	B
108	1KS20EC115	VINAY SAGAR V ALUR	Male	17-01-2003	sagarvinay1703@gmail.com	8150045445	VILAS V ALUR	9980626767	PUSHPA G DESHPAND	9620350096	B
109	1KS20EC116	VINEETH M S	Male	21/11/2002	Mvineeth70@gmail.com	+917975657991	Somashekar M N	9448798847	Mamatha K S	9008006551	B
110	1KS20EC117	YASHILAA.S	Female	28/05/2002	yashilaa078@gmail.com	7975689781	S N SHANKAR RAO	9845545398	MALATHI R N	9980741101	B
111	1KS20EC118	YASHWANTH Y	Male	07/11/2002	yashwanthshetty281@gmail.com	9535056009	Yogesh T	6361313577	Jayalakshmi	8073107253	B
112	1KS21EC401	SUDEEP V	Male	3/3/2003	sudeepv452@gmail.com	8088665752	VENKATESH REDDY	8453040792	SRIVDEVI	6362032203	B

SL. NO	USN	NAME OF THE STUDENT	Gender	Date of Birth	EMAIL_ID	Student Phone No	NAME OF THE FATHER	Father Phone No	Mother	Mother Phone No	SEC
90	1KS20EC096	Shreya H Padmanabha	Female	01/06/2002	shreyah532@gmail.com	7676869258	PADMANABHAIAH K	9902308548	HEMALATH A K R	9743042590	B
91	1KS20EC097	Shreyas M S	Male	21/08/2002	shrems08@gmail.com	8050289057	Shankarappa M R	9845447704	Sowbhagya G S	9900379104	B
92	1KS20EC098	Shreyas p s rao	Male	27/09/2002	sshreyas578@gmail.com	+916364557803	Sudhakar m p	9343835454	Suma b s	9341229890	B
93	1KS20EC099	SHWETA DEEPAK K	Female	20/10/2002	shwetakunichi20@gmail.com	9482046205	DEEPAK K S	984527786	VANI M	9945218760	B
94	1KS20EC101	SONIKA.R	Female	11/12/2002	Sonikajk1@gmail.com	9980733590	Rajesh.K	9916897160	Sumathi.T	9986849682	B
95	1KS20EC102	SUMANA N	Female	20/6/2002	sumanaravan20@gmail.com	8884199651	K Narayana	9663342083	Leelavathi M	9738722600	B
96	1KS20EC103	SUMUKHA.S	Male	04/01/2003	sumukha4012003@gmail.com	09380204638	SUBRAMANYA.JS	9741191725	USHA.H	9591248708	B
97	1KS20EC104	SURAKSHA.N	Female	06-05-2002	suraksha.nagaraj@gmail.com	9108675849	NAGARA1.M	9845809413	SHIVARATHNA	9632459970	B
98	1KS20EC105	Tarun Prasanna	Male	24/05/2002	tarunp2405@gmail.com	08660233065	S Prasanna Kumar	8805236881	Govardhini B S	7722007910	B
99	1KS20EC106	TEJAS N REDDY	Male	18/07/2002	reddytejas18@gmail.com	9606559319	B narayanaswamy	9880178585	B bhuvanavat	6364743051	B
100	1KS20EC107	T.GIRISHCHOWDARY	Male	13/08/2003	thummamalagirishchowdary2003@gmail.com	6304887699	T.SRINIVASULU	9502022945	T.SUDHA	6304887699	B
101	1KS20EC108	Uday C H	Male	16/04/2002	udaych810@gmail.com	8660434249	Nagesh C H	9900138435	Sharada	9513820966	B
102	1KS20EC109	UJJWAL NAIDU	Male	13-05 -2001	kandrajjjwalaaidu16@gmail.com	9353513629	K H NARAYANA REDDY	9663574352	LAKSHMI DEVI	7259488464	B
103	1KS20EC110	VAISHNAVI A	Female	26/12/2001	vaishnavibharadwaj1817@gmail.com	7975440553	Ajay H A	8217586332	Suma A	9886957673	B
104	1KS20EC111	Vaishnavi.V.H	Female	1/09/2002	vaishnavivadagoor@gmail.com	8660383450	Harish.V.S	9663878282	Gaya(thiri.K.R	8904275341	B
105	1KS20EC112	N Varsha	Female	16-04-2002	varshanachar@gmail.com	9740644194	R S Natashekara	9980465195	Mangala Madhumath	9449792744	B
106	1KS20EC113	Vijayalakshmi K	Female	05/04/2002	vijayalakshmi025@gmail.com	7349262315	Kumaraswamy R	9448169331	Annapurna N S	9481037802	B
107	1KS20EC114	VINAY S P	Male	06-05-2002	Vinaysp6522@gmail.com	8904305025	S M PUTTEGOWDA	9972225344	BHAGYA JYOTHI	6361875036	B
108	1KS20EC115	VINAY SAGAR V ALUR	Male	17-01-2003	sagarvinay1703@gmail.com	8150045445	VILAS V ALUR	9980626767	PUSHPA G DESHPAND	9620350096	B
109	1KS20EC116	VINEETH M S	Male	21/11/2002	Msvineeth70@gmail.com	+917975657991	Somashekar M N	9448798847	Mamatha K S	9008006551	B
110	1KS20EC117	YASHILAA.S	Female	28/05/2002	yashilaa078@gmail.com	7975689781	S N SHANKAR RAO	9845545398	MALATHI R N	9980741101	B
111	1KS20EC118	YASHWANTH Y	Male	07/11/2002	yashwanthshetty281@gmail.com	9535056009	Yogesh T	6361313577	Jayalakshmi	8073107253	B
112	1KS21EC401	SUDEEP V	Male	3/3/2003	sudeepv452@gmail.com	8088665752	VENKATESH REDDY	8453040792	SRIVDEVI	6362032203	B



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE -109**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**INDIVIDUAL TIME TABLE FOR THE YEAR - 2023 ( EVEN SEMESTER)**

W.E.F. : 20/3/2023

NAME OF THE FACULTY : Dr. SUREKHA B

DESIGNATION: PROFESSOR

PERIOD	1	2	10.20 AM 10.35 AM	3	4	12.25 PM 1.15 PM	5	6	7
TIME DAY	8.30 AM 9.25 AM	9.25 AM 10.20 AM		10.35 AM 11.30 AM	11.30 AM 12.25 PM		1.15 PM 2.10 PM	2.10 PM 3.05 PM	3.05 PM 4.00 PM
MON	PYAP (18EC646) -B		T E A  B R E A K			L U N C H  B R E A K	PYAP (18EC646) -A		
TUE	PYAP (18EC646) -B			PYAP (18EC646) -A					
WED				PYAP (18EC646) -B					
THU	PYAP (18EC646) -A				PYAP (18EC646) -B				
FRI		PYAP (18EC646) -A							

	Subject Code	Subject Name	Sem	Section	Work Load
Subject 1	18EC646	Python Application Programming (Professional Elective-1)	VI	A&B	8
Mini project	18ECMP68	Mini-Project (Guide)	VI		2
Project	18ECP83	Project Work Phasc -2 - (Guide)	VIII		2
Internship	18ECI85	Internship (Guide)	VIII		2
<b>ADDITIONAL WORK: MENTORING AND OTHERS</b>					
<b>TOTAL LOAD=14 Hrs/Week</b>					

*[Signature]*  
Time Table Co-ordinator

*[Signature]*  
**HEAD OF THE DEPARTMENT**  
Dept. of Electronics & Communication Engg  
K.S. Institute of Technology  
Bengaluru - 560 109

*[Signature]*  
**Principal**  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109.



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE -109**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**VI SEMESTER TIME TABLE FOR THE YEAR 2023 (EVEN SEMESTER)**

W.E.F. : 20/3/2023  
 SEC : 'A'

CLASS TEACHER : Dr. Rekha N  
 CLASS ROOM : OBLH 204

PERIOD	1	2	10.20 AM 10.35 AM	3	4	12.25 PM 1.15 PM	5	6	7
TIME DAY	8.30 AM 9.25 AM	9.25 AM 10.20 AM		10.35 AM 11.30 AM	11.30 AM 12.25 PM		1.15 PM 2.10 PM	2.10 PM 3.05 PM	3.05 PM 4.00 PM
MON	ES (18EC62)	MWA (18EC63)	T E A	DC (18EC61)	DSA (18CS652) / SCM(18ME653)	L U N C H B R E A K	PYAP (18EC646)	T	T
TUE	DC (18EC61)	DSA (18CS652) / SCM(18ME653)		PYAP (18EC646)	MWA (18EC63)		ES LAB (18ECL66) - A3 / COM LAB (18ECL67)-A1		
WED	ES LAB (18ECL66) -A1/ COM LAB (18ECL67)-A2				DSA (18CS652) / SCM(18ME653)		ES (18EC62)	DC (18EC61)	
THU	PYAP (18EC646)	ES (18EC62)	B R E A K	MWA (18EC63)	DC (18EC61)		ES LAB (18ECL66)-A2 / COM LAB (18ECL67)-A3		
FRI	DSA (18CS652) / SCM(18ME653)	PYAP (18EC646)		MWA (18EC63)	ES (18EC62)		Mini-Project (18ECMP68)		

Sub-Code	Subject Name	Faculty Name
18EC61	Digital Communication	Dr. Rekha N
18EC62	Embedded Systems	Dr. Sudarshan B
18EC63	Microwave and Antennas	Dr. Dinesh Kumar D S
18EC646	Python Application Programming (Professional Elective-1)	Dr. Surekha B
18CS652	Introduction to Data Structures and Algorithms (Open Elective Elective-A)	Dr. Vijaya Lakshmi M
18ME653	Supply Chain Management (Open Elective Elective-A)	Mrs. Bhargavi Ananth
18ECL66	Embedded Systems Laboratory	Dr. Sudarshan B -A2, A3, Dr. Dinesh Kumar D S -A1,A2,A3 Mr. Praveen A - A1
18ECL67	Communication Laboratory	Dr. Rekha N - A1,A3, Dr. Pooja S, A1, A2, A3 Mrs. Bhargavi Ananth- A2
18ECMP68	Mini-Project	Dr. Chanda V Reddy, Mrs. Vishalini Divakar
	Internship	

*V.S.H*  
 Time Table Co-ordinator

**HEAD OF THE DEPARTMENT**  
 Dept. of Electronics & Communication Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109

*[Signature]*  
 Principal  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE -109**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**VI SEMESTER TIME TABLE FOR THE YEAR 2023 (EVEN SEMESTER)**

W.E.F. : 20/3/2023  
 SEC : 'B'

CLASS TEACHER : Mr. Praveen A  
 CLASS ROOM : OB LH 205

PERIOD	1	2	10.20 AM 10.35 AM	3	4	12.25 PM 1.15 PM	5	6	7	
TIME DAY	8.30 AM 9.25 AM	9.25 AM 10.20 AM		10.35 AM 11.30 AM	11.30 AM 12.25 PM		1.15 PM 2.10 PM	2.10 PM 3.05 PM	3.05 PM 4.00 PM	
MON	PYAP (18EC646)	ES (18EC62)	T E A B R E A K	MWA (18EC63)	DSA (18CS652) / SCM(18ME653)	L U N C H B R E A K	ES LAB (18ECL66) -B3 / COM LAB (18ECL67) -B1			
TUE	PYAP (18EC646)	DSA (18CS652) / SCM(18ME653)		DC (18EC61)	ES (18EC62)		Mini-Project (18ECMP68)			
WED	MWA (18EC63)	DC (18EC61)		PYAP (18EC646)	DSA (18CS652) / SCM(18ME653)		ES LAB (18ECL66) - B1 / COM LAB (18ECL67) - B2			
THU	ES (18EC62)	DC (18EC61)		MWA (18EC63)	PYAP (18EC646)		MWA (18EC63) - T	T	T	
FRI	DSA (18CS652) / SCM(18ME653)	MWA (18EC63)		ES (18EC62)	DC (18EC61)		ES LAB (18ECL66) - B2 / COM LAB (18ECL67) -B3			

Sub-Code	Subject Name	Faculty Name
18EC61	Digital Communication	Dr. Rekha N
18EC62	Embedded Systems	Mr. Praveen A
18EC63	Microwave and Antennas	Dr. Chanda V Reddy
18EC646	Python Application Programming (Professional Elective-1)	Dr. Surekha B
18CS652	Introduction to Data Structures and Algorithms (Open Elective Elective-A)	Dr. Vijaya Lakshmi M
18ME653	Supply Chain Management (Open Elective Elective-A)	Mrs. Bhargavi Ananth
18ECL66	Embedded Systems Laboratory	Dr. Sudarshan B -B3, Dr. Dinesh Kumar D S, - B1,B2, B3 Mr. Praveen A -B1, B2
18ECL67	Communication Laboratory	Dr. Rekha N B1, Dr. Pooja S - B1, B2, B3 Mrs. Bhargavi Ananth - B2, B3
18ECMP68	Mini-Project	Dr. Chanda V Reddy, Mrs. Vishalini Divakar
	Internship	

V.S.T  
 Time Table Co-ordinator

HEAD OF THE DEPARTMENT  
 Dept. of Electronics & Communication Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109

K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.



## SYLLABUS

### PYTHON APPLICATION PROGRAMMING

As per Choice Based Credit System (CBCS) and Outcome Based Education (OBE)

Course Code	18EC646	CIE Marks	40
Number of Lecture Hours/Week	04	SEE Marks	60
Total Number of Lecture Hours	40 (8 Hours / Module)	Exam Hours	03

#### CREDITS – 03

**Course objectives:** This course will enable students to:

- Learn Syntax and Semantics and create Functions in Python. Handle Strings and Files in Python.
- Understand Lists, Dictionaries and Regular expressions in Python.
- Implement Object Oriented Programming concepts in Python
- Build Web Services, Network and Database Programs in Python.

#### Module-1

Why should you learn to write programs, Variables, expressions and statements, Conditional execution, Functions

#### Module-2

Iteration, Strings, Files

#### Module-3

Lists, Dictionaries, Tuples, Regular Expressions

#### Module-4

Classes and objects, Classes and functions, Classes and methods

#### Module-5

Networked programs, Using Web Services, Using databases and SQL

**Course Outcomes:** After studying this course, students will be able to:

1. Examine Python syntax and semantics and be fluent in the use of Python flow control and functions
2. Demonstrate proficiency in handling Strings and File Systems.
3. Create, run and manipulate Python Programs using core data structures like Lists, Dictionaries and Regular Expressions.
4. Interpret the concepts of Object-Oriented Programming as used in Python.
5. Implement exemplary applications related to Network Programming, Web Services and Databases in Python.

#### **Textbooks:**

1. Charles R. Severance, "Python for Everybody: Exploring Data Using Python 3", 1 Edition, Create Space Independent Publishing Platform, 2016 (Chapters 1 — 13, 15).
2. Allen B. Doey, "Think Python: How to Think Like a Computer Scientist", 2n Edition, Green Tea Press, 2015 (Chapters 15,16,17)

#### **Reference Books:**

1. Mark Lutz, "Programming Python", 4th Edition, O'Reilly Media, 2011. ISBN-13: 978-9350232873.
2. Wesley J Chun, "Core Python Applications Programming", 3rd Edition, Pearson Education India, 2015. ISBN—13: 978—9332555365.
3. Reema Thareja, "Python Programming using problem solving approach", Oxford university press, 2017

#### **Assignments:**

1. Written Assignment
2. Written Assignment
3. Mini Projects



**K. S. INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**LESSON PLAN 2022-23 EVEN SEMESTER**

**COURSE INCHARGE** : Dr. Surekha Borra  
**COURSE CODE/TITLE** : 18EC646/ Python Application Programming  
**YEAR/ SEMESTER/SECTION** : 4/6 / A  
**BRANCH** : ECE

Sl. No.	Topic to be delivered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date
<b>Module 1: INTRODUCTION</b>						
1	Introduction: Why should you learn to write programs? Computer hardware architecture	L+D	BB+PPT	1	1	20/3/23
2	Terminology: Interpreter and compiler, programs, building blocks, Debugging	L+D	BB+PPT	1	2	21/3/23
3	Variables, expressions, and statements	L+ D	BB+PPT	1	3	23/3/23
4	Variables, expressions, and statements	L+D	BB+PPT		4	24/3/23
5	Variables, expressions, and statements: Exercises	L+D	BB+PPT	1	5	25/3/23
6	Variables, expressions, and statements: Exercises	L+D	BB+PPT	1	6	27/3/23
7	Conditional execution	L+ D	BB+PPT	1	7	28/3/23
8	Conditional execution: Exercises	L+D	BB+PPT	1	8	30/3/23
9	Functions	L+D	BB+PPT	1	9	31/3/23
10	Functions: Exercises	L+D	BB+PPT	1	10	1/4/23
<b>Module 2: ITERATIONS</b>						
11	Iteration	L+D	BB+PPT	1	11	4/4/23
12	Iteration: Exercises	L+ D	BB+PPT	1	12	6/4/23
13	Strings	L+D	BB+PPT	1	13	10/4/23
14	Strings: Exercises	L+D	BB+PPT	1	14	11/4/23
15	Strings: Exercises	L+D	BB+PPT	1	15	13/4/23
16	Files	L+D	BB+PPT	1	16	15/4/23

17	IA-1				17	18/4/23
18	Files: Exercises	L+D	BB+PPT	1	18	20/4/23
19	Files; Exercises			1	19	21/4/23
<b>Module 3: LISTS</b>						
20	Lists	L+D	BB+PPT	1	20	24/4/23
21	Lists: Exercises	L+D	BB+PPT	1	21	25/4/23
22	Lists: Exercises	L+D	BB+PPT	1	22	27/4/23
23	Dictionaries	L+D	BB+PPT	1	23	28/4/23
24	Dictionaries: Exercises	L+D	BB+PPT	1	24	29/4/23
25	Dictionaries: Exercises	L+D	BB+PPT	1	25	2/5/23
26	Tuples	L+D	BB+PPT	1	26	4/5/23
27	Tuples: Exercises	L+D	BB+PPT	1	27	5/5/23
28	Regular Expressions	L+D	BB+PPT	1	28	8/5/23
29	Regular Expressions: Exercises	L+D	BB+PPT	1	29	9/5/23
<b>Module 4: CLASSES AND OBJECTS</b>						
30	Classes and objects	L+D	BB+PPT	1	30	11/5/23
31	Classes and objects	L+D	BB+PPT	1	31	12/5/23
32	Classes and objects: Exercises	L+D	BB+PPT	1	32	13/5/23
33	Classes and Functions	L+D	BB+PPT	1	33	15/5/23
34	Classes and Functions: Exercises	L+D	BB+PPT	1	34	16/5/23
35	Classes and Methods	L+D	BB+PPT	1	35	18/5/23
36	Classes and Methods: Exercises	L+D	BB+PPT	1	36	19/5/23
<b>Module 5: NETWORKED PROGRAMS</b>						
37	Networked programs	L+D	BB+PPT	1	37	22/5/23
38	Networked Programs: Exercises	L+D	BB+PPT	1	38	23/5/23
39	Using Web Services	L+D	BB+PPT	1	39	25/5/23
40	Using Web Services: Exercises	L+D	BB+PPT	1	40	26/5/23
41	Using Web Services: Exercises	L+D	BB+PPT	1	41	27/5/23
42	IA-2				42	30/5/23
43	Using databases Exercises	L+D	BB+PPT	1	43	1/6/23
44	Using databases Exercises	L+D	BB+PPT	1	44	2/6/23
45	SQL	L+D	BB+PPT	1	45	5/6/23
46	SQL Exercises	L+D	BB+PPT	1	46	6/6/23
47	Additional Exercises	L+D	BB+PPT	1	47	8/6/23

48	Additional Exercises	L+D	BB+PPT	1	48	9/6/23
49	Additional Exercises	L+D	BB+PPT	1	49	12/6/23
50	Additional Exercises	L+D	BB+PPT	1	50	13/6/23
51	Additional Exercises	L+D	BB+PPT	1	51	15/6/23
52	Additional Exercises	L+D	BB+PPT	1	52	16/6/23
53	Additional Exercises	L+D	BB+PPT	1	53	19/6/23
54	Mini-Project Presentations	L+D	BB+PPT	1	54	20/6/23
55	Mini-Project Presentations	L+D	BB+PPT	1	55	22/6/23
56	Mini-Project Presentations	L+D	BB+PPT	1	56	23/6/23
57	Mini-Project Presentations	L+D	BB+PPT	1	57	24/6/23
58	Mini-Project Presentations	L+D	BB+PPT	1	58	26/6/23
59	Mini-Project Presentations	L+D	BB+PPT	1	59	27/6/23
60	Mini-Project Presentations	L+D	BB+PPT	1	60	30/6/23
61	IA-3				61	4/7/23
62	Mini-Project Presentations	L+D	BB+PPT	1	62	6/7/23
63	Mini-Project Presentations	L+D	BB+PPT	1	63	7/7/23
64	Mini-Project Presentations	L+D	BB+PPT	1	64	10/7/23

**Textbooks:**

1. Charles R. Sseverance, "Python for Everybody: Exploring Data Using Python 3", 1 Edition, Create Space Independent Publishing Platform, 2016 (Chapters 1 — 13, 15).
2. Allen B. Do ey, "Think Python: How to Think Like a Computer Scientist", 2n Edition, Green Tea Press, 2015 (Chapters 15,16,17)

**Reference Books:**

1. Mark Lutz, "Programming Python", 4th Edition, O'Reilly Media, 2011. ISBN-13:978-9350232873.
2. Wesley J Chun, "Core Python Applications Programming", 3rd Edition, Pearson Education India, 2015. ISBN—13: 978—9332555365.
3. Reema Thareja, "Python Programming using problem solving approach", Oxford university press, 2017

**Web Materials:**

- W1: <https://nptel.ac.in/courses/106106145/>  
W2: <https://nptel.ac.in/courses/117106113/34>  
W3: <https://nptel.ac.in/courses/106105166/26>

**Details of the teaching aids:**

Black Board and Power Point Presentations, Python IDE, Jupyter Notebook

  
**Course Incharge**

  
**Module Coordinator**

  
**HOD ECE**

  
**PRINCIPAL**



**K. S. INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**LESSON PLAN 2022-23 EVEN SEMESTER**

**COURSE INCHARGE** : Dr. Surekha Borra  
**COURSE CODE/TITLE** : 18EC646/ Python Application Programming  
**YEAR/ SEMESTER/SECTION** : 4/6 /B  
**BRANCH** : ECE

Sl. No.	Topic to be delivered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date
<b>Module 1: INTRODUCTION</b>						
1	Introduction: Why should you learn to write programs? Computer hardware architecture	L+D	BB+PPT	1	1	20/3/23
2	Terminology: Interpreter and compiler, programs, building blocks, Debugging	L+D	BB+PPT	1	2	21/3/23
3	Variables, expressions, and statements	L+ D	BB+PPT	1	3	23/3/23
4	Variables, expressions, and statements	L+D	BB+PPT		4	27/3/23
5	Variables, expressions, and statements: Exercises	L+D	BB+PPT	1	5	28/3/23
6	Variables, expressions, and statements: Exercises	L+D	BB+PPT	1	6	29/3/23
7	Conditional execution	L+ D	BB+PPT	1	7	30/3/23
8	Conditional execution: Exercises	L+D	BB+PPT	1	8	1/4/23
9	Functions	L+D	BB+PPT	1	9	4/4/23
10	Functions: Exercises	L+D	BB+PPT	1	10	5/4/23
<b>Module 2: ITERATIONS</b>						
11	Iteration	L+D	BB+PPT	1	11	6/4/23
12	Iteration: Exercises	L+ D	BB+PPT	1	12	10/4/23
13	Strings	L+D	BB+PPT	1	13	11/4/23
14	Strings: Exercises	L+D	BB+PPT	1	14	12/4/23
15	Strings: Exercises	L+D	BB+PPT	1	15	13/4/23
16	Files	L+D	BB+PPT	1	16	15/4/23

17	IA-1				17	18/4/23
18	Files: Exercises	L+D	BB+PPT	1	18	20/4/23
19	Files: Exercises			1	19	24/4/23
<b>Module 3: LISTS</b>						
20	Lists	L+D	BB+PPT	1	20	25/4/23
21	Lists: Exercises	L+D	BB+PPT	1	21	26/4/23
22	Lists: Exercises	L+D	BB+PPT	1	22	27/4/23
23	Dictionaries	L+D	BB+PPT	1	23	2/5/23
24	Dictionaries: Exercises	L+D	BB+PPT	1	24	3/5/23
25	Dictionaries: Exercises	L+D	BB+PPT	1	25	4/5/23
26	Tuples	L+D	BB+PPT	1	26	8/5/23
27	Tuples: Exercises	L+D	BB+PPT	1	27	9/5/23
28	Regular Expressions	L+D	BB+PPT	1	28	10/5/23
29	Regular Expressions: Exercises	L+D	BB+PPT	1	29	11/5/23
<b>Module 4: CLASSES AND OBJECTS</b>						
30	Classes and objects	L+D	BB+PPT	1	30	15/5/23
31	Classes and objects	L+D	BB+PPT	1	31	16/5/23
32	Classes and objects: Exercises	L+D	BB+PPT	1	32	17/5/23
33	Classes and Functions	L+D	BB+PPT	1	33	18/5/23
34	Classes and Functions: Exercises	L+D	BB+PPT	1	34	22/5/23
35	Classes and Methods	L+D	BB+PPT	1	35	23/5/23
36	Classes and Methods: Exercises	L+D	BB+PPT	1	36	24/5/23
<b>Module 5: NETWORKED PROGRAMS</b>						
37	Networked programs	L+D	BB+PPT	1	37	25/5/23
38	Networked Programs: Exercises	L+D	BB+PPT	1	38	27/5/23
39	IA-2					30/5/23
40	Using Web Services	L+D	BB+PPT	1	40	1/6/23
41	Using Web Services: Exercises	L+D	BB+PPT	1	41	5/6/23
42	Using databases Exercises	L+D	BB+PPT	1	42	6/6/23
43	Using databases Exercises	L+D	BB+PPT	1	43	7/6/23
44	Using databases Exercises	L+D	BB+PPT	1	44	8/6/23
45	SQL	L+D	BB+PPT	1	45	10/6/23
46	SQL Exercises	L+D	BB+PPT	1	46	12/6/23
47	Additional Exercises	L+D	BB+PPT	1	47	13/6/23

48	Additional Exercises	L+D	BB+PPT	1	48	14/6/23
49	Additional Exercises	L+D	BB+PPT	1	49	15/6/23
50	Additional Exercises	L+D	BB+PPT	1	50	19/6/23
51	Additional Exercises	L+D	BB+PPT	1	51	20/6/23
52	Additional Exercises	L+D	BB+PPT	1	52	21/6/23
53	Additional Exercises	L+D	BB+PPT	1	53	22/6/23
54	Mini-Project Presentations	L+D	BB+PPT	1	54	24/6/23
55	Mini-Project Presentations	L+D	BB+PPT	1	55	26/6/23
56	Mini-Project Presentations	L+D	BB+PPT	1	56	28/6/23
57	IA-3				57	4/7/23
58	Mini-Project Presentations	L+D	BB+PPT	1	58	6/7/23
59	Mini-Project Presentations	L+D	BB+PPT	1	59	8/7/23
60	Mini-Project Presentations	L+D	BB+PPT	1	60	10/7/23

#### Textbooks:

1. Charles R. Severance, "Python for Everybody: Exploring Data Using Python 3", 1 Edition, Create Space Independent Publishing Platform, 2016 (Chapters 1 – 13, 15).
2. Allen B. Doey, "Think Python: How to Think Like a Computer Scientist", 2n Edition, Green Tea Press, 2015 (Chapters 15,16,17)

#### Reference Books:

1. Mark Lutz, "Programming Python", 4th Edition, O'Reilly Media, 2011. ISBN-13: 978-9350232873.
2. Wesley J Chun, "Core Python Applications Programming", 3rd Edition, Pearson Education India, 2015. ISBN-13: 978-9332555365.
3. Reema Thareja, "Python Programming using problem solving approach", Oxford university press, 2017

#### Web Materials:

- W1: <https://nptel.ac.in/courses/106106145/>  
W2: <https://nptel.ac.in/courses/117106113/34>  
W3: <https://nptel.ac.in/courses/106105166/26>

#### Details of the teaching aids:

Black Board and Power Point Presentations, Python IDE, Jupyter Notebook

  
Course Incharge

  
Module Coordinator

  
HOD ECE

  
PRINCIPAL

**KSIT****KSIT Bangalore****DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
ASSIGNMENT-1**

Academic Year	2022-2023		
Batch	2020-2024		
Year/Semester/section	III/VI/A & B		
Subject Code-Title	18EC646-Python Application Programming		
Name of the Instructor	Dr.B.Surekha	Dept	ECE

Assignment No: 1

Date of Issue: 21/3/2023

Total marks:30

Date of Submission:15/4/2023

Sl.No.	Assignment Questions	K Level	CO	Marks
1.	a) Utilize Python operators and their precedence to build a python program to display the result of an expression $F_n=2^{2n+1}$ . The n value to be prompted by the user. b) Make use of Python arithmetic operators and build a python program to calculate the area of square, rectangle, and circle. print the results. Take input from user. c) Make use of Python arithmetic operators and build a python program to convert given Celsius to Fahrenheit temperature.	Applying(K3)	CO1	6
2.	a) Build a Python user defined function to find maximum and minimum letter in a string also to find the length of the string using in build functions. b) Build a Python function that takes decimal number as input and convert that to binary equivalent and return the same. c) Build a single user defined function named 'Solve' that returns the Remainder and Quotient.	Applying(K3)	CO1	6
3.	a) Make use of conditional statements to build a Python user defined function to find the largest of three numbers. b) Make use of Python conditional statements to build a user defined function to check whether the given year is leap year or not with functions. c) Build a Python program to check whether the given number is positive or negative or zero using conditional statements. d) Build a Python program to find the best of two test average marks out of three test marks accepted from the user.	Applying(K3)	CO1	6
4.	a) Make use of Python loops to build a python program to generate and print prime numbers in the given range. b) Build a Python program to generate Fibonacci series up to the given limit by defining Fibonacci (n) function c) Build a program to compute only even numbers sum within the given natural number using continue statement	Applying(K3)	CO2	6
5.	a) Make use of for loops to model Python program for counting, summing, and average of elements. b) Make use of iterations and build a python program to find the largest value from the given set of accepted values.	Applying(K3)	CO2	6

Signature of Course Incharge

Signature of HOD/ECE





**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**ASSIGNMENT 1 SCHEME**  
**2022 - 23 EVEN SEMESTER**

Degree : B.E  
Branch : ECE  
Course Title : PYTHON APPLICATION  
PROGRAMMING


Semester : VI  
Course Code : 18EC646  
Max Marks : 30


Q.NO.	POINTS	MARKS
1a	<pre>#Using Python Operators n=int(input('Enter the n value : ')) Fn=2**(2*n+1) print(Fn)  -----  # Using Math Module n=int(input('Enter the value for n:\n')) import math Fn=pow(2,(2*n)+1) print(Fn)</pre>	2
1b	<pre>import math a=int(input('Enter the length of the side for square : ')) l=int(input('Enter the length of the rectangle : ')) b=int(input('Enter the breadth of the rectangle : ')) r=int(input('Enter the radius of the circle : ')) print("Area of square : ",a*a) print("Area of rectangle : ",l*b) print("Area of circle : ",math.pi*r*r)</pre>	2
1c	<pre>celsius=float(input('Enter temperature in celsius:\n')) fahr=celsius*9/5+32 print (fahr)</pre>	2
2a	<pre>def max_min_len(name):     maximum=max(name)     minimum=min(name)     length=len(name)     return maximum,minimum,length  name=input("Enter the string : ") m,n,l=max_min_len(str(name)) print("maximum = ",m,' minimum = ',n,' length = ',l)</pre>	2

2b	<pre> def decimalToBinary(num):     if num &gt; 1:         decimalToBinary(num // 2)     print(num % 2, end="") # decimal number number = int(input("Enter any decimal number: ")) decimalToBinary(number) ----- def binary(n):     l=[]     while(n&gt;0):         l.append(n%2)         n=n//2     l.reverse()     return l  n=int(input("Enter the decimal number : ")) l=binary(n) for i in range(len(l)):     print(l[i],end="") </pre>	2
2c	<pre> def Solve(divisor,dividend):     remainder=dividend%divisor     quotient=dividend//divisor     return remainder,quotient  div=int(input("Enter the dividend : ")) dis=int(input("Enter the divisor : ")) r,q=Solve(dis,div) print("Remainder = ",r,' Quotient = ',q) </pre>	2
3a	<pre> def largest(n1,n2,n3):     if n1&gt;n2 and n1&gt;n3:         print('largest number is ',n1)     elif n2&gt;n1 and n2&gt;n3:         print('largest number is ',n2)     else:         print('largest number is ',n3) n1=int(input("Enter the first number : ")) n2=int(input("Enter the second number : ")) n3=int(input("Enter the third number : ")) largest(n1,n2,n3) </pre>	1.5
3b	<pre> def leap_year(year):     if (year%4)==0:         if (year%100)==0:             if (year%400)==0:                 print("Leap year")             else:                 print("Not a leap year")         else:             print("Leap year")     else:         print("Not a leap year") </pre>	1.5

	<pre> year =int(input("Enter the year : ")) leap_year(year) ----- def findifleap(year):     if(year%400==0)and(year%100==0):         print("{0} is a leap year".format(year))     elif(year%4==0)and (year%100!=0):         print("{0} is leap year".format(year))     else:         print("{0} is not a leap year".format(year))  year=int(input("enter an year")) findifleap(year) </pre>	
3c	<pre> n=int(input('Enter a number : ')) if n&gt;0:     print("The number is positive") elif n&lt;0:     print("The number is negative") else:     print("The number is zero") </pre>	1.5
3d	<pre> l=[] for i in range(3):     n=int(input("Enter the marks : "))     l.append(n) l.sort() avg=(l[1]+l[2])/2 print('average marks =',avg) ----- m1=int(input("Enter the marks in First IA: ")) m2=int(input("Enter the marks in Second IA: ")) m3=int(input("Enter the marks in Third IA: ")) if (m1&gt;m2):     if (m2&gt;m3):         total=m1+m2     else:         total=m1+m3 elif (m1&gt;m3):     total=m1+m2 else:     total=m2+m3 Avg=total/2 print("The average of best two test marks is: ", Avg) </pre>	1.5
4a	<pre> start=int(input("Enter the starting range of prime number ")) end=int(input("Enter the ending range of prime number "))  for i in range(start,end+1):     c=0     for j in range(2,i):         if(i==j) :             continue         if(i%j==0):             c=1 </pre>	2

	<pre> break if c==0 and i!=1: print(i,end=" ") </pre>	
4b	<pre> def Fibonacci(n): a=0 b=1 for i in range (n): print(a,end= " ") f=a+b a=b b=f n=int(input("Enter the number to generate fibonacci series : ")) Fibonacci(n) </pre>	2
4c	<pre> maximum=int(input("Enter the maximum value:")) total=0 for num in range(1,maximum+1): if(num%2==0): total=total+num else: continue print("THE SUM OF EVEN NUMBERS=", total) </pre>	2
5a	<pre> count=0 total=0 for y in [20,10,10,20,20,20]: count=count+1 total=total+y  print('number of elements=',count) print('sum=',total) average=total/count print('average=',average) </pre>	3
5b	<pre> largest=0 l=[34,65,45,89,99,45,31] for i in l: if i&gt;largest: largest=i print("Largest = ",largest) </pre>	3

  
Course In charge

  
Module Coordinator

  
HOD ECE



KSIT Bangalore

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
ASSIGNMENT-2

Academic Year	2022-2023		
Batch	2019-2023		
Year/Semester/section	III/VI/A &B		
Subject Code-Title	18EC646-Python Application Programming		
Name of the Instructor	Dr.B.Surekha	Dept	ECE


Assignment No: 2

Date of Issue: 27/4/2023

Total marks:30

Date of Submission:26/5/2023

Sl. No.	Assignment Questions	K Level	CO	Marks
1.	(a) <b>Utilize</b> python input function and strings to write a program to accept a sentence from the user and display the longest word of that sentence along with its length. (b) <b>Build</b> a python code to display the last 6 characters of the string "Make hay while the sun shines" to the console. (c) <b>Build</b> a python program to display the presence of the given sub-string in the main string. (d) <b>Build</b> a python program to accept a file name from the user. (i) <b>Display</b> the first N-lines of the file. (ii) <b>Find</b> the frequency of occurrence of the word accepted from the user in the file. (e) <b>Build</b> a python program to copy all lines beginning with vowels from FROM.text file to VOWELTEXT.text file retaining the other lines. (f) <b>Build</b> a python program to count the number of occurrences of a given word in a file.	Applying(K3)	CO2	6
2.	(a) <b>Choose</b> and explain any 6 lists handling functions in python with example. (b) <b>Make use of</b> a program to explain lists properties slicing and list traversing.	Applying(K3)	CO3	6
3.	(a) <b>Make use of</b> syntax to explain how tuples are created in python? Explain the different ways of accessing and creating them. (b) <b>Identify</b> the need of regular expressions in python language using examples.	Applying(K3)	CO3	6
4.	(a) <b>Build</b> a python program to read all the lines in a file accepted by the user and print all e-mail addresses contained in it. Assume the e-mail addresses that contain only non-white space characters (b) <b>Build</b> a python program to search for lines that start with the word 'From' and a character followed by a two-digit number between 00 and 99 followed by '.'. Print the number if it is greater than zero. Assume any input file.	Applying(K3)	CO3	6
5.	<b>Make use of</b> example program to instantiate a class and how the class members are accessed?	Applying(K3)	CO4	6

  
Course In charge

  
Module Coordinator

  
HOD ECE



# K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

## ASSIGNMENT 2 SCHEME 2022 - 23 EVEN SEMESTER

Degree : B.E  
Branch : ECE  
Course Title : PYTHON APPLICATION  
PROGRAMMING

Semester : VI  
Course Code : 18EC646  
Max Marks : 30

Q.NO.	POINTS	MARKS
1a	<pre>sentence = input("Enter sentence: ") longest = max(sentence.split()) # Finding longest word print("Longest word is: ", longest) # Displaying longest word print("And its length is: ", len(longest))</pre>	1
1b	<pre>string = "Make hay while the sun shines" a=string[-6:] print(a)</pre>	1
1c	<pre>string = input('Enter the string of sentences\n') sub_str = input('Enter the sub-string to search\n') if (string.find(sub_str) == -1):     print(" NOT PRESENT") else:     print(" YESIIT IS PRESENT")</pre>	1
1d	<pre>2a i ACCEPT FILE AND DISPLAY FIRST N LINES filename=input("Enter filename : ") f1=open(filename,'r') N=int(input("Enter number of lines to be displayed : ")) linenumber=0 count=0 for line in f1:     linenumber=linenumber+1     print(line,end="") #file already has each word in new lines, print adds new line by default, so we are changing the default     if N==linenumber:         break 2a ii FREQUENCY OF A WORD file = open("pythoneg.txt", "r") #read content of file to string data = file.read() frequency = data.count("Feature") print('frequency of the word :', frequency)</pre>	1
1e	<pre>with open('pythoneg.txt','r') as firstfile, open('voweltext.txt','a') as secondfile:     # read content from first file     for line in firstfile:         words = line.split()         for word in words:             if word[0] in ['A','E','I','O','U']:                 # append content to second file                 secondfile.write(line)</pre>	1
1f	<pre>file = open("pythoneg.txt", "r") #read content of file to string data = file.read() #enter a word to find number of its occurrence</pre>	1

	<pre>occurrences = data.count("Python") print('Number of occurrences of the word !', occurrences)</pre>	
2a	<p>1.capitalize () – Converts the first character to upper case</p> <pre>txt = "hello, and welcome to my world." x = txt.capitalize() print (x) output - Hello, and welcome to my world.</pre> <p>2.find () - Searches the string for a specified value and returns the position of where it was found</p> <pre>txt = "Hello, welcome to my world." x = txt.find("welcome") print(x) output – 7</pre> <p>3.endswith () - Returns true if the string ends with the specified value</p> <pre>txt = "Hello, welcome to my world." x = txt.endswith(".") print(x) output – True</pre> <p>4.lower () – Converts a string into lower case</p> <pre>txt = "Hello my FRIENDS" x = txt.lower() print(x) output – hello my friends</pre> <p>5.split () – Splits the string at he specified separator, and returns a list</p> <pre>txt = "welcome to the jungle" x = txt.split() print(x) output – ['welcome', 'to', 'the', 'jungle']</pre> <p>6.upper () - Converts a string into upper case</p> <pre>txt = "Hello my friends" x = txt.upper() print(x) output – HELLO MY FRIENDS</pre>	2
2b	<p>1. A list is a sequence and they are ordered. Like a string, a list is a sequence of values. In a string, the values are characters in a list, they can be any type. The values in list are called elements or sometimes items. There are several ways to create a new list; the simplest is to enclose the elements in square brackets ("[" and "]")</p> <p>example</p> <pre>[10, 20, 30, 40] ['crunchy frog', 'ram bladder', 'lark vomit']</pre> <p>The first example is a list of four integers. The second is a list of three strings.</p> <p>2. The elements of a list don't have to be the same type. The following list contains a string, a float, an integer.</p> <p>Example:</p> <pre>['spam', 2.0, 5]</pre> <p>3.Nested lists are allowed. A list within another list is called nested lists. example: ['spam', 2.0, 5,[10, 20]]</p> <p>4. Empty lists is also considered. A list that contains no elements is called an empty list you can create one with empty brackets, [].</p> <p>example:</p> <pre>empty = []</pre> <p>5.We can assign values As you might expect, you can assign list values to variables:</p> <pre>&gt;&gt;&gt; cheeses = ['Cheddar', 'Edam', 'Gouda']</pre>	2

```
>>> numbers = [17, 123]
>>> empty = []
>>> print(cheeses, numbers, empty)
['Cheddar', 'Edam', 'Gouda'] [17, 123] []
```

#### 6. Lists are mutable

Unlike strings, lists are mutable because you can change the order of items in a list or reassign an item in a list.

When the bracket operator appears on the left side of an assignment, it identifies the element of the list that will be assigned.

example:

```
>>> numbers = [17, 123]
>>> numbers[1] = 5
>>> print(numbers)
[17, 5]
```

The one-th element of numbers, which used to be 123, is now 5.

#### 7. Accessing elements into the list.

The syntax for accessing the elements of a list is the same as for accessing the characters of a string: the bracket operator.

The expression inside the brackets specifies the index.

Remember that the indices start at 0:

example:

```
>>> print(cheeses[0])
Cheddar
```

If an index has a negative value, it counts backward from the end of the list.

The in operator also works on lists.

```
>>> cheeses = ['Cheddar', 'Edam', 'Gouda']
>>> 'Edam' in cheeses
```

```
True
```

```
>>> 'Brie' in cheeses
```

```
False
```

#### 8. Traversing a list

The most common way to traverse the elements of a list is with a for loop. The syntax is the same as for strings:

```
for cheese in cheeses:
```

```
    print(cheese)
```

#### LIST SLICING

The slice operator also works on lists:

syntax and example:

```
>>> t = ['a', 'b', 'c', 'd', 'e', 'f']
>>> t[1:3]
['b', 'c']
>>> t[:4]
['a', 'b', 'c', 'd']
>>> t[3:]
['d', 'e', 'f']
```

If you omit the first index, the slice starts at the beginning. If you omit the second, the slice goes to the end. So if you omit both, the slice is a copy of the whole list.

```
>>> t[:]
['a', 'b', 'c', 'd', 'e', 'f']
```

```
s
```

Since lists are mutable, it is often useful to make a copy before performing operations that fold, spindle, or mutilate lists.

A slice operator on the left side of an assignment can update multiple elements:

```
>>> t = ['a', 'b', 'c', 'd', 'e', 'f']
>>> t[1:3] = ['x', 'y']
>>> print(t)
['a', 'x', 'y', 'd', 'e', 'f']
```



3a	<p>A tuple is a sequence of values much like a list. The values stored in a tuple can be any type, and they are indexed by integers. The important difference is that tuples are immutable. Tuples are also comparable and hashable so we can sort lists of them and use tuples as key values in Python dictionaries. Syntactically, a tuple is a comma-separated list of values:</p> <pre>&gt;&gt;&gt; t = 'a', 'b', 'c', 'd', 'e'</pre> <p>Although it is not necessary, it is common to enclose tuples in parentheses to help us quickly identify tuples when we look at Python code:</p> <pre>&gt;&gt;&gt; t = ('a', 'b', 'c', 'd', 'e')</pre> <p>To create a tuple with a single element, you have to include the final comma:</p> <pre>&gt;&gt;&gt; t1 = ('a',) &gt;&gt;&gt; type(t1) &lt;type 'tuple'&gt;</pre> <p>Without the comma Python treats ('a') as an expression with a string in parentheses that evaluates to a string:</p> <pre>&gt;&gt;&gt; t2 = ('a') &gt;&gt;&gt; type(t2) &lt;type 'str'&gt;</pre> <p>Another way to construct a tuple is the built-in function tuple. With no argument, it creates an empty tuple</p> <p>The word "tuple" comes from the names given to sequences of numbers of varying lengths: single, double, triple, quadruple, quintuple, sextuple, septuple, etc.</p> <pre>&gt;&gt;&gt; t = tuple() &gt;&gt;&gt; print(t) ()</pre> <p>If the argument is a sequence (string, list, or tuple), the result of the call to tuple is a tuple with the elements of the sequence:</p> <pre>&gt;&gt;&gt; t = tuple('lupins') &gt;&gt;&gt; print(t) ('l', 'u', 'p', 'i', 'n', 's')</pre> <p>Because tuple is the name of a constructor, you should avoid using it as a variable name. Most list operators also work on tuples. The bracket operator indexes an element:</p> <pre>&gt;&gt;&gt; t = ('a', 'b', 'c', 'd', 'e') &gt;&gt;&gt; print(t[0]) 'a'</pre> <p>And the slice operator selects a range of elements.</p> <pre>&gt;&gt;&gt; print(t[1:3]) ('b', 'c')</pre> <p>But if you try to modify one of the elements of the tuple, you get an error:</p> <pre>&gt;&gt;&gt; t[0] = 'A'</pre> <p>You can't modify the elements of a tuple, but you can replace one tuple with another:</p> <pre>&gt;&gt;&gt; t = ('A',) + t[1:] &gt;&gt;&gt; print(t) ('A', 'b', 'c', 'd', 'e')</pre>	3
3b	<p>Regular expressions is a library. It is used to match strings of text such as particular characters, words, or patterns of characters. It means that we can match and extract any string pattern from the text with the help of regular expressions. Like any other library, it has to be imported before use, as:</p> <pre>import re</pre> <p>Regular expressions are useful in :</p> <ul style="list-style-type: none"> <li>&gt; verify the structure of strings</li> <li>&gt; extract substrings form structured strings</li> <li>&gt; search / replace / rearrange parts of the string</li> <li>&gt; split a string</li> </ul> <p>Example:</p> <pre># Search for lines that contain 'From' import re</pre>	3

	<pre>hand = open('demo.txt') for line in hand: line = line.rstrip() if re.search('From:', line): print(line) </pre> <p>This will only match lines that start with the string "From:".</p> <p>This is still a very simple example that we could have done equivalently with the startswith() method from the string library. But it serves to introduce the notion that regular expressions contain special action characters that give us more control as to what will match the regular expression.</p>							
4a	<pre>data = 'From stephen.marquard@uct.ac.za Sat Jan 5 09:14:16 2008' atpos = data.find('@') print(atpos) sppos = data.find(' ', atpos) print(sppos) host = data[atpos+1:sppos] print(host) </pre>	3						
4b	<pre>import re file = open('Abc.txt') for line in file: x=re.findall('^From.*[0-9][0-9]::.*', line) if len(x) &gt; 0: print(x) </pre>	3						
5	<p>class: A user-defined compound type. A class can also be thought of as a template for the objects that are instances of it.</p> <p>instantiate: To create an instance of a class.</p> <p>instance: An object that belongs to a class.</p> <p>object: A compound data type that is often used to model a thing or concept in the real world.</p> <p>constructor: A method used to create new objects.</p> <p>attribute: One of the named data items that makes up an instance.</p> <p>Example:</p> <pre>class Point: pass blank = Point() blank.x = 3.0 blank.y = 4.0 x = blank.x print(x) print(blank.y) 3.0 #Explanation about every command </pre> <div style="display: inline-block; vertical-align: middle; margin-left: 20px;"> <p>blank →</p> <table border="1" style="border-collapse: collapse;"> <tr> <td style="padding: 5px;">x</td> <td style="padding: 5px;">→</td> <td style="padding: 5px;">3.0</td> </tr> <tr> <td style="padding: 5px;">y</td> <td style="padding: 5px;">→</td> <td style="padding: 5px;">4.0</td> </tr> </table> </div>	x	→	3.0	y	→	4.0	6
x	→	3.0						
y	→	4.0						

  
Course In charge

  
Module Coordinator

  
HOD ECE



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109**  
**Department of Electronics & Communication Engineering**

**ASSIGNMENT TYPE: MINI PROJECT**

**Important dates:**

Sl. No	Details	Date
1.	Date of issue of topics for presentation	25/3/23
2.	Dates for Appeal/challenge (on or before)	28/3/23
3.	Last date for the submission of the Project Code	8/6/23
4.	Last date for Demo Presentation	10/6/23
5.	Date of announcement of evaluation	30/6/23

Note:

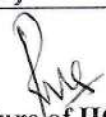
1. **Projects should be helpful to society**

2. Assignments marks will not be given if submitted on later dates or failed to present a seminar/demo.

**Rubrics/Evaluation Strategy**

Sl. No	Criteria	Marks
1.	Results	10
2.	Quality of Team Demo	5
3.	Quality of Code	5
4.	Usefulness to society/environment	5
5.	Individual Contribution to Project	5
6.	Individual Contribution to Report	5
7.	Tool Learning	5
	<b>Total</b>	<b>40 (Scale the Marks to 10)</b>

  
Signature of Course Incharge

  
Signature of HOD/ECE

K.S.INSTITUTE OF TECHNOLOGY  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
VI SEMESTER SECTION : A ASSIGNMENT :3  
COURSE : PYTHON APPLICATION PROGRAMMING CODE: 18EC646

Sl.No.	Team No.		USN	Name	Title of Project	Date of presentation	Marks
1	T-1	1	1KS20EC036	HARSHITHA. N	Banking Sytem	16/6/23	10
2		2	1KS20EC034	HARSHITHA. BL			10
3		3	1KS20EC035	HARSHITHA. J			10
4		4	1KS20EC032	HARINI K			9
5	T-2	1	1KS20EC025	Divya.N	Library Management System	16/6/23	10
6		2	1KS20EC023	Dhamini.J.Naidu			10
7		3	1KS20EC010	Bhavitha.B			10
8	T-3	1	1KS20EC015	C. Umadevi	Online digital voting system using pyth	19/6/23	10
9		2	1KS20EC050	K. Prathima			10
10		3	1KS19EC026	Eram Fathima			10
11		4	1KS20EC060	N.Gouthami			10
12	T-4	1	1KS20EC042	K Jeevitha	Face detection and counting	16/6/23	10
13		2	1KS20EC046	Kavya S M			10
14		3	1KS20EC054	Madiha			10
15	T-5	1	1KS20EC002	Aditi Dubey	Data visualization of Covid-19 Cases in	16/6/23	10
16		2	1KS20EC030	Gandhamani			10
17		3	1KS20EC057	Meghashree			10
18	T-6	1	1KS20EC053	M.Archana	Units converter	19/6/23	10
19		2	1KS20EC047	Keerthana.b.s			10
20		3	1KS20EC014	C.Sai Srujitha			10
21		4	1KS20EC038	J.Chaithanya Krishna			10
22	T-7	1	1KS20EC039	JAMUNA SG	Employees number tracking	16/6/23	10
23		2	1KS20EC040	JANHAVI R			10
24		3	1KS20EC056	MANASWINI KM			AB
25	T-8	1	1KS20EC077	Rakshith R	Language Translator using Python	16/6/23	10
26		2	1KS20EC093	Sharath M			10

27		3	1KS20FC108	Uday C H			10
28		4	1KS20EC098	Shreyas P S Rao			10
29	T-9	1	1KS19EC034	Hima swetha	Health and Fitness Calculator	16/6/23	10
30		2	1KS20EC008	Bs. Hema shree			10
31		3	1KS20EC013	Chaitra k			10
32	T-10	1	1KS20EC070	Priyanka K	ATM Simulation	19/6/23	10
33		2	1KS20EC083	S Arun kumar			10
34		3	1KS20EC085	Sadhana srinivas			10
35		4	1KS20EC092	Shakthi Anbazhagan M			10
36	T-11	1	1KS20EC001	Abhishek J	Object Weight Calculation	19/6/23	10
37		2	1KS20EC017	Chetan G			10
38		3	1KS20EC018	Chetan Kumar J			6
39		4	1KS20EC019	Chetan Kumar T			10
40	T-12	1	1KS20EC111	VAISHNAVI VH	QR CODE GENERATOR USING PYTHON	16/6/23	10
41		2	1KS20EC113	VIJAYALAKSHMI K			10
42		3	1KS20EC117	YASHILAA S			10
43	T-13	1	1KS20EC026	Eshwar Biradar	Make a clock using python program	16/6/23	8
44		2	1KS20EC048	Kiran Dev D			10
45		3	1KS20EC052	Kusuma V R-			10
46		4	1KS20EC055	Mahesh Biradar			9
47	T-14	1	1KS20EC062	NEHA NAGARAJ AIRANI	Password Compliance Checker	15/6/23	10
48		2	1KS20EC112	N Varsha			9
49		3	1KS20EC080	Ramya T			8
50	T-15	1	1KS20EC073	Rahul Krishnan V	Python Weather Forecasting	16/6/23	10
51		2	1KS20EC103	Sumukha S			7
52		3	1KS20EC105	Tarun Prasanna			10
53		4	1KS20EC106	Taejas N Reddy			0
54	T-16	1	1KS20EC084	Sachin NM	Air Quality index Tracker	16/6/23	10
55		2	1KS20EC087	Sandeep YH			10
56		3	1KS20FC109	Ujjwal Naidu			10
57		4	1KS20EC114	Vinay SP			10

58	T-17	1	1KS20EC068	Prema G	Random Geometric Patten	16/6/23	10
59		2	1KS20EC079	Rameshwar			10
60		3	1KS20EC094	Shashank S			10
61		4	1KS20EC097	Shreyas MS			10
62	T-18	1	1KS20EC043	AMSHUMANTH.K.M	TEXT TO SPEECH CONVERTER	16/6/23	10
63		2	1KS20EC049	KIRAN V NARAYAN			10
64		3	1KS20EC051	KIJMAR KG			AB
65		4	1KS20EC058	MOHAN KRISHNA			10
66	T-19	1	1KS20EC059	N Shreya	Generation of Contact Book	16/6/23	10
67		2	1KS20EC076	Rakshith NM			10
68		3	1KS20EC101	Sonika R			10
69		4	1KS20EC104	Suraksha N			10
70	T-20	1	1KS20EC066	Pradhyumna SK	Daily Expenses Entry	16/6/23	8
71		2	1KS20EC075	Rajath KA			8
72		3	1KS20EC116	Vineeth MS			8
73		4	1KS20EC118	Yeshwanth Y			8
74	T-21	1	1KS20EC061	Neha CR	BMI Calculator	16/6/23	10
75		2	1KS20EC065	Pavani TS			10
76		3	1KS20EC071	Priyanka M			10
77		4	1KS20FC072	Pushpa DT			7
78	T-22	1	1KS20EC024	Dhruva Kumar S	Currency Converter	16/6/23	5
79		2	1KS20EC028	Gagan HC			10
80		3	1KS20EC033	Harshith Gowda AR			7
81		4	1KS20EC041	Jayanth H			10
82	T-23	1	1KS20EC004	Ajay BG	Expenses Tracker GUI with Calender	16/6/23	10
83		2	1KS20EC006	Akash M			10
84		3	1KS20EC016	Chaya S			10
85	T-24	1	1KS20EC021	Darshan Kumar S	Speech to Text Converter	16/6/23	10
86		2	1KS20EC027	G Bhavana P			10
87		3	1KS20EC031	Gomitha RC			10
88	T-25	1	1KS20EC095	Shiva Reddy	Movie ticket booking system	19/6/23	10

89		2	1KS20EC096	Shreya H			10
90		3	1KS20EC099	Shweta Deepak			10
91	T-26	1	1KS20EC089	Sanjana G	Morse code translator	19/6/23	10
92		2	1KS20EC091	Sanjana TG			
93		3	1KS20EC102	Sumana N			10
94		4	1KS20EC110	Vaishnavi A			10
95	T-27	1	1KS20EC107	T Girish Chowdary	Donation Tracker	19/6/23	10
96	T-28	1	1KS20EC037	Inchara P	Income Tax Calculation	19/6/23	10
97		2	1KS20EC029	Gagana BS			10
98	T-29	1	1KS20EC003	Afeefa	Donation Report Generator	19/6/23	10
99		2	1KS20EC011	Bhuvaneshwari			10
100		3	1KS20EC012	Chaitanya			10
101		4	1KS20EC020	Darshan K			10
102	T-30	1	1KS20EC074	RAHUL R	Youtube mp4 downloader	19/6/23	10
103		2	1KS20EC078	RAKSHITHIA A			10
104		3	1KS20EC082	ROHIT A K			10
105		4	1KS20EC115	VINAY SAGAR V ALUR			10

*[Handwritten signature]*

*[Handwritten signature]*



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**FIRST INTERNAL TEST QUESTION PAPER 2022 – 23 EVEN SEMESTER**

SET: A

Degree : B. E  
Branch : ECE  
Course Title : Python Application Programming  
Duration : 90 Minutes

USN									
-----	--	--	--	--	--	--	--	--	--

Semester : VI A & B  
Course Code : 18EC646  
Date : 18-4-2023  
Max Marks : 30

Note: Answer ONE full question from each part.

K-Levels: K1-Remembering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Question	Marks	CO mapping	K-Level
PART-A				
1(a)	Identify and explain the applications of compiler and interpreter with an example and list the features of Python Programming Language.	6	CO1	K3
(b)	Make use of flowchart to explain the conditional execution and alternative execution statements with an example.	6	CO1	K3
(c)	Make use of Python arithmetic operators, try and except statements and build a python program to convert given Fahrenheit to Celsius temperature.	6	CO1	K3
OR				
2(a)	Develop example for fruitful and non-fruitful functions in Python.	6	CO1	K3
(b)	Identify the rules of precedence used by Python to evaluate an expression with example.	6	CO1	K3
(c)	Make use of at least three different types of variables in example program to explain the rules to declare a variable in Python.	6	CO1	K3
PART-B				
3	Make use of syntax and example program to explain the definite and infinite looping constructs in python.	12	CO2	K3
OR				
4	Identify the use of break and continue keywords using a snippet of code.	12	CO2	K3

  
Course In charge

  
Module Coordinator

  
HOD ECE

  
Principal





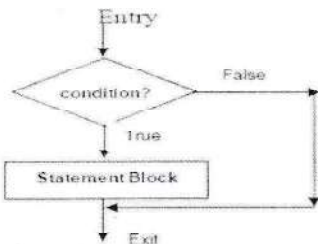
**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**FIRST INTERNAL TEST QUESTION PAPER 2022-23 EVEN SEMESTER**

SET - A

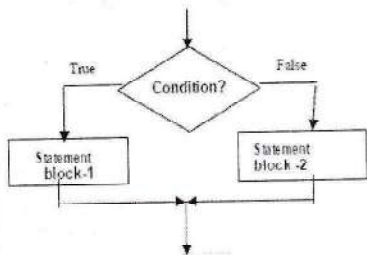
**SCHEME AND SOLUTION**

Degree : B. E  
Branch : Electronics & Communication Engg.  
Course Title : Python Application Programming

Semester : VI  
Course Code : 18EC646  
Max Marks : 30

Q.NO.	POINTS	MARKS
1.(a)	<p><b>Features of Python</b></p> <ul style="list-style-type: none"><li>• A variety of basic data types are available: numbers, strings, lists, and dictionaries.</li><li>• Python supports object-oriented programming with classes and multiple inheritance.</li><li>• Code can be grouped into modules and packages.</li><li>• The language supports raising and catching exceptions, resulting in cleaner error handling.</li><li>• Data types are strongly and dynamically typed.</li></ul> <p>Python is an <b>interpreter</b> and when we are running Python interactively, we can type a line of Python (a sentence) and Python processes it immediately and is ready for us to type another line of Python.</p> <p>Example: &gt;&gt;&gt; x = 6 &gt;&gt;&gt; print(x) 6</p> <p><b>Compilers</b> needs to be handed the entire program in a file, and then it runs a process to translate the high-level source code into machine language and then the compiler puts the resulting machine language into a file for later execution.</p>	2M+2M+2M
(b)	<p><b>Conditional Execution</b></p>  <pre>graph TD; Entry --&gt; Condition{condition?}; Condition -- True --&gt; StatementBlock[Statement Block]; StatementBlock --&gt; Condition; Condition -- False --&gt; Condition; Condition --&gt; Exit;</pre> <p>Example: &gt;&gt;&gt; x=10 &gt;&gt;&gt; if x&lt;40:     print("Fail")</p>	3M+3M

### Alternative Execution



```
x=int(input("Enter x:"))
if x%2==0:
    print("x is even")
else:
    print("x is odd")
```

(c)

**Python program to convert given Fahrenheit to Celsius temperature.**

6M

```
inp = input('Enter Fahrenheit Temperature:')
try:
    fahr = float(inp)
    cel = (fahr - 32.0) * 5.0 / 9.0
    print(cel)
except:
    print('Please enter a number')
```

2.(a)

A function that performs some task, but do not return any value to the calling function is known as **Non-fruitful function (void function)**. The function which returns some result to the calling function after performing a task is known as **fruitful function**. The built-in functions like mathematical functions, random number generating functions etc

3M+3M

```
def sum(a,b):
    return a+b
x=int(input("Enter a number:"))
y=int(input("Enter another number:"))
s=sum(x,y)
print("Sum of two numbers:",s)
```

(b)

Highest precedence rule to lowest precedence rule:

6M

- Parenthesis are always respected
- Exponentiation (raise to a power)
- Multiplication, Division, and Remainder
- Addition and Subtraction

```
>>> x = 1 + 2 ** 3 / 4 * 5
>>> print(x)
11.0
```

Q.NO.	POINTS	MARKS
(c)	<ul style="list-style-type: none"> <li>• Variable names can be arbitrarily long.</li> <li>• They can contain both letters and numbers, but they cannot start with a number.</li> <li>• It is legal to use uppercase letters, but it is a good idea to begin variable names with a lowercase letter</li> <li>• The underscore character ( <code>_</code> ) can appear in a name.</li> <li>• Variable names can start with an underscore character, but we generally avoid doing this unless we are writing library code for others to use.</li> <li>• Keywords or reserved words cannot be used as variable names.</li> <li>• <b>Examples</b></li> </ul> <pre data-bbox="363 722 776 1058"> &gt;&gt;&gt; xample=10 &gt;&gt;&gt; print(x) 10          #output &gt;&gt;&gt; type(x) &lt;class 'int'&gt; #type of x is integer &gt;&gt;&gt; y="hi" &gt;&gt;&gt; print(y) hi #output &gt;&gt;&gt; type(y) &lt;class 'str'&gt; #type of y is string Another example for float </pre>	6M
3.	<p><b>Infinite Loops:</b> A loop may execute infinite number of times when the condition is never going to become false.</p> <p><b>Example:</b></p> <pre data-bbox="363 1199 980 1398"> while True:     x=int(input("Enter a number:"))     if x&gt;= 0:         print("You have entered ",x)     else:         print("You have entered a negative number!!") </pre> <p><b>Definite Loops:</b> When we know total number of times the set of statements to be executed, for loop will be used.</p> <p><b>Example:</b></p> <pre data-bbox="363 1535 792 1671"> names=["Ram", "Shyam", "Bheem"] for x in names:     print("Happy New Year",x) print('Done!') </pre>	6M+6M
4.	<p>Sometimes, programmer would like to move to next iteration by skipping few statements in the loop, based on some condition with current iteration. For this purpose, continue statement is used.</p>	6M+6M

- Infinite loop has been avoided by using break statement with a condition.

**Example:**

```
sum=0
count=0
while True:
    x=input("Enter a number:")
    if x%2!=0:
        continue
    else:
        sum+=x
        count+=1
    if count==5:
        break
print("Sum= ", sum)
```



Course In charge



Module Coordinator



HOD ECE



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**FIRST INTERNAL TEST QUESTION PAPER 2022 – 23 EVEN SEMESTER**

SET: B

USN


Degree : B. E  
Branch : ECE  
Course Title : Python Application Programming  
Duration : 90 Minutes


Semester : VI A& B  
Course Code : 18EC646  
Date : 18-4-2023  
Max Marks : 30

Note: Answer ONE full question from each part.

K-Levels: K1-Remembering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating

Q. No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	Identify the types of errors with examples.	6	CO1	K3
(b)	Make use of syntax and flowcharts to explain the chained and nested conditional execution statements with an example.	6	CO1	K3
(c)	Make use of conditional statements to build a Python user defined function to find the smallest of three numbers.	6	CO1	K3
<b>OR</b>				
2(a)	Identify how to pass parameters in user defined functions with suitable example.	6	CO1	K3
(b)	Make use of built-in modules and explain type conversion functions and math functions in python.	6	CO1	K3
(c)	Make use of Python arithmetic operators and build a python program to calculate the area of square, rectangle, and circle. print the results. Take input from user.	6	CO1	K3
<b>PART-B</b>				
3	Identify the applications of while and for loops with suitable examples.	12	CO2	K3
<b>OR</b>				
4	Make use of syntax and example program to explain the finishing iterations with break and continue statements in python.	12	CO2	K3

  
Course In charge

  
Module Coordinator

  
HOD ECE

  
Principal

*Selaled*



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**FIRST INTERNAL TEST QUESTION PAPER 2022-23 EVEN SEMESTER**

**SET: B**

**SCHEME AND SOLUTION**

Degree : B. E  
 Branch : Electronics & Communication Engg  
 Course Title : Python Application Programming

Semester : VI  
 Course Code : 18EC646  
 Max Marks : 30

Q.NO.	POINTS	MARKS
1.(a)	<p><b>Syntax Errors:</b> The statements which are not following the grammar (or syntax) of the programming language are tend to result in syntax errors.</p> <p><b>Logical Errors:</b> Logical error occurs due to poor understanding of the problem. Syntactically, the program will be correct. But it may not give the expected output. For example, you are intended to find a%b, but by mistake you have typed a/b. Then it is a logical error.</p> <p><b>Semantic Errors:</b> A semantic error may happen due to wrong use of variables, wrong operations or in wrong order. For example, trying to modify un-initialized variable etc.</p> <p><b>Building Blocks of Programs:</b> Input, output, sequential execution, conditional execution, repeated execution and reuse.</p>	4M+2M
(b)	<p><b>Nested Conditionals:</b> one set of conditional statements can be nested inside the other.</p> <p><b>Example</b></p> <pre>marks=float(input("Enter marks:")) if marks&gt;=60:     if marks&lt;70:         print("First Class")     else:         print("Distinction")</pre> <p><b>Chained Conditionals:</b> Some of the programs require more than one possibility to be checked for executing a set of statements. That means, we may have more than one branch.</p> <pre> graph TD     Start(( )) --&gt; Cond1{Cond1}     Cond1 -- T --&gt; S1[Statement Block-1]     Cond1 -- F --&gt; Cond2{Cond2}     Cond2 -- T --&gt; S2[Statement Block-2]     Cond2 -- F --&gt; Dots[...]     Dots --&gt; Condn{Condn}     Condn -- T --&gt; Sn[Statement Block-n]     Condn -- F --&gt; Sn1[Statement Block-(n+1)]     S1 --&gt; Merge(( ))     S2 --&gt; Merge     Sn --&gt; Merge     Sn1 --&gt; Merge     Merge --&gt; End(( ))   </pre> <p><b>Example:</b> <pre>marks=float(input("Enter marks:")) if marks &gt;= 80:     print("First Class with Distinction")</pre> </p>	3M+3M

	<pre> elif marks &gt;= 60 and marks &lt; 80:     print("First Class") elif marks &gt;= 50 and marks &lt; 60:     print("Second Class") elif marks &gt;= 35 and marks &lt; 50:     print("Third Class") else:     print("Fail") </pre>	
(c)	<p><b>Python user defined function to find the smallest of three numbers.</b></p> <pre> a = int(input('Enter first number :')) b = int(input('Enter second number :')) c = int(input('Enter third number :')) smallest = 0 if a &lt; b and a &lt; c :     smallest = a elif b &lt; c :     smallest = b else :     smallest = c print(smallest, "is the smallest of three numbers.") </pre>	6M
2.(a)	<ul style="list-style-type: none"> <li>• We can define more than one parameter in the function definition</li> <li>• We simply add more arguments when we call the function</li> <li>• We match the number and order of arguments and parameters</li> </ul> <pre> def addtwo(a, b):     added = a + b     return added  x = addtwo(3, 5) print(x) </pre>	6M
(b)	<p>The type of the variable/value can be converted using functions int(), float(), str(). Python provides built-in functions that convert values from one type to another.</p> <pre> int('20') float('3.5') str(21) </pre> <p>Python provides a rich set of mathematical functions through the module math. To use these functions, the math module has to be imported in the code.</p> <pre> sqrt(), pi, log10(), log(), sin(), cos(), tan(), pow() </pre>	3M+3M

(c)	<pre>import math a=int(input('Enter the length of the side for square : ')) l=int(input('Enter the length of the rectangle : ')) b=int(input('Enter the breadth of the rectangle : ')) r=int(input('Enter the radius of the circle : ')) print("Area of square : ",a*a) print("Area of rectangle : ",l*b) print("Area of circle : ",math.pi*r*r)</pre>	6M
3.	<p><b>While Loop:</b> A loop may execute infinite number of times when the condition is never going to become false.</p> <p><b>Example:</b></p> <pre>n=1 while True:     print(n)     n=n+1</pre> <p><b>For Loop:</b> When we know total number of times the set of statements to be executed, for loop will be used.</p> <p><b>Example:</b></p> <pre>for i in "Hello":     print(i, end="\t")</pre>	3M+3M
4	<ul style="list-style-type: none"> <li>• Sometimes you are in an iteration of a loop and want to finish the current iteration and immediately jump to the next iteration.</li> <li>• In that case you can use the continue statement to skip to the next iteration without finishing the body of the loop for the current iteration.</li> </ul> <p><b>Example:</b></p> <pre>while True:     line = input('&gt; ')     if line[0] == '#':         continue     if line == 'done':         break     print(line) print('Done!')</pre>	6M+6M

  
Course In charge

  
Module Coordinator

  
HOD ECE





K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109  
SECOND INTERNAL TEST QUESTION PAPER 2022 - 23 EVEN SEMESTER

SET: A

Degree : B. E  
Branch : ECE  
Course Title : Python Application Programming  
Duration : 90 Minutes


USN									
-----	--	--	--	--	--	--	--	--	--

Semester : VI A & B  
Course Code : 18EC646  
Date : 6-6-2023  
Max Marks : 30

Note: Answer ONE full question from each part.


K-Levels: K1-Remembering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	Make use of syntax and example programs to explain the properties and slicing of Lists.	6	CO3	K3
(b)	Differentiate between POP and REMOVE methods on lists. How to delete more than one element from a list.	6	CO3	K3
(c)	Make use of python program to demonstrate creation and indexing in dictionaries.	6	CO3	K3
<b>OR</b>				
2(a)	Choose any two list operations and list methods and explain with examples.	6	CO3	K3
(b)	Identify the differences between tuples and lists with examples.	6	CO3	K3
(c)	Make use of example programs to explain the following operations in tuples: (i) Sum of two tuples. (ii) Slicing operators. (iii) Assignment to variables.	6	CO3	K3
<b>PART-B</b>				
3(a)	Choose any 6 string handling methods in python and explain with examples	6	CO2	K3
(b)	Make use of example program to define a class, instance, instantiation, attributes and accessing of class members.	6	CO4	K3
<b>OR</b>				
4(a)	Make use of syntaxes and examples to explain read (), write () methods for a file.	6	CO2	K3
(b)	Make use of python code, to explain how functions return instance values.	6	CO4	K3

  
Course In charge

  
Module Coordinator

  
HoD ECE

  
Principal  
Sulebhd.



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**SECOND INTERNAL TEST QUESTION PAPER 2022-23 EVEN SEMESTER**

SET - A

**SCHEME AND SOLUTION**

Degree : B. E  
 Branch : Electronics & Communication Engg.  
 Course Title : Python Application Programming

Semester : VI  
 Course Code : 18EC646  
 Max Marks : 30

Q. No.	POINTS	MARKS												
1 (a)	<p>Properties of Lists: -3M            Lists are ordered Sequence            Example: &gt;&gt;&gt; a = ['foo', 'bar', 'baz', 'qux']            Lists can contain any arbitrary objects            Example:            &gt;&gt;&gt; a = [21.42, 'foobar', 3, 4, 'bark', False, 3.14159]            List elements can be accessed by index.</p> <div style="display: flex; align-items: center; margin: 10px 0;"> <div style="border: 1px solid gray; padding: 5px; margin-right: 10px;"> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <td>'foo'</td> <td>'bar'</td> <td>'baz'</td> <td>'qux'</td> <td>'quux'</td> <td>'corge'</td> </tr> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table> </div> <div> <p>Example &gt;&gt;&gt; a[0]                      'foo'            &gt;&gt;&gt; a[2]                      'baz'</p> </div> </div> <p style="margin-left: 100px; font-size: small;">List indices</p> <p>Lists can be nested to arbitrary depth.            Example: x = ['a', ['bb', ['ccc', 'ddd'], 'ee', 'ff'], 'g', ['hh', 'ii'], 'j']            Lists are mutable.            Example: &gt;&gt;&gt; numbers = [17, 123]                      &gt;&gt;&gt; numbers [1] = 5                      &gt;&gt;&gt; print(numbers)                              [17, 5]</p> <p><u>List Slicing-3M</u>            Example:            &gt;&gt;&gt; t = ['a', 'b', 'c', 'd', 'e', 'f']            &gt;&gt;&gt; t[1:3]                  ['b', 'c']            &gt;&gt;&gt; t[:4]                  ['a', 'b', 'c', 'd']            &gt;&gt;&gt; t[3:]                  ['d', 'e', 'f']            &gt;&gt;&gt; t[:]                  ['a', 'b', 'c', 'd', 'e', 'f']</p> <p align="right">#Explanation about every command</p>	'foo'	'bar'	'baz'	'qux'	'quux'	'corge'	0	1	2	3	4	5	3+3=6
'foo'	'bar'	'baz'	'qux'	'quux'	'corge'									
0	1	2	3	4	5									
1(b)	<p>POP:4 M            -use pop if the index of the element to be removed is known.            - pop modifies the list and returns the element that was removed.            -If index is not provided pop deletes and returns the last element.</p>	4+2=6M												

	<pre>&gt;&gt;&gt; t = ['a', 'b', 'c'] &gt;&gt;&gt; x = t.pop(1) &gt;&gt;&gt; print(t) ['a', 'c'] &gt;&gt;&gt; print(x) B &gt;&gt;&gt; t1 = ['a', 'b', 'c'] &gt;&gt;&gt; y = t1.pop() &gt;&gt;&gt; print(t1) ['a', 'b'] REMOVE:-2M Use remove if the element to be removed is known (but not the index). The return value from remove is None. &gt;&gt;&gt; t = ['a', 'b', 'c'] &gt;&gt;&gt; t.remove('b') &gt;&gt;&gt; print(t) ['a', 'c'] #Explanation about every command</pre>	
1 (c)	<pre>Dictionaries creation -3M &gt;&gt;&gt; purse = dict() &gt;&gt;&gt; purse['money'] = 12 &gt;&gt;&gt; purse['candy'] = 3 &gt;&gt;&gt; purse['tissues'] = 75 &gt;&gt;&gt; print(purse) {'money': 12, 'tissues': 75, 'candy': 3} Dictionaries Indexing-3M &gt;&gt;&gt; print(purse['candy']) 3 &gt;&gt;&gt; purse['candy'] = purse['candy'] + 2 &gt;&gt;&gt; print(purse) {'money': 12, 'tissues': 75, 'candy': 5} #Explanation about every command</pre>	3+3=6M
2(a)	<pre>Any 2 List Operations:-3M i) Concatenation using "+"- The two list can be created and can be joined using '+' operator Eg- a= [1,2,3]     b= [4,5,6]     c=a + b     print(c) OUTPUT:- [1,2,3,4,5,6] ii) Repetitions using "*" The * is used to repeat the list of number of times Eg - a= [1,2,3]      b=3      c=a*b      print(c) OUTPUT :-[1,2,3,1,2,3,1,2,3] Any 2 methods:-3M (a) append adds a new element to the end of a list:</pre>	3+3=6M

Example:

```
>>> t = ['a', 'b', 'c']
>>> t.append('d')
>>> print(t)
['a', 'b', 'c', 'd']
```

(b) Extend takes a list as an argument and appends all of the elements. Leaves t2 unmodified.

Example:

```
>>> t1 = ['a', 'b', 'c']
>>> t2 = ['d', 'e']
>>> t1.extend(t2)
>>> print(t1)
['a', 'b', 'c', 'd', 'e']
```

(c) Sort arranges the elements of the list from low to high:

Example:

```
>>> t = ['d', 'c', 'e', 'b', 'a']
>>> t.sort()
>>> print(t)
['a', 'b', 'c', 'd', 'e']
```

#Explanation about every command

2(b)

Sl. No.	List	Tuple
1.	Lists are mutable	Tuples are immutable
2.	Lists have several built-in methods	Tuple does not have many built-in methods.
3.	Lists consume more memory	Tuples consume less memory as compared to the list
4.	The implication of iterations is time consuming in the list	Implications of iterations are much faster in tuples
5.	A list has a class of 'list', <class 'list'>	A tuple has a class of 'tuple', <class 'tuple'>
6.	Example- list_data = ['an', 'example', 'of', 'a', 'list'] print(list_data) output- ['an', 'example', 'of', 'a', 'list']	Example- tuple_data = ('this', 'is', 'an', 'example', 'of', 'tuple') print(tuple_data) output- ( 'this', 'is', 'an', 'example', 'of', 'tuple')

#Explanation about every command

6\*1=6M

2(c)

Sum of two tuples-2M

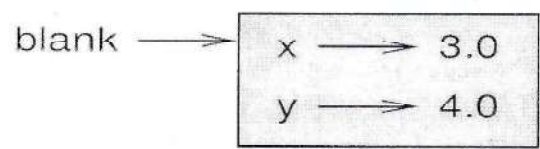
```
>>> t = ('a', 'b', 'c', 'd', 'e')
>>> t = ('A',) + t[1:]
>>> print(t)
('A', 'b', 'c', 'd', 'e')
```

Slicing operator-2M

```
>>> t = ('a', 'b', 'c', 'd', 'e')
>>> print(t[1:3])
```


2+2+2=6M

	<p>('b', 'c')</p> <p>Assignment to variables-2M</p> <pre>&gt;&gt;&gt; m = ('have', 'fun') &gt;&gt;&gt; x, y = m &gt;&gt;&gt; x 'have' &gt;&gt;&gt; y 'fun'</pre> <p>#Explanation about every command</p>	
3a	<p>1.capitalize () – Converts the first character to upper case</p> <pre>txt = "hello, and welcome to my world." x = txt.capitalize() print (x) output - Hello, and welcome to my world.</pre> <p>2.find () - Searches the string for a specified value and returns the position of where it was found</p> <pre>txt = "Hello, welcome to my world." x = txt.find("welcome") print(x) output – 7</pre> <p>3.endswith () - Returns true if the string ends with the specified value</p> <pre>txt = "Hello, welcome to my world." x = txt.endswith(".") print(x) output – True</pre> <p>4.lower () – Converts a string into lower case</p> <pre>txt = "Hello my FRIENDS" x = txt.lower() print(x) output – hello my friends</pre> <p>5.split () – Splits the string at the specified separator, and returns a list</p> <pre>txt = "welcome to the jungle" x = txt.split() print(x) output – ['welcome', 'to', 'the', 'jungle']</pre> <p>6.upper () - Converts a string into upper case</p> <pre>txt = "Hello my friends" x = txt.upper() print(x) output – HELLO MY FRIENDS</pre> <p>#Explanation about every command</p>	6*1=6M
3b	<p>class: A user-defined compound type. A class can also be thought of as a template for the objects that are instances of it.</p> <p>instantiate: To create an instance of a class.</p>	2+3+1=6M

	<p>instance: An object that belongs to a class.  attribute: One of the named data items that makes up an instance.-2M  Example:  class Point:      pass  blank = Point()  blank.x = 3.0  blank.y = 4.0  x = blank.x  print(x)  print(blank.y)  3.0  #Explanation about every command-3M</p>  <pre> blank → [ x → 3.0          y → 4.0 ] </pre>	
4a	<ul style="list-style-type: none"> <li>• File read() <pre> fhand = open('sample.txt') inp = fhand.read() print(len(inp)) print(inp[:20]) </pre> </li> <li>• File Write () <pre> fout = open('output1.txt', 'w') print(fout) line1 = "Prepare well for IA 2\n" fout.write(line1) line2 = "Module 2(partial),3(full),4(partial)\n" fout.write(line2) fout.close() </pre> </li> <li>• write(): <p>The write() method writes a specified text to the file.  Where the specified text will be inserted depends on the file mode and stream position.  "a": The text will be inserted at the current file stream position, default at the end of the file.  "w": The file will be emptied before the text will be inserted at the current file stream position, default 0.</p> <ul style="list-style-type: none"> <li>• Syntax : <pre> file.write(byte) </pre> </li> <li>• Example: <pre> f = open("demofile2.txt", "a") f.write("\nSee you soon!") f.close() </pre> </li> </ul> <p>#open and read the file after the appending:</p> </li> </ul>	3+3=6M
	1M	

	<pre>f = open("demofile2.txt", "r") print(f.read())</pre> <ul style="list-style-type: none"> <li>• output : C:\Users\My Name&gt;python demo_file_write2.py Hello! Welcome to demofile2.txt This file is for testing purposes. Good Luck! See you soon!</li> <li>• Read(): The read() method returns the specified number of bytes from the file. Default is -1 which means the whole file.</li> <li>• SYNTAX : file.read()</li> <li>• EXAMPLE: f = open("demofile.txt", "r") print(f.read(33))</li> <li>• OUTPUT: C:\Users\My Name&gt;python demo_file_read.py Hello! Welcome to demofile.txt This file is for testing purposes. Good Luck!</li> </ul> <p>#Explanation about every command</p>	
4b	<p>Functions can return instances. For example, find_center takes a Rectangle as an argument and returns a Point that contains the coordinates of the center of the Rectangle:</p> <pre>def find_center(rect):     p = Point()     p.x = rect.corner.x + rect.width/2     p.y = rect.corner.y + rect.height/2     return p</pre> <pre>&gt;&gt;&gt; center = find_center(box) &gt;&gt;&gt; print_point(center) (50, 100)</pre>	3+3=6M

  
Course In charge

  
Module Coordinator

  
HOD ECE



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**SECOND INTERNAL TEST QUESTION PAPER 2022 – 23 EVEN SEMESTER**

**SET: B**

USN

Degree : B. E  
Branch : ECE  
Course Title : Python Application Programming  
Duration : 90 Minutes

Semester : VI A & B  
Course Code : 18EC646  
Date : 6-6-2023  
Max Marks : 30

**Note: Answer ONE full question from each part.**

**K-Levels: K1-Remebering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating**

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	Choose and explain any 3 lists handling functions in python with example.	6	CO3	K3
(b)	Make use of syntax to explain how tuples are created in python? Explain the different ways of accessing and creating them.	6	CO3	K3
(c)	Build a python program using lists to store and display the average of N integers accepted from the user.	6	CO3	K3
<b>OR</b>				
2(a)	Make use of a program to explain lists slicing and list traversing.	6	CO3	K3
(b)	Make use of python program to demonstrate creation and indexing in dictionaries.	6	CO3	K3
(c)	Identify the need of regular expressions in python language using examples.	6	CO3	K3
<b>PART-B</b>				
3(a)	Choose and explain any 6 built-in string manipulation functions supported by python.	6	CO2	K3
(b)	Identify the differences between shallow equality and deep equality with respect to classes and objects, with the help of python codes.	6	CO4	K3
<b>OR</b>				
4(a)	Make use of syntaxes and examples to explain file functions in python.	6	CO2	K3
(b)	Make use of example program to instantiate a class and how the class members are accessed?	6	CO4	K3

  
Course In charge

  
Module Coordinator

  
HoD ECE

  
Principal





**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**THIRD INTERNAL TEST QUESTION PAPER 2022 – 23 EVEN SEMESTER**

SET: A

Degree : B. E  
Branch : ECE  
Course Title : Python Application Programming  
Duration : 90 Minutes

USN									
-----	--	--	--	--	--	--	--	--	--

Semester : VI A& B  
Course Code : 18EC646  
Date : 4-07-2023  
Max Marks : 30

**Note: Answer ONE full question from each part.**

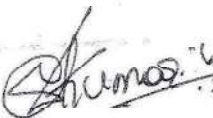
K-Levels: K1-Remebering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	Make use of python code and explain how to retrieve contents of an image file over socket connection?	6	CO5	K3
(b)	Develop python code for parsing JSON and explain.	6	CO5	K3
(c)	Make use of SQL cursor architecture to explain connect, execute, and close command of databases with suitable examples.	6	CO5	K3
<b>OR</b>				
2(a)	Make use of python code and explain how to retrieve web pages with urllib.	6	CO5	K3
(b)	Develop a python code for parsing XML and explain.	6	CO5	K3
(c)	Identify the advantages of Service Oriented Architecture and explain the concept.	6	CO5	K3
<b>PART-B</b>				
3 (a)	Make use of a python program to explain_str_method.	6	CO4	K3
(b)	Make use of Python code to explain the polymorphic functions.	6	CO4	K3
<b>OR</b>				
4 (a)	Develop a python code to overload "+", and "*" operator by the methods __add_ and __mul_.	6	CO4	K3
(b)	Identify the difference in working of pure functions and modifiers with python codes and explain.	6	CO4	K3

  
Course In charge

  
Module Coordinator

  
HOD ECE

  
Principal Selected



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**THIRD INTERNAL TEST QUESTION PAPER 2022-23 EVEN SEMESTER**

SET - A

**SCHEME AND SOLUTION**

Degree : B. E  
Branch : Electronics & Communication Engg.  
Course Title : Python Application Programming

Semester : VI  
Course Code : 18EC646  
Max Marks : 30

Q.NO.	POINTS	MARKS
1.(a)	<p><b><u>Retrieve an image over HTTP</u></b> <b>Program:</b> import socket import time HOST = 'data.pr4e.org' PORT = 80 mysock = socket.socket(socket.AF_INET, socket.SOCK_STREAM) mysock.connect((HOST, PORT)) mysock.sendall(b'GET http://data.pr4e.org/cover3.jpg HTTP/1.0\r\n\r\n') count = 0 picture = b"" while True:     data = mysock.recv(5120)     if len(data) &lt; 1: break     time.sleep(0.25)     count = count + len(data)     print(len(data), count)     picture = picture + data mysock.close() pos = picture.find(b"\r\n\r\n") print('Header length', pos) print(picture[:pos].decode()) picture = picture[pos+4: fhand = open("stuff.jpg", "wb") fhand.write(picture) fhand.close()</p>	6M
(b)	<p><b><u>Parsing Json</u></b> <b>Program:</b> import json data = "[{ 'id' : '001', 'x' : '2', 'name' : 'Chuck' }, { 'id' : '009', 'x' : '7', 'name' : 'Brent' }]" info = json.loads(data)</p>	6M

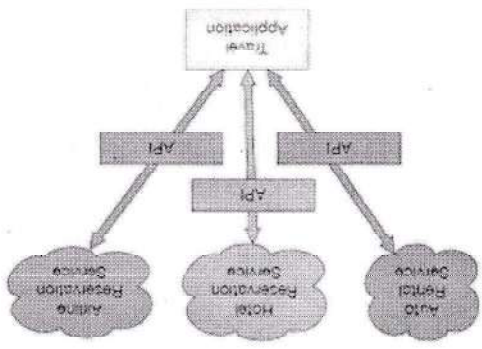
	<pre>print('User count:', len(info)) for item in info:     print('Name', item['name'])     print('Id', item['id'])     print('Attribute', item['x'])</pre>	
(c)	<p>Explanation on SQL cursor architecture to connect, execute, and close command of databases</p> <p>Example:</p> <pre>import sqlite3 conn = sqlite3.connect('music.sqlite') cur = conn.cursor() cur.execute('DROP TABLE IF EXISTS Tracks') cur.execute('CREATE TABLE Tracks (title TEXT, plays INTEGER)') cur.execute('INSERT INTO Tracks (title, plays) VALUES (?, ?),('Thunderstruck', 20)) cur.execute('INSERT INTO Tracks (title, plays) VALUES (?, ?),('My Way', 15)') conn.commit() print('Tracks:') cur.execute('SELECT title, plays FROM Tracks') for row in cur:     print(row) cur.execute('DELETE FROM Tracks WHERE plays &gt; 17') conn.commit() for row in cur:     print(row) conn.commit() cur.close() conn.close()</pre> <p><b>Fig</b></p>	<p><b>2M+4M</b></p>
2.(a)	<ul style="list-style-type: none"> <li>• Using urllib, a web page is treated much like a file. On indicating which web page to retrieve and urllib handles all of the HTTP protocol and header details.</li> <li>• Once the web page has been opened with urllib.urlopen, it can be treated like a file and read through it using a for loop.</li> <li>• When the program runs, only the output of the contents of the file are seen. The headers are still sent, but the urllib code consumes the headers and only returns the data.</li> </ul> <p>Program:</p> <pre>import urllib.request fhand = urllib.request.urlopen('http://data.pr4e.org/romeo.txt') for line in fhand:     print(line.decode().strip())</pre>	<p><b>3M+3M</b></p>

(b) Parsing XML Program:  
 import xml.etree.ElementTree as ET  
 input = ""  
 <stuff>  
 <users>  
 <user x="2">  
 <id>001</id>  
 <name>Chuck</name>  
 </user>  
 <user x="7">  
 <id>009</id>  
 <name>Brent</name>  
 </user>  
 </users>  
 </stuff>  
 stuff = ET.fromstring(input)  
 lst = stuff.findall('users/user')  
 print('User count: ', len(lst))  
 for item in lst:  
 print('Name', item.find('name').text)  
 print('Id', item.find('id').text)  
 print('Attribute', item.get('x'))

6M

(c) Application Program Interfaces (APIs): When we use an API,

- generally one program makes a set of services available for use by other applications and publishes the APIs (i.e., the "rules") that must be followed to access the services provided by the program.
- When an application makes a set of services in its API available over the web, we call these web services.
- Service-oriented architecture (SOA). A SOA approach is one where our overall application makes use of the services of other applications. A Service-oriented architecture has many advantages, including: (1) always maintain only one copy of data (this is particularly important for things like hotel reservations where we do not want to over-commit) and (2) the owners of the data can set the rules about the use of their data.



2M+4M

(b)

**Parsing XML Program:**

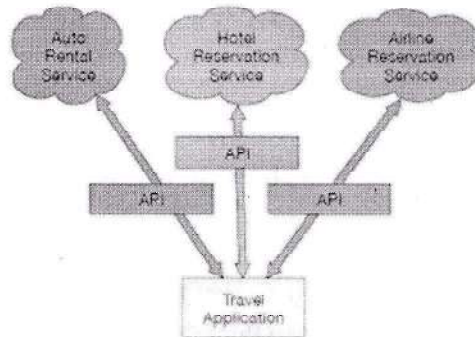
```
import xml.etree.ElementTree as ET
input = '''
<stuff>
  <users>
    <user x="2">
      <id>001</id>
      <name>Chuck</name>
    </user>
    <user x="7">
      <id>009</id>
      <name>Brent</name>
    </user>
  </users>
</stuff>'''
stuff = ET.fromstring(input)
lst = stuff.findall('users/user')
print('User count:', len(lst))
for item in lst:
    print('Name', item.find('name').text)
    print('Id', item.find('id').text)
    print('Attribute', item.get('x'))
```

6M

(c)

- Application Program Interfaces (APIs): When we use an API, generally one program makes a set of services available for use by other applications and publishes the APIs (i.e., the “rules”) that must be followed to access the services provided by the program.
- When an application makes a set of services in its API available over the web, we call these web services.
- Service-oriented architecture (SOA). A SOA approach is one where our overall application makes use of the services of other applications. A Service-oriented architecture has many advantages, including: (1) always maintain only one copy of data (this is particularly important for things like hotel reservations where we do not want to over-commit) and (2) the owners of the data can set the rules about the use of their data.

2M+4M



3.(a)	__Str method__ : Purpose-1M Definition using example program -2M Calling method using example program-2M Output-1M	6M
(b)	Polymorphic Function : Purpose-1M Definition using example program -2M Calling method using example program-2M Output-1M	6M
4(a)	methods __add__ and __mul__ (3M+3M) Definition using example program -2M Calling method using example program-2M Output-1M	6M
(b)	pure functions and modifiers (3M +3M) Definition using example program -2M Calling method using example program-2M Output-1M	6M



Course In charge



Module Coordinator



HOD ECE



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**THIRD INTERNAL TEST QUESTION PAPER 2022 – 23 EVEN SEMESTER**

SET: B

USN | 1 | K | S | 2 | 0 | E | C | 0 | b | 9

Degree : B. E  
Branch : ECE  
Course Title : Python Application Programming  
Duration : 90 Minutes

Semester : VI A & B  
Course Code : 18EC646  
Date : 4-07-2023  
Max Marks : 30

**Note: Answer ONE full question from each part.**

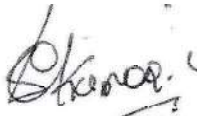
K-Levels: K1-Remembering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	Identify how socket connection can be established to the internet using python code over the TCP/IP connection and the http protocol to get the web document.	6	CO5	K3
(b)	Identify the differences between JavaScript object Notation (JSON) and XML.	6	CO5	K3
(c)	Make use of cursor architecture and an example program to create of database table.	6	CO5	K3
<b>OR</b>				
2(a)	Make use of urllib to write a python code to read the file from web and to retrieve the data of the file. Also compute the frequency of each word in the file.	6	CO5	K3
(b)	Model a python program to retrieve a node present in XML tree using example program	6	CO5	K3
(c)	Develop a Python code to support for parsing HTML using regular expression.	6	CO5	K3
<b>PART-B</b>				
3(a)	Make use of a python code to explain how __int__ method is invoked when an object is initiated.	6	CO4	K3
(b)	Make use of a python code to explain pure functions and explain.	6	CO4	K3
<b>OR</b>				
4(a)	Make use of python code to explain the concept of operator overloading.	6	CO4	K3
(b)	Make use of a python code to explain Modifier functions and explain.	6	CO4	K3

  
Course In charge

  
Module Coordinator

  
HOD ECE

  
Principal



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**THIRD INTERNAL TEST QUESTION PAPER 2022-23 EVEN SEMESTER**

SET - B

**SCHEME AND SOLUTION**

Degree : B. E  
 Branch : Electronics & Communication Engg  
 Course Title : Python Application Programming

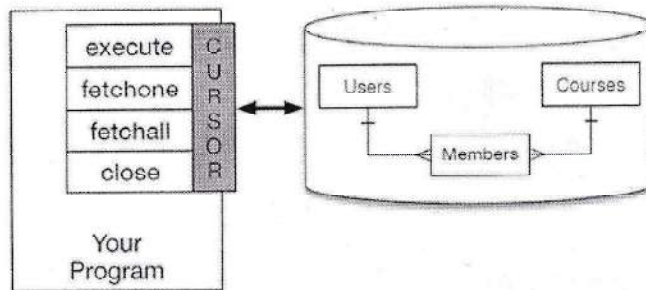
Semester : VI  
 Course Code : 18EC646  
 Max Marks : 30

Q.NO.	POINTS	MARKS									
I.(a)	<pre> import socket mysock = socket.socket(socket.AF_INET, socket.SOCK_STREAM) mysock.connect(('data.pr4e.org', 80)) cmd = 'GET http://data.pr4e.org/romeo.txt HTTP/1.0\r\n\r\n'.encode() mysock.send(cmd) while True:     data = mysock.recv(512)     if len(data) &lt; 1:         break     print(data.decode(),end='') mysock.close() </pre>	6M									
(b)	<table border="1"> <thead> <tr> <th></th> <th>XML (eXtensible Markup Language)</th> <th>JSON (JavaScript Object Notation)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>In XML, we can add attributes like "intl" to the "phone" tag.</td> <td>In JSON, we simply have key-value pairs</td> </tr> <tr> <td>2</td> <td>XML includes tags like "person"</td> <td>In JSON, tags are replaced by a set of outer curly braces.</td> </tr> </tbody> </table>		XML (eXtensible Markup Language)	JSON (JavaScript Object Notation)	1	In XML, we can add attributes like "intl" to the "phone" tag.	In JSON, we simply have key-value pairs	2	XML includes tags like "person"	In JSON, tags are replaced by a set of outer curly braces.	6M
	XML (eXtensible Markup Language)	JSON (JavaScript Object Notation)									
1	In XML, we can add attributes like "intl" to the "phone" tag.	In JSON, we simply have key-value pairs									
2	XML includes tags like "person"	In JSON, tags are replaced by a set of outer curly braces.									



3	XML is complex than JSON	JSON structures are simpler than XML
4	XML has more capabilities than JSON	JSON has fewer capabilities than XML
4	It has start and end tags.	It doesn't use end tag.
5	It supports namespaces.	It does not provide any support for namespaces.
6	It doesn't support array.	It supports array.

(c)

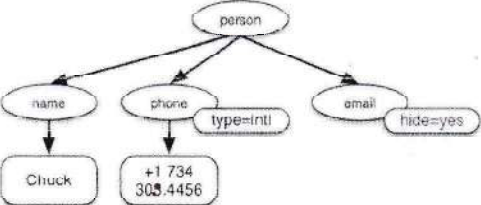


2M+4M

**Program:**

```
import sqlite3
conn = sqlite3.connect('music.sqlite')
cur = conn.cursor()
cur.execute('DROP TABLE IF EXISTS Tracks')
cur.execute('CREATE TABLE Tracks (title TEXT, plays INTEGER)')
cur.execute('INSERT INTO Tracks (title, plays) VALUES (?, ?),('Thunderstruck', 20)')
cur.execute('INSERT INTO Tracks (title, plays) VALUES (?, ?),('My Way', 15)')
conn.commit()
print('Tracks:')
cur.execute('SELECT title, plays FROM Tracks')
for row in cur:
    print(row)
cur.execute('DELETE FROM Tracks WHERE plays > 17')
conn.commit()
for row in cur:
    print(row)
conn.commit()
cur.close()
conn.close()
```

3M+3M

<p>2.(a)</p>	<p><b>To retrieve web pages with urllib</b></p> <pre>import urllib.request fhand = urllib.request.urlopen('http://data.pr4e.org/romeo.txt') for line in fhand:     print(line.decode().strip())</pre> <p><b>Compute the frequency of each word in the file</b></p> <pre>import urllib.request fhand = urllib.request.urlopen('http://data.pr4e.org/romeo.txt') counts = dict() for line in fhand:     words = line.decode().split()     for word in words:         counts[word] = counts.get(word, 0) + 1 print(counts)</pre>	<p>3M+3M</p>
<p>(b)</p>	 <pre>import xml.etree.ElementTree as ET data = "" &lt;person&gt;   &lt;name&gt;Chuck&lt;/name&gt;   &lt;phone type="intl"&gt;     +1 734 303 4456   &lt;/phone&gt;   &lt;email hide="yes" /&gt; &lt;/person&gt;"" tree = ET.fromstring(data) print('Name:', tree.find('name').text) print('Attr:', tree.find('email').get('hide')) print('Attr:', tree.find('phone').get('type'))</pre>	<p>2M+4M</p>
<p>(c)</p>	<p>Program:</p> <pre># Search for link values within URL input import urllib.request, urllib.parse, urllib.error import re import ssl # Ignore SSL certificate errors ctx = ssl.create_default_context() ctx.check_hostname = False ctx.verify_mode = ssl.CERT_NONE url = input('Enter - ') html = urllib.request.urlopen(url, context=ctx).read()</pre>	<p>6M</p>

3.(a)	<pre>links = re.findall(b'href="(http[s]?://.*?)"', html) for link in links: print(link.decode())</pre> <p>__Str method__ : Purpose-1M  Definition using example program -2M  Calling method using example program-2M  Output-1M</p>	6M
(b)	<p>Pure functions  Definition using example program -2M  Calling method using example program-2M  Output-1M</p>	6M
4 (a)	<p>methods __add__ or __mul__.  Definition using example program -2M  Calling method using example program-2M  Output-1M</p>	6M
(b)	<p>Modifier Function  Definition using example program -2M  Calling method using example program-2M  Output-1M</p>	6M



Course In charge



Module Coordinator



HOD ECE



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**FIRST INTERNAL TEST QUESTION PAPER 2022-23 EVEN SEMESTER**

SET - B

**SCHEME AND SOLUTION**

Degree : B. E  
Branch : Electronics & Communication Eng.  
Course Title : Python Application Programming

Semester : VI  
Course Code : 18EC646  
Max Marks : 30

Q.NO.	POINTS	MARKS
1.(a)	<p>Any 3 functions: Ex: stuff = list() &gt;&gt;&gt; stuff.append('book') &gt;&gt;&gt; stuff.append(99) &gt;&gt;&gt; print(stuff) ['book', 99]</p> <p>&gt;&gt;&gt; friends = ['Joseph', 'Glenn', 'Sally'] &gt;&gt;&gt; friends.sort() &gt;&gt;&gt; print(friends) ['Glenn', 'Joseph', 'Sally']</p>	6M
(b)	<p>Tuples are another kind of sequence that functions much like a list - they have elements which are indexed starting at 0.</p> <pre>&gt;&gt;&gt; x = ('Glenn', 'Sally', 'Joseph') &gt;&gt;&gt; print(x[2]) Joseph &gt;&gt;&gt; y = (1, 9, 2) &gt;&gt;&gt; print(y) (1, 9, 2) &gt;&gt;&gt; print(max(y)) 9</pre> <p><b>Tuples and assignment</b></p> <pre>&gt;&gt;&gt; (x, y) = (4, 'fred') &gt;&gt;&gt; print(y) fred</pre>	2M+2M+2M

(c)	<p><b>Tuples and Dictionaries</b></p> <pre>&gt;&gt;&gt; d = dict() &gt;&gt;&gt; d['csev'] = 2 &gt;&gt;&gt; d['cwen'] = 4 &gt;&gt;&gt; tups = list(d.items()) &gt;&gt;&gt; print(tups) [('csev', 2), ('cwen', 4)]</pre> <pre>numlist = list() while True :     inp = input('Enter a number: ')     if inp == 'done' : break     value = float(inp)     numlist.append(value)</pre> <pre>average = sum(numlist) / len(numlist) print('Average:', average)</pre>	6M
2.(a)	<p><b>List Traversing</b></p> <pre>friends = ['Joseph', 'Dravid', 'Dhoni'] for friend in friends :     print('Happy New Year:', friend) print('Done!')</pre> <p><b>List Slicing</b></p> <pre>&gt;&gt;&gt; t = [9, 41, 12, 3, 74, 15] &gt;&gt;&gt; t[1:3] [41,12] &gt;&gt;&gt; t[:4] [9, 41, 12, 3] &gt;&gt;&gt; t[3:] [3, 74, 15] &gt;&gt;&gt; t[:] [9, 41, 12, 3, 74, 15]</pre>	3M+3M
(b)	<p><b>Dictionaries creation and Indexing</b></p> <pre>&gt;&gt;&gt; purse = dict() &gt;&gt;&gt; purse['money'] = 12</pre>	6M

	<p>1</p> <p>c.  <pre>&gt;&gt;&gt; line = ' Here we go ' &gt;&gt;&gt; line.strip() 'Here we go'</pre> </p> <p>d.  <pre>&gt;&gt;&gt; line = 'Have a nice day' &gt;&gt;&gt; line.startswith('Have') True</pre> </p> <p>e.  <pre>&gt;&gt;&gt; line = 'Have a nice day' &gt;&gt;&gt; line.lower() 'have a nice day' &gt;&gt;&gt; line.lower().startswith('h') True</pre> </p> <p>f.  <pre>&gt;&gt;&gt; greet = 'Hello Bob' &gt;&gt;&gt; nstr = greet.replace('Bob','Jane') &gt;&gt;&gt; print(nstr) Hello Jane</pre> </p> <p>(b) Shallow equality: If the two variables refer to the same object. Compares only the references, not the contents of the objects. To find out if two references refer to the same object, use the == operator.  EXAMPLE:  <pre>class Point:     pass &gt;&gt;&gt; p1 = Point() &gt;&gt;&gt; p1.x = 3 &gt;&gt;&gt; p1.y = 4 &gt;&gt;&gt; p2 = Point() &gt;&gt;&gt; p2.x = 3 &gt;&gt;&gt; p2.y = 4 &gt;&gt;&gt; p1 == p2 False</pre> <p>Even though p1 and p2 contain the same coordinates, they are not the same object. If we assign p1 to p2, then the two variables are aliases of the same object:</p> </p>	<p>6M</p> <p>1M+2M+2M+1M</p>
--	--	------------------------------

```

>>> p3 = p1
>>> p1 == p3
True

```

Deep equality: If objects have same contents.  
If the two variables refer to the same object, they have both shallow and deep equality.

Example: Function definition to verify deep equality:

```

def samePoint(p1, p2) :
    return (p1.x == p2.x) and (p1.y == p2.y)
samePoint(p2, p2)

```

OUTPUT: True

#Explanation about every command

Functions can return instances. For example, find\_center takes a Rectangle as an argument and returns a Point that contains the coordinates of the center of the Rectangle:

```

def find_center(rect):
    p = Point()
    p.x = rect.corner.x + rect.width/2
    p.y = rect.corner.y + rect.height/2
    return p

```

```

>>> center = find_center(box)
>>> print_point(center)
(50, 100)

```

4.(a)

#### File Open

Before we can read the contents of the file, we must tell Python which file we are going to work with and what we will be doing with the file. This is done with the open() function. open() returns a "file handle"

#### File Read

A file handle open for read can be treated as a sequence of strings where each line in the file is a string in the sequence. Use the for statement to iterate through a sequence.

Example:

```

>>> fhand = open('mbox-short.txt')
>>> inp = fhand.read()
>>> print(len(inp))
94626

```

6M

### File Write

The write method of the file handle object puts data into the file, returning the number of characters written. The default write mode is text for writing (and reading) strings.

Example

```
>>> line1 = "This here's the wattle,\n"
>>> fout.write(line1)
24
```

### File Close

When you are done writing, you have to close the file to make sure that the last bit of data is physically written to the disk so it will not be lost if the power goes off.

```
>>> fout.close()
```

(b)

```
class Rectangle:
```

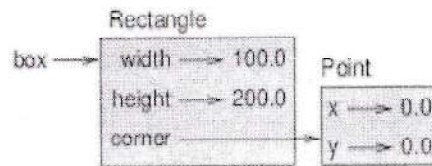
```
    """Represents a rectangle.
```

```
    attributes: width, height, corner.
```

```
    """
```

Instantiate a Rectangle object and assign values to the attributes:

```
box = Rectangle()
box.width = 100.0
box.height = 200.0
box.corner = Point()
box.corner.x = 0.0
box.corner.y = 0.0
```



The expression `box.corner.x` means, "Go to the object `box` refers to and select the attribute named `corner`; then go to that object and select the attribute named `x`."

  
Course In charge

  
Module Coordinator

  
HOD-ECE



Semester / Sec : VI/ A &amp; B

Subject Code : 18EC646

Dept / Branch : ECE

Subject : PYTHON APPLICATION PROGRAMMING

Sl.No	SEC	USN	NAME	A1	A2	A3	Avg A Marks (10)	IA1	IA2	IA3	Avg IA marks (30)	Total Marks(40)
1	A	1KS19EC026	ERAM FATHIMA	10	10	10	10	21	26	10	19	29
2	A	1KS19EC034	HIMA SWETHA S	10	10	10	10	26	29	22	26	36
3	A	1KS20EC001	ABHISHEK J	10	10	10	10	26	17	17	20	30
4	A	1KS20EC002	Aditi dubey	10	10	10	10	30	29	30	30	40
5	A	1KS20EC003	AFFEEFA SHARIEFF	10	10	10	10	28	29	16	25	35
6	A	1KS20EC004	Ajay B G	10	10	10	10	23	27	18	23	33
7	A	1KS20EC006	Akash M	10	6	10	9	23	24	18	22	31
8	A	1KS20EC008	B.S.HEMASHREE	10	10	10	10	15	25	22	21	31
9	A	1KS20EC009	BHARATH M	5	5	0	4	22	10	12	15	19
10	A	1KS20EC010	Bhavitha. B	10	10	10	10	18	30	16	22	32
11	A	1KS20EC011	Bhuvaneshwari k	10	10	10	10	25	26	21	24	34
12	A	1KS20EC012	Chaitanya k	10	10	10	10	24	18	14	19	29
13	A	1KS20EC013	CHAITHRA K	10	10	10	10	23	24	22	23	33
14	A	1KS20EC014	C. Sai Srujitha	10	4	10	8	29	21	20	24	32
15	A	1KS20EC015	C.Umadevi	10	10	10	10	28	24	20	24	34
16	A	1KS20EC016	Chaya. S	10	10	10	10	28	30	15	25	35
17	A	1KS20EC017	Chethan G	10	4	10	8	16	19	20	19	27
18	A	1KS20EC018	Chethankumar J	10	10	6	9	14	12	7	11	20
19	A	1KS20EC019	CHEETHAN KUMAR T	8	6	10	8	22	17	11	17	25
20	A	1KS20EC020	DARSHAN K	10	6	10	9	22	29	18	23	32
21	A	1KS20EC021	DARSHAN KUMAR S	10	10	10	10	29	27	14	24	34
22	A	1KS20EC023	Dhamini. J	10	10	10	10	26	15	13	18	28
23	A	1KS20EC024	Dhruva Kumar S	10	10	5	9	19	21	19	20	29
24	A	1KS20EC025	Divya .N	10	10	10	10	21	27	17	22	32
25	A	1KS20FC026	Eshwar Biradar	10	10	8	10	18	15	15	16	26

26	A	1KS20EC027	G BHAVANA DRIYADARSHINI	10	10	10	10	29	30	20	27	37
27	A	1KS20EC028	Gagan.H.C	10	10	10	10	16	21	19	19	29
28	A	1KS20EC029	Gagana B S	10	10	10	10	21	30	9	20	30
29	A	1KS20EC030	Gandhamani C M	10	10	10	10	26	30	25	27	37
30	A	1KS20EC031	Gomitha R C	10	10	10	10	25	26	21	24	34
31	A	1KS20EC032	Harini k	10	10	9	10	23	24	17	22	32
32	A	1KS20EC033	Harshith gowda AR	10	10	7	9	19	24	24	23	32
33	A	1KS20EC034	Harshitha.B.L	10	10	10	10	24	25	19	23	33
34	A	1KS20EC035	Harshitha.J	10	10	10	10	21	26	25	24	34
35	A	1KS20EC036	HARSHITHA N	10	10	10	10	25	30	25	27	37
36	A	1KS20EC037	Inchara. P	10	10	10	10	21	29	11	21	31
37	A	1KS20EC038	Chaithanya krishna.J	10	10	10	10	16	25	15	19	29
38	A	1KS20EC039	Jamuna s g	10	10	10	10	23	30	22	25	35
39	A	1KS20EC040	Janhavi r	10	10	10	10	29	30	21	27	37
40	A	1KS20EC041	JAYANTH. H	10	10	10	10	26	24	24	25	35
41	A	1KS20EC042	K Jeevitha	10	10	10	10	29	28	24	27	37
42	A	1KS20EC043	K.M.Amshumanth	10	10	10	10	30	30	23	28	38
43	A	1KS20EC045	Kavana.G.S	10	5	8	8	17	18	10	15	23
44	A	1KS20EC046	Kavya S M	10	10	10	10	27	30	21	26	36
45	A	1KS20EC047	Keerthana BS	10	10	10	10	17	16	13	16	26
46	A	1KS20EC048	Kiran Dev D	10	10	10	10	26	24	23	25	35
47	A	1KS20EC049	KIRAN V NARAYAN	10	10	10	10	28	30	22	27	37
48	A	1KS20EC050	KODIDELA. PRATHIMA	10	10	10	10	24	26	29	27	37
49	A	1KS20EC051	KUMAR K G	10	10	0	7	24	26	28	26	33
50	A	1KS20EC052	Kusuma VR	10	10	10	10	24	24	28	26	36
51	A	1KS20EC053	M.Archana	10	10	10	10	23	23	26	24	34
52	A	1KS20EC054	MADIHA	10	8	10	10	21	30	13	22	32
53	A	1KS20EC055	MAHESH BIRADAR	10	10	9	10	20	23	16	20	30
54	A	1KS20EC056	MANASWINI KM	10	10	10	10	15	20	24	20	30
55	A	1KS20EC057	Meghashree.M	10	10	10	10	28	28	29	29	39
56	A	1KS20EC058	MOHAN KRISHNA K	10	10	10	10	27	30	9	22	32
57	B	1KS20EC059	N.shreya	10	10	10	10	26	29	30	29	39

58	B	1KS20EC060	NALLANI GOWTHAMI	10	5	10	9	12	18	10	14	23
59	B	1KS20EC061	NEHA CR	10	10	10	10	22	30	22	25	35
60	B	1KS20EC062	NEHA NAGARAJ AIRANI	10	10	10	10	25	30	7	21	31
61	B	1KS20EC063	VASANTH Kumar	10	5	5	7	18	13	14	15	22
62	B	1KS20EC064	PAVAN.C	5	5	5	5	21	16	10	16	21
63	B	1KS20EC065	Pavani TS	10	10	10	10	22	27	17	22	32
64	B	1KS20EC066	Pradhyumna S Kashyap	10	10	8	10	23	29	21	25	35
65	B	1ks20ec067	Praveen D B	10	5	5	7	24	28	19	24	31
66	B	1KS20EC068	Prema G	10	10	10	10	28	29	29	29	39
67	B	1KS20EC069	PRIYANKA.H C	10	8	8	9	9	6	14	10	19
68	B	1KS20EC070	PRIYANKA K	10	10	10	10	29	27	15	24	34
69	B	1KS20EC071	Priyanka.M	10	6	10	9	24	30	20	25	34
70	B	1KS20EC072	Pushpa DT	10	10	7	9	15	15	6	12	21
71	B	1KS20EC073	RAHUL KRISHNAN V	10	10	10	10	22	28	18	23	33
72	B	1KS20EC074	RAHUL R	10	4	10	8	17	14	3	12	20
73	B	1KS20EC075	RAJATH K ACHAR	10	10	8	10	24	27	22	25	35
74	B	1KS20EC076	Rakshith NM	10	10	10	10	15	26	18	20	30
75	B	1KS20EC077	RAKSHITH.R	10	10	10	10	22	29	22	25	35
76	B	1KS20EC078	Rakshitha A	10	8	10	10	26	29	27	28	38
77	B	1KS20EC079	RAMESHWAR	10	8	10	10	18	18	19	19	29
78	B	1KS20EC080	Ramya T	10	10	8	10	20	26	25	24	34
79	B	1KS20EC082	Rohit A.k	10	10	10	10	12	5	10	9	19
80	B	1KS20EC083	S Arun Kumar	10	10	10	10	20	28	21	23	33
81	B	1KS20EC084	Sachin NM	10	10	10	10	7	16	12	12	22
82	B	1KS20EC085	SADHANA.SRINIVAS	10	10	10	10	22	28	17	23	33
83	B	1KS20EC087	Sandeep Y H	10	10	10	10	20	23	18	21	31
84	B	1KS20EC089	Sanjana.G	10	10	10	10	29	28	23	27	37
85	B	1KS20EC091	Sanjana T Gadikar	10	10	8	10	24	20	19	21	31
86	B	1KS20EC092	Shakthi Anbazhagan M	10	10	10	10	26	30	26	28	38
87	B	1KS20EC093	Sharath M	10	10	10	10	23	29	19	24	34
88	B	1KS20EC094	SHASHANK S	10	10	10	10	23	27	18	23	33
89	B	1KS20EC095	SHIVAREDDY B A	10	10	10	10	22	22	26	24	34

90	B	1KS20EC096	Shreya H Padmanabha	10	10	10	10	23	30	23	26	36
91	B	1KS20EC097	Shreyas M S	10	10	10	10	18	25	10	18	28
92	B	1KS20EC098	Shreyas p s rao	10	10	10	10	15	22	17	18	28
93	B	1KS20EC099	SHWETA DEEPAK K	10	10	10	10	24	30	22	26	36
94	B	1KS20EC101	SONIKA.R	10	10	10	10	28	28	17	25	35
95	B	1KS20EC102	SUMANA N	10	10	10	10	29	30	24	28	38
96	B	1KS20EC103	SUMUKHA.S	10	10	7	9	22	29	16	23	32
97	B	1KS20EC104	SURAKSHA.N	10	10	10	10	28	30	30	30	40
98	B	1KS20EC105	Tarun Prasanna	10	10	10	10	25	28	22	25	35
99	B	1KS20EC106	TEJAS N REDDY	10	5	0	5	21	16	17	18	23
100	B	1KS20EC107	T.GIRISHCHOWDARY	10	10	10	10	13	22	7	14	24
101	B	1KS20EC108	Uday C H	10	10	10	10	29	30	23	28	38
102	B	1KS20EC109	UJJWAL NAIDU	10	10	10	10	17	21	14	18	28
103	B	1KS20EC110	VAISHNAVI A	10	10	10	10	24	28	28	27	37
104	B	1KS20EC111	Vaishnavi.V.H	10	10	10	10	22	25	22	23	33
105	B	1KS20EC112	N Varsha	10	10	9	10	25	30	18	25	35
106	B	1KS20EC113	Vijayalakshmi K	10	10	10	10	23	25	18	22	32
107	B	1KS20EC114	VINAY S P	10	10	10	10	19	30	23	24	34
108	B	1KS20EC115	VINAY SAGAR V ALUR	10	9	10	10	9	16	8	11	21
109	B	1KS20EC116	VINEETH M S	10	10	8	10	21	23	12	19	29
110	B	1KS20EC117	YASHILAA.S	10	10	10	10	24	29	A	18	28
111	B	1KS20EC118	YASHWANTH Y	10	10	8	10	23	30	26	27	37
112	B	1KS21EC401	SUDEEP V	10	5	5	7	10	7	17	12	19

# K. S. INSTITUTE OF TECHNOLOGY

#14, Raghuvanahalli, Kanakapura Main Road, Bengaluru-5600109

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

2022-23 EVEN SEMESTER

List of students who are identified as slow learners and their marks in every internal

Subject and Subject Code: Python Application Programming/18EC646

Semester and Section: VI /A &B

Sl. No	USN	NAME	First Test Marks (30)	Remedial Class Dates & Attendance		Improvement Test Marks (30)	Second Test Marks (30)	Remedial Class Dates & Attendance		Improvement Test Marks (30)	Third Test Marks (30)	Improvement Test Marks (30)	FINAL (30)
				27/4/23	5/5/23			14/6/23	22/6/23				
01	1KS20EC001	ABHISHEK J	11	P	P	26	17	P	P	-	17	-	20
02	1KS20EC014	C. Sai Srujitha	12	P	P	29	21	P	P	-	20	-	24
03	1KS20EC018	Chethankumar J	14	P	P	AB	7	P	P	12	7	-	11
04	1KS20EC032	Harini k	13	P	P	23	24	P	P	-	17	-	22
05	1KS20EC036	HARSHITHA N	AB	P	P	25	30	P	P	-	25	-	27
06	1KS20EC047	Keerthana BS	10	P	P	17	16	P	P	-	13	-	16
07	1KS20EC056	MANASWINI KM	14	P	P	15	20	P	P	-	24	-	20
08	1KS20EC060	NALLANI GOWTHAMI	12	P	P	AB	9	P	P	18	10	-	14
09	1KS20EC063	Vasant Kumar	4	P	P	18	13	P	P	-	14	-	15
10	1KS20EC064	PAVAN.C	5	P	P	21	16	P	P	-	10	-	16
11	1KS20EC065	Pavani TS	13	P	P	22	27	P	P	-	17	-	22
12	1KS20EC067	Praveen D B	9	P	P	24	28	P	P	-	19	-	24

13	1KS20EC069	PRIYANKA.H C	5	P	P	9	6	P	P	-	14	-	10
14	1KS20EC072	Pushpa DT	AB	P	P	15	15	P	P	-	6	-	12
15	1KS20EC082	Rohit A.k	0	P	P	12	5	P	P	-	10	-	9
16	1KS20EC084	Sachin NM	8	P	P	7	16	P	P	-	12	-	12
17	1KS20EC094	SHASHANK S	9	P	P	23	27	P	P	-	18	-	23
18	1KS20EC098	Shreyas p s rao	12	P	P	15	22	P	P	-	17	-	18
19	1KS20EC106	TEJAS N REDDY	11	P	P	21	16	P	P	-	17	-	18
20	1KS20EC107	T. GIRISH CHOWDARY	13	P	P	13	22	P	P	-	7	-	14
21	1KS20EC115	VINAY SAGAR V ALUR	9	P	P	AB	16	P	P	-	8	-	11
22	1KS21EC401	SUDEEP V	7	P	P	10	7	P	P	-	17	-	12

  
Signature of the Faculty

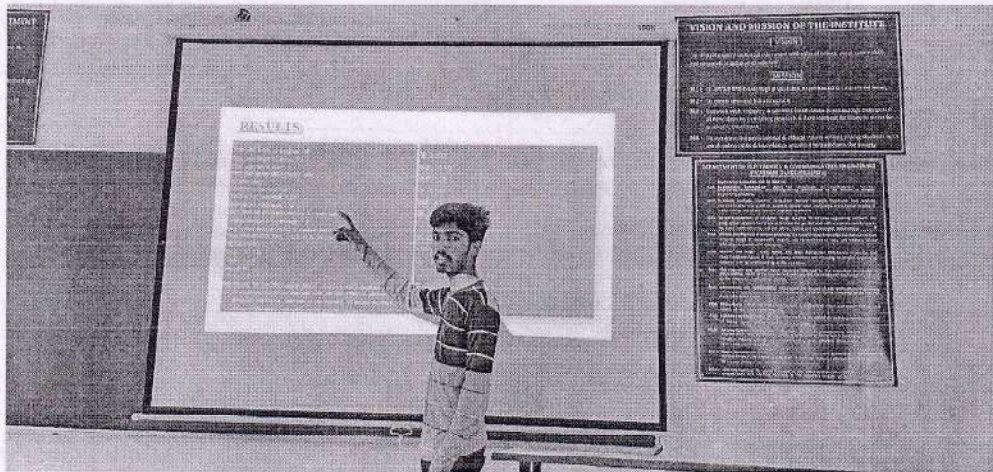
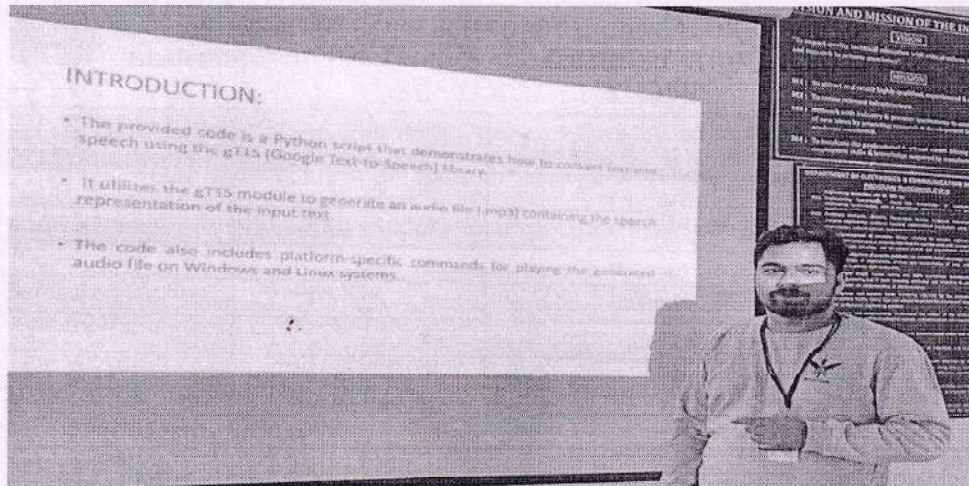
  
Signature of the HOD



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**CONTENT BEYOND SYLLABUS**

Academic Year	2022-23 (Even)
Name of the Faculty	Dr. Surekha Borra
Course Name /Code	Python Application Programming/18EC646
Semester/Section	VI/A & B
Activity Name	Poster Presentations
Topic Covered	All Modules
Date	25/3/2023 to 30/06/23
No. of Participants	105
Relevant PO's	9,10,12

**Proofs (Photographs/Videos/Reports/Charts/Models)**



Sl. No	Details	Date
1.	Date of issue of topics for presentation	25/3/23
2.	Dates for Appeal/challenge (on or before)	28/3/23
3.	Last date for the submission of the Project Code	8/6/23
4.	Last date for Demo Presentation	10/6/23
5.	Date of announcement of evaluation	30/6/23

Note:

1. Projects should be helpful to society
2. Assignments marks will not be given if submitted on later dates or failed to present a seminar/demo.

**Rubrics/Evaluation Strategy**

Sl. No	Criteria	Marks
1.	Results	10
2.	Quality of Team Demo	5
3.	Quality of Code	5
4.	Usefulness to society/environment	5
5.	Individual Contribution to Project	5
6.	Individual Contribution to Report	5
7.	Tool Learning	5
	<b>Total</b>	<b>40 (Scale the Marks to 10)</b>

Sl.No.	Team No.		USN	Name	Title of Project
1	T-1	1	1KS20EC036	HARSHITHA. N	Banking Sytem
2		2	1KS20EC034	HARSHITHA. BL	
3		3	1KS20EC035	HARSHITHA. J	
4		4	1KS20EC032	HARINI K	
5	T-2	1	1KS20EC025	Divya.N	Library Management System
6		2	1KS20EC023	Dhamini.J.Naidu	
7		3	1KS20EC010	Bhavitha.B	
8	T-3	1	1KS20EC015	C. Umadevi	Online digital voting system using python
9		2	1KS20EC050	K. Prathima	
10		3	1KS19EC026	Eram Fathima	
11		4	1KS20EC060	N.Gouthami	
12	T-4	1	1KS20EC042	K Jeevitha	Face detection and counting
13		2	1KS20EC046	Kavya S M	
14		3	1KS20EC054	Madhitha	
15	T-5	1	1KS20EC002	Aditi Dubey	Data visualization of Covid-19 Cases in India
16		2	1KS20EC030	Gandhamani	
17		3	1KS20EC057	Meghashree	
18	T-6	1	1KS20EC053	M.Archana	Units converter
19		2	1KS20EC047	Keerthana.b.s	



20		3	1KS20EC014	C.Sai Srujitha	
21		4	1KS20EC038	J.Chaitanya Krishna	
22	T-7	1	1KS20EC039	JAMUNA SG	Employees number tracking
23		2	1KS20EC040	JANHAVI R	
24		3	1KS20EC056	MANASWINI KM	
25	T-8	1	1KS20EC077	Rakshith R	Language Translator using Python
26		2	1KS20EC093	Sharath M	
27		3	1KS20EC108	Uday C H	
28		4	1KS20EC098	Shreyas P S Rao	
29	T-9	1	1KS19FC034	Hima swetha	Health and Fitness Calculator
30		2	1KS20EC008	Bs. Hema shree	
31		3	1KS20EC013	Chaitra k	
32	T-10	1	1KS20EC070	Priyanka K	ATM Simulation
33		2	1KS20EC083	S Arun kumar	
34		3	1KS20EC085	Sadhana srinivas	
35		4	1KS20EC092	Shakthi Anbazhagan M	
36	T-11	1	1KS20EC001	Abhishek J	Object Weight Calculation
37		2	1KS20EC017	Chetan G	
38		3	1KS20EC018	Chetan Kumar J	
39		4	1KS20EC019	Chetan Kumar T	
40	T-12	1	1KS20EC111	VAISHNAVI VH	QR CODE GENERATOR USING PYTHON
41		2	1KS20EC113	VIJAYALAKSHIMI K	
42		3	1KS20EC117	YASHILAA S	
43	T-13	1	1KS20EC026	Eshwar Biradar	Make a clock using python programming
44		2	1KS20EC048	Kiran Dev D	
45		3	1KS20EC052	Kusuma V R-	
46		4	1KS20EC055	Mahesh Biradar	
47	T-14	1	1KS20EC062	NEHA NAGARAJ AIRANI	Password Compliance Checker
48		2	1KS20EC112	N Varsha	
49		3	1KS20EC080	Ramya T	
50	T-15	1	1KS20EC073	Rahul Krishnan V	Python Weather Forecasting
51		2	1KS20EC103	Sumukha S	
52		3	1KS20EC105	Tarun Prasanna	
53		4	1KS20EC106	Taejas N Reddy	
54	T-16	1	1KS20EC084	Sachin NM	Air Quality Index Tracker
55		2	1KS20EC087	Sandeep YH	
56		3	1KS20EC109	Ujjwal Naidu	
57		4	1KS20EC114	Vinay SP	
58	T-17	1	1KS20FC068	Prema G	Random Geometric Patten
59		2	1KS20EC079	Rameshwar	

60		3	1KS20EC094	Shashank S	
61		4	1KS20EC097	Shreyas MS	
62	T-18	1	1KS20EC043	Amshumanth.k.m	TEXT TO SPEECH CONVERTER
63		2	1KS20EC049	Kiran v narayan	
64		3	1KS20EC051	Kumar kg	
65		4	1KS20EC058	Mohan krishna	
66	T-19	1	1KS20EC059	N Shreya	Generation of Contact Book
67		2	1KS20EC076	Rakshith NM	
68		3	1KS20EC101	Sonika R	
69		4	1KS20EC104	Suraksha N	
70	T-20	1	1KS20EC066	Pradhyumna SK	Daily Expenses Entry
71		2	1KS20EC075	Rajath KA	
72		3	1KS20EC116	Vineeth MS	
73		4	1KS20EC118	Yeshwanth Y	
74	T-21	1	1KS20EC061	Neha CR	BMI Calculator
75		2	1KS20EC065	Pavani TS	
76		3	1KS20EC071	Priyanka M	
77		4	1KS20EC072	Pushpa DT	
78	T-22	1	1KS20EC024	Dhruva Kumar S	Currency Converter
79		2	1KS20EC028	Gagan HC	
80		3	1KS20EC033	Harshith Gowda AR	
81		4	1KS20EC041	Jayanth H	
82	T-23	1	1KS20EC004	Ajay BG	Expenses Tracker GUI with Calender
83		2	1KS20EC006	Akash M	
84		3	1KS20EC016	Chaya S	
85	T-24	1	1KS20EC021	Darshan Kumar S	Speech to Text Converter
86		2	1KS20EC027	G Bhavana P	
87		3	1KS20EC031	Gumitha RC	
88	T-25	1	1KS20EC095	Shiva Reddy	Movie ticket booking system
89		2	1KS20EC096	Shreya H	
90		3	1KS20EC099	Shweta Deepak	
91	T-26	1	1KS20EC089	Sanjana G	Morse code translator
92		2	1KS20EC091	Sanjana TG	
93		3	1KS20EC102	Sumana N	
94		4	1KS20EC110	Valshnavi A	
95	T-27	1	1KS20EC107	T Girish Chowdary	Donation Tracker
96	T-28	1	1KS20EC037	Inchara P	Income Tax Calculation
97		2	1KS20EC029	Gagana BS	
98	T-29	1	1KS20EC003	Afeefa	Donation Report Generator
99		2	1KS20EC011	Bhuvaneshwari	
100		3	1KS20EC012	Chaitanya	
101		4	1KS20EC020	Darshan K	
102	T-30	1	1KS20EC074	Rahul r	Youtube mp4 downloader
103		2	1KS20EC078	Rakshitha a	
104		3	1KS20EC082	Rohit a k	
105		4	1KS20EC115	Vinay sagar v alur	

Signature of Course In charge

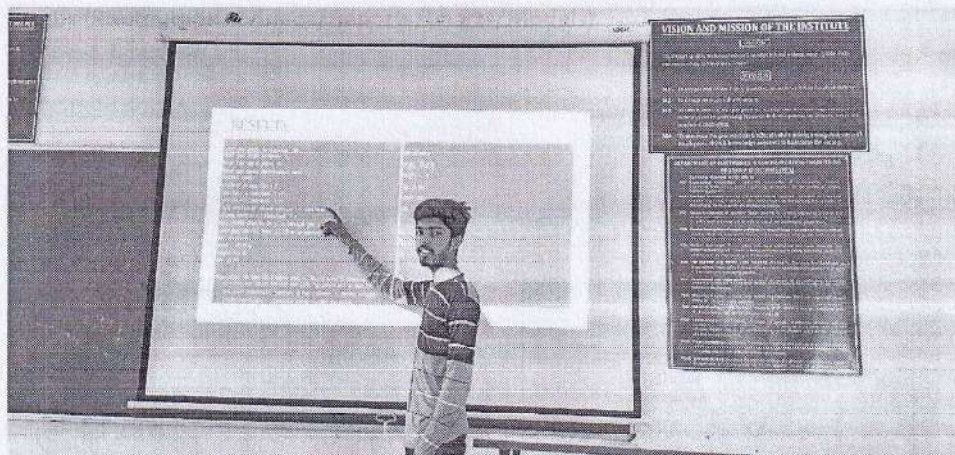
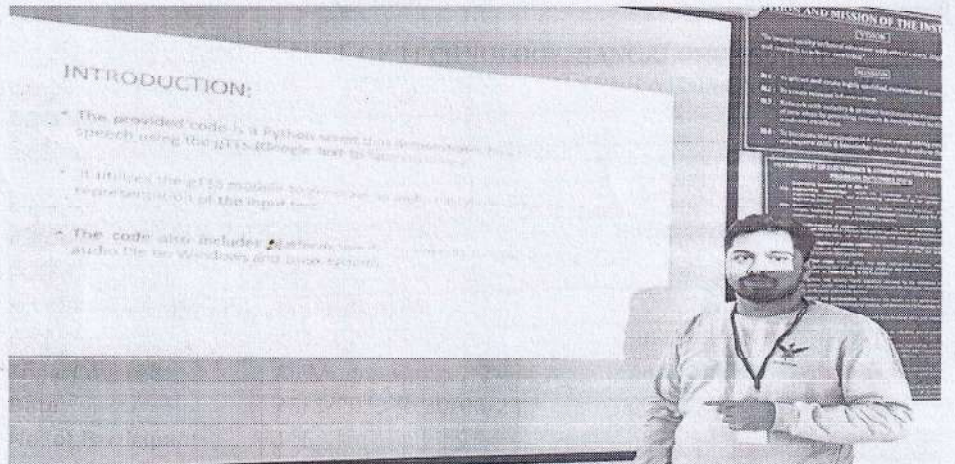
Signature of HOD ECE



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**CONTENT BEYOND SYLLABUS**

Academic Year	2022-23 (Even)
Name of the Faculty	Dr. Surekha Borra
Course Name /Code	Python Application Programming/18EC646
Semester/Section	VI/A & B
Activity Name	Poster Presentations
Topic Covered	All Modules
Date	25/3/2023 to 30/06/23
No. of Participants	105
Relevant PO's	9,10,12

**Proofs (Photographs/Videos/Reports/Charts/Models)**



Sl. No	Details	Date
1.	Date of issue of topics for presentation	25/3/23
2.	Dates for Appeal/challenge (on or before)	28/3/23
3.	Last date for the submission of the Project Code	8/6/23
4.	Last date for Demo Presentation	10/6/23
5.	Date of announcement of evaluation	30/6/23

Note:

1. Projects should be helpful to society

2. Assignments marks will not be given if submitted on later dates or failed to present a seminar/demo.

#### Rubrics/Evaluation Strategy

Sl. No	Criteria	Marks
1.	Results	10
2.	Quality of Team Demo	5
3.	Quality of Code	5
4.	Usefulness to society/environment	5
5.	Individual Contribution to Project	5
6.	Individual Contribution to Report	5
7.	Tool Learning	5
<b>Total</b>		<b>40 (Scale the Marks to 10)</b>

Sl.No.	Team No.		USN	Name	Title of Project
1	T-1	1	1KS20EC036	HARSHITHA N	Banking System
2		2	1KS20EC034	HARSHITHA. BL	
3		3	1KS20EC035	HARSHITHA. J	
4		4	1KS20EC032	HARINI K	
5	T-2	1	1KS20EC025	Divya.N	Library Management System
6		2	1KS20EC023	Dhamini.J.Naidu	
7		3	1KS20CC010	Bhavitha.B	
8	T-3	1	1KS20FC015	C. Umadevi	Online digital voting system using python
9		2	1KS20EC050	K. Prathima	
10		3	1KS19EC026	Eram Fathima	
11		4	1KS20EC060	N.Gouthami	
12	T-4	1	1KS20EC042	K Jeevitha	Face detection and counting
13		2	1KS20EC046	Kavya S M	
14		3	1KS20EC054	Madiha	
15	T-5	1	1KS20EC002	Aditi Dubey	Data visualization of Covid-19 Cases in India
16		2	1KS20EC030	Gandhamani	
17		3	1KS20EC057	Meghashree	
18	T-6	1	1KS20EC053	M.Archana	Units converter
19		2	1KS20EC047	Keerthana.b.s	

20		3	1KS20EC014	C.Sai Srujitha	
21		4	1KS20EC038	J.Chaithanya Krishna	
22	T-7	1	1KS20EC039	JAMUNA SG	Employees number tracking
23		2	1KS20EC040	JANHAVI R	
24		3	1KS20EC056	MANASWINI KM	
25	T-8	1	1KS20EC077	Rakshith R	Language Translator using Python
26		2	1KS20EC093	Sharath M	
27		3	1KS20EC108	Uday C H	
28		4	1KS20EC098	Shreyas P S Rao	
29	T-9	1	1KS19EC034	Hima swetha	Health and Fitness Calculator
30		2	1KS20EC008	Bs. Hema shree	
31		3	1KS20EC013	Chaitra k	
32	T-10	1	1KS20EC070	Priyanka K	ATM Simulation
33		2	1KS20EC083	S Arun kumar	
34		3	1KS20EC085	Sadhana srinivas	
35		4	1KS20EC092	Shakthi Anbazhagan M	
36	T-11	1	1KS20EC001	Abhishek I	Object Weight Calculation
37		2	1KS20EC017	Chetan G	
38		3	1KS20EC018	Chetan Kumar J	
39		4	1KS20EC019	Chetan Kumar T	
40	T-12	1	1KS20EC111	VAISHNAVI VH	QR CODE GENERATOR USING PYTHON
41		2	1KS20EC113	VIJAYALAKSHMI K	
42		3	1KS20EC117	YASHILAA S	
43	T-13	1	1KS20EC026	Eshwar Biradar	Make a clock using python programming
44		2	1KS20EC048	Kiran Dev D	
45		3	1KS20EC052	Kusuma V R	
46		4	1KS20EC055	Mahesh Biradar	
47	T-14	1	1KS20EC062	NEHA NAGARAJ AIRANI	Password Compliance Checker
48		2	1KS20EC112	N Varsha	
49		3	1KS20EC080	Ramya T	
50	T-15	1	1KS20EC073	Rahul Krishnan V	Python Weather Forecasting
51		2	1KS20EC103	Sumukha S	
52		3	1KS20EC105	Tarun Prasanna	
53		4	1KS20EC106	Taejas N Reddy	
54	T-16	1	1KS20EC084	Sachiin NM	Air Quality Index Tracker
55		2	1KS20EC087	Sandeep YH	
56		3	1KS20EC109	Ujjwal Naidu	
57		4	1KS20EC114	Vinay SP	
58	T-17	1	1KS20EC068	Prema G	Random Geometric Pattern
59		2	1KS20EC079	Rameshwar	

60		3	1KS20EC094	Shashank S	
61		4	1KS20EC097	Shreyas MS	
62	T-18	1	1KS20EC043	Amshumanth.k.m	TEXT TO SPEECH CONVERTER
63		2	1KS20EC049	Kiran v narayan	
64		3	1KS20EC051	Kumar kg	
65		4	1KS20EC058	Mohan krishna	
66	T-19	1	1KS20EC059	N Shreya	Generation of Contact Book
67		2	1KS20EC076	Rakshith NM	
68		3	1KS20EC101	Sonika R	
69		4	1KS20EC104	Suraksha N	
70	T-20	1	1KS20EC066	Pradhyumna SK	Daily Expenses Entry
71		2	1KS20EC075	Rajath KA	
72		3	1KS20EC116	Vineeth MS	
73		4	1KS20EC118	Yeshwanth Y	
74	T-21	1	1KS20FC061	Neha CR	BMI Calculator
75		2	1KS20EC065	Pavani TS	
76		3	1KS20EC071	Priyanka M	
77		4	1KS20EC072	Pushpa DT	
78	T-22	1	1KS20EC024	Dhruva Kumar S	Currency Converter
79		2	1KS20EC028	Gagan HC	
80		3	1KS20EC033	Harshith Guwda AR	
81		4	1KS20EC041	Jayanth H	
82	T-23	1	1KS20EC004	Ajay BG	Expenses Tracker GUI with Calender
83		2	1KS20EC006	Akash M	
84		3	1KS20EC016	Chaya S	
85	T-24	1	1KS20EC021	Darshan Kumar S	Speech to Text Converter
86		2	1KS20EC027	G Bhavana P	
87		3	1KS20EC031	Gomitha RC	
88	T-25	1	1KS20EC095	Shiva Reddy	Movie ticket booking system
89		2	1KS20EC096	Shreya H	
90		3	1KS20EC099	Shweta Deepak	
91	T-26	1	1KS20EC089	Sanjana G	Morse code translator
92		2	1KS20EC091	Sanjana TG	
93		3	1KS20EC102	Sumana N	
94		4	1KS20EC110	Vaishnavi A	
95	T-27	1	1KS20EC107	T Girish Chowdary	Donation Tracker
96	T-28	1	1KS20EC037	Inchara P	Income Tax Calculation
97		2	1KS20EC029	Gagana BS	
98	T-29	1	1KS20EC003	Afeefa	Donation Report Generator
99		2	1KS20EC011	Bhuvaneshwari	
100		3	1KS20EC012	Chaitanya	
101		4	1KS20EC020	Darshan K	
102	T-30	1	1KS20EC074	Rahul r	Youtube mp4 downloader
103		2	1KS20EC078	Rakshitha a	
104		3	1KS20EC082	Rohit a k	
105		4	1KS20EC115	Vinay sagar v alur	

Signature of Course In charge

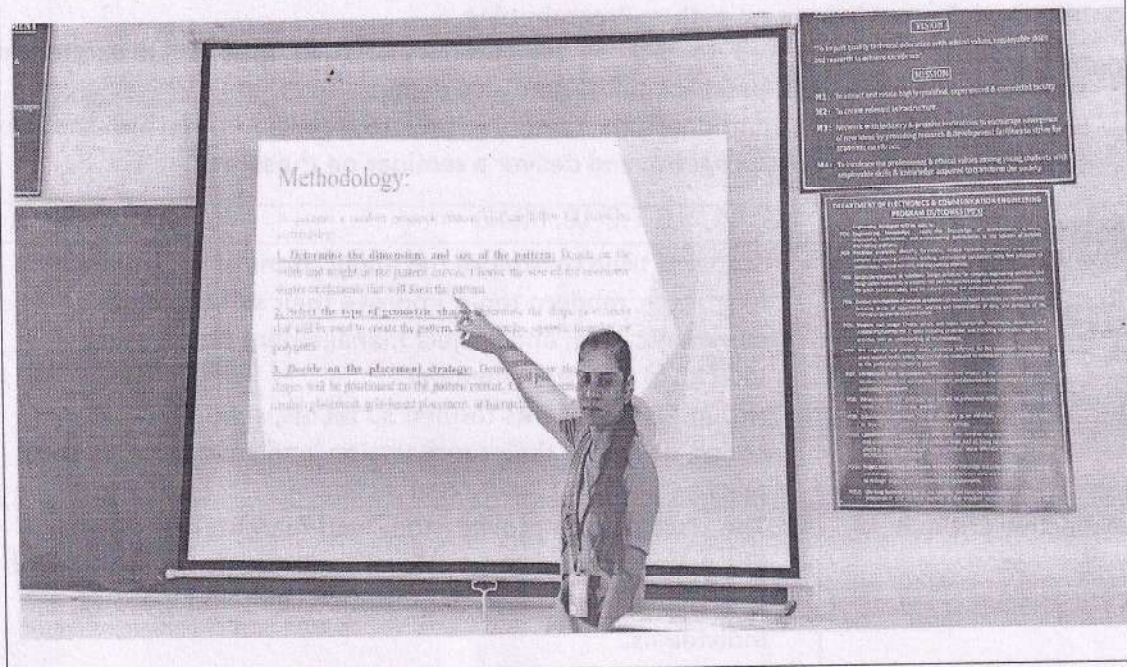
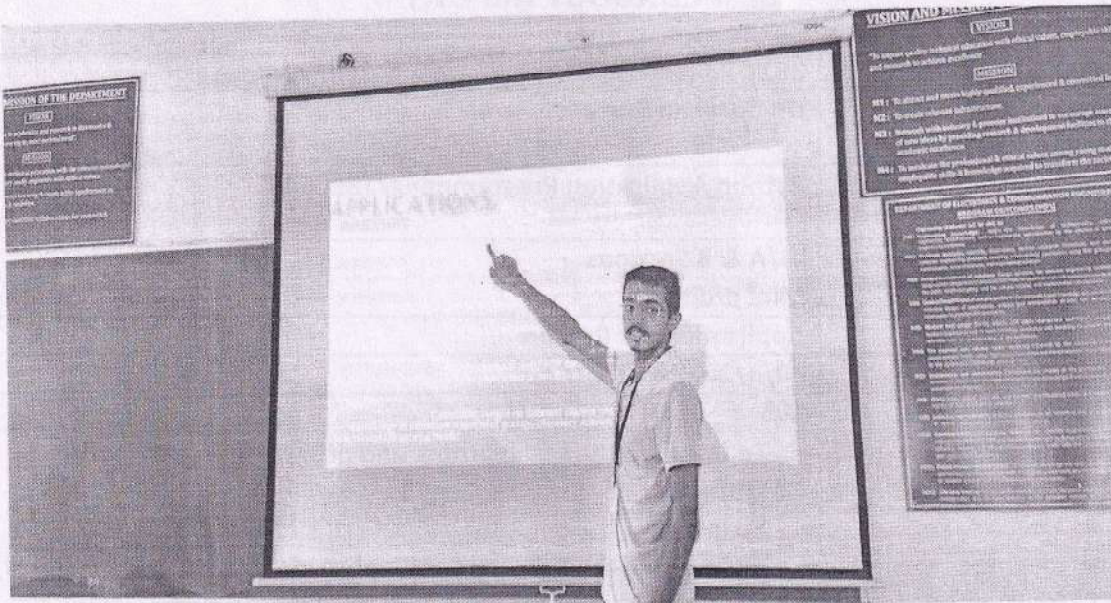
Signature of HOD ECE



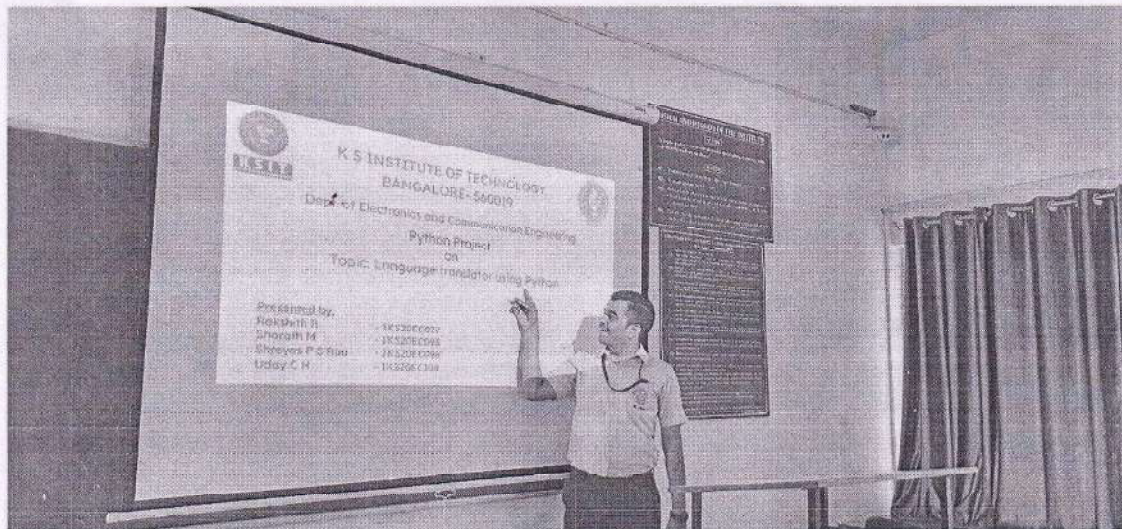
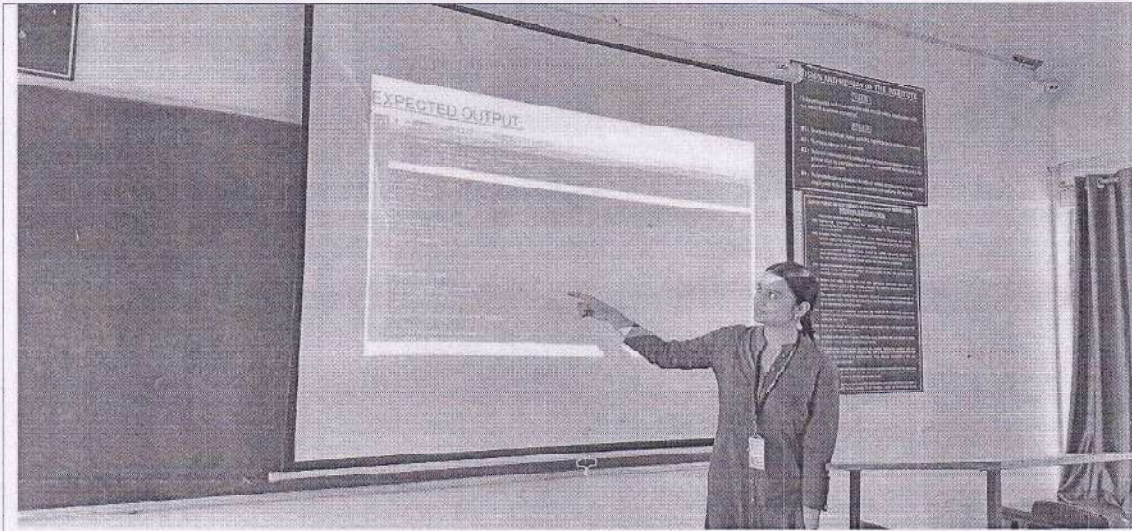
K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
TEACHING AND LEARNING  
**PEDAGOGY REPORT**


Academic Year	2022-23 (Even)
Name of the Faculty	Dr. Surekha Borra
Course Name /Code	Python Application Programming/18EC646
Semester/Section	VI/A & B Sections
Activity Name	Mini project
Topic Covered	Applications of Python
Date	20/4/2022 to 15/7/22
No. of Participants	105
Objectives/Goals	<ul style="list-style-type: none"><li>• To improve the self-learning and programming skills of students</li><li>• To improve the communication skills of students.</li><li>• To improve the ICT usage skills of students</li></ul>
ICT Used	PPTs
Appropriate Method/Instructional materials/Exam Questions	<ul style="list-style-type: none"><li>• Initially delivered lecture on python Programming.</li><li>• Later students were asked to pick any application of their interest, program the application, prepare PPT, present the PPT and give demo.</li><li>• Students are given with additional information/templates, sources from which they can select the topics, prepare, program, and deliver a seminar on the same.</li></ul>
Relevant PO's	1,2,3,4, 5,6,7,9,10,11,12
Significance of Results/Outcomes	<ul style="list-style-type: none"><li>• Students tried to explore the applications of programming languages, modern tools, improve their self-learning, communication, and project management skills as an individual and team member.</li><li>• Around 105 Students formed 30 teams, submitted python codes, delivered their presentation, and gave demo of their apps.</li></ul>
Reflective Critique	<ul style="list-style-type: none"><li>• The activity improved the self-learning of students.</li><li>• The activity provided a platform for students to interact with peers, improve their communication skills and work as individuals.</li></ul>

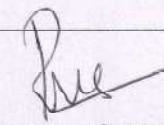
## Proofs (Photographs/Videos/Reports/Charts/Models)







  
Signature of Course In charge

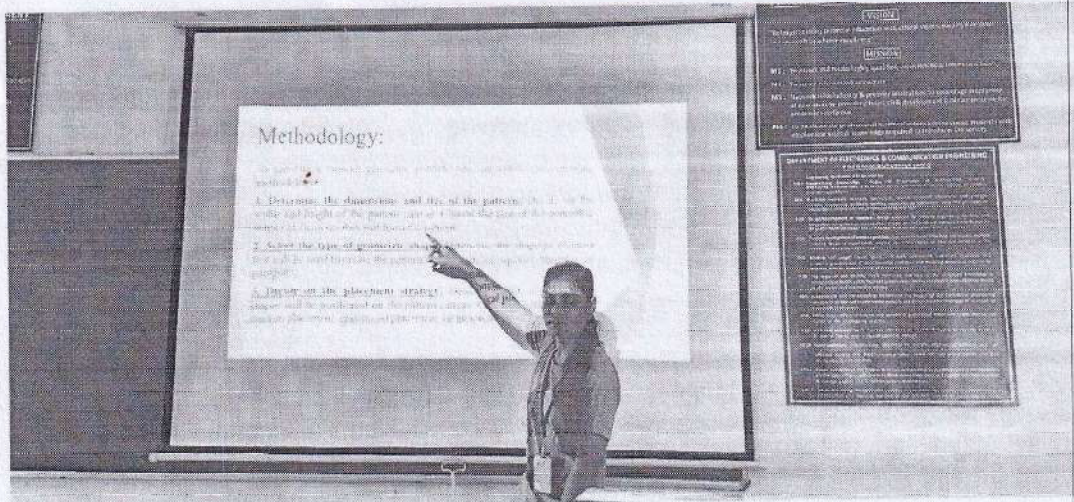
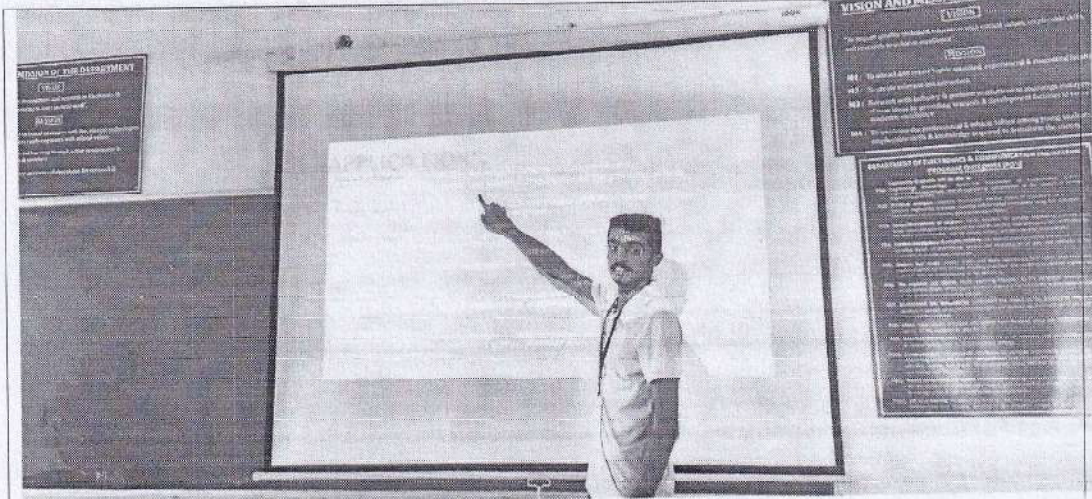
  
Signature of HOD ECE

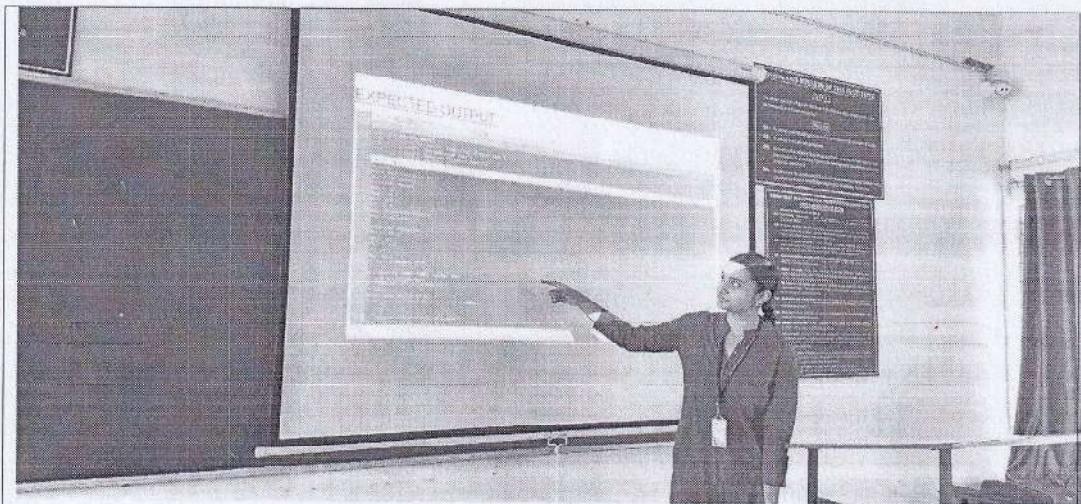


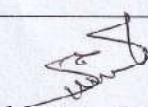
K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
TEACHING AND LEARNING  
**PEDAGOGY REPORT**

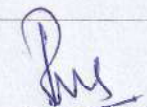
Academic Year	2022-23 (Even)
Name of the Faculty	Dr. Surekha Borra
Course Name /Code	Python Application Programming/18EC646
Semester/Section	VI/A & B Sections
Activity Name	Mini project
Topic Covered	Applications of Python
Date	20/4/2022 to 15/7/22
No. of Participants	105
Objectives/Goals	<ul style="list-style-type: none"><li>To improve the self-learning and programming skills of students</li><li>To improve the communication skills of students.</li><li>To improve the ICT usage skills of students</li></ul>
ICT Used	PPTs
Appropriate Method/Instructional materials/Exam Questions	
<ul style="list-style-type: none"><li>Initially delivered lecture on python Programming.</li><li>Later students were asked to pick any application of their interest, program the application, prepare PPT, present the PPT and give demo.</li><li>Students are given with additional information/templates, sources from which they can select the topics, prepare, program, and deliver a seminar on the same.</li></ul>	
Relevant PO's	1,2,3,4, 5,6,7,9,10,11,12
Significance of Results/Outcomes	<ul style="list-style-type: none"><li>Students tried to explore the applications of programming languages, modern tools, improve their self-learning, communication, and project management skills as an individual and team member.</li><li>Around 105 Students formed 30 teams, submitted python codes, delivered their presentation, and gave demo of their apps.</li></ul>
Reflective Critique	<ul style="list-style-type: none"><li>The activity improved the self-learning of students.</li><li>The activity provided a platform for students to interact with peers, improve their communication skills and work as individuals.</li></ul>

Proofs (Photographs/Videos/Reports/Charts/Models)





  
Signature of Course In charge

  
Signature of HOD ECE



**KS INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**PYTHON APPLICATION PROGRAMMING**  
**QUESTION BANK**  
**MODULE-1**

1. What is Python? and List some features of Python.
2. Use try and except so that your program handles non-numeric input gracefully by printing a message and exit the program.
3. Explain in detail the building blocks of a program. State the need for functions in Python.
4. What are the differences between C and Python?
5. Explain Syntax errors and Logic errors. Write a program which prompts the user for a Celsius temperature, convert the temperature to Fahrenheit and print out the converted temperature.
6. Explain built-in datatypes of python.
7. Explain the type of function arguments in Python.
8. List some built-in modules in Python and explain with suitable example.
9. Explain the function definition and function calling in Python.
10. Explain variable names, keywords, operators, operands, and order of operations with examples.
11. Explain break and continue statements with examples in Python. Write Pythonic code that iteratively prompts the user for input. It should continue until the user enters 'done' and then return the average value.
12. Briefly describe the methods of regular expression.
13. How to comment specific line(s) in Python program? and Define Quotations
14. Give the syntax and significance of raw\_input() and input() methods.
15. Briefly explain the input and output functions used in python.
16. Differentiate interactive mode and script mode.
17. List the various data types in python and define the scope of the variable.
18. Write the syntax of if and if-else statement. Develop a program to find the largest among three numbers.
19. Define operator & operator precedence. Discuss about the arithmetic, assignment, comparison, and bitwise operators with examples.
20. Briefly discuss about the looping techniques in Python with suitable examples.



**KS INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**PYTHON APPLICATION PROGRAMMING**  
**CHALLENGING QUESTIONS**  
**MODULE-1**

1. Briefly discuss about the types of decision-making statement.
2. Explain the concept of short circuit evaluation of logical expressions in Python. Write a program to prompt the user for a score between 0.0 and 1.0. If the score is out of range print an error. If the score is between 0.0 and 1.0, print a grade using the following table:

Score	Grade
$\geq 0.9$	A
$\geq 0.8$	B
$\geq 0.7$	C
$\geq 0.6$	D
$< 0.6$	F

3. Write Python program to swap two numbers using functions. (Write without using intermediate/temporary variables). Prompt the user for input.
4. Find the area and perimeter of a circle using functions. Prompt the user for input.
5. Write a Python Program to check whether a number is prime or not using while loop and print appropriate messages.
6. Write Pythonic code to multiply two matrices using nested loops and print the result.
7. Write a Python program to print Fibonacci series upto n terms.
8. Write a Python program to check whether the given no is Armstrong or not using user defined function.
9. Write a Python program to search a specific value from a given list of values using binary search method.
10. Write a python program to take the temperature in Celsius and convert it to Fahrenheit.
11. Write a program to perform addition, subtraction, multiplication, integer division, modulo division, floor division on two values.
12. Write a Python program using function to check given number is odd or even.
13. Write a program that accept a word from the user and reverse it.
14. Find in detail the building blocks of a program in Python.
15. Identify the features of Python and explain the input and output functions used in python.
16. Identify different types of variables, keywords, operators, operands, and operator precedence with examples.
17. Apply different looping techniques of Python with suitable examples
18. Find the output of the following and justify your answer  
i) not"False" ii)-17%10 iii)(212-32)\*5/9 iv) 3.5//1.3
19. Utilize the concept of Catching exceptions using try and except and Construct examples
20. Trace the function call and explain the memory model of the following code:

```
def f(x):  
    X=2*X  
    return X  
  
X=1  
X=f(X+1)
```



**KS INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**PYTHON APPLICATION PROGRAMMING**  
**QUESTION BANK**  
**MODULE-2**

1. Write a Python program that counts the number of occurrences of the character in the given string. Provide two implementations: recursive and iterative.
2. "Strings in Python are immutable". Explain this statement with example. Write Pythonic code to find the factorial of any number entered through the keyboard.
3. A number with more than one digit is input through the keyboard. Write Pythonic code to reverse the digits in the number and find the sum of all the digits in the reversed number.
4. Explain the following String methods in detail a) upper( ) and b) find(). Write a Python Program to check whether a number is prime or not using while loop and print appropriate messages.
5. "Strings in Python are immutable". Explain this statement with example. Write Pythonic code to find the factorial of any number entered through the keyboard.
6. Write a python program to search a specific value from a given list of values using binary search method.
7. What is list in Python? Demonstrate use of any three methods of list.
8. What is the use of islower() and isupper() method?
9. Describe the following:
  - i) Initialising string variable
  - ii) Accessing string variable
  - iii) Slicing strings
  - iv) String concatenation
  - v) String replication
10. Discuss with suitable examples
  - i) Opening a file
  - ii) Writing a file
  - iii) Closing a file



**KS INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**PYTHON APPLICATION PROGRAMMING**  
**CHALLENGING QUESTIONS**  
**MODULE-2**

1. Describe about the file operations in Python.
2. What is Python list? Explain the basic list operations with suitable examples.
3. Write a Python program to read the file and count and print the lines that start with the word "From". Prompt the user for the file name. Also use try/except to handle bad file names. Explain format operator with examples in Python.
4. Write Pythonic code to Count and Print the occurrence of each of the word in the file using dictionaries. Prompt the user for the file name. Also use try/except to handle bad file names.





**KS INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**PYTHON APPLICATION PROGRAMMING**

**QUESTION BANK**

**MODULE-3**

1. What are the different operations that can be performed on a list? Explain with examples.
2. Write in brief about List in python.
3. Write in brief about Tuple in python. Write operations with suitable examples.
4. Write in brief about Dictionary in python. Write operations with suitable examples or Write an python program to illustrate the operation on directory
5. Write in brief about Sequence in python. Write operations with suitable examples.
6. Compare List and Tuple.
7. Give any four differences between a list and a string in Python.
8. Write a Python program to read a string with punctuations and print the same string without punctuations.
9. What is a list of lists? Give an example along with its memory model.
10. Write Pythonic code that implements and returns the functionality of histogram using dictionaries. Also, write the function print\_hist to print the keys and their values in alphabetical order from the values returned by the histogram function.
11. Explain join(), split() and append() methods in a List with examples. Write Pythonic code to input information about 20 students as given below:
  - 1) Roll number
  - 2) Name
  - 3) Total MarksGet the input from the user for a student name. The program should display the Roll number and total marks for the given student's name. Also, find the average marks of all the students. Use dictionaries
12. How are dictionaries and tuples used together? Demonstrate the use of Tuple assignment with dictionaries to traverse the keys and values of dictionary.
13. Write Pythonic code to create a function called most\_frequent that takes a string and prints the letters in decreasing order of frequency. Use dictionaries.
14. Why do you need regular expressions in Python? Consider a file "ksit.txt". Write a Python program to read the file and look for lines of the form  
X-DSPAM1-Confidence: 0.8475  
X-DSPAM2-Probability: 0.458  
Extract the number from each of the lines using a regular expression. Compute the average of the numbers and print out the average. Also use try/except to handle bad file.
15. Consider the string 'brontosaurus'. Write Pythonic code that implements and returns the functionality of histogram using dictionaries for the given string. Also, write the function print\_hist to print the keys and their values in alphabetical order from the values returned by the histogram function.
16. Explain join (), split() and append() methods in a List with examples. Write a program which repeatedly reads numbers until the user enters 'done'. Once 'done' is entered, print out the total, count, and average of the numbers. If the user enters anything other than a number, detect their mistake using try and except and print an error message and skip to the next number
17. Define tuple. Explain DSU pattern. Write Pythonic code to demonstrate tuples by sorting a list of words from longest to shortest using loops.



**KS INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**PYTHON APPLICATION PROGRAMMING**  
**CHALLENGING QUESTIONS**  
**MODULE-3**

1. Explain about methods in Lists of Python with appropriate examples.
2. Write a python program to describe different ways of deleting an element from the given List.
3. Write a Python Program to read a word and prints the number of letters, vowels and percentage of vowels in the word using dictionary.
4. Write a python program to compute Selection Sort using list.
5. Write a python program to compute Merge Sort.
6. Variable kingdoms refers to the list ['Bacteria','Protozoa','Chromista','Plantae','Fungi','Animalia']. Using kingdoms and either slicing or indexing with positive indices, write expressions that produce the following:
  - a. The first item of kingdoms
  - b. The last item of kingdoms
  - c. The list ['Bacteria','Protozoa','Chromista']
  - d. The list ['Chromista','Plantae','Fungi']
  - e. The list ['Fungi','Animalia']
  - f. The empty list
7. Consider the list qty= [5, 4, 7, 3, 6, 2, 1] and write the Python code to perform the following operation without using built-in methods:
  - a. Insert an element 9 at the beginning of the list
  - b. Insert an element 8 at the end of the list
  - c. Insert an element 8 at the index position 3 of the list
  - d. Delete an element at the beginning of the list
  - e. Delete an element at the end of the list
  - f. Delete an element at the index position 3
  - g. Print the list in reverse order (end to start)
  - h. Delete all the elements of the list.
  - i.
8. Why do you need regular expressions in Python? Consider a line "From stephen.marquard@uct.ac.za Sat Jan 5 09:14:16 2008" in the file email.txt. Write Pythonic code to read the file and extract email address from the lines starting from the word "From". Use regular expressions to match email address.
9. Write an `__init__` method for the Point class that takes x and y as optional parameters and assigns them to the corresponding attributes. Write an add method for Points that works with either a Point object or a tuple. If the second operand is a Point, the method should return a new Point whose x coordinate is the sum of the x coordinates of the operands, and likewise for the y coordinates. If the second operand is a tuple, the method should add the first element of the tuple to the x coordinate and the second element to the y coordinate and return a new Point with the result.
10. Consider a user defined class called Point. Write a function called distance that takes two Points as arguments and returns the distance between them.



**KS INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**PYTHON APPLICATION PROGRAMMING**  
**QUESTION BANK**  
**MODULE-4**

1. Make use of examples to explain classes, objects, and attributes in python language.
2. Make use of python code, to explain how functions return instance values.
3. Identify the differences between shallow equality and deep equality with respect to classes and objects, with the help of python codes.
4. Make use of example program to define a class and its uses in Python? Explain how to instantiate a class and how the class members are accessed?
5. Explain pure functions and modifiers with examples
6. Explain initialization method with example
7. What is operator overloading ? write python code to overload "+" and "\*" operator by providing the methods `__add__`, `__sub__` and `__mul__`.
8. Illustrate the concept of pure functions and modifiers with python code
9. What is the difference between method and function? Explain the working of init method with suitable code
10. What is type based dispatch? Illustrate with python example.
11. What are the polymorphic functions? Explain with a snippet code.
12. Differentiate between simple, multiple, and multi-level inheritance?
13. Differentiate class variables and instance variables.
14. What does the keyword self in python mean? Explain with an example.
15. Show using a python code how `__int__` method is invoked when an object is initiated. explain its working
16. Explain `__str__` method with a python program.



**KS INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**PYTHON APPLICATION PROGRAMMING**  
**CHALLENGING QUESTIONS**  
**MODULE-4**

1. Write a class rectangle that has attributes length and breadth and a method area which returns the area of the rectangle.
2. Write a program that has a class Point with attributes as X and Y co-ordinates, Create two objects of this class and find the midpoint of both the points. Add a method reflex\_x to classpoint, which returns a new point. Which is the reflection of the point about the x axis.
3. Ex: point (5, 10)= reflex\_x returns point (5,-10).
4. Write a program that has a class Person, Inherit a class Student from Person which also has a class MarksAttendance. Assume the attributes for Person class as: USN, Name, dob, gender. Attributes for Student class as: Class, branch, year, MA. Attributes for Marks Attendance: Marks, Attendance. Create a student S= Student ("1AB16CS005", "XYZ", "18-1-90", "M", 85, 98) and display the details of the student.
5. Create student class and initialize it with name and roll number. Design methods to:
  - a. Display\_to display all information of the student.
  - b. setAge\_to assign age to student.
  - c. setMarks\_to assign marks to the student.
6. Write a program that uses class to store the name and marks of students. Use list to store the marks in three subjects
7. Write a Python program that uses datetime module within a class, takes a birthday as input and prints the age and the number of days, hours, minutes and seconds until the next birthday.
8. Using datetime module write a program that gets the current time and prints the day of the week.
9. Define polymorphism. Demonstrate polymorphism with function to find histogram to count the members of times each letters appears in a word and in sentence.
10. Write a python program to find duration of event if start and end time is given by defining class TIME.
11. Write a python program to express instances as return values to define a class RECTANGLE with members width ,height, corner\_x, corner\_y and member function: to find centre ,area and perimeter of a rectangle.



**KS INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**PYTHON APPLICATION PROGRAMMING**  
**QUESTION BANK**  
**MODULE-4**

1. Make use of examples to explain classes, objects, and attributes in python language.
2. Make use of python code, to explain how functions return instance values.
3. Identify the differences between shallow equality and deep equality with respect to classes and objects, with the help of python codes.
4. Make use of example program to define a class and its uses in Python? Explain how to instantiate a class and how the class members are accessed?
5. Explain pure functions and modifiers with examples
6. Explain initialization method with example
7. What is operator overloading ? write python code to overload "+"-"and "\*" operator by providing the methods `__add__`, `__sub__` and `__mul__`.
8. Illustrate the concept of pure functions and modifiers with python code
9. What is the difference between method and function? Explain the working of init method with suitable code
10. What is type based dispatch? Illustrate with python example.
11. What are the polymorphic functions? Explain with a snippet code.
12. Differentiate between simple, multiple, and multi-level inheritance?
13. Differentiate class variables and instance variables.
14. What does the keyword self in python mean? Explain with an example.
15. Show using a python code how `__int__` method is invoked when an object is initiated. explain its working
16. Explain `__str__` method with a python program.

## Sixth Semester B.E. Degree Examination, Jan./Feb. 2023

### Python Application Programming

Time: 3 hrs.

Max. Marks: 100

*Note: Answer any FIVE full questions, choosing ONE full question from each module.*

#### Module-1

- 1 a. Identify three types of errors encountered in Python and also explain the basic building blocks of Python program. (07 Marks)
- b. Predict the output and justify your answer (i)  $-13\%9$  (ii)  $6.6//16$  (iii)  $1+2**3/4*5$   
(iv) not "False" (v)  $5*1**3$  (05 Marks)
- c. Develop python programs to, (i) Find largest of three numbers (ii) Check whether the given year is leap year or not with functions. (08 Marks)

**OR**

- 2 a. Make use of necessary examples and flow chart to explain the concept of alternate execution, chained conditional and nested conditional statements. (08 Marks)
- b. Develop a user defined function named 'Solve' that returns the sum and difference of two numbers accepted from the user. Print the sum and difference separately on the console. (05 Marks)
- c. Make use of necessary code examples to explain the following – (i) Short circuit evaluation of an expression (ii) Fruitful functions and void functions. (07 Marks)

#### Module-2

- 3 a. Build a python program to compute counting summing and average of elements using loops. (06 Marks)
- b. Make use of necessary examples to explain any six methods associated with strings. (06 Marks)
- c. Mention the advantages of break and continue statement. Write a program to compute the sum of only odd numbers within the given natural number using continue statement. (08 Marks)

**OR**

- 4 a. Make use of necessary syntax to explain fileopen, fileclose, fileread and filewrite concepts in python. (08 Marks)
- b. Develop a python program to accept a file name from the user : (i) Display the first N lines of the file, (ii) Find the frequency of occurrence of the word accepted by the user. (08 Marks)
- c. Use find and string slicing to extract the portion of the string after the colon character and then use the float function to convert the extracted string into a floating point number. Assume the following string :  
`str = X-DSPAM-Confidence : 99.94` (04 Marks)

#### Module-3

- 5 a. Describe any two list operations and list methods. Develop a python program to accept n numbers from user, find sum of all even numbers and product of all odd numbers in entered list. (08 Marks)
- b. Identify pop and remove methods on lists. How to delete more than one element from a list. (06 Marks)
- c. Identify the difference between list and tuples and also demonstrate (i) How a dictionary item can be represented as a list of tuples, (ii) How tuples can be used as keys in dictionaries. (06 Marks)

OR

- 6 a. Develop a program to check the validity of a password read by the users. The following criteria should be used to check the validity. Password should have at least –
- One lower case letter.
  - One digit.
  - One upper case letter.
  - One special character from (\$#!@)
  - Six characters
- (08 Marks)
- b. Build a python program that accepts a sentence and builds a dictionary with LETTERS, DIGITS, UPPERCASE, LOWERCASE as key values and their count in the sentence as values and their count in the sentence as values.  
Ex : Sentence = "VTU@123.e-Learning"  
d = {"LETTERS" :12, "DIGITS" : 3, "UPPERCASE" : 4, "LOWERCASE" : 8} (06 Marks)
- c. Develop a python program to count occurrence frequency of words in a file using dictionary. (06 Marks)

**Module-4**

- 7 a. Create a student class and initialize it with name and roll number. Develop method to,
- (i) SetAge – to assign age to student
  - (ii) SetMarks – to assign marks to student
  - (iii) Display – to display all information of the student
- (08 Marks)
- b. Differentiate between pure function and modifier. Develop a python program to find duration of an event if start and end time is given by defining class TIME. (08 Marks)
- c. Demonstrate the concept of operator overloading with a code snippet. (04 Marks)

OR

- 8 a. Make use of necessary examples to explain single, multiple, multilevel and hierarchial inheritance. (08 Marks)
- b. Develop a python program to express instances as return values to define a class RECTANGLE with members width, height, corner\_X, corner\_Y and member functions : to find center, area and perimeter of a rectangle. (08 Marks)
- c. Explain \_\_init\_\_ method with an example. (04 Marks)

**Module-5**

- 9 a. Explain any two socket functions. Explain support for parsing HTML using regular expression with an example program. (08 Marks)
- b. Make use of an example to explain the significance of XML over the web development. (08 Marks)
- c. Compare and contrast the JavaScript object Notation (JSON) and XML. (04 Marks)

OR

- 10 a. Describe creation of database table using database cursor architecture. (08 Marks)
- b. Create a simple spidering program that will go through Twitter accounts and build a database of them. (08 Marks)
- c. What is service oriented architecture? List the advantages of the same. (04 Marks)

\*\*\*\*\*

**Sixth Semester B.E. Degree Examination, Aug./Sept. 2020**  
**Python Application Programming**

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

**Module-1**

- 1 a. Explain types of error with examples. (04 Marks)  
b. Explain various Names, Keywords and expressions with examples. (06 Marks)  
c. Write a python program using try and except, so that your program handles non-numeric input gracefully by printing a message and exiting the program the following shown two execution of the program  
Enter Hours : 20  
Enter Rate : nine  
Error, please enter numeric input  
Enter hours : forty  
Error, please enter numeric input. (06 Marks)

OR

- 2 a. Explain conditional execution, Alternative execution chained conditionals and nested conditionals with examples. (08 Marks)  
b. Explain break and continue statement with examples in python. (04 Marks)  
c. Explain with an example what are fruitful functions and void functions. (04 Marks)

**Module-2**

- 3 a. Explain while and for loops with examples. (04 Marks)  
b. Write a python program to find the largest value from the given set of accepted values. (06 Marks)  
c. Discuss the string handling methods in python with examples. (06 Marks)

OR

- 4 a. Write a python program to check whether a given string is palindrome or not. (06 Marks)  
b. Explain with example the syntax of read ( ), write ( ) methods for a file. (04 Marks)  
c. Develop a python program for creating a copy an existing file. (06 Marks)

**Module-3**

- 5 a. Explain the difference between a list and a dictionary. (04 Marks)  
b. Make a list of first ten letters of the alphabet then using the slice operation do the following:  
i) Print the first three letters from the list  
ii) Print any three letters from the middle  
iii) Print the letters from 5<sup>th</sup> letters to the end of the list. (04 Marks)  
c. Discuss the lists handling functions in python with example. (08 Marks)



**OR**

- 6 a. Differentiate between list and dictionary. (08 Marks)  
b. Define tuple, explain DSU pattern. Write a python code to determinate tuples by sorting a list of words from longest to shortest using loops. (04 Marks)  
c. Explain the need of Regular expressions in python language. (04 Marks)

**Module-4**

- 7 a. Explain classes and attributes in python language with examples. (05 Marks)  
b. Explain pure functions and modifiers with examples. (05 Marks)  
c. Write a program that uses class to store the name and marks of students. Use list to store the marks in three subjects. (06 Marks)

**OR**

- 8 a. Explain initialization method with example. (04 Marks)  
b. Write a class Rectangle that has attributes length and breadth and a method area which returns the area of the rectangle. (06 Marks)  
c. What is operator overloading? Write python code to overload “+” “-” and “\*” operator by providing the methods `__add__`, `__sub__` and `__mul__`. (06 Marks)

**Module-5**

- 9 a. Write a python code for retrieving the romeo.txt file from the web and compute the frequency of each word in the file. (06 Marks)  
b. Write a note on XML. (05 Marks)  
c. Explain with a neat diagram of Service Oriented Architecture. (05 Marks)

**OR**

- 10 a. Describe creation of database table using database cursor architecture. (08 Marks)  
b. Write a python code for creating employee database, inserting records and selecting the employees working in the company. (08 Marks)

### CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--

15CS664

Sixth Semester B.E. Degree Examination, Dec.2019/Jan.2020

### Python Application Programming

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

#### Module-1

- 1 a. Explain the salient features of python. (05 Marks)
- b. Write a python program to calculate the area of square, rectangle and circle. Print the results. Take input from user. (05 Marks)
- c. What are user defined functions? How can we pass parameters in user defined functions? Explain with suitable example. (06 Marks)

OR

- 2 a. Explain the concept of conditional execution alternate execution and chained conditions with suitable examples. (06 Marks)
- b. Write a python program to create a user defined function to find maximum and minimum letter in string. Also find the length the string without using inbuilt function. (05 Marks)
- c. Explain the concept of type conversion functions and math functions in python with examples. (05 Marks)

#### Module-2

- 3 a. Explain the working of while loop in python with suitable example. (05 Marks)
- b. Write a python program to demonstrate counting, summing and average of elements using loops. (05 Marks)
- c. What is a string? Write a python program to demonstrate traversal through a string with a loop. Also explain the concept of string slicing. (06 Marks)

OR

- 4 a. With syntax and example code, explain the working of definite loop in python. (05 Marks)
- b. Write a python program to concatenate and compare two strings. Read the strings from user. (05 Marks)
- c. Explain fileopen, fileclose, fileread and filewrite concepts in python with example. (06 Marks)

#### Module-3

- 5 a. What is a list? Explain the concept of list slicing and list traversing with example. (05 Marks)
- b. Explain the concept of comparing tuples. Describe the working of sort function with python code. (06 Marks)
- c. Write a python program to search for lines that start with 'F' followed by 2 characters, followed by 'm:'. (05 Marks)

OR

- 6 a. What is dictionary? How is it different from list? Write a python program to count occurrence of characters in a string and print the count. (06 Marks)
- b. With an example program, illustrate how to pass function arguments to list. (05 Marks)
- c. Write a python program to search lines that start with 'X' followed by any non whitespace characters, followed by ':' ending with number. Display the sum of all these number. (05 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and/or equations written eg. 42.8 = 50, will be treated as malpractice.

**Module-4**

- 7 a. Define class and object? What are programmer defined types? Explain with example. (05 Marks)  
b. Illustrate the concept of pure function with python code. (05 Marks)  
c. What is the difference between method and function? Explain the working of init method with suitable code. (06 Marks)

OR

- 8 a. Define attribute? With the help of python code, explain how functions return instance values. (06 Marks)  
b. Explain the concept of modifier with python code. (05 Marks)  
c. What is type based dispatch? Illustrate with python example. (05 Marks)

**Module-5**

- 9 a. Define socket? Write a python program that makes a connection to a webserver and follows the rules of HTTP protocol to request a plain text document and display what server sends back. (06 Marks)  
b. What is XML? How is it used in python? Explain parsing of XML with example. (05 Marks)  
c. Define cursor? Explain connect, execute and close command of databases with suitable example. (05 Marks)

OR

- 10 a. Write a python code to read the file from web using urllib and retrieve the data of the file. Also compute the frequency of each word in the file. (06 Marks)  
b. What is JSON? Illustrate the concept of parsing JSON python code. (05 Marks)  
c. Explain the concept of using JOIN to retrieve data in python. (05 Marks)

\*\*\*\*\*







112	DRS21EC401	SUBJECT V	10	8	0	N	2	0	N	10	6	J	Y	8	J	Y	7	2	0	N	5	0	N	0	0	N	5	1	1	N	1	1	N	1	1	N	17	4	0	N	13	J	Y	5	2	1	N	J	0	N	0	N
CO			CO 1	CO 2	CO 1	CO 2	CO 1	CO 2	CO 2	CO 3	CO 4	CO 2	CO 3	CO 4	CO 2	CO 3	CO 4	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5			
Number of Not Attempted(NA)			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Score index & No of Y's			2.7	88	2.5	83	3.0	102	3.0	102	2.7	91	2.7	95	2.0	66	2.7	90	2.8	94	2.6	86	1.0	28	2.4	82	2.8	96	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97				
No. of N's			16	21	2	2	13	9	58	14	10	18	76	24	22	8	7	104	8	7	92	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
CO Attainment			85	80	98	95	88	91	63	87	90	83	27	79	92	95	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93				
Level			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3					

CO	CIE	SE F	DIRECT ATTAINMENT	Level	INDI REC T ATT ABIL MEM T	Final All
CO1	91.35	0	45.67	0.0	3.0	0.3
CO2	87.98	0	43.99	0.0	3.0	0.3
CO3	90.87	0	45.43	0.0	3.0	0.3
CO4	66.35	0	33.17	0.0	3.0	0.3
CO5	86.06	0	43.03	0.0	3.0	0.3
AVERAGE						0.3

CO	Score index out of 3
CO1	1.33
CO2	1.71
CO3	1.37
CO4	0.49
CO5	1.22

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CO1	3	2	1	1	2	3	3	3	3	3	1	2	3	2	2
CO2	3	1	1	1	2	3	3	3	3	3	1	2	3	2	2
CO3	3	2	1	1	2	1	1	3	3	1	1	1	2	2	2
CO4	3	2	1	1	2	1	1	1	1	1	1	1	2	2	2
CO5	3	2	2	2	2	1	1	1	1	1	1	2	3	3	3
AVG	2.00	2.60	1.40	1.20	2.00	1.80	1.80	1.80	1.80	1.80	1.00	1.60	2.60	2.00	2.00

PO Attainment

CO'S	CO Attainment	CO RES ULT	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PO 13	PO 14	PO 15
CO1	0.30	N	0.3	0.3	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.1	0.2	0.3	0.2	0.2	0.2
CO2	0.30	N	0.3	0.3	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.1	0.2	0.3	0.2	0.2	0.2
CO3	0.30	N	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
CO4	0.30	N	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
CO5	0.3	N	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Average			0.3	0.26	0.14	0.12	0.2	0.18	0.15	0.18	0.18	0.1	0.15	0.26	0.2	0.2	0.2

112	1RS21EC401	SUDEEP V	10	8	0	N	2	0	N	10	0	1	V	4	3	Y	7	2	0	N	5	0	N	0	0	N	5	1	1	N	1	N	1	N	1	N	17	4	0	N	13	1	Y	5	2	1	N	3	0	N	0	N	0	N				
CO			CO 1	CO 2	CO 1	CO 2	CO 1	CO 2	CO 2	CO 3	CO 4	CO 2	CO 3	CO 4	CO 4	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5	CO 4	CO 5					
Number of Not Attempted(NA)			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Score index & No of Y's			2.7	88	2.5	83	3.0	102	3.0	102	2.7	91	2.7	95	2.0	66	2.7	90	2.8	94	2.6	86	1.0	28	2.4	82	2.8	96	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97	2.8	97
No. of N's			16	21	2	2	13	9	58	14	10	18	76	24	22	8	28	22	79	83	27	79	27	79	27	79	27	79	27	79	27	79	27	79	27	79	27	79	27	79	27	79	27	79	27	79	27	79	27	79	27	79	27	79	27	79		
CO Attainment			85	80	98	98	88	91	63	87	90	83	27	79	83	27	79	83	27	79	83	27	79	83	27	79	83	27	79	83	27	79	83	27	79	83	27	79	83	27	79	83	27	79	83	27	79	83	27	79	83	27	79	83	27	79		
Level			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		

CO	CIE	SE F	DIRECT ATTAINMENT	Level	REG T ATTAINMENT	Final Att
CO1	91.35	0	45.67	0.0	3.0	0.3
CO2	87.98	0	43.99	0.0	3.0	0.3
CO3	90.87	0	45.43	0.0	3.0	0.3
CO4	66.35	0	33.17	0.0	3.0	0.3
CO5	86.06	0	43.03	0.0	3.0	0.3
AVERAGE						0.3

CO	Score index out of 3
CO1	1.33
CO2	1.71
CO3	1.37
CO4	0.49
CO5	1.22

CU %	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	2	1	1	2	3	3	-	3	3	1	2	3	2
CO2	3	1	1	1	3	3	3	-	3	3	1	2	3	2
CO3	3	2	1	1	3	1	1	-	1	1	1	1	2	2
CO4	3	2	1	1	2	1	1	-	1	1	1	1	2	2
CO5	3	2	3	2	2	1	1	-	1	1	1	2	3	3
AVG	2.00	1.60	1.40	1.20	2.00	1.80	1.80	-	1.80	1.80	1.00	1.60	2.60	2.00

PO Attainment

CO'S	CO Attainment	CO RESULT	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
CO1	0.30	N	0.3	0.3	0.1	0.1	0.2	0.2	0.3	-	0.3	0.3	0.1	0.2	0.1	0.2
CO2	0.30	N	0.3	0.3	0.1	0.1	0.2	0.3	0.3	-	0.3	0.3	0.1	0.2	0.3	0.2
CO3	0.30	N	0.3	0.2	0.1	0.1	0.2	0.1	0.1	-	0.1	0.1	0.1	0.1	0.2	0.2
CO4	0.30	N	0.3	0.2	0.1	0.1	0.2	0.1	0.1	-	0.1	0.1	0.1	0.1	0.2	0.2
CO5	0.3	N	0.3	0.3	0.3	0.2	0.2	0.1	0.1	-	0.1	0.1	0.3	0.1	0.3	0.2
Average			0.3	0.28	0.14	0.12	0.2	0.18	0.18	-	0.18	0.18	0.1	0.15	0.26	0.2



**K.S.Institute of Technology,Bangalore -109**  
**Department of Electronics and Communication Engg**  
**6th sem Course End Survey 2022-23**

Course : Python Application Programming ( Professional Elective-1)

Course Code :18EC646

Q1.How well you are able to understand Python programming syntax and semantics ?

Q2.To what level are you familiar with use of flow control, functions, strings and file systems in python.

Q3.To what extent are you familiar with the concepts of object oriented programming as used in Python.

Q4.How well you can utilize the concepts related to network programming, web services and database in python application?

Q5.How well you are able to make use of knowledge gained from python programming for different applications ?

Date	USN	Name of the Student	Faculty Name	Q1	Q2	Q3	Q4	Q5
06-07-2023	1KS20EC080	Ramya T	Dr. Surekha Borra	2	2	2	2	2
06-07-2023	1KS20EC091	Sanjana t gadikar	Dr. Surekha Borra	3	3	3	3	2
06-07-2023	1KS20EC117	Yashilaa S	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC099	Shweta Deepak K	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC084	Sachin NM	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC062	Neha Nagraj Airani	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC113	Vijayalakshmi K	Dr. Surekha Borra	3	2	3	2	3
06-07-2023	1KS20EC023	DHAMINI. J	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1ks20ec115	Vinay sagar	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC111	Vaishnavi vh	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC008	B.S.Hemashree	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC031	Gomitha R C	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC036	HARSHITHA N	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC105	Tarun Prasanna	Dr. Surekha Borra	2	3	2	3	2
06-07-2023	1ks20ec107	T.Girishchowdary	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC060	Nallani gowthami	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	Chaitanya k	Chaitanya k	Dr. Surekha Borra	2	2	2	2	2
06-07-2023	1KS20EC032	Harini k	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC106	tejas n reddy	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1ks20ec094	Shashank S	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC034	Harshitha.B.L	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC051	KUMAR KG	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC072	Pushpa DT	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC035	Harshitha J	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1ks20ec074	Rahul R	Dr. Surekha Borra	2	2	2	2	2
06-07-2023	1KS20EC103	SUMUKHA.S	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC019	Chethan Kumar T	Dr. Surekha Borra	3	3	3	3	3
06-07-2023	1KS20EC043	Amshumanth	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC048	Kiran Dev D	Dr. Surekha Borra	3	3	3	3	1
07-07-2023	1KS20EC068	Prema C	Dr. Surekha Borra	2	2	2	2	2
07-07-2023	1KS20EC093	Sharath M	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC055	Mahesh Biradar	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC033	Harshith Gowda AR	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC028	Gagan HC	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC041	Jayanth H	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC087	Sandeep YH	Dr. Surekha Borra	3	3	3	3	3

07-07-2023	1KS20EC095	Shivareddy	Dr. Surekha Borra	1	1	1	1	1
07-07-2023	1KS20EC108	Uday C H	Dr. Surekha Borra	3	3	3	2	3
07-07-2023	1KS20EC066	Pradhymna S Kashyap	Dr. Surekha Borra	2	2	2	2	2
07-07-2023	1KS20EC039	Jamuna s g	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC056	Manaswini km	Dr. Surekha Borra	3	3	3	2	3
07-07-2023	1KS20EC010	Bhavitha	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC013	CHAITHRA K	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC085	Sadhana Srinivas	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC015	C.Umadevi	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC052	Kusuma VR	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1st	Aditi dubey	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1ks19ec034	Hima swetha	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC024	Dhruva Kumar S	Dr. Surekha Borra	2	2	2	2	2
07-07-2023	1ks20ec067	Praveen D B	Dr. Surekha Borra	2	2	2	2	2
07-07-2023	1KS20EC003	Afeefa Sharieff	Dr. Surekha Borra	2	2	2	2	2
07-07-2023	1KS20EC049	Kiran V Narayan	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC097	Shreyas M S	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC018	Chethan Kumar J	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC027	G BHAVANA PRIYADARSHINI	Dr. Surekha Borra	3	3	3	1	2
07-07-2023	1KS20EC070	Priyanka K	Dr. Surekha Borra	3	3	3	3	2
07-07-2023	1KS20EC029	Gagana B S	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC050	K. Prathima	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC065	Pavani T S	Dr. Surekha Borra	2	3	3	2	2
07-07-2023	1KS20EC061	Neha cr	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1ks20ec071	Priyanka M	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC037	INCHARA P	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC014	Challagundla Sai Srujitha	Dr. Surekha Borra	2	2	2	2	2
07-07-2023	1KS20EC045	Kavana G S	Dr. Surekha Borra	2	2	2	3	2
07-07-2023	1KS20EC089	Sanjana G	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC025	Divya N	Dr. Surekha Borra	2	2	2	2	2
07-07-2023	1KS20EC083	S Arun Kumar	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC047	Keerthana B S	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC073	Rahul Krishnan V	Dr. Surekha Borra	3	3	3	2	2
07-07-2023	1ks20ec063	Vasanth Kumar	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1KS20EC112	Varsha N	Dr. Surekha Borra	3	3	2	3	3
07-07-2023	1KS20EC021	Darshan kumar	Dr. Surekha Borra	3	3	2	3	2
07-07-2023	1KS20EC079	Rameshwar	Dr. Surekha Borra	3	3	3	3	3
07-07-2023	1ks20ec092	Shakthi Anbazhagan M	Dr. Surekha Borra	3	3	3	3	2
07-07-2023	1KS20EC075	RAJATH K ACHAR	Dr. Surekha Borra	3	3	3	3	3
08-07-2023	1KS20EC116	Vineeth M S	Dr. Surekha Borra	3	3	3	3	3
08-07-2023	1KS20EC030	Gandhamani	Dr. Surekha Borra	3	3	3	3	3
08-07-2023	1KS20EC109	Ujjwal Naidu	Dr. Surekha Borra	3	3	3	3	3
08-07-2023	1KS20EC078	RAKSHITHA A	Dr. Surekha Borra	3	3	3	3	3
08-07-2023	1ks20ec069	Priyanka hc	Dr. Surekha Borra	3	3	3	3	3
08-07-2023	1KS20EC016	CHAYA S	Dr. Surekha Borra	3	3	3	3	3
08-07-2023	1KS20EC026	Eshwar Biradar	Dr. Surekha Borra	3	3	3	3	3
09-07-2023	1KS20EC102	SUMANA N	Dr. Surekha Borra	3	3	3	3	3
09-07-2023	1KS20EC104	Suraksha N	Dr. Surekha Borra	3	3	3	3	3
09-07-2023	1. KS20EC059	N shreya	Dr. Surekha Borra	3	3	3	3	3

09-07-2023	1KS20EC046	KAVYA S M	Dr. Surekha Borra	3	3	3	3	3	
09-07-2023	1KS20EC053	M.Archana	Dr. Surekha Borra	3	3	3	3	3	
09-07-2023	1kz20ec004	Ajay B.G	Dr. Surekha Borra	3	3	3	3	3	
09-07-2023	1KS20EC057	Meghashree.M	Dr. Surekha Borra	3	3	3	3	3	
09-07-2023	1KS20EC054	Madiha	Dr. Surekha Borra	2	2	2	2	2	
09-07-2023	1KS20EC042	K Jeevitha	Dr. Surekha Borra	2	2	3	3	3	
09-07-2023	1KG20EC020	Darshan.K	Dr. Surekha Borra	3	3	2	2	2	
09-07-2023	1KS20EC011	Bhuvaneshwari k	Dr. Surekha Borra	2	2	2	2	2	
09-07-2023	1KS20EC114	VINAY S P	Dr. Surekha Borra	3	3	3	3	3	
09-07-2023	1KS20EC118	YASHWANTH Y	Dr. Surekha Borra	3	3	3	3	3	
09-07-2023	1KS20EC110	Vaishnavi A	Dr. Surekha Borra	3	2	3	3	3	
09-07-2023	1KS20EC077	RAKSHITH R	Dr. Surekha Borra	1	2	2	2	1	
09-07-2023	1KS20EC096	Shreya h	Dr. Surekha Borra	3	3	3	3	3	
09-07-2023	1KS20EC009	Bharath.M	Dr. Surekha Borra	3	2	2	2	2	
10-07-2023	1ks20ec064	Pavan c	Dr. Surekha Borra	3	3	3	3	3	
10-07-2023	1ks20ec038	JAMPULA CHAITHANYA KRISHNA	Dr. Surekha Borra	3	2	3	2	3	
10-07-2023	1KS20EC101	Sonika.R	Dr. Surekha Borra	2	2	2	2	2	
10-07-2023	1KS20EC017	Chethan G	Dr. Surekha Borra	3	3	3	3	3	
10-07-2023	1KS20EC001	Abhishek J	Dr. Surekha Borra	3	3	3	3	3	
10-07-2023	1KS20EC082	Rohit A k	Dr. Surekha Borra	3	3	3	3	3	
10-07-2023	1ks19ec026	Eram fathima	Dr. Surekha Borra	3	3	3	3	3	
				<b>No.of '1's</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>
				<b>Total</b>	<b>106</b>	<b>106</b>	<b>106</b>	<b>106</b>	<b>106</b>
				<b>%age of 2 and above</b>	<b>98.11</b>	<b>99.06</b>	<b>99.06</b>	<b>98.11</b>	<b>97.17</b>
				<b>Average</b>	<b>98.30</b>				







Co-PO Mapping Table

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	2	2	1	1	2	3	3	-	3	3	1	2	3	2
CO2	3	1	1	1	2	3	3	-	3	3	1	2	3	2
CO3	1	2	1	1	2	1	1	-	1	1	1	1	2	2
CO4	2	2	1	1	2	1	1	-	1	1	1	1	2	2
CO5	3	3	2	2	2	1	1	-	1	1	1	2	3	2
AVG	3.00	2.60	1.49	1.20	2.09	1.89	1.89	-	1.89	1.89	1.60	1.60	2.60	2.60

PO Attainment

CO'S	CO Attainment	CO RES. ULT	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PS	PS		
			1	2	3	4	5	6	7	8	9	10	11	12	O1	O2
CO1	3.00	Y	3	3	1	1	2	3	3	-	3	3	1	2	3	2
CO2	3.00	Y	3	3	1	1	2	3	3	-	3	3	1	2	3	2
CO3	3.00	Y	3	2	1	1	2	1	1	-	1	1	1	1	2	2
CO4	2.10	Y	2.1	1.4	0.7	0.7	1.4	0.7	0.7	-	0.7	0.7	0.7	1.4	1.4	
CO5	3	Y	3	3	3	2	2	1	1	-	1	1	1	1.33	3	2
Average			2.87	2.48	1.34	1.14	1.88	1.74	1.74	-	1.74	1.74	0.94	1.41	2.48	1.83



# ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟಿ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

(State University of Government of Karnataka Established as per the VTU Act, 1994)

"JnanaSangama" Belagavi-590018, Karnataka, India

Prof. Dr. B. E. Rangaswamy, Ph.D.

Fax : (0831) 2405467

Phone: (0831) 2498100 REGISTRAR

REF: VTU/BGM/ACA/2022-23/ 6241

DATE: 21 JAN 2023

### Revised-NOTIFICATION

**Subject:** - Revised-Academic Calendar of 3<sup>rd</sup> semester of B.E./B.Tech., programs of University regarding...

**Reference:** Dean Faculty of Engineering, VTU Belagavi approval dated 20.01.2023

Hon'ble Vice-Chancellor's approval dated: 20.01.2023

The **revised-academic calendar** concerned to 3<sup>rd</sup> semester of B.E./B.Tech., programs of the University for the academic year 2022-23 are hereby notified as mentioned below;

Revised Academic Calendar for 3rd-semester B.E./B.Tech. Programs		
Details	Existing Dates	Revised Dates
Commencement of III semester	31.10.2022	31.10.2022
Commencement of Classes for Lateral Entry students	-----	06.02.2023
Last working date	11.02.2023	01.04.2023
Practical Examinations Regular Students	13.02.2023 To 21.02.2023	04.04.2023 To 13.04.2023
Theory Examinations	22.02.2023 To 22.03.2023	17.04.2023 To 05.05.2023
Practical Examination for Lateral Entry students	-----	08.05.2023 To 13.05.2023
Intra/Inter Institute Internship	26.03.2023 To 16.04.2023	----
Commencement of IV semester	17.04.2023	15.05.2023



**Please Note:**

- The Institute needs to function for **six days** a week with **Saturday** being a full working day. Timing for the classes is either 08.00 am to 04.15 pm or 09.00 am to 05.00 pm in total 08 hours a day. #if required, the college can also plan to have extra classes on Sundays to complete academic activities within the duration mentioned.
- **Separate classes** should be conducted for lateral entry students as per the revised academic calendar; however, the regular students may attend the classes along with lateral entry students for review.
- Notification regarding the Calendar of Events relating to the conduct of University **Examinations** will be issued by the Registrar (Evaluation) from time to time.
- Academic Calendar **may be modified** based on guidelines/directions issued in the future by MHRD/UGC/AICTE/State Government.
- Academic Calendar is also applicable for **Autonomous Colleges**. If any changes are to be affected by Autonomous Colleges in the academic terms and examination schedule, they could do so with the approval of the University.
- The college has to conduct offline classes to cover **80%** of the syllabus of the courses; however, **20%** of the syllabus can be covered in virtual model (Online) mode. **Attendance** of the students for offline and online classes is mandatory and records should be maintained and submitted to the university whenever informed.
- AICTE Activity point details circular will be issued by the Registrar's office separately.
- If any clarification/correction, please email-[registrar@vtu.ac.in](mailto:registrar@vtu.ac.in) or [sbhvtuso@yahoo.com](mailto:sbhvtuso@yahoo.com)
- **Intra/Inter Institute Internship for lateral entry students shall be conducted parallelly with academic activities of even the semester.**

The Principals of Affiliated, Constituent and Autonomous Engineering Colleges, Chairpersons of the University departments are hereby informed to bring the revised-academic calendar to the notice of all concerned.

Sd/-

REGISTRAR

**To,**

1. The Principals of all affiliated/ constituent /Autonomous Engineering Colleges under the ambit of VTU Belagavi.
2. The chairperson, of the Department of Mechanical Engineering /Civil Engineering /Computer Science and Engineering& Communication Electronics Engineering of the University.

**Copy to.**

1. To the Hon'ble Vice-Chancellor through the secretary to VC, VTU Belagavi for information
2. The Registrar (Evaluation), VTU Belagavi for information.
3. The Regional Directors (I/c) of all the regional offices of VTU for circulation.
4. The Director I/c. ITI SMU, VTU Belagavi for information and to make arrangements to upload Academic Calendar on the VTU web portal.
5. The Director of Physical Education, VTU Belagavi for information
6. OS for information and make arrangements to send the circular regarding AICTE Activity Points
7. All the concerned Special Officer/s and Caseworker/s of the academic section, VTU, Belagavi

 21.1.23  
**REGISTRAR**

2/2



# ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟಿ ಯು ಅಧಿನಿಯಮ ೧೯೯೪ ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ")

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

(State University of Government of Karnataka Established as per the VTU Act, 1994)

"JnanaSangama" Belagavi-590018, Karnataka, India

REGISTRAR

Phone : (0831) 2498100

Fax : (0831) 2405467

REF: VTU/BGM/ACA/2022-23/ 3000

DATE: 3 SEP 2022

### NOTIFICATION

**Subject:** - Academic Calendar of ODD semesters B.E./B.Tech./B.Plan./B.Arch. programs of University regarding...

**Reference:** Hon'ble Vice-Chancellor's approval dated: 03.09.2022

The academic calendar concerned to **ODD semesters of B.E./B.Tech./B.Plan./B.Arch.** programs of University for academic year 2022-23 are hereby notified as mentioned in the attached sheet;

The Principals of Affiliated, Constituent and Autonomous Engineering Colleges are hereby informed to bring the academic calendar to the notice of all concerned.

Encl: As mentioned

Sd/-

REGISTRAR

To,

1. The Principals of all affiliated/ constituent /Autonomous Engineering Colleges under the ambit of VTU Belagavi.
2. The chairperson, Department of Mechanical Engineering /Civil Engineering /Computer Science and Engineering and Business Studies of the University.

Copy to.

1. To the Hon'ble Vice-Chancellor through the secretary to VC, VTU Belagavi for information
2. The Registrar (Evaluation), VTU Belagavi for information.
3. The Regional Directors (I/c) of all the regional offices of VTU for circulation.
4. The Director I/c. ITI SMU, VTU Belagavi for information and to make arrangements to upload revised Academic Calendar on the VTU web portal.
5. The Director of Physical Education, VTU Belagavi for information
6. PS to Registrar VTU Belagavi
7. All the concerned Special Officer/s and Caseworker/s of the academic section, VTU, Belagavi

Rag 03/09/2022  
Registrar

✍

### Academic Calendar for ODD Semester of UG programs for the year 2022-23

	I semester B.E./B.Tech.	I semester B.Arch./B.Plan	I semester B.Sc.	III semester B.E./ B.Tech.	III Semester B.Arch.	III semester B. Plan	III Semester B.Sc.	V Semester B.E./B.Tech.	V Semester B.Arch./ B.Plan.	VII semester B.E./B.Tech.	VII semester B.Plan.	VII semester B.Arch	IX semester B.Arch
Commencement of ODD Semester	# 10.10.2022	# 10.10.2022	10.10.2022 (Tentative)	11.10.2022	31.10.2022	31.10.2022	10.10.2022	10.10.2022	12.09.2022	21.08.2022	21.08.2022	19.09.2022	01.09.2022
Internship				11.10.2022 To 30.10.2022						21.08.2022 To 17.09.2022	21.08.2022 To 24.09.2022		
Commencement of Classes				31.10.2022	31.10.2022	31.10.2022	10.10.2022	10.10.2022	12.09.2022	19.09.2022	26.09.2022	19.09.2022	01.09.2022
Last Working day of ODD Semester				11.02.2023	11.02.2023	11.02.2023	28.01.2023	27.01.2023	31.12.2022	31.12.2022	07.01.2023	31.12.2022	20.12.2022
Practical Examination				13.02.2023 To 21.02.2023	13.02.2023 To 21.02.2023	13.02.2023 To 21.02.2023	01.02.2023 To 09.02.2023	30.01.2023 To 09.02.2023	03.01.2023 To 13.01.2023	03.01.2023 To 13.01.2023	09.01.2023 To 14.01.2023	03.01.2023 To 13.01.2023	21.12.2022 To 31.12.2022
Theory Examinations				22.02.2023 To 22.03.2023	22.02.2023 To 22.03.2023	22.02.2023 To 22.03.2023	13.02.2023 To 03.03.2023	13.02.2023 To 18.03.2023	16.01.2023 To 15.02.2023	16.01.2023 To 15.02.2023	16.01.2023 To 15.02.2023	16.01.2023 To 15.02.2023	----
Internship			*	26.03.2023 To 16.04.2023	---	---		---	---		---		---
Internship Viva Voce/ Project viva				---	---	---		---	---	---	---		---
Commencement of EVEN Semester				17.04.2023	17.04.2023	17.04.2023	20.03.2023	20.03.2023	20.03.2023	20.02.2023	20.02.2023	20.02.2023	06.01.2023

**Please Note:**

- The academic sessions for ODD semesters should commence from the dates mentioned above. # Commencement of Induction Program As per AICTE Academic Calendar 2022-23
- The commencement date of VII semester B.E./B.Tech/, is postponed from 12.09.2022 to 19.09.2022 to cover 04 weeks of Internship duration. The students of B.E./B.Tech., compulsorily have to complete the Internship in this duration only.
- The commencement date of VII semester B.Plan., is postponed from 12.09.2022 to 26.09.2022 to cover 06 weeks of Internship duration.
- Students joining to VII semester B.E./B.Tech/B.Plan should complete the Internship before the commencement of the classes.
- The Institute needs to function for six days a week with additional hours (Saturday is a full working day). #if required, the college can also plan to have extra classes on Sundays to complete academic activities within the duration mentioned.
- The faculty/staff shall be available to undertake any work assigned by the university.
- Notification regarding the Calendar of Events relating to the conduct of University Examinations will be issued by the Registrar (Evaluation) from time to time.
- Academic Calendar may be modified based on guidelines/directions issued in the future by MHRD/UGC/AICTE/State Government.
- Academic Calendar is also applicable for Autonomous Colleges. if any changes are to be effected by Autonomous Colleges in the academic terms and examination schedule, they could do so with the approval of the University.
- The college has to conduct offline classes to cover 80% of the syllabus of the courses; however, 20% of the syllabus can be covered in virtual model (Online) mode. Attendance of the students for offline and online classes is mandatory and records should be maintained and submitted to the university whenever informed.
- If any clarification/correction, please email to [sbhvtuso@gmail.com](mailto:sbhvtuso@gmail.com)

\* Internship for Lateral Entry Students

Ray 03/09/2022  
REGISTRAR  
7/3/12



# K.S INSTITUTE OF TECHNOLOGY, BENGALURU-560109

TENTATIVE CALENDAR OF EVENTS: III ODD SEMESTER (2022-2023)

SESSION: OCT 2022 – FEB 2023

Week No.	Month	Day						Days	Activities
		Mon	Tue	Wed	Thu	Fri	Sat		
1	OCT/NOV	31*	1H	2	3	4 TA	5 DH	4	31* - Commencement of III Sem 1- Kannada Rajyotsava
2	NOV	7	8	9	10	11II	12	5	11- Kanakadasa Jayanti 12- Tuesday Time Table
3	NOV	14	15	16	17	18	19 DH	5	
4	NOV	21	22	23	24	25	26 TA	6	26 - Wednesday Time Table
5	NOV/DEC	28 T1	29 T1	30 T1	1	2	3 DH	5	
6	DEC	5	6	7	8 LT1	9 LT1	10 LT1	6	10- Tuesday Time Table
7	DEC	12* FFB1	13 BV	14 ASD	15	16	17 DH	5	12* - First Faculty Feed Back
8	DEC	19	20	21	22	23	24	6	24 - Wednesday Time Table
9	DEC	26	27	28	29	30	31 TA	6	31 - Monday Time Table
10	JAN	2 T2	3 T2	4 T2	5	6	7 DH	5	
11	JAN	9	10	11	12 BV	13 ASD	14 H	5	14- Makara Sankranthi
12	JAN	16* FFB2	17	18	19	20	21 DH	5	16* - First Faculty Feed Back
13	JAN	23	24	25	26 H	27	28	5	26- Republic Day 28- Wednesday Time Table
14	JAN/FEB	30	31	1 TA	2 T3	3 T3	4 DH	5	
15	FEB	6 T3	7	8 LT2	9 LT2	10 LT2	11*	6	11- Thursday Time Table 11* - Last Working day

Total No of Working Days : 79

Total Number of working days ( Excluding holidays and Tests)=64

H	Holiday
BV	Blue Book Verification
T1,T2,T3	Tests 1,2,3
ASD	Attendance & Sessional Display
DH	Declared Holiday
LT	Lab Test
TA	Test attendance

Monday	13
Tuesday	13
Wednesday	13
Thursday	13
Friday	12
<b>Total</b>	<b>64</b>

*(Signature)*  
**PRINCIPAL**  
**K.S. INSTITUTE OF TECHNOLOGY**  
**BENGALURU - 560 109.**



# K.S. INSTITUTE OF TECHNOLOGY, BENGALURU-560109

TENTATIVE CALENDAR OF EVENTS: V ODD SEMESTER (2022-2023)

SESSION: OCT 2022 - JAN 2023

Week No.	Month	Day						Days	Activities
		Mos	Tue	Wed	Thu	Fri	Sat		
1	OCT	10*	11	12	13	14	15	6	10* - Commencement of V Sem 15-Wednesday Time Table
2	OCT	17	18	19	20	21	22 DH	5	
3	OCT	24 H	25	26 H	27	28	29	4	24-Naraka Chaturdashi 26- Balipadyami Deepavalli 29- Friday Time Table
4	OCT/NOV	31	10	2	3	4 TA	5 DH	4	1- Kannada Rajyotsava
5	NOV	7 T1	8 T1	9 T1	10	11 H	12	5	11- Kanakadasa Jayanti 12- Wednesday Time Table
6	NOV	14	15	16 LT1	17 LT1	18 LT1	19 DH	5	
7	NOV	21* FFB1	22 BV	23 ASD	24	25	26	6	21* - First Faculty Feed Back 26 - Monday Time Table
8	NOV/DEC	28	29	30	1	2	3 DH	5	
9	DEC	5	6	7	8	9	10 TA	6	10- Tuesday Time Table
10	DEC	12 T2	13 T2	14 T2	15	16	17 DH	5	
11	DEC	19* FFB2	20	21	22 BV	23	24 ASD	6	19* - Second Faculty Feed Back 24 - Thursday Time Table
12	DEC	26	27	28	29	30	31 DH	5	
13	JAN	2	3	4	5	6	7	6	7-Wednesday Time Table
14	JAN	9	10 TA	11 T3	12 T3	13 T3	14 DH	5	
15	JAN	16	17	18 LT3	19 LT2	20 LT2	21*	6	21- Wednesday Time Table 21* - Last Working day

Total No of Working Days : 79

Total Number of working days ( Excluding holidays and Tests)=64

H	Holiday
BV	Blue Book Verification
T1,T2,T3	Tests 1,2,3
ASD	Attendance & Sectional Display
DH	Declared Holiday
LT	Lab Test
TA	Test attendance

Monday	13
Tuesday	13
Wednesday	13
Thursday	13
Friday	12
Total	64

*S. Kumar*  
22/08/22  
PRINCIPAL  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109



# K.S. INSTITUTE OF TECHNOLOGY, BENGALURU-560109

TENTATIVE CALENDAR OF EVENTS: VII ODD SEMESTER (2022-2023)

SESSION: SEP 2022 - DEC 2022

Week No.	Month	Day						Days	Activities
		Mon	Tue	Wed	Thu	Fri	Sat		
1	SEP	19*	20	21	22	23	24 DH	5	19*-Commencement of VII Semester
2	SEP/OCT	26	27	28	29	30	1	6	1- Wednesday Time Table
3	OCT	3	4H	5H	6	7	8 DH	3	4-Ayudha Pooja 5- Vijaya Dasami
4	OCT	10	11	12	13	14	15 TA	6	15-Friday Time Table
5	OCT	17 T1	18 T1	19 T1	20	21	22 DH	5	
6	OCT	24 H	25	26 H	27 LT1	28 LT1	29 LT1	4	24-Naraka Chaturdashi 26- Balipadyami Deepavalli
7	OCT/NOV	31	1H	2	3* FFB1	4 BV	5 DH	4	1- Kannada Rajyotsava 3* - First Faculty Feed Back
8	NOV	7 ASD	8	9	10	11H	12	5	11- Kanakadasa Jayanti 12- Tuesday Time Table
9	NOV	14	15	16	17	18 TA	19 DH	5	
10	NOV	21 T2	22 T2	23 T2	24	25	26	6	26 - Wednesday Time Table
11	NOV/DEC	28 * FFB2	29	30 BV	1	2 ASD	3 DH	5	28* -Second Faculty Feed Back
12	DEC	5	6	7	8	9	10	6	10- Tuesday Time Table
13	DEC	12	13	14	15	16	17 DH	5	
14	DEC	19	20	21 TA	22 T3	23 T3	24 T3	6	
15	DEC	26	27	28 LT2	29 LT2	30 LT2	31*	6	31-Monday Time Table 31 - Last Working day

Total No of Working Days : 77

Total Number of working days ( Excluding holidays and Tests)=62

H	Holiday
BV	Blue Book Verification
T1,T2,T3	Tests 1,2,3
ASD	Announcement & Seasonal Display
DH	Declared Holiday
LT	Lab Test
TA	Test attendance

Monday	13
Tuesday	13
Wednesday	12
Thursday	12
Friday	12
Total	62

*(Signature)*  
22/09/22  
PRINCIPAL  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109



**K. S INSTITUTE OF TECHNOLOGY, BENGALURU-560109**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**TENTATIVE CALENDAR OF EVENTS: III ODD SEMESTER (2022-2023)**  
**SESSION: OCT 2022 – FEB 2023**

Week No.	Month	Day						Days	Activities	Department Activities Tentative Dates
		Mon	Tue	Wed	Thu	Fri	Sat			
1	OCT/NOV	31*	1H	2	3	4 TA	5 DH	4	31* - Commencement of III Sem 1- Kannada Rajyotsava	Nov. 2nd - Industrial Visit for 5th sem
2	NOV	7	8	9	10	11H	12	5	11- Kanakadasa Jayanti 12- Tuesday Time Table	Nov. 8th Self Happiness & Resilience Nov. 12th - FDP on "Patent Search and Analysis" for students & staff.
3	NOV	14	15	16	17	18	19 DH	5		Nov. 15 - IEEE Awareness for 1st year students Nov. 16th - Talk Under ASH/IEEE-WIE for 5th & 7th sem Nov.17th -Talk on Entrepreneurship development Skill Under ISTE
4	NOV	21	22	23	24	25	26 TA	6	26 - Wednesday Time Table	Nov. 24,25&26th -3 days "Hands-on Workshop on Embedded system Design using Raspberry pico" for students
5	NOV/DEC	28 T1	29 T1	30 T1	1	2	3 DH	5		Nov. 28th & 29th AICTE Activity
6	DEC	5	6	7	8 LT1	9 LT1	10 LT1	6	10- Tuesday Time Table	Dec.8th & 9th - Workshop for 3rd & 5th sem students Under Garut Aerobatics Club Dec. 10th - Guest Lecture on "Addressing challenges in research publications" for students & Staff
7	DEC	12* FFB1	13 BV	14 ASD	15	16	17 DH	5	12* - First Faculty Feed Back	Dec. 12th- Motivational Talk Under ISTE
8	DEC	19	20	21	22	23	24	6	24 - Wednesday Time Table	Dec. 24th- Industrial Visit for 3rd sem
9	DEC	26	27	28	29	30	31 TA	6	31 - Monday Time Table	Dec. 30th- Career Guidance
10	JAN	2 T2	3 T2	4 T2	5	6	7 DH	5		Jan 5th - Miniproject Exhibition
11	JAN	9	10	11	12 BV	13 ASD	14 H	5	14- Makara Sankranti	
12	JAN	16* FFB2	17	18	19	20	21 DH	5	16* - First Faculty Feed Back	
13	JAN	23	24	25	26 H	27	28	5	26- Republic Day 28- Wednesday Time Table	
14	JAN/FEB	30	31	1 TA	2 T3	3 T3	4 DH	5		
15	FEB	6 T3	7	8 LT2	9 LT2	10 LT2	11*	6	11- Thursday Time Table 11* - Last Working day	

**Total No of Working Days : 79**

Total Number of working days ( Excluding holidays and Tests)=64

<b>H</b>	Holiday
<b>BV</b>	Blue Book Verification
<b>T1,T2, T3</b>	Tests 1,2, 3
<b>ASD</b>	Attendance & Sessional Display
<b>DH</b>	Declared Holiday
<b>LT</b>	Lab Test
<b>TA</b>	Test attendance

Monday	<b>13</b>
Tuesday	<b>13</b>
Wednesday	<b>13</b>
Thursday	<b>13</b>
Friday	<b>12</b>
<b>Total</b>	<b>64</b>

**HEAD OF THE DEPARTMENT**  
 Dept. of Electronics & Communication Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109

**PRINCIPAL**  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.



**K. S INSTITUTE OF TECHNOLOGY, BENGALURU-560109**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**TENTATIVE CALENDAR OF EVENTS: V ODD SEMESTER (2022-2023)**  
**SESSION: OCT 2022 – JAN 2023**

Week No.	Month	Day						Days	Activities	Department Activities Tentative Dates
		Mon	Tue	Wed	Thu	Fri	Sat			
1	OCT	10*	11	12	13	14	15	6	10* - Commencement of V Sem 15- Friday Time Table	Oct. 10th & 11th Workshop Under Ananthakish Oct 15th - IEEE day
2	OCT	17	18	19	20	21	22 DH	5		Oct 21st - Industrial Visit for 7th sem
3	OCT	24 H	25	26 H	27	28	29	4	24-Naraka Chaturdashi 26- Balipadyami Deepavalli 29- Wednesday Time Table	
4	OCT/ NOV	31	1H	2	3	4	5 DH	4	1- Kannada Rajyotsava	Nov. 2nd - Industrial Visit for 5th sem
5	NOV	7	8	9	10	11H	12 TA	5	11- Kanakadasa Jayanti 12- Tuesday Time Table	Nov. 8th Self Happiness & Resilience Nov. 12th - FDP on "Patent Search and Analysis" for students & staff.
6	NOV	14 T1	15 T1	16 T1	17	18	19 DH	5		Nov. 15 - IEEE Awareness for 1st year students Nov. 16th - Talk Under ASH/IEEE-WIE for 5th & 7th sem Nov. 17th -Talk on Entrepreneurship development Skill Under ISTE
7	NOV	21	22	23 LT1	24 LT1	25 LT1	26	6	26 - Wednesday Time Table	Nov. 24,25&26th -3 days "Hands-on Workshop on Embedded system Design using Raspberry pico" for students
8	NOV/ DEC	28* FFB1	29 BV	30 ASD	1	2	3 DH	5	28* - First Faculty Feed Back	Nov. 28th & 29th AICTE Activity
9	DEC	5	6	7	8	9	10	6	10- Tuesday Time Table	Dec.8th & 9th - Workshop for 3rd & 5th sem students Under Garut Aerobatics Club Dec. 10th - Guest Lecture on "Addressing challenges in research publications" for students & Staff
10	DEC	12	13	14	15	16 TA	17 DH	5		Dec. 12th- Motivational Talk Under ISTE
11	DEC	19 T2	20 T2	21 T2	22	23	24	6	24 - Wednesday Time Table	Dec. 24th- Industrial Visit for 3rd sem
12	DEC	26	27	28	29* FFB2	30 BV	31 ASD	6	29* -Second Faculty Feed Back 31 - Monday Time Table	Dec. 30th- Carrier Guidance
13	JAN	2	3	4	5	6	7 DH	5		Jan 5th - Miniproject Exhibition
14	JAN	9	10	11	12	13	14 H	5	14- Makara Sankranti	
15	JAN	16	17 TA	18 T3	19 T3	20 T3	21 DH	5		
16	JAN	23 LT2	24 LT2	25 LT2	26 LT1	27*		4	26- Republic Day 27* - Last Working day	
<b>Total No of Working Days : 82</b>										

Total Number of working days ( Excluding holidays and Tests)=67

H	Holiday
BV	Blue Book Verification
T1,T2, T3	Tests 1,2, 3
ASD	Attendance & Sessional Display
DH	Declared Holiday
LT	Lab Test
TA	Test attendance

Monday	13
Tuesday	13
Wednesday	13
Thursday	14
Friday	14
<b>Total</b>	<b>67</b>

**HEAD OF THE DEPARTMENT**  
 Dept. of Electronics & Communication Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109

**PRINCIPAL**  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.





**K. S INSTITUTE OF TECHNOLOGY, BENGALURU-560109**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**TENTATIVE CALENDAR OF EVENTS: VII ODD SEMESTER (2022-2023)**  
**SESSION: SEP 2022 – DEC 2022**

Week No.	Month	Day						Days	Activities	Department Activities Tentative Dates
		Mon	Tue	Wed	Thu	Fri	Sat			
1	SEP	19*	20	21	22	23	24 DH	5	19*-Commencement of VII Semester	
2	SEP/OCT	26	27	28	29	30	1	6	1 - Wednesday Time Table	Sep 26th to 30th - FDP Under IEEE, IET, IETE & ISTE
3	OCT	3	4H	5H	6	7	8 DH	3	4-Ayudha Pooja 5- Vijaya Dasami	
4	OCT	10	11	12	13	14	15 TA	6	15-Friday Time Table	Oct. 10th & 11th Workshop Under Anthariksh Oct 15th - IEEE day
5	OCT	17 T1	18 T1	19 T1	20	21	22 DH	5		Oct 21st - Industrial Visit for 7th sem
6	OCT	24 H	25	26 H	27 LT1	28 LT1	29 LT1	4	24-Naraka Chaturdashi 26- Balipadyami Deepavalli	
7	OCT/NOV	31	1H	2	3* FFB1	4 BV	5 DH	4	1- Kannada Rajyotsava 3* - First Faculty Feed Back	Nov. 2nd - Industrial Visit for 5th sem
8	NOV	7 ASD	8	9	10	11H	12	5	11- Kanakadasa Jayanti 12- Tuesday Time Table	Nov. 8th Self Happiness & Resilience Nov. 12th - FDP on "Patent Search and Analysis" for students & staff.
9	NOV	14	15	16	17	18 TA	19 DH	5		Nov. 15 - IEEE Awareness for 1st year students Nov. 16th - Talk Under ASH/IEEE-WIE for 5th & 7th sem Nov. 17th -Talk on Entrepreneurship development Skill Under ISTE
10	NOV	21 T2	22 T2	23 T2	24	25	26	6	26 - Wednesday Time Table	Nov. 24,25&26th -3 days "Hands-on Workshop on Embedded system Design using Raspberry pico" for students
11	NOV/DEC	28* FFB2	29	30 BV	1	2 ASD	3 DH	5	28* -Second Faculty Feed Back	Nov. 28th & 29th AICTE Activity
12	DEC	5	6	7	8	9	10	6	10- Tuesday Time Table	Dec.8th & 9th - Workshop for 3rd & 5th sem students Under Garut AeroModeling Club Dec. 10th - Guest Lecture on "Addressing challenges in research publications" for students & Staff
13	DEC	12	13	14	15	16	17 DH	5		Dec. 12th- Motivational Talk Under ISTE
14	DEC	19	20	21 TA	22 T3	23 T3	24 T3	6		Dec. 24th- Industrial Visit for 3rd sem
15	DEC	26	27	28 LT2	29 LT2	30 LT2	31*	6	31-Monday Time Table 31 - Last Working day	Dec. 30th- Carrier Guidance

Total No of Working Days : 77

Total Number of working days ( Excluding holidays and Tests)=62

H	Holiday
BV	Blue Book Verification
T1,T2, T3	Tests 1,2, 3
ASD	Attendance & Sessional Display
DH	Declared Holiday
LT	Lab Test
TA	Test attendance

Monday	13
Tuesday	13
Wednesday	12
Thursday	12
Friday	12
<b>Total</b>	<b>62</b>

*[Signature]*  
**HEAD OF THE DEPARTMENT**  
 Dept. of Electronics & Communication Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109

*[Signature]*  
**PRINCIPAL**  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109,




**K. S. INSTITUTE OF TECHNOLOGY, BANGALORE**  
**VII SEM (2018 SCHEME)**  
**I SESSIONAL TEST TIME TABLE (2022-2023)**

DATE: 11-10-2022

DATE	TIME	COMPUTER SCIENCE AND ENGG	ELECTRONICS AND COMMUNICATION ENGG	ELECTRONICS AND TELECOMMUNICATION ENGG	MECHANICAL ENGG
27-10-2022 THURSDAY	9.30 AM TO 11.00 AM	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (18CS71)	COMPUTER NETWORKS (18EC71)	OPTICAL COMMUNICATION (18TE71)	CONTROL ENGINEERING (18ME71)
	2.00 PM TO 3.30 PM	BIG DATA ANALYTICS (18CS72)	VLSI DESIGN (18EC72)	WIRELESS COMMUNICATION (18TE72)	COMPUTER AIDED DESIGN & MANUFACTURING (18ME72)
28-10-2022 FRIDAY	9.30 AM TO 11.00 AM	USER INTERFACE DESIGN (18CS734)	SATELLITE COMMUNICATION (18EC732)	SATELLITE COMMUNICATION (18EC732)	TOTAL QUALITY MANAGEMENT (18ME734)
	2.00 PM TO 3.30 PM	CRYPTOGRAPHY (18CS744)	CRYPTOGRAPHY (18EC744)	CRYPTOGRAPHY (18EC744)	ADDITIVE MANUFACTURING (18ME741)
29-10-2022 SATURDAY	9.30 AM TO 11.00 AM	ENERGY AND ENVIRONMENT (18ME751)	ENERGY AND ENVIRONMENT (18ME751)	ENERGY AND ENVIRONMENT (18ME751)	PYTHON APPLICATION PROGRAMMING (18CS752)
	2.00 PM TO 3.30 PM	---	---	---	---

NOTE: All the students are strictly informed to wear LAB uniforms, College ID Card is compulsory during the test.

  
**ACADEMIC COORDINATOR**  
Head of the Department  
Dept. of Mechanical Engg.  
K.S. Institute of Technology  
Bengaluru - 560 109.

  
**PRINCIPAL**  
PRINCIPAL  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109

## K.S.INSTITUTE OF TECHNOLOGY, Bangalore - 109

### VII SEM I SESSIONAL TEST INVIGILATION DUTY (2022-2023)

Date	Timings	201	203	204	205	206	207	208	209
27-10-2022 THURSDAY	9:30 am to 11:00 am	BK (CSE)	NM (ME)	KG (CSE)	RGL (ME)	PR (CSE)	PA (ECE)	PS (ECE)	AKG (ECE)
	2:00 pm to 3:30 pm	PR (CSE)	MBR (ME)	KMS (CSE)	PHS. (CSE)	SST (ECE)	SB (ECE)	LK (CSE)	PS (ECE)
28-10-2022 FRIDAY	9:30 am to 11:00 am	KMS (CSE)	AKG (ECE)	SB (ECE)	PKN (CSE)	MBR (ME)	PA <sup>PS</sup> (ECE)	SST (ECE)	LK <sup>GR</sup> (CSE)
	2:00 pm to 3:30 pm	BK (CSE)	SST (ECE)	PKN (CSE)	PS <sup>PA</sup> (ECE)	RGL (ME)	GR <sup>LK</sup> (CSE)	NM (ME)	AKG (ECE)
29-10-2022 SATURDAY	9:30 am to 11:00 am	LK (CSE)	PA (ECE)	GR (CSE)	MBR (ME)	PHS (CSE)	AKG (ECE)	RGL (ME)	KG (CSE)

*[Signature]*  
20/10/22  
ACADEMIC-INCHARGE

*[Signature]*  
PRINCIPAL

Mr. Krishna Gudi	KG	Dr. Surekha	SB
Mr. Prashanth HS	PHS	Mr. Praveen	PA
Mrs. Beena K	BK	Mr. Saleem S Tevaramani	SST
Mrs. Geetha R	GR	Mr. Aswini Kumar	AKG
Mrs. Pallavi K N	PKN	Mrs. Pooja S	PS
Mrs. Kavya M S	KMS	Mr. Nagabhushana M	NM
Mrs. Pallavi R	PR	Mr. Manjunath B R	MBR
Mr. Laxmikantha K	LK	Mr. Rajesh G L	RGL

K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**FIRST INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

ROOM No: 201

**BLACK BOARD**

VII 'A' CS	VII 'A' EC	VII 'A' CS	VII 'A' EC	VII 'A' CS	VII 'A' EC
1KS19CS001	1KS19EC001	1KS19CS007	1KS19EC007	1KS19CS015	1KS19EC014
1KS19CS002	1KS19EC002	1KS19CS009	1KS19EC008	1KS19CS016	1KS19EC015
1KS19CS003	1KS19EC003	1KS19CS010	1KS19EC009	1KS19CS017	1KS19EC016
1KS19CS004	1KS19EC004	1KS19CS011	1KS19EC010	1KS19CS018	1KS19EC017
1KS19CS005	1KS19EC005	1KS19CS012	1KS19EC011	1KS19CS019	1KS19EC018
1KS19CS006	1KS19EC006	1KS19CS014	1KS19EC012	1KS19CS020	1KS19EC019

VII CS 'A' SEC Total = 18

VII EC 'A' SEC Total = 18

  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

  
**PRINCIPAL**  
 K.S. INSTITUTE OF TECHNOLOGY  
 BANGALORE - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**

**VII SEM 2018 SCHEME**

**FIRST INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

**ROOM No: 203**

**BLACK BOARD**

VII 'A' CS	VII 'A' EC
1KS19CS021	1KS19EC020
1KS19CS022	1KS19EC021
1KS19CS023	1KS19EC022
1KS19CS024	1KS19EC023
1KS19CS025	1KS19EC024
1KS19CS026	1KS19EC025

VII 'A' CS	VII 'A' EC
1KS19CS028	1KS19EC027
1KS19CS029	1KS19EC028
1KS19CS030	1KS19EC029
1KS19CS031	1KS19EC030
1KS19CS032	1KS19EC031
1KS19CS033	1KS19EC032

VII 'A' CS	VII 'A' ME
1KS19CS034	1KS19ME001
1KS19CS035	1KS19ME002
1KS19CS036	1KS19ME003
1KS19CS038	1KS19ME004
1KS19CS039	1KS19ME005
1KS19CS040	1KS19ME008

**VII CS 'A' SEC Total = 18**

**VII EC 'A' SEC Total = 12**

**VII ME 'A' SEC Total = 06**

*G. Hanu*  
**ACADEMIC COORDINATOR**  
 Head of the Dept.  
 Dept. of Mechanical Engg  
 K.S. Institute of Technology  
 Bengaluru - 550 109.

*S. Kumar C*  
 19/10/22  
**PRINCIPAL**  
 K.S INSTITUTE OF TECHNOLOGY  
 BENGALURU - 550 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**FIRST INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

ROOM No: 204

BLACK BOARD

VII 'A' CS	VII 'A' EC	VII 'A' CS	VII 'A' EC	VII 'A' CS	VII 'A' ME
1KS19CS041	1KS19EC033	1KS19CS047	1KS19EC040	1KS19CS053	1KS19ME009
1KS19CS042	1KS19EC035	1KS19CS048	1KS19EC041	1KS19CS054	1KS19ME010
1KS19CS043	1KS19EC036	1KS19CS049	1KS19EC042	1KS19CS055	1KS19ME011
1KS19CS044	1KS19EC037	1KS19CS050	1KS19EC043	1KS19CS056	1KS19ME013
1KS19CS045	1KS19EC038	1KS19CS051	1KS19EC044	1KS19CS057	1KS19ME014
1KS19CS046	1KS19EC039	1KS19CS052	1KS19EC045	1KS19CS058	1KS19ME015

VII CS 'A' SEC Total = 18

VII EC 'A' SEC Total = 12

VII ME 'A' SEC Total = 06

  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

  
**PRINCIPAL** 19/10/22  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**FIRST INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

ROOM No: 205

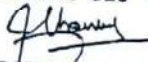
**BLACK BOARD**

VII 'A & B' CS	VII 'A' EC	VII 'B' CS	VII 'A' EC	VII 'B' CS	VII 'A' ME
1KS18CS011	1KS19EC046	1KS19CS060	1KS19EC052	1KS19CS066	1KS19ME016
1KS19CS116	1KS19EC047	1KS19CS061	1KS19EC053	1KS19CS067	1KS19ME017
1KS20CS400	1KS19EC048	1KS19CS062	1KS19EC054	1KS19CS068	1KS19ME018
1KS20CS404	1KS19EC049	1KS19CS063	1KS19EC055	1KS19CS069	1KS19ME019
1KS20CS402	1KS19EC050	1KS19CS064	1KS19EC056	1KS19CS070	1KS19ME020
1KS19CS059	1KS19EC051	1KS19CS065	1KS19EC057	1KS19CS071	1KS19ME021

VII CS 'A' SEC Total = 05    VII CS 'B' SEC TOTAL = 13

VII EC 'A' SEC Total = 12

VII ME 'A' SEC Total = 06

  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

  
 19/10/22  
**PRINCIPAL**  
 K.S INSTITUTE OF TECHNOLOG  
 BENGALURU - 560 108

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**FIRST INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

ROOM No: 206

**BLACK BOARD**

VII 'B' CS	VII 'A' EC	VII 'B' CS	VII 'A & B' EC	VII 'A' ME	VII 'B' EC
1KS19CS072	1KS19EC058	1KS18CS078	1KS19EC085	1KS19ME022	1KS19EC071
1KS19CS073	1KS19EC059	1KS19CS079	1KS19EC086	1KS19ME023	1KS19EC073
1KS19CS074	1KS19EC061	1KS19CS080	1KS19EC067	1KS19ME024	1KS19EC074
1KS19CS075	1KS19EC082	1KS19CS081	1KS19EC068	1KS19ME025	1KS19EC075
1KS19CS076	1KS19EC063	1KS19CS082	1KS19EC069	1KS19ME026	1KS19EC076
1KS19CS077	1KS19EC064	1KS19CS083	1KS19EC070	1KS19ME027	1KS19EC077

VII CS 'B' SEC Total = 12

VII EC 'A' SEC Total = 08

VII ME 'A' SEC Total = 06

VII EC 'B' SEC TOTAL = 10

*[Signature]*  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
 19/10/22  
**PRINCIPAL**  
 Principal  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109



**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**FIRST INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

ROOM No: 207

**BLACK BOARD**

VII 'B' CS		VII 'B' EC	VII 'B' CS		VII 'B' EC	VII 'A' ME		VII 'B' EC
1KS19CS084		1KS19EC078	1KS19CS090		1KS19EC085	1KS19ME028		1KS19EC092
1KS19CS085		1KS19EC079	1KS19CS091		1KS19EC086	1KS19ME029		1KS19EC093
1KS19CS086		1KS19EC081	1KS19CS092		1KS19EC087	1KS19ME030		1KS19EC094
1KS19CS087		1KS19EC082	1KS19CS093		1KS19EC088	1KS19ME032		1KS19EC095
1KS19CS088		1KS19EC083	1KS19CS094		1KS19EC089	1KS19ME033		1KS19EC096
1KS19CS089		1KS19EC084	1KS19CS096		1KS19EC090	1KS19ME034		1KS19EC097

VII CS 'B' SEC Total = 12

VII EC 'B' SEC Total = 18

VII ME 'A' SEC Total = 06

*[Signature]*  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
 19/10/22  
**PRINCIPAL**  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**

**VII SEM 2018 SCHEME**

**FIRST INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

**ROOM No: 208**

**BLACK BOARD**

VII 'B' CS	VII 'B' EC	VII 'B' CS	VII 'B' EC	VII 'A' ME	VII 'B' EC & VII TCE
1KS19CS097	1KS19EC098	1KS18CS103	1KS19EC104	1KS19ME035	1KS20EC400
1KS19CS098	1KS19EC099	1KS19CS104	1KS19EC105	1KS19ME036	1KS20EC401
1KS19CS099	1KS19EC100	1KS19CS105	1KS19EC106	1KS19ME037	1KS20EC402
1KS19CS100	1KS19EC101	1KS19CS106	1KS19EC107	1KS19ME039	1KS18TE005
1KS19CS101	1KS19EC102	1KS19CS107	1KS19EC108	1KS19ME040	1KS19ET002
1KS19CS102	1KS19EC103	1KS19CS108	1KS18EC089	1KS18ME001	1KS19ET003

**VII CS 'B' SEC Total = 12**

**VII EC 'B' SEC Total = 18**

**VII ME 'A' SEC Total = 06**

*[Signature]*  
**ACADEMIC COORDINATOR**  
Head of the Department  
Dept. of Mechanical Engg  
K.S. Institute of Technology  
Bangaluru - 560 109.

*[Signature]*  
**PRINCIPAL**  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'A' for First Internal Test (2022-2023)**

Room No: 201

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC001	<i>Anish</i>	-AB-	<i>Anish</i>	<i>Anish</i>	<i>Anish</i>
2	IKS19EC002	<i>Anish</i>	<i>Anish</i>	<i>Anish</i>	<i>Anish</i>	<i>Anish</i>
3	IKS19EC003	<i>Aishwarya</i>	<i>Aishwarya</i>	<i>Aishwarya</i>	<i>Aishwarya</i>	<i>Aishwarya</i>
4	IKS19EC004	<i>Aish</i>	<i>Aish</i>	<i>Aish</i>	<i>Aish</i>	<i>Aish</i>
5	IKS19EC005	<i>Aish</i>	<i>Aish</i>	<i>Aish</i>	<i>Aish</i>	<i>Aish</i>
6	IKS19EC006	<i>Aish</i>	<i>Aish</i>	<i>Aish</i>	<i>Aish</i>	<i>Aish</i>
7	IKS19EC007	<i>Anvitha</i>	<i>Anvitha</i>	Absent	<i>Anvitha</i>	← AB →
8	IKS19EC008	<i>Amulya</i>	<i>Amulya</i>	<i>Amulya</i>	<i>Amulya</i>	<i>Amulya</i>
9	IKS19EC009	<i>Anvitha</i>	-AB-	<i>Anvitha</i>	<i>Anvitha</i>	<i>Anvitha</i>
10	IKS19EC010	AB	<i>Anjali</i>	<i>Anjali</i>	<i>Anjali</i>	<i>Anjali</i>
11	IKS19EC011	AB	-AB-	<i>Archana</i>	<i>Archana</i>	<i>Archana</i>
12	IKS19EC012	<i>Ash</i>	<i>Ash</i>	<i>Ash</i>	<i>Ash</i>	<i>Ash</i>
13	IKS19EC014	<i>Bharg</i>	<i>Bharg</i>	<i>Bharg</i>	<i>Bharg</i>	<i>Bharg</i>
14	IKS19EC015	<i>Chaitanya</i>	<i>Chaitanya</i>	<i>Chaitanya</i>	<i>Chaitanya</i>	<i>Chaitanya</i>
15	IKS19EC016	<i>Chanda Raj</i>	<i>Chanda Raj</i>	<i>Chanda Raj</i>	<i>Chanda Raj</i>	<i>Chanda Raj</i>
16	IKS19EC017	<i>Ch</i>	<i>Ch</i>	<i>Ch</i>	<i>Ch</i>	← AB →
17	IKS19EC018	<i>Pranj</i>	-AB-	<i>Pranj</i>	<i>Pranj</i>	<i>Pranj</i>
18	IKS19EC019	<i>Chirathara</i>	-AB-	<i>Chirathara</i>	<i>Chirathara</i>	<i>Chirathara</i>
DATE:		27/10/22	27/10/22	28/10/22	28/10/22	28/10/22
NO. OF STUDENTS PRESENT		16	18	17	18	16
NO. OF STUDENTS ABSENT		2	05	01	0	02
NAME OF INVIGILATOR		<i>Beena</i>	<i>Pallavi</i>	<i>Kanya MS</i>	<i>Beena</i>	<i>LC</i>
SIGNATURE OF INVIGILATOR		<i>Beena</i>	<i>Pallavi</i>	<i>Kanya MS</i>	<i>Beena</i>	<i>LC</i>

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'A' for First Internal Test (2022-2023)**

Room No: 203

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC020	Nayya	Nayya	AB	Nayya	Nayya
2	IKS19EC021	<del>De</del>	AB	<del>De</del>	<del>De</del>	<del>De</del>
3	IKS19EC022	Paul	Paul	AB	Paul	Paul
4	IKS19EC023	AB	AB	Shrushti	Shrushti	Shrushti
5	IKS19EC024	TKM	TKM	TKM	TKM	TKM
6	IKS19EC025	Dishant	Dishant	Dishant	Dishant	Dishant
7	IKS19EC027	Hall	Hall	Hall	Hall	Hall
8	IKS19EC028	Gayatri	Gayatri	Gayatri	Gayatri	Gayatri
9	IKS19EC029	AB	AB	Siddhartha	Siddhartha	← AB →
10	IKS19EC030	<del>GS</del>	<del>GS</del>	AB	<del>GS</del>	<del>GS</del>
11	IKS19EC031	Harsh B	AB	Harsh B	Harsh B	Harsh B
12	IKS19EC032	B.Y.Hanvi	B.Y.Hanvi	B.Y.Hanvi	B.Y.Hanvi	B.Y.Hanvi
DATE:		27/10/22	27/10/22	28/10/22	28/10/22	29/10/22
NO. OF STUDENTS PRESENT		10	08	09	12	11
NO. OF STUDENTS ABSENT		2	04	03	00	01
NAME OF INVIGILATOR		K. Narasimhan	Manjusha	G. Anjali Kumar	Saleem S. Talwar	Praveen
SIGNATURE OF INVIGILATOR						

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'A' for First Internal Test (2022-2023)**

Room No: 204

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	1KS19EC033	<u>Pruthi R</u>	<u>Pruthi R</u>	<u>Pruthi R</u>	<u>Pruthi R</u>	<u>Pruthi R</u>
2	1KS19EC035	<u>pruthi</u>	<u>pruthi</u>	<u>pruthi</u>	<u>pruthi</u>	<u>pruthi</u>
3	1KS19EC036	<u>Jayath</u>	<u>Jayath</u>	<u>Jayath</u>	<u>Jayath</u>	<u>Jayath</u>
4	1KS19EC037	<u>Manogya</u>	<u>Manogya</u>	<u>Manogya</u>	<u>Manogya</u>	<u>Manogya</u>
5	1KS19EC038	<u>Karthi</u>	<u>Absent</u>	<u>Karthi</u>	<u>Karthi</u>	<u>Karthi</u>
6	1KS19EC039	<u>Kee</u>	<u>Kee</u>	<u>Kee</u>	<u>Kee</u>	<u>Kee</u>
7	1KS19EC040	<u>Sur d</u>	<u>Sur d</u>	<u>Sur d</u>	<u>Sur d</u>	<u>Sur d</u>
8	1KS19EC041	<u>Krutika</u>	<u>Krutika</u>	<u>Krutika</u>	<u>Krutika</u>	<u>Krutika</u>
9	1KS19EC042	<u>Lakshankumar</u>	<u>Absent</u>	<u>Lakshankumar</u>	<u>Lakshankumar</u>	<u>Lakshankumar</u>
10	1KS19EC043	<u>Pritha H.</u>	<u>Pritha H.</u>	<u>Pritha H.</u>	<u>Pritha H.</u>	<u>Pritha H.</u>
11	1KS19EC044	<u>ABSENT</u>	<u>(M. Jothi)</u>	<u>(M. Jothi)</u>	<u>(M. Jothi)</u>	<u>(M. Jothi)</u>
12	1KS19EC045	<u>Mandika</u>	<u>Mandika</u>	<u>Mandika</u>	<u>Mandika</u>	<u>Mandika</u>
DATE:		27/10/22	27/10/22	28/10/22	28/10/22	29/10/22
NO. OF STUDENTS PRESENT		11	10	12	12	12
NO. OF STUDENTS ABSENT		01	02	00	- Nil -	- 00 -
NAME OF INVIGILATOR		<u>Krishna</u>	<u>Kavya MS</u>	<u>Dr B. Surekha</u>	<u>Pallavikn</u>	<u>Geetha. R</u>
SIGNATURE OF INVIGILATOR		<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'A' for First Internal Test (2022-2023)**

Room No: 205

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	1KS19EC046	Murug	Murug	-AB-	Murug	Murug
2	1KS19EC047	-AB-	-AB	Pulak	Arshad	Pulak
3	1KS19EC048	⊕	⊕	⊕	⊕	⊕
4	1KS19EC049	Monika	Monika	Monika	Monika	Monika
5	1KS19EC050	Mounshik	Mounshik	Mounshik	Mounshik	Mounshik
6	1KS19EC051	Qish	Qish	Qish	Qish	Qish
7	1KS19EC052	Nidhi	Nidhi	Nidhi	-AB-	(A) -
8	1KS19EC053	Nirarg	Nirarg	Nirarg	Nirarg	Nirarg
9	1KS19EC054	Nithin	Nithin	Nithin	Nithin	Nithin
10	1KS19EC055	Pavani	Pavani	Pavani	Pavani	Pavani
11	1KS19EC056	P.M.	P.M.	P.M.	P.M.	P.M.
12	1KS19EC057	-AB-	Pooja	Pooja	Pooja	Pooja
DATE:		27/10/2022	27/10/22	28/10/2022	28/10/22	29/10/22
NO. OF STUDENTS PRESENT		10	11	11	11	11
NO. OF STUDENTS ABSENT		02	01	01	01	01
NAME OF INVIGILATOR		RAJESHWAR	Prashanth	Pallavi.KN	Proveen	mangurath
SIGNATURE OF INVIGILATOR		[Signature]	[Signature]	[Signature]	[Signature]	[Signature]



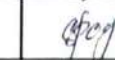


**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'A & B' for First Internal Test (2022-2023)**

Room No: 206

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC058	<del>Pradeep A</del>	<del>(AB)</del>	<del>Pradeep A</del>	<del>Pradeep A</del>	<del>Pradeep A</del>
2	IKS19EC059	<del>Pradeep A</del>	<del>(AB)</del>	<del>Pradeep A</del>	<del>Pradeep A</del>	<del>Pradeep A</del>
3	IKS19EC061	<del>(AB)</del>	<del>(AB)</del>	PSK	PSK	PSK
4	IKS19EC062	Praveena	Praveena	Praveena	Praveena	Praveena
5	IKS19EC063	<del>(AB)</del>	<del>(AB)</del>	<del>(AD)</del>	<del>Pradeep A</del>	<del>- AB -</del>
6	IKS19EC064	Prinip	Prinip	Prinip	Prinip	<del>- AB -</del>
7	IKS19EC065	Rachkish	Rachkish	Rachkish	Rachkish	Rachkish
8	IKS19EC066	Raji	Raji	Raji	Raji	Raji
9	IKS19EC067	<del>Pradeep A</del>	<del>Pradeep A</del>	<del>(AD)</del>	<del>Pradeep A</del>	<del>- AB -</del>
10	IKS19EC068	<del>(AB)</del>	<del>(AB)</del>	<del>Pradeep A</del>	<del>Pradeep A</del>	<del>Pradeep A</del>
11	IKS19EC069	Pohau. L.P	Pohau. L.P	<del>(AD)</del>	Pohau. L.P	Pohau. L.P
12	IKS19EC070	S.K.Paratesh	S.K.Paratesh	S.K.Paratesh	S.K.Paratesh	S.K.Paratesh
13	IKS19EC071	Sahana.S	Sahana.S	Sahana.S	Sahana.S	Sahana.S
14	IKS19EC073	Sahana.S	Sahana.S	Sahana.S	Sahana.S	Sahana.S
15	IKS19EC074	<del>(AB)</del>	<del>(AB)</del>	<del>(AD)</del>	<del>- AB -</del>	<del>- AB -</del>
16	IKS19EC075	Sarav	Sarav	Sarav	Sarav	Sarav
17	IKS19EC076	Santosh	Santosh	Santosh	Santosh	Santosh
18	IKS19EC077	Sarav	Sarav	Sarav	Sarav	Sarav
DATE:		27/10/22	27/10/22	27/10/22	28/10/2022	29/10/22
NO. OF STUDENTS PRESENT		14	12	14	17	14
NO. OF STUDENTS ABSENT		04	06	04	01	04
NAME OF INVIGILATOR		Pallavi R.	Saleem S. Teja Sammi	Mr	RAJESH GL	Prayantkhs
SIGNATURE OF INVIGILATOR						

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'B' for First Internal Test (2022-2023)**

Room No: 207

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC078	Banitha	Banitha	Banitha	Banitha	AB
2	IKS19EC079	HPB	HPB	HPB	HPB	HPB
3	IKS19EC081	Shreyans	Shreyans	Shreyans	Shreyans	Shreyans
4	IKS19EC082	Shreyas B	Shreyas B.	Shreyas B.	Shreyas B.	Shreyas B.
5	IKS19EC083	Shreyas	Shreyas	Shreyas	Shreyas	Shreyas
6	IKS19EC084	Shreyal	Shreyal	Shreyal	Shreyal	Shreyal
7	IKS19EC085	SPJ	- AB -	← AB →	SPJ	SPJ
8	IKS19EC086	Sinchana MN	Sinchana MN	Sinchana MN	Sinchana MN	AB
9	IKS19EC087	Saini	Saini	Saini	Saini	Saini
10	IKS19EC088	Solanki	Solanki	Solanki	Solanki	Solanki
11	IKS19EC089	Srinam	Srinam	Srinam	Srinam	Srinam
12	IKS19EC090	← AB →	- AB -	Sudhas	Sudhas	AB
13	IKS19EC092	Sumukha	Sumukha	Sumukha	Sumukha	Sumukha
14	IKS19EC093	Sushmita S	Sushmita S	Sushmita S	Sushmita S	AB
15	IKS19EC094	<del>SPJ</del>	<del>SPJ</del>	← AB →	<del>SPJ</del>	<del>SPJ</del>
16	IKS19EC095	← AB →	Swathi	Swathi	Swathi	AB
17	IKS19EC096	Ruti	Ruti	Ruti	Ruti	Ruti
18	IKS19EC097	Tejashwini	Tejashwini	Tejashwini	Tejashwini	Tejashwini
DATE:		27/10/22	27/10/22	28/10/22	28/10/22	29/10/22
NO. OF STUDENTS PRESENT		16	16	16	18	13
NO. OF STUDENTS ABSENT		02	02	02	00	05
NAME OF INVIGILATOR		Praveen	Dr. B. Surekha	Pooja S.	LK	G. Anish Kumar
SIGNATURE OF INVIGILATOR						



**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'B' for First Internal Test (2022-2023)**

Room No: 208

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC098	<del>Theethan</del>	<del>Theethan</del>	<del>Theethan</del>	<del>Theethan</del>	<del>Theethan</del>
2	IKS19EC099	← AB →	← AB →	← AB →	- AB -	- AB -
3	IKS19EC100	Vaishwanth	Vaishwanth	Vaishwanth	Vaishwanth	Vaishwanth
4	IKS19EC101	Vandana	Vandana	Vandana	Vandana	Vandana
5	IKS19EC102	← AB →	Vandana.S	Vandana.S	Vandana.S	Vandana.S
6	IKS19EC103	R.vignathais	R.vignathais	R.vignathais	R.vignathais	R.vignathais
7	IKS19EC104	← AB →	← AB →	Ukai.S	Ukai.S	Ukai.S
8	IKS19EC105	← AB →	← AB →	<del>KK</del>	<del>KK</del>	<del>KK</del>
9	IKS19EC106	Ushal	Ushal	Ushal	Ushal	Ushal
10	IKS19EC107	Vishwas	Vishwas	Vishwas	Vishwas	Vishwas
11	IKS19EC108	← AB →	← AB →	Yashu	Yashu	Yashu
12	IKS18EC089	← AB →	← AB →	Sneha	Sneha	- AB -
13	IKS20EC400	MVF	← AB →	MVF	MVF	MVF
14	IKS20EC401	← AB →	Ranjana.P	Ranjana.P	Ranjana.P	- AB -
15	IKS20EC402	← AB →	← AB →	Bindhu	Bindhu	- AB -
DATE:		27/10/22	27/10/22	28/10/22	28/10/22	29/10/22
NO. OF STUDENTS PRESENT		07	08	14	14	11
NO. OF STUDENTS ABSENT		08	07	01	01	04
NAME OF INVIGILATOR		PS	LK	SST	Harish	RAJESH GL
SIGNATURE OF INVIGILATOR		ps	LK	SST	Harish	Rajesh GL

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Telecommunication Engineering**  
**Attendance of VII Sem for First Internal Test (2022-2023)**

Room No: 208

SL.NO	REGISTER NO.	OPTICAL COMMUNICATION (18TE71)	WIRELESS COMMUNICATION (18TE72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	1KS18TE005	Ankitha	Ankitha	Ankitha	Ankitha	Ankitha
2	1KS19ET002	Chaitra C	Chaitra C	Chaitra C	Chaitra C	Chaitra C
3	1KS19ET003	AB	← AB →	<del>Ankitha</del>	<del>Ankitha</del>	— AB —
DATE: 27/10/22		27/10/22	27/10/22	28/10/22	28/10/22	29/10/22
NO. OF STUDENTS PRESENT		02	02	03	03	02
NO. OF STUDENTS ABSENT		01	01	00	00	01
NAME OF INVIGILATOR		PS	LK	SST	T. Narasimhan	RAJESH G L
SIGNATURE OF INVIGILATOR		PS	LK	SST	T. Narasimhan	Rajesh GL 29/10/22

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Telecommunication Engineering**  
**Attendance of VII Sem for First Internal Test (2022-2023)**

Room No: 209

SL.NO	REGISTER NO.	OPTICAL COMMUNICATION (18TE71)	WIRELESS COMMUNICATION (18TE72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	1KS19ET004	anahadev AC	anahadev AC	anahadev AC	anahadev AC	AB
2	1KS19ET005	AB	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>
3	1KS19ET006	N. Nalbin	N. Nalbin	N. Nalbin	N. Nalbin	N. Nalbin
4	1KS19ET007	Nisranjan S. Pat	Nisranjan S. Pat	Nisranjan S. Pat	Nisranjan S. Pat	Nisranjan S. Pat
5	1KS19ET008	AB	← AB →	← AB →	AB	AB
6	1KS19ET009	Rohit kumar	Rohit kumar	Rohit kumar	Rohit kumar	AB
7	1KS19ET010	Abhijit	Abhijit	Abhijit	Abhijit	Abhijit
8	1KS19ET011	Shweta	Shweta	Shweta	Shweta	Shweta
9	1KS19ET012	AB.	← AB →	AB	AB	AB
DATE:		27/10/22	29/10/22	28/10/22	28/10/22	29/10/22
NO. OF STUDENTS PRESENT		06	07	08	08	05
NO. OF STUDENTS ABSENT		03	02	01	01	04
NAME OF INVIGILATOR		G. Anand Kumar	PS	Geetha R	G. Anand Kumar	Krishna Patil
SIGNATURE OF INVIGILATOR		G. Anand Kumar	PS	Geetha R	G. Anand Kumar	Krishna Patil



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**FIRST INTERNAL TEST QUESTION PAPER 2022 – 23 ODD SEMESTER**

SET: A

USN 



--	--	--	--	--	--	--	--	--	--

Degree : B. E  
Branch : ECE  
Course Title : Energy and Environment  
Duration : 90 Minutes

Semester : VII A & B  
Course Code : 18ME751  
Date : 29-10-2022  
Max Marks : 30

Note: Answer ONE full question from each part.


K-Levels: K1-Remembering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	<b>Interpret</b> World Energy Scenario with respect to production and consumption using relevant statistics.	12	CO1	K2
	<b>Explain</b> primary energy demand in India by fuel with sector wise comparison.	6	CO1	K2
<b>OR</b>				
2(a)	<b>Illustrate</b> how the following factors effects the energy development in India: <ul style="list-style-type: none"><li>• Energy prices and Affordability</li><li>• Social and environmental aspects</li><li>• Investments</li></ul>	12	CO1	K2
(b)	<b>Explain:</b> (i) The Rajiv Gandhi Grameena Vidutikaran Yojana (RGGVY) (ii) Deen Dayal Upadhyana Grama Jyoti Yojana (DDUDJY) (iii) Energy Production in India - Coal (only)	6	CO1	K2
<b>PART-B</b>				
3(a)	<b>Identify</b> and explain the factors relevant to energy pricing.	6	CO2	K3
	<b>Calculate</b> the cost of generation per kWh for a power station having the following data: Installed capacity of the plant = 200 MW Capital cost = Rs 400 crores Rate of interest and depreciation = 12% Annual cost of fuel, salaries, and taxation = Rs 5 crores Load factor = 50%	6	CO2	K3
<b>OR</b>				
4(a)	<b>Identify</b> the principles of energy management system	6	CO2	K3
(b)	Identify and explain 10 steps methodology for detailed Energy Audit.	6	CO2	K3

  
Course In charge

  
Module Coordinator

  
HOD ECE

  
Principal  
*Selubed*



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**FIRST INTERNAL TEST QUESTION PAPER 2022 – 23 ODD SEMESTER**

SET: B

USN

Degree : B. E  
Branch : ECE  
Course Title : Energy and Environment  
Duration : 90 Minutes

Semester : VII A& B  
Course Code : 18ME751  
Date : 29-10-2022  
Max Marks : 30

**Note: Answer ONE full question from each part.**

K-Levels: K1-Remembering, K2-Understanding, K3-Appling, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	Summarize with relevant statistics, the primary energy production and trade trend for India.	12	CO1	K2
(b)	Compare Energy and Power.	6	CO1	K2
<b>OR</b>				
2(a)	Illustrate how economy, demographics, policies, and framework effects the energy development in India.	12	CO1	K2
(b)	Summarize the India's rural electrification programme relevant to modern energy access.	6	CO1	K2
<b>PART-B</b>				
3(a)	Identify the need for energy audit, preliminary audit, and detailed audit.	6	CO2	K3
(b)	Calculate the cost of generation per kWh for a power station having the following data: Installed capacity of the plant = 200 MW Capital cost = Rs 400 crores Rate of interest and depreciation = 12% Annual cost of fuel, salaries, and taxation = Rs 5 crores Load factor = 60%	6	CO2	K3
<b>OR</b>				
4(a)	Identify the need for energy demand estimation.	6	CO2	K3
(b)	Identify and explain various phases of energy audit methodology	6	CO2	K3

  
Course In charge

  
Module Coordinator

  
HOB-ECE

  
Principal



# K. S. INSTITUTE OF TECHNOLOGY, BANGALORE

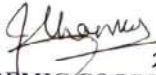
## VII SEM (2018 SCHEME)

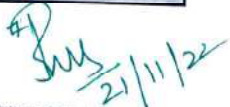
### II SESSIONAL TEST TIME TABLE (2022-2023)

DATE: 21-11-2022

DATE	TIME	COMPUTER SCIENCE AND ENGG	ELECTRONICS AND COMMUNICATION ENGG	ELECTRONICS AND TELECOMMUNICATION ENGG	MECHANICAL ENGG
28-11-2022 MONDAY	9.30 AM TO 11.00 AM	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (18CS71)	COMPUTER NETWORKS (18EC71)	OPTICAL COMMUNICATION (18TE71)	CONTROL ENGINEERING (18ME71)
	2.00 PM TO 3.30 PM	BIG DATA ANALYTICS (18CS72)	VLSI DESIGN (18EC72)	WIRELESS COMMUNICATION (18TE72)	COMPUTER AIDED DESIGN & MANUFACTURING (18ME72)
29-11-2022 TUESDAY	9.30 AM TO 11.00 AM	USER INTERFACE DESIGN (18CS734)	SATELLITE COMMUNICATION (18EC732)	SATELLITE COMMUNICATION (18EC732)	TOTAL QUALITY MANAGEMENT (18ME734)
	2.00 PM TO 3.30 PM	CRYPTOGRAPHY (18CS744)	CRYPTOGRAPHY (18EC744)	CRYPTOGRAPHY (18EC744)	ADDITIVE MANUFACTURING (18ME741)
30-11-2022 WEDNESDAY	9.30 AM TO 11.00 AM	ENERGY AND ENVIRONMENT (18ME751)	ENERGY AND ENVIRONMENT (18ME751)	ENERGY AND ENVIRONMENT (18ME751)	PYTHON APPLICATION PROGRAMMING (18CS752)
	11.30 AM ONWARDS	REGULAR CLASSES / LABS WILL BE HELD			

NOTE: All the students are strictly informed to wear LAB uniforms, College ID Card is compulsory during the test.

  
21/11/22  
**ACADEMIC COORDINATOR**  
Head of the Department  
Dept. of Mechanical Engg.  
K.S. Institute of Technology  
Bengaluru - 560 109.

  
21/11/22  
**PRINCIPAL**  
PRINCIPAL  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109.

**K. S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEMESTER SECOND SESSIONAL TEST INVIGILATION DUTY (2022-2023)**

Date	Timings	201	203	204	205	206	207	208	209
28-11-2022 MONDAY	9:30 am to 11:00 am	PA (ECE)	HU (ME)	KG (CSE)	NM (ME)	KMS (CSE)	SST (ECE)	RGL (ME)	LK (CSE)
	2:00 pm to 3:30 pm	MBR (ME)	VM (CSE)	PA (ECE)	AKG (ECE)	PHS (CSE)	BK (CSE)	MN (BS)	MKS (CSE)
29-11-2022 TUESDAY	9:30 am to 11:00 am	MBR (ME)	ST (CSE)	PHS (CSE)	AKG (ECE)	SG (CSE)	NP (CSE)	PS (ECE)	CJ (ECE)
	2:00 pm to 3:30 pm	SD (CSE)	NV (BS)	NM (ME)	PR (CSE)	VD (ECE)	RGL (ME) (R <sup>th</sup> )	PS (ECE)	LK (CSE)
30-11-2022 WEDNESDAY	9:30 am to 11:00 am	AMV (BS)	PR (CSE)	BK (CSE)	GR (CSE)	MBR (ME)	NP (CSE)	SST (ECE)	SKS (ECE)

**NOTE : BLUE BOOK & QUESTION PAPER WILL BE DISTRIBUTED IN VLSI LAB OLD BUILDING 2RD FLOOR**

Invigilators :	Dr. Vijayalaxmi M	VM	Mr. Harish U	HU
	Mr. Sanjoy Das	SD	Mrs. Anuradha M V	AMV
	Mr. Krishna Gudi	KG	Mrs. Nagabhushana M	NM
	Mr. Prashanth HS	PHS	Mr. Rajesh G L	RGL
	Mrs. Beena K	BK	Mr. Prashanth H S	PHS
	Mr. Manoj Kumar S	MKS	Mr. Manjunath B R	MSR
	Mrs. Geetha R	GR	Mr. Praveen. A	PA
	Mrs. Kavya M S	KMS	Mr. Saleem. S. Tevaramani	SST
	Mr. Somasekhar T	ST	Ms. Pooja. S	PS
	Mrs. Supreetha Ganesh	SG	Mr. Ashwini Kumar	AKG
	Mrs. Pallavi R	PR	Mr. Christo Jain	CJ
	Mr. Laxmikantha K	LK	Mr. Sampath Kumar. S	SKS
	Mrs. Namyapriya	NP	Ms. Vishalini Divakar	VD
	Mr. Naveen. V	NV	Ms. Mamatha. N	MN

*[Signature]*  
**ACADEMIC COORDINATOR**  
 Dept. of Mechanical Engg.

*[Signature]*  
**PRINCIPAL**

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**SECOND INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

Room No: 201

BLACK BOARD

VII 'B' CS		VII 'B' EC	VII 'B' CS		VII 'B' EC	VII 'A' ME	VII 'B' EC
1KS19CS097		1KS19EC098	1KS19CS103		1KS19EC104	1KS19ME035	1KS20EC400
1KS19CS098		1KS19EC099	1KS19CS104		1KS19EC105	1KS19ME036	1KS20EC401
1KS19CS099		1KS19EC100	1KS19CS105		1KS19EC106	1KS19ME037	1KS20EC402
1KS19CS100		1KS19EC101	1KS19CS106		1KS19EC107	1KS19ME039	
1KS19CS101		1KS19EC102	1KS19CS107		1KS19EC108	1KS19ME040	
1KS19CS102		1KS19EC103	1KS19CS108		1KS18EC089	1KS18ME001	

**VII CS 'B' SEC Total = 12**

**VII EC 'B' SEC Total = 15**

**VII ME 'A' SEC Total = 06**

*[Signature]*  
 23/11/22  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109

*[Signature]*  
**PRINCIPAL**  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109



**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**SECOND INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

**Room No: 204**

**BLACK BOARD**

VII 'A' CS	VII 'A' EC
1KS19CS001	1KS19EC001
1KS19CS002	1KS19EC002
1KS19CS003	1KS19EC003
1KS19CS004	1KS19EC004
1KS19CS005	1KS19EC005
1KS19CS006	1KS19EC006

VII 'A' CS	VII 'A' EC
1KS19CS007	1KS19EC007
1KS19CS009	1KS19EC008
1KS19CS010	1KS19EC009
1KS19CS011	1KS19EC010
1KS19CS012	1KS19EC011
1KS19CS014	1KS19EC012

VII 'A' CS	VII 'A' EC
1KS19CS015	1KS19EC014
1KS19CS016	1KS19EC015
1KS19CS017	1KS19EC016
1KS19CS018	1KS19EC017
1KS19CS019	1KS19EC018
1KS19CS020	1KS19EC019

**VII CS 'A' SEC Total = 18**

**VII EC 'A' SEC Total = 18**

*[Signature]*  
 23/11/22  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
**PRINCIPAL**  
 - PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**SECOND INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

Room No: 205

BLACK BOARD

VII 'A' CS		VII 'A' EC	VII 'A' CS		VII 'A' EC	VII 'A' CS		VII 'A' ME
1KS19CS021		1KS19EC020	1KS19CS028		1KS19EC027	1KS19CS034		1KS19ME001
1KS19CS022		1KS19EC021	1KS19CS029		1KS19EC028	1KS19CS035		1KS19ME002
1KS19CS023		1KS19EC022	1KS19CS030		1KS19EC029	1KS19CS036		1KS19ME003
1KS19CS024		1KS19EC023	1KS19CS031		1KS19EC030	1KS19CS038		1KS19ME004
1KS19CS025		1KS19EC024	1KS19CS032		1KS19EC031	1KS19CS039		1KS19ME005
1KS19CS026		1KS19EC025	1KS19CS033		1KS19EC032	1KS19CS040		1KS19ME008

**VII CS 'A' SEC Total = 18**

**VII EC 'A' SEC Total = 12**

**VII ME 'A' SEC Total = 06**

*[Signature]*  
23/11/22

**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109

*[Signature]*

**PRINCIPAL**  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**SECOND INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

ROOM No: 206

BLACK BOARD

VII 'A' CS	VII 'A' EC	VII 'A' CS	VII 'A' EC	VII 'A' CS	VII 'A' ME
1KS19CS041	1KS19EC033	1KS19CS047	1KS19EC040	1KS19CS053	1KS19ME009
1KS19CS042	1KS19EC035	1KS19CS048	1KS19EC041	1KS19CS054	1KS19ME010
1KS19CS043	1KS19EC036	1KS19CS049	1KS19EC042	1KS19CS055	1KS19ME011
1KS19CS044	1KS19EC037	1KS19CS050	1KS19EC043	1KS19CS056	1KS19ME013
1KS19CS045	1KS19EC038	1KS19CS051	1KS19EC044	1KS19CS057	1KS19ME014
1KS19CS046	1KS19EC039	1KS19CS052	1KS19EC045	1KS19CS058	1KS19ME015

VII CS 'A' SEC Total = 18

VII EC 'A' SEC Total = 12

VII ME 'A' SEC Total = 06

*J. Shankar*  
23/11/22  
ACADEMIC COORDINATOR

Head of the  
Dept. of Mechanical Engg  
K.S. Institute of Technology  
Bengaluru - 560 109.

*S. Kumar*  
PRINCIPAL

PRINCIPAL  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109

**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**SECOND INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

**ROOM No: 207**

**BLACK BOARD**

VII 'A & B' CS	VII 'A' EC	VII 'B' CS	VII 'A' EC	VII 'B' CS	VII 'A' ME
1KS18CS011	1KS19EC046	1KS19CS060	1KS19EC052	1KS19CS066	1KS19ME016
1KS19CS116	1KS19EC047	1KS19CS061	1KS19EC053	1KS19CS067	1KS19ME017
1KS20CS400	1KS19EC048	1KS19CS062	1KS19EC054	1KS19CS068	1KS19ME018
1KS20CS404	1KS19EC049	1KS19CS063	1KS19EC055	1KS19CS069	1KS19ME019
1KS20CS402	1KS19EC050	1KS19CS064	1KS19EC056	1KS19CS070	1KS19ME020
1KS19CS059	1KS19EC051	1KS19CS065	1KS19EC057	1KS19CS071	1KS19ME021

**VII CS 'A' SEC Total = 05    VII CS 'B' SEC TOTAL = 13**

**VII EC 'A' SEC Total = 12**

**VII ME 'A' SEC Total = 06**

*[Signature]*  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
**PRINCIPAL**  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**SECOND INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

ROOM No: 208

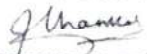
BLACK BOARD


VII 'B' CS		VII 'A' EC	VII 'B' CS		VII 'A & B' EC	VII 'A' ME		VII 'B' EC
1KS19CS072		1KS19EC058	1KS19CS078		1KS19EC065	1KS19ME022		1KS19EC071
1KS19CS073		1KS19EC059	1KS19CS079		1KS19EC066	1KS19ME023		1KS19EC073
1KS19CS074		1KS19EC061	1KS19CS080		1KS19EC067	1KS19ME024		1KS19EC074
1KS19CS075		1KS19EC062	1KS19CS081		1KS19EC068	1KS19ME025		1KS19EC075
1KS19CS076		1KS19EC063	1KS19CS082		1KS19EC069	1KS19ME026		1KS19EC076
1KS19CS077		1KS19EC064	1KS19CS083		1KS19EC070	1KS19ME027		1KS19EC077

VII CS 'B' SEC Total = 12

VII EC 'A' SEC Total = 08      VII EC 'B' SEC TOTAL = 10

VII ME 'A' SEC Total = 06

  
**ACADEMIC COORDINATOR**  
 Head of the Dept.  
 Dept. of Mech.  
 K.S. Institute of Technology  
 Bengaluru - 560 109

  
**PRINCIPAL**  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**VII SEM 2018 SCHEME**  
**SECOND INTERNAL TEST SEATING ARRANGEMENT (ODD SEMESTER - 2022-2023)**

Room No: 209

BLACK BOARD

VII 'B' CS	VII 'B' EC	VII 'B' CS	VII 'B' EC	VII 'A' ME	VII 'B' EC
1KS19CS084	1KS19EC078	1KS19CS090	1KS19EC085	1KS19ME028	1KS19EC092
1KS19CS085	1KS19EC079	1KS19CS091	1KS19EC086	1KS19ME029	1KS19EC093
1KS19CS086	1KS19EC081	1KS19CS092	1KS19EC087	1KS19ME030	1KS19EC094
1KS19CS087	1KS19EC082	1KS19CS093	1KS19EC088	1KS19ME032	1KS19EC095
1KS19CS088	1KS19EC083	1KS19CS094	1KS19EC089	1KS19ME033	1KS19EC096
1KS19CS089	1KS19EC084	1KS19CS096	1KS19EC090	1KS19ME034	1KS19EC097

VII CS 'B' SEC Total = 12

VII EC 'B' SEC Total = 18

VII ME 'A' SEC Total = 06

*[Signature]*  
23/11/22  
ACADEMIC COORDINATOR

Head of the Department  
 Dept. of Mechanical Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109

*[Signature]*  
PRINCIPAL

PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 - BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'A' for Second Internal Test (2022-2023)**

Room No: 204

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC001	A	Anuj D	AB	Anuj D	Anuj D
2	IKS19EC002	A	←AB→	AB	-AB-	Anuj D
3	IKS19EC003	dishuvaraj	dishuvaraj	dishuvaraj	dishuvaraj	dishuvaraj
4	IKS19EC004	dishl	dishl	dishl	dishl	dishl
5	IKS19EC005	A	←AB→	AB	-AB-	dishl
6	IKS19EC006	Akshay	Akshay	Akshay	Akshay	Akshay
7	IKS19EC007	Anvitha	Anvitha	Anvitha	Anvitha	Anvitha
8	IKS19EC008	Amulya	Amulya	Amulya	Amulya	Amulya
9	IKS19EC009	A	Anvitha	Anvitha	-AB-	Anvitha
10	IKS19EC010	Anjali	Anjali	AB	Anjali	Anjali
11	IKS19EC011	Archana	Archana	AB	-AB-	Archana
12	IKS19EC012	Ash	Ash	Ash	Ash	Ash
13	IKS19EC014	A	←AB→	AB	Bhavya	Bhavya
14	IKS19EC015	chaitray	chaitray	AB	-AB-	chaitray
15	IKS19EC016	chanda	chanda	chanda	chanda	chanda
16	IKS19EC017	A	←AB→	AB	-AB-	dishl
17	IKS19EC018	A	Anvitha	AB	Anvitha	Anvitha
18	IKS19EC019	A	←AB→	AB	-AB-	←AB→
DATE:		28/11/22	28/11/22	29/11/22	29/11/22	30/11/22
NO. OF STUDENTS PRESENT		10	13	08	11	17
NO. OF STUDENTS ABSENT		08	05	10	7	1
NAME OF INVIGILATOR		Krishna G	Paveen A	Prashanth	T. Narasimhan	Beene K
SIGNATURE OF INVIGILATOR		Kg	P	Prashanth	T-narasimhan	Beene K

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'A' for Second Internal Test (2022-2023)**

Room No: 205

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC 732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	1KS19EC020	-AB-	Nayya	Nayya	-AB-	Nayya
2	1KS19EC021	<del>AB</del>	<del>AB</del>	<del>AB</del>	-AB-	<del>AB</del>
3	1KS19EC022	Geetha	Geetha	Geetha	-AB-	Geetha
4	1KS19EC023	-AB-	Shruthi	Shruthi	-AB-	Shruthi
5	1KS19EC024	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>
6	1KS19EC025	Dishank	Dishank	Dishank	Dishank	Dishank
7	1KS19EC027	-AB-	-AB-	-AB-	-AB-	Hall
8	1KS19EC028	Gayathri	Gayathri	Gayathri	Gayathri	Gayathri
9	1KS19EC029	-AB-	Riddala	-AB-	Riddala	Riddala
10	1KS19EC030	-AB-	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>
11	1KS19EC031	-AB-	Harsh B	Harsh B	Harsh B	Harsh B
12	1KS19EC032	B.Y.Harshith	B.Y.Harshith	B.Y.Harshith	B.Y.Harshith	B.Y.Harshith
DATE:		28/11/22	28/11/22	29/11/22	29/11/22	30/11/22
NO. OF STUDENTS PRESENT		6	11	10	07	12
NO. OF STUDENTS ABSENT		6	1	2	05	0
NAME OF INVIGILATOR		K. Prasad	Surra.S.	G. Anand Kumar	Pallavi K	Geetha K
SIGNATURE OF INVIGILATOR		K. Prasad	S	A	Pallavi	Geetha



**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'A' for Second Internal Test (2022-2023)**

Room No: 206

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC033	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
2	IKS19EC035	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
3	IKS19EC036	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
4	IKS19EC037	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
5	IKS19EC038	← AB →	<i>[Signature]</i>	AB	← AB →	- A5 -
6	IKS19EC039	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	← AB →	<i>[Signature]</i>
7	IKS19EC040	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
8	IKS19EC041	B.	B.	B.	← AB →	B.
9	IKS19EC042	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
10	IKS19EC043	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
11	IKS19EC044	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
12	IKS19EC045	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
DATE:		28/11/2022	28/11/22	29/11/22	29/11/22	3-11/22
NO. OF STUDENTS PRESENT		11	11	10	09	11
NO. OF STUDENTS ABSENT		01	00	01	03	01
NAME OF INVIGILATOR		PALLAVI	<i>[Signature]</i>	Suproetha	Pooja S.	<i>[Signature]</i>
SIGNATURE OF INVIGILATOR		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'A' for Second Internal Test (2022-2023)**

Room No: 207

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC046	Mulip	Mulip	Mulip	— AB —	Absent
2	IKS19EC047	Ratheed	Ratheed	Ratheed	Ratheed	Ratheed
3	IKS19EC048	<del>(AB)</del>	Absent	Absent	— AB —	Absent
4	IKS19EC049	Monika	Monika	Monika	Monika	Monika
5	IKS19EC050	<del>(AB)</del>	Absent	Absent	— AB —	Mowshakk
6	IKS19EC051	Quik	Quik	Quik	Quik	Quik
7	IKS19EC052	<del>(AB)</del>	Absent	Nidhi D	Nidhi D	Nidhi D
8	IKS19EC053	Niranjana	Niranjana	Niranjana	Niranjana	Absent
9	IKS19EC054	Nithin D	Nithin D	Nithin D	Nithin D	Nithin D
10	IKS19EC055	Pavan	Pavan	Pavan	Pavan	Pavan
11	IKS19EC056	P.M. D	P.M. D	P.M. D	P.M. D	P.M. D
12	IKS19EC057	Poojya	Poojya	Poojya	— AB —	Poojya
DATE:		28/11/22	28/11/22	29/11/22	29/11/22	30/11/22
NO. OF STUDENTS PRESENT		09	09	10	08	09
NO. OF STUDENTS ABSENT		03	03	02	04	03
NAME OF INVIGILATOR		Saleem S. Tevankari	Nanyapriya	Nanyapriya	Ranganath W	Nanyapriya
SIGNATURE OF INVIGILATOR		SST	Nanyapriya	Nanyapriya	R	Nanyapriya

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'A & B' for Second Internal Test (2022-2023)**

Room No: 208

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC058	<del>Pradeep A</del>	<del>Pradeep A</del>	<del>Pradeep A</del>	<del>Pradeep A</del>	<del>Pradeep A</del>
2	IKS19EC059	<del>Pradeep A</del>	<del>Pradeep A</del>	<del>Pradeep A</del>	<del>Pradeep A</del>	<del>Pradeep A</del>
3	IKS19EC061	- AB -	- AB -	← AB →	← AB →	PSK
4	IKS19EC062	Praveena	Praveena	Praveena	Praveena	Praveena
5	IKS19EC063	- AB -	- AB -	← AB →	<del>Pradeep A</del>	<del>Pradeep A</del>
6	IKS19EC064	Priya	Priya	Priya	Priya	Priya
7	IKS19EC065	- AB -	Rohith	← AB →	Rohith	← AB →
8	IKS19EC066	Rishi	Rishi	Rishi	Rishi	Rishi
9	IKS19EC067	Rishi	Rishi	Rishi	Rishi	← AB →
10	IKS19EC068	Rishi	Rishi	Rishi	Rishi	Rishi
11	IKS19EC069	Rohan K R	Rohan K R	Rohan K R	← AB →	Rohan K R
12	IKS19EC070	S.K. Prateesh	S.K. Prateesh	S.K. Prateesh	S.K. Prateesh	S.K. Prateesh
13	IKS19EC071	- AB -	- AB -	Saharish S	Saharish S	Saharish S
14	IKS19EC073	Sahara S	Sahara S	Sahara S	← AB →	Sahara S
15	IKS19EC074	Saipriya S	Saipriya	Saipriya	Saipriya S	Saipriya
16	IKS19EC075	- AB -	← AB →	← AB →	Saharish S	← AB →
17	IKS19EC076	Santosh	Santosh	Santosh	Santosh	Santosh
18	IKS19EC077	Santosh	Santosh	Santosh	Santosh	Santosh
DATE:		28/11/2022	28/11/2022	29/11/2022	29/11/22	30/11/22
NO. OF STUDENTS PRESENT		13	14	14	15	15
NO. OF STUDENTS ABSENT		05	04	04	03	03
NAME OF INVIGILATOR		RAJESHA	MAMATHA N	Pooja S.	VD	Saleem S. TEVARAMANI
SIGNATURE OF INVIGILATOR		Rajesh	Mamatha	Pooja	VD	SSTY

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'B' for Second Internal Test (2022-2023)**

Room No: 209

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC73)	CRYPTOGRAPHY (18EC74)	ENERGY AND ENVIRONMENT (18ME751)
1	1KS19EC078	Banitha	Banitha	Banitha	Banitha	Banitha
2	1KS19EC079	AB	AB	AB	Absent	- AB -
3	1KS19EC081	Shreyas	Shreyas	AB	Shreyas	- AB -
4	1KS19EC082	Shreyas B.	Shreyas B.	Shreyas B.	Shreyas B.	Shreyas B.
5	1KS19EC083	AB	Shreyas	AB	Shreyas	- AB -
6	1KS19EC084	AB	AB	Shreyas VB	Shreyas	Shreyas
7	1KS19EC085	Shul	Shul	Shul	Shul	Shul
8	1KS19EC086	sinchan MN	sinchan MN	sinchan MN	sinchan MN	sinchan MN
9	1KS19EC087	AB	Sarini	Sarini	Sarini	Sarini
10	1KS19EC088	AB	AB	AB	Absent	- AB -
11	1KS19EC089	AB	Sarvam K	Sarvam K	Sarvam K	Sarvam K
12	1KS19EC090	Suba	Suba	AB	Suba	Suba
13	1KS19EC092	Sumukhe	Sumukhe	Sumukhe	Sumukhe	- AB -
14	1KS19EC093	Sushmita	Sushmita	Sushmita	Sushmita	Sushmita
15	1KS19EC094	AB	AB	AB	AB	AB
16	1KS19EC095	Swathi	Swathi	Swathi	Swathi	Swathi
17	1KS19EC096	Rut	Rut	Rut	Rut	Rut
18	1KS19EC097	tejaswini	tejaswini	tejaswini	tejaswini	tejaswini
DATE:		28/11/22	28/11/22	29/11/22	29/11/22	30/11/22
NO. OF STUDENTS PRESENT		11	15	13	16	13
NO. OF STUDENTS ABSENT		7	03	05	02	05
NAME OF INVIGILATOR		Beena.k	MKS	Christo	Nanya Priga	Sampath
SIGNATURE OF INVIGILATOR		B	M	C	N	S

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'B' for Second Internal Test (2022-2023)**

Room No: 201

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC098	← AB →	<del>Theethana</del>	-A-	<del>Theethana</del>	-AB-
2	IKS19EC099	<del>Tushet</del>	<del>Tushet</del>	<del>Tushet</del>	ABSENT	<del>Tushet</del>
3	IKS19EC100	Vaishman	Vaishman	Vaishman	Vaishman	Vaishman
4	IKS19EC101	Vandana	Vandana	Vandana	Vandana	Vandana
5	IKS19EC102	Vandana	Vandana	Vandana	Vandana	Vandana
6	IKS19EC103	R.igneshkumar	R.igneshkumar	R.igneshkumar	R.igneshkumar	R.igneshkumar
7	IKS19EC104	← AB →	(A) -	- AB -	ABSENT	<del>AB</del> Vikal
8	IKS19EC105	<del>R</del>	(A) -	- A -	<del>R</del>	<del>AB</del> AB
9	IKS19EC106	Ushal	Ushal	Ushal	Ushal	Ushal
10	IKS19EC107	← AB →	Vishwas	Vishwas	Vishwas	Vishwas
11	IKS19EC108	← AB →	(A) -	Yashu	Yashu	Yashu
12	IKS18EC089	Srehan	Srehan	Srehan	ABSENT	Srehan
13	IKS20EC400	← AB →	<del>MV</del>	- A -	ABSENT	<del>MV</del>
14	IKS20EC401	Ranjana.P	Ranjana.P	- A -	Ranjana.P	Ranjana.P
15	IKS20EC402	Binal	Binal	Binal	Binal	Binal
DATE:		28/11/22	28/11/22	29/11/22	29/11/22	30/11/22
NO. OF STUDENTS PRESENT		10	12	10	11	12
NO. OF STUDENTS ABSENT		05	03	05	04	02
NAME OF INVIGILATOR		Praveen.A	M	M	SANJOY DAS	J. Muradhar
SIGNATURE OF INVIGILATOR		<del>P</del>	<del>M</del>	<del>M</del>	<del>S</del>	<del>J</del>



K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109  
SECOND SESSIONAL TEST QUESTION PAPER 2022 – 23 ODD SEMESTER

USN

Degree : B.E  
Branch : ECE  
Course Title : Energy and Environment  
Duration : 90 Minutes


Semester: VII  
Course Code: 18ME751  
Date: 30/11/2022  
Max Marks: 30

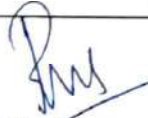
Note: Answer ONE full question from each part.

K-Levels: K1-Remembering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	Explain Environment, its scope and the need for public awareness	6	CO3	K2
(b)	Interpret how water cycle is utilized in the ecosystem.	6	CO3	K2
(c)	Illustrate grassland ecosystem. What are its types? How conservation of grassland can be made.	6	CO3	K2
<b>OR</b>				
2(a)	Explain the food chain process. Write a short note on food web.	6	CO3	K2
(b)	Interpret the utilization of carbon in ecosystem	6	CO3	K2
(c)	Illustrate aquatic ecosystem and its types.	6	CO3	K2
<b>PART-B</b>				
3(a)	Make use of the packed bed storage and storage wall technology to explain thermal energy storage.	6	CO2	K3
(b)	Summarize the effects of air pollution on living organisms	6	CO4	K2
4(a)	Identify the types of Thermal energy storage systems. Write short notes.	6	CO2	K3
(o)	Summarize the causes of water pollution and control measures to prevent water pollution	6	CO4	K2

  
Course in charge

  
Module Coordinator

  
HOD

  
Principal



**K.S.I.T.**  
**SET B**

**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109**  
**SECOND SESSIONAL TEST QUESTION PAPER 2022 – 23 ODD SEMESTER**

USN 

--	--	--	--	--	--	--	--	--	--

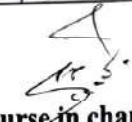
**Degree : B.E**  
**Branch : ECE**  
**Course Title : Energy and Environment**  
**Duration : 90 Minutes**

**Semester: VII**  
**Course Code: 18ME751**  
**Date: 30/11/22**  
**Max Marks: 30**

Note: Answer **ONE full** question from each part.

K-Levels: K1-Remebering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	Outline the aspects of ecosystem and oxygen cycle.	6	CO3	K2
(b)	Explain forest ecosystem. What are its types? How conservation of forest can be made.	6	CO3	K2
(c)	Explain ecological pyramid and ecological succession.	6	CO3	K2
<b>OR</b>				
2(a)	Outline the importance and scope of environmental studies.	6	CO3	K2
(b)	Explain the utilization of nitrogen in ecosystem.	6	CO3	K2
(c)	Explain the desert ecosystem. What are its types?	6	CO3	K2
<b>PART-B</b>				
3(a)	Identify the sensible heat and latent heat storage methods	6	CO2	K3
(b)	Explain the effects of ozone depletion and air pollution on plants and materials.	6	CO4	K2
4(a)	Identify the benefits of energy storage systems, the 3 processes in general in energy storage systems, the advantages, and disadvantages of Thermal Energy Storage systems.	6	CO2	K3
(b)	Explain the causes of air Pollution and control measures to prevent air pollution.	6	CO4	K2

  
**Course in charge**

  
**Module Coordinator**

  
**HOD**

  
**Principal**  
*Selute d:*

**K.S. INSTITUTE OF TECHNOLOGY**  
**VII SEM (2018 SCHEME)**  
**III SESSIONAL TEST TIME TABLE (2022-2023)**

**DATE: 13-12-2022**

DATE	TIME	COMPUTER SCIENCE AND ENGINEERING	ELECTRONICS AND COMMUNICATION ENGG	ELECTRONICS AND TELECOMMUNICATION ENGG	MECHANICAL ENGG
22-12-2022 THURSDAY	9.30 AM TO 11.00 AM	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (18CS71)	COMPUTER NETWORKS (18EC71)	OPTICAL COMMUNICATION (18TE71)	CONTROL ENGINEERING (18ME71)
	2.00 PM TO 3.30 PM	BIG DATA ANALYTICS (18CS72)	VLSI DESIGN (18EC72)	WIRELESS COMMUNICATION (18TE72)	COMPUTER AIDED DESIGN & MANUFACTURING (18ME72)
23-12-2022 FRIDAY	9.30 AM TO 11.00 AM	USER INTERFACE DESIGN (18CS734)	SATELLITE COMMUNICATION (18EC732)	SATELLITE COMMUNICATION (18EC732)	TOTAL QUALITY MANAGEMENT (18ME734)
	2.00 PM TO 3.30 PM	CRYPTOGRAPHY (18CS744)	CRYPTOGRAPHY (18EC744)	CRYPTOGRAPHY (18EC744)	ADDITIVE MANUFACTURING (18ME741)
24-12-2022 SATURDAY	9.30 AM TO 11.00 AM	ENERGY AND ENVIRONMENT (18ME751)	ENERGY AND ENVIRONMENT (18ME751)	ENERGY AND ENVIRONMENT (18ME751)	PYTHON APPLICATION PROGRAMMING (18CS752)
	2.00 PM TO 3.30 PM	_____	_____	_____	_____

**NOTE: All the students are strictly informed to wear lab uniforms, Mask and college ID Cards compulsory during the test.**

*[Signature]*  
 13/12/22  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
 13/12/22  
**PRINCIPAL**  
 PRINCIPAL  
**K.S. INSTITUTE OF TECHNOLOGY**  
 BENGALURU - 560 109.

IMG-20221213-WA0007.jpg

12/12/22, 2:13 PM



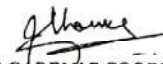
**K. S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**V & VII SEMESTER - II & III INTERNAL TEST INVIGILATION DUTY (2022-2023)**

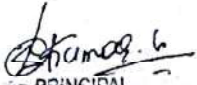
Date	Timings	OB 201	OB 203	OB 204	OB 205	OB 206	OB 207	OB 208	OB 209	OB 305	OB 306	OB 307 (ECE-SH)	NB 103 (1st Floor-SH)	NB 303 (3rd Floor-SH)	NB 403 (4th Floor-SH)
22-12-2022 THURSDAY	9:30 am to 11:00 am	BK (CSE)	KBN (CSE)	LK (CSE)	GR (CSE)	MBR (ME)	RN (ME)	RGL (ME)	PHS (CSE)	VD (ECE)	PS (ECE)	KBM (CSE)	SV (ECE)	BA (ECE)	BHA (ECE)
	2:00 pm to 3:30	SD (CSE)	RH (CSE)	KRS (B&H)	KMS (CSE)	AK (ME)	MBR (ME)	LN (ME)	KP (ME)	NM (ME)	SST (ECE)	RM (AIML)	SS (AIML)	LKK (AIML)	AKG (ECE)
23-12-2022 FRIDAY	9:30 am to 11:00 am	BK (CSE)	SD (CSE)	KG (CSE)	ST (CSE)	LN (ME)	NM (ME)	RN (ME)	AS (AIML)	PA (ECE)	SST (ECE)	RN (ECE)	BA (ECE)	SV (ECE)	KBM (ECE)
	2:00 pm to 3:30	PKN (CSE)	GR (CSE)	KBN (CSE)	KMS (CSE)	RN (ME)	RGL (ME)	PHS (CSE)	MBR (ME)	SS (AIML)	LKK (AIML)	AS (AIML)	RN (ECE)	BA (ECE)	SV (ECE)
24-12-2022 SATURDAY	9:30 am to 11:00 am	LK (CSE)	RH (CSE)	SG (CSE)	PR (CSE)	PA (ECE)	AK (ME)	VD (ECE)	KBM (ECE)	PS (ECE)	BHA (ECE)	MKS (CSE)	PKN (CSE)	KG (CSE)	ST (CSE)
	1.30 pm to 3.00 pm	AS (AIML)	RM (AIML)	SS (AIML)	LKK (AIML)	PS (ECE)				BHA (ECE)	AKG (ECE)	KP (ME)			
	3.00 pm to 4.00 pm	RGL (ME)	PHS (CSE)	PA (ECE)	SST (ECE)	RNP (BS&H)				MKS (CSE)	SG (CSE)	PR (CSE)			

Mrs. Beena k	BK	Mr. Krishna Gudi	KG
Mr. Kushal Kumar B N	KBN	Mr.Somasekhar T	ST
Mr. Laxmikantha K	LK	Mrs. Pallavi K N	PKN
Mrs. Geetha R	GR	Mrs. Supreetha Ganc	SG
Mr. Sanjoy Das	SD	Mrs. Pallavi R	PR
Mrs. Rashmi H	RH	Mr. Manoj Kumar S	MKS
Mrs. Kavya M S	KMS	Mrs. Radhika N P	RNP
Mrs. Shylaja K R	KRS	Mr. Rajesh G L	RGL
Mr. Manjunath B R	MBR	Mr. Prashanth H S	PHS
Amulyashree S	AS	Sahana Sharma	SS

Mr. Anil Kumar A	AK	Dr.Rekha.N	RN
Dr. L Nirmala	LN	Ms.Sangeetha.V	SV
Mr. Prasad K	KP	Ms.Barghavi.A	BA
Mr. Ranganath N	RN	Ms.Bhanumathi	BHA
Mr. Nagabhushana M	NM	Ms.Kavya.B.M	KBM
Mr.Praveen.A	PA	Ms.Vishalini Divakar	VD
Mr.Saleem.S.Tevaramani	SST		
Mr.Ashwini Kumar	AKG		
Roopa Murthy	RM		
Lakshmi K K	LKK		

NOTE: Issue and Collection of Blue Books at Design Lab, 3rd Floor NB, Mechanical Engg. Block

  
 ACADEMIC COORDINATOR

  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.

K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109

Department of Electronics and Communication Engineering

Attendance of VII 'A & B' for THIRD Internal Test (2022-2023)

Room No: NB SH 303

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC73)	CRYPTOGRAPHY (18EC74)	ENERGY AND ENVIRONMENT (18EC75)
1	IKS19EC052	Nidhi	Nidhi	Nidhi	Nidhi	Nidhi
2	IKS19EC053	Nirangya	Nirangya	Nirangya	Nirangya	Nirangya
3	IKS19EC054	Nithin	Nithin	Nithin	Nithin	Nithin
4	IKS19EC055	Pavani	Pavani	Pavani	Pavani	Pavani
5	IKS19EC056	P.M. W	P.M. W	P.M. W	P.M. W	P.M. W
6	IKS19EC057	← AB →	(AB)	← (AB) →	← AB →	← AB →
7	IKS19EC058	Pradip	Pradip	Pradip	Pradip	Pradip
8	IKS19EC059	Pratik	Pratik	Pratik	Pratik	Pratik
9	IKS19EC061	PSK	PSK	PSK	PSK	PSK
10	IKS19EC062	← (AR) →	Praveen	Praveen	Praveen	Praveen
11	IKS19EC063	Prathibha	Prathibha	Prathibha	Prathibha	Prathibha
12	IKS19EC064	Priya	Priya	Priya	Priya	Priya
13	IKS19EC065	Rachit	Rachit	Rachit	Rachit	Rachit
14	IKS19EC066	Rishi	Rishi	Rishi	Rishi	Rishi
15	IKS19EC067	Rishi	Rishi	Rishi	Rishi	Rishi
16	IKS19EC068	Rishi	Rishi	Rishi	Rishi	Rishi
17	IKS19EC069	Rohan	Rohan	Rohan	Rohan	Rohan
18	IKS19EC070	S.K. Prateek	S.K. Prateek	S.K. Prateek	S.K. Prateek	S.K. Prateek
19	IKS19EC071	Saharsh	Saharsh	Saharsh	Saharsh	Saharsh
20	IKS19EC073	Sahana.S	Sahana.S	Sahana.S	Sahana.S	Sahana.S
21	IKS19EC074	Saipriya	Saipriya	Saipriya	Saipriya	Saipriya
22	IKS19EC075	Sanku	Sanku	Sanku	Sanku	Sanku
23	IKS19EC076	Santosh	Santosh	Santosh	Santosh	Santosh
24	IKS19EC077	Satish	Satish	Satish	Satish	Satish
25	IKS19EC078	Satish	Satish	Satish	Satish	Satish
26	IKS19EC079	Satish	Satish	Satish	Satish	Satish
27	IKS19EC081	Shreyas	Shreyas	Shreyas	Shreyas	Shreyas
28	IKS19EC082	Shreyas.B	Shreyas.B	Shreyas.B	Shreyas.B	Shreyas.B
29	IKS19EC083	Shreyas	Shreyas	Shreyas	Shreyas	Shreyas
30	IKS19EC084	Shreyas	Shreyas	Shreyas	Shreyas	Shreyas
DATE:		22/12/22	22/12/22	23/12/22	23/12/22	24/12/22
NO. OF STUDENTS PRESENT		28	29	29	29	29
NO. OF STUDENTS ABSENT		02	01	01	01	01
NAME OF INVIGILATOR		BA	Tejaswini	V.Sanjay	BA	Krishna Gopal
SIGNATURE OF INVIGILATOR		[Signature]	[Signature]	[Signature]	[Signature]	[Signature]

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'A' for THIRD Internal Test (2022-2023)**

Room No: 306

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	1KS19EC001	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
2	1KS19EC002	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
3	1KS19EC003	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
4	1KS19EC004	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
5	1KS19EC005	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
6	1KS19EC006	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
7	1KS19EC007	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
8	1KS19EC008	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
9	1KS19EC009	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
10	1KS19EC010	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
11	1KS19EC011	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
12	1KS19EC012	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
13	1KS19EC014	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
14	1KS19EC015	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
15	1KS19EC016	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
16	1KS19EC017	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
17	1KS19EC018	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
18	1KS19EC019	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
DATE:		22/12/22	22/12/22	23/12/22	23/12/22	24/12/22
NO. OF STUDENTS PRESENT		18	18	18	18	18
NO. OF STUDENTS ABSENT		00	00	00	00	00
NAME OF INVIGILATOR		<i>[Signature]</i>	Kavya BM	Saleem S. Tevaramani	Lakshmi K K	Bhanumathi A
SIGNATURE OF INVIGILATOR		<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109

Department of Electronics and Communication Engineering

Attendance of VII 'A' for THIRD Internal Test (2022-2023)

Room No: OB SH 307

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC020	Nayar	Nayar	Nayar	Nayar	Nayar
2	IKS19EC021	<del>Sh</del>	<del>Sh</del>	<del>Sh</del>	<del>Sh</del>	<del>Sh</del>
3	IKS19EC022	Pranav	Pranav	Pranav	Pranav	Pranav
4	IKS19EC023	Pranav Subhakar	Pranav Subhakar	Pranav Subhakar	Pranav Subhakar	Pranav Subhakar
5	IKS19EC024	<del>Pranav</del>	<del>Pranav</del>	<del>Pranav</del>	<del>Pranav</del>	<del>Pranav</del>
6	IKS19EC025	Dishank	Dishank	Dishank	Dishank	Dishank
7	IKS19EC027	Pranav	Pranav	Pranav	Pranav	Pranav
8	IKS19EC028	Pranav	Pranav	Pranav	Pranav	Pranav
9	IKS19EC029	Siddavter	Siddavter	Siddavter	Siddavter	Siddavter
10	IKS19EC030	<del>Sh</del>	<del>Sh</del>	<del>Sh</del>	<del>Sh</del>	<del>Sh</del>
11	IKS19EC031	Harsho	Harsho	Harsho	Harsho	Harsho
12	IKS19EC032	Harshika	Harshika	Harshika	Harshika	Harshika
13	IKS19EC033	AB	AB	AB	AB	AB
14	IKS19EC035	Pranav	Pranav	Pranav	Pranav	Pranav
15	IKS19EC036	Pranav	Pranav	Pranav	Pranav	Pranav
16	IKS19EC037	Manogna	Manogna	Manogna	Manogna	Manogna
17	IKS19EC038	Krishna	Krishna	Krishna	Krishna	Krishna
18	IKS19EC039	<del>Pranav</del>	<del>Pranav</del>	<del>Pranav</del>	<del>Pranav</del>	<del>Pranav</del>
19	IKS19EC040	Pranav	Pranav	Pranav	Pranav	Pranav
20	IKS19EC041	Krutika	Krutika	Krutika	Krutika	Krutika
21	IKS19EC042	Pranav	Pranav	Pranav	Pranav	Pranav
22	IKS19EC043	Pranav	Pranav	Pranav	Pranav	Pranav
23	IKS19EC044	Pranav	Pranav	Pranav	Pranav	Pranav
24	IKS19EC045	Pranav	Pranav	Pranav	Pranav	Pranav
25	IKS19EC046	Pranav	Pranav	Pranav	Pranav	Pranav
26	IKS19EC047	Pranav	Pranav	Pranav	Pranav	Pranav
27	IKS19EC048	AB	AB	AB	AB	AB
28	IKS19EC049	Monika	Monika	Monika	Monika	Monika
29	IKS19EC050	Monika	Monika	Monika	Monika	Monika
30	IKS19EC051	Pranav	Pranav	Pranav	Pranav	Pranav
DATE:		22/12/22	22/12/22	23/12/22	23/12/22	24/12/22
NO. OF STUDENTS PRESENT		28	28	29	30	30
NO. OF STUDENTS ABSENT		02	02	01	0	0
NAME OF INVIGILATOR		Kavya B.M	Roopa K.M	Dr. Rekha N	Amulyashree S	MKS
SIGNATURE OF INVIGILATOR						

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of VII 'B' for THIRD Internal Test (2022-2023)**

Room No: NB SH 403

SL.NO	REGISTER NO.	COMPUTER NETWORKS (18EC71)	VLSI DESIGN (18EC72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS19EC085	(AB)	← AB →	← AB →	Sub	Sub
2	IKS19EC086	Sinchana MN	Sinchana MN	Sinchana MN	Sinchana MN	Sinchana MN
3	IKS19EC087	Srinani	← AB →	Srinani	Srinani	Srinani
4	IKS19EC088	(AB)	← AB →	Srinani	Srinani	Srinani
5	IKS19EC089	Srinani	← AB →	Srinani	Srinani	Srinani
6	IKS19EC090	Subas	Subas	Subas	Subas	Subas
7	IKS19EC092	Sushmita	Sushmita	Sushmita	Sushmita	Sushmita
8	IKS19EC093	Sushmita	Sushmita	Sushmita	Sushmita	← AB →
9	IKS19EC094	Suathi	Suathi	Suathi	Suathi	Suathi
10	IKS19EC095	Suathi	Suathi	Suathi	Suathi	Suathi
11	IKS19EC096	Ruti	Ruti	Ruti	Ruti	Ruti
12	IKS19EC097	Tejashwini	Tejashwini	Tejashwini	← AB →	Tejashwini
13	IKS19EC098	Theethara	Theethara	Theethara	Theethara	Theethara
14	IKS19EC099	Tushal	Tushal	Tushal	Tushal	Tushal
15	IKS19EC100	Vaishnav	Vaishnav	Vaishnav	Vaishnav	Vaishnav
16	IKS19EC101	Vandana	Vandana	Vandana	Vandana	Vandana
17	IKS19EC102	Vandana	Vandana	Vandana	Vandana	Vandana
18	IKS19EC103	Vignesh	Vignesh	Vignesh	Vignesh	Vignesh
19	IKS19EC104	Vikas	Vikas	Vikas	Vikas	Vikas
20	IKS19EC105	Vishal	Vishal	Vishal	Vishal	Vishal
21	IKS19EC106	Vishal	Vishal	Vishal	Vishal	Vishal
22	IKS19EC107	Vishal	Vishal	Vishal	Vishal	Vishal
23	IKS19EC108	Yashu	Yashu	Yashu	Yashu	Yashu
24	IKS18EC089	SA	SA	SA	SA	SA
25	IKS20EC400	(AB)	← AB →	MH	MH	MH
26	IKS20EC401	Ranjana.P	Ranjana.P	Ranjana.P	Ranjana.P	Ranjana.P
27	IKS20EC402	Binalu	Binalu	Binalu	Binalu	Binalu
DATE:		22/12/22	22/12/22	23/12/22	23/12/22	24/12/22
NO. OF STUDENTS PRESENT		24	22	26	26	26
NO. OF STUDENTS ABSENT		03	05	01	01	01
NAME OF INVIGILATOR		SST	PS	BHA	SV	f. Somashekhar
SIGNATURE OF INVIGILATOR		SST	PS	BHA	SV	f. Somashekhar

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Telecommunication Engineering**  
**Attendance of VII Sem for THIRD Internal Test (2022-2023)**

Room No: NB SH 103

SL.NO	REGISTER NO.	OPTICAL COMMUNICATION (18TE71)	WIRELESS COMMUNICATION (18TE72)	SATELLITE COMMUNICATION (18EC732)	CRYPTOGRAPHY (18EC744)	ENERGY AND ENVIRONMENT (18ME751)
1	IKS18TE005	Adikhe	Adikhe	Adikhe	Adikhe	Adikhe
2	IKS19ET002	Chaitra.c	Chaitra.c	Chaitra.c	Chaitra.c	Chaitra.c
3	IKS19ET003	Nitichitha	Nitichitha	Nitichitha	Nitichitha	Nitichitha
4	IKS19ET004	mahadev.AC	mahadev.AC	mahadev.AC	mahadev.AC	mahadev.AC
5	IKS19ET005	As	As	As	As	As
6	IKS19ET006	Mubin	Mubin	Mubin	Mubin	Mubin
7	IKS19ET007	Niranjans.Pas	Niranjans.Pas	Niranjans.Pas	Niranjans.Pas	Niranjans.Pas
8	IKS19ET008	Rishi	Rishi	Rishi	Rishi	Rishi
9	IKS19ET009	Rohit kumar	Rohit kumar	Rohit kumar	Rohit kumar	Rohit kumar
10	IKS19ET010	Arjun	Arjun	Arjun	Arjun	Arjun
11	IKS19ET011	Shweta	Shweta	Shweta	Shweta	Shweta
12	IKS19ET012	vaish	vaish	vaish	vaish	vaish
DATE:		22/12/22	22/12/22	23/12/22	23/12/22	24/12/22
NO. OF STUDENTS PRESENT		12	12	12	12	12
NO. OF STUDENTS ABSENT		NIL	NIL	00	00	NIL
NAME OF INVIGILATOR		V.Sangeetha	Saharsh Sharma	BA	Dr. Rekha.N	PALLAVI.K.N
SIGNATURE OF INVIGILATOR		V.Sangeetha	Saharsh Sharma	BA	Dr. Rekha.N	PALLAVI.K.N



K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109  
THIRD SESSIONAL TEST QUESTION PAPER 2022 – 23 ODD SEMESTER

USN

Degree : B.E  
Branch : ECE  
Course Title : Energy and Environment  
Duration : 90 Minutes

Semester: VII  
Course Code: 18ME751  
Date: 24/12/22  
Max Marks: 30

Note: Answer ONE full question from each part.

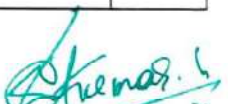
K-Levels: K1-Remembering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	Outline the aspects of ozone layer depletion.	6	CO5	K2
(b)	Explain the types, causes, and objectives of wasteland reclamation.	6	CO5	K2
(c)	Explain water (Prevention and Control of Pollution) Act.	6	CO5	K2
<b>OR</b>				
2(a)	Outline the Environment protection Act and Environment Impact Assessment (EIA).	6	CO5	K2
(b)	Explain any two case studies related to Nuclear Hazards.	6	CO5	K2
(c)	Explain forest conservation (Prevention and Control of Pollution) Act.	6	CO5	K2
<b>PART-B</b>				
3(a)	Identify the causes and effects of Noise Pollution. Mention control measures.	6	CO4	K2
(b)	Explain any two case studies related to pollution of environment.	6	CO4	K2
4(a)	Identify the environmental problems and health risks caused by hazardous wastes.	6	CO4	K2
(b)	Explain the role of an individual in prevention of pollution	6	CO4	K2

  
Course in charge

  
Module Coordinator

  
HOD

  
Principal

**Degree** : B.E  
**Branch** : ECE  
**Course Title** : Energy and Environment  
**Duration** : 90 Minutes

USN 

--	--	--	--	--	--	--	--	--	--

**Semester:** VII  
**Course Code:** 18ME751  
**Date:** 24/12/22  
**Max Marks:** 30


Note: Answer **ONE full** question from each part.

K-Levels: K1-Remembering, K2-Understanding, K3-Appling, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	<b>Outline</b> the aspects of acid rain and its effects.	6	C05	K2
(b)	<b>Explain</b> the wasteland reclamation methods.	6	C05	K2
(c)	<b>Explain</b> Air (Prevention and Control of Pollution) Act.	6	C05	K2
<b>OR</b>				
2(a)	<b>Outline</b> the concept of Consumerism and waste products. Mention control measures explaining the roles of an individual in protecting environment.	6	C05	K2
(b)	<b>Explain</b> any two case studies related to pollution of environment.	6	C05	K2
(c)	<b>Explain</b> wildlife (Prevention and Control of Pollution) Act.	6	C05	K2
<b>PART-B</b>				
3(a)	<b>Identify</b> the causes and effects of Thermal Pollution. Mention control measures.	6	C04	K2
(b)	<b>Explain</b> Characteristics of hazardous wastes.	6	C04	K2
4(a)	<b>Identify</b> the causes and effects of Marine Pollution. Mention control measures.	6	C04	K2
(b)	<b>Explain</b> solid waste management techniques.	6	C04	K2

  
Course in charge

  
Module Coordinator

  
HOD

  
Principal

*Substituted*





# ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

ವಿಜಯಲಕ್ಷ್ಮಿನಿಯಮಂ ೧೯೯೪ ರ ರಜಿಯಲ್ಪಿತನಾರ್ತಕರ್ತಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

State University of Government of Karnataka Established as per the VTU Act, 1994 "JuanaSangama" Belagavi-590018, Karnataka, India

Prof. B. E. Rangaswamy, Ph.D  
REGISTRAR

Phone: (0831) 2498100  
Fax: (0831) 2405467

REF: VTU/BGM/GC/2023/ 712

DATE: 9 MAY 2023

### Revised-NOTIFICATION

**Subject:** Tentative Academic Calendar of II Semester B.E./B.Tech., B.Arch and B.Plan and IV semester B.E./B.Tech., programs of University regarding...

**Reference:** Hon'ble Vice-Chancellor's approval dated: 9 MAY 2023

The computer-Aided Engineering Drawing (BCEDK103) examinations of II semester B.E./B.Tech., programs are scheduled between 15.05.2023 to 24.05.2023. A revised Academic Calendar (Tentative) of II Semester B.E./B.Tech., B.Arch and B.Plan and IV semester B.E./B.Tech., programs of the University for the academic year 2022-23 are hereby notified as mentioned below;

(Tentative) Academic Calendar for semesters of II semester B.E./B.Tech./B.Arch./B.Plan and IV semester B.E./B.Tech., Programs for AY 2022-23 (May 2023)			
	II Semester B.E./B.Tech. (2022 scheme)	II Semester B. Arch, B. Plan (2021 scheme)	IV Semester B.E./ B.Tech (2021 scheme)
Commencement of the semester	25.05.2023	17.05.2023	17.05.2023
Internship	-----	-----	17.05.2023 To 03.06.2023
Commencement of the Classes	25.05.2023	17.05.2023	05.06.2023
Last Working day of the Semester	09.09.2023	31.08.2023	16.09.2023
Practical Examination/Viva Examination	11.09.2023 To 20.09.2023	01.09.2023 To 08.09.2023	19.09.2023 To 30.09.2023
Theory Examinations	21.09.2023 To 21.10.2023	11.09.2023 To 27.09.2023	03.10.2023 To 20.10.2023
Commencement of next Semester	25.10.2023	09.10.2023	25.10.2023

R

**Please Note:**

- The academic sessions for EVEN semesters should commence on the **date mentioned** above. The **induction program** shall be conducted for 10 days for 2nd-semester students. Scheduling the induction program's activities during the afternoon session in the 1st week is advised, the remaining sessions of induction programs shall be planned on Saturdays. The colleges must email a brief report to **sbhalbhavi@vtu.ac.in** after completing the Induction program
- The college may hold extra classes on Saturdays and Sundays to complete academic activities within the specified timeframe.
- The faculty/staff shall be available to undertake any work assigned by the university.
- University Examination Calendars will be published by the Registrar (Evaluation) from time to time.
- The Academic Calendar may be modified as MHRD/UGC/AICTE/state governments issue guidelines/directives in the future.
- Academic calendars are also applicable to autonomous colleges. If any changes are to be made by Autonomous colleges in the academic terms and examination schedule, they could do so with the approval of the university
- If any clarification/correction/suggestions, please email **sbhalbhavi@vtu.ac.in**

The principals of engineering colleges under the ambit of the University, are hereby informed to bring the academic calendar to the notice of all concerned. The Chairpersons of the PG department of the University where UG programs are offered are hereby informed to bring the academic calendar to the notice of the all concerned

The Directors of Schools of Architecture and Planning under the ambit of the university are hereby informed to bring the academic calendar to the notice of all concerned.

Sd/-

REGISTRAR

To,

1. The principal of all engineering colleges, Directors of Schools of Architecture and Planning, under the ambit of VTU Belagavi. The Chairperson of the PG Department of the university.

Copy to.

1. To the Hon'ble Vice-Chancellor through the secretary to VC, VTU Belagavi for information
2. The Registrar (Evaluation), VTU Belagavi for information.
3. The Regional Directors (I/c) of all the regional offices of VTU for circulation.
4. The Director I/c. ITI SMU, VTU Belagavi for information and to make arrangements to upload Academic Calendar on the VTU web portal.
5. The Director of Physical Education, VTU Belagavi for information
6. The Director of Central Placement Officer VTU Belagavi for information
7. All the concerned Special Officer/s and Caseworker/s of the academic section, VTU, Belagavi

Rao 09/05/23 B.E  
REGISTRAR  
A.



# ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟಿ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

(State University of Government of Karnataka Established as per the VTU Act, 1994)  
"JnanaSangama" Belagavi-590018, Karnataka, India

Prof. Dr. B. E. Rangaswamy, Ph.D.  
REGISTRAR

Phone : (0831) 2498100  
Fax : (0831) 2405467

REF: VTU/BGM/ACA/2022-23/ 7119

DATE: 2 MAR 2023

### NOTIFICATION

- Subject:** Tentative Academic Calendar of II and IV sem B.Sc (Hon), VI sem B.E./B.Tech., B.Plan, B.Arch programs of University regarding...
- Reference:** Hon'ble Vice-Chancellor's approval dated: 01.03.2023

The tentative academic calendar concerned to II and IV sem B.Sc (Hon), VI sem B.E./B.Tech., B.Plan, B.Arch., programs of University for academic year 2022-23 are hereby notified as mentioned in Annexure-I;

The Principals/ Directors of all Engineering Colleges/Schools of Architecture, under the ambit of University are hereby informed to bring the academic calendar to the notice of all concerned.

Sd/-

REGISTRAR

To,

1. The Principals all Engineering Colleges under the ambit of University
2. The Director of all school of Architecture under the ambit of University
3. The chairperson/Program coordinator of MBA(IEV) program VTU Belagavi

Copy to.

1. To the Hon'ble Vice-Chancellor through the secretary to VC, VTU Belagavi for information
2. The Registrar (Evaluation), VTU Belagavi for information.
3. The special Officer QPDS section VTU Belagavi
4. The Regional Directors (I/c) of all the regional offices of VTU for circulation.
5. The Director I/c. ITI SMU, VTU Belagavi for information and to make arrangements to upload Academic Calendar on the VTU web portal.
6. The Director of Physical Education, VTU Belagavi for information
7. The Director, Central Placement Cell, VTU Belagavi
8. All the concerned Special Officer/s and Caseworker/s of the academic section, VTU, Belagavi

Rav BE

REGISTRAR

7.

**Annexure-I**  
**Tentative Academic Calendar for academic year 2022-23**

	II sem B.Sc.(Hon)	IV sem B.Sc (Hon)	VI sem B.E./B.Tech	VI sem B.Plan	#VI sem B.Arch.
Commencement of semester Classes	06.03.2023 ✓	20.03.2023 ✓	20.03.2023 ✓	20.03.2023 ✓	20.03.2023 ✓
Last Working day of the Semester	30.06.2023 ✓	10.07.2023 ✓	10.07.2023 ✓	10.07.2023 ✓	10.07.2023 ✓
Practical Examination/Viva Examination	03.07.2023 To 07.07.2023 ✓	11.07.2023 To 15.07.2023 ✓	11.07.2023 To 21.07.2023 ✓	11.07.2023 To 21.07.2023 ✓	11.07.2023 To 21.07.2023 ✓
Theory Examinations	10.07.2023 To 25.07.2023 ✓	17.07.2023 To 31.07.2023 ✓	24.07.2023 To 12.08.2023 ✓	24.07.2023 To 12.08.2023 ✓	24.07.2023 To 12.08.2023 ✓
Internship	-----	-----	04 weeks 09.09.2023 ✓	06 weeks 16.09.2023 ✓	-----
Commencement of next Semester	01.08.2023 ✓	01.08.2023 ✓	11.09.2023 ✓	19.09.2023 ✓	16.08.2023 ✓

# Academic calendar already notified vide VTU/BGM/ACA/2022-23/6889, dated 15.02.2023

**Please Note:**

- The academic sessions should commence on the **date mentioned** above.
- If required, the college can also plan to have extra classes on Saturday(1<sup>st</sup> and 3<sup>rd</sup>) and Sundays full day to complete academic activities within the duration mentioned.
- The faculty/staff shall be available to undertake any work assigned by the university.
- Notification regarding the Calendar of Events relating to the conduct of University **Examinations** will be issued by the Registrar (Evaluation) from time to time.
- Academic Calendar **may be modified** based on guidelines/directions issued in the future by MHRD/UGC/AICTE/State Government.
- Academic Calendar is also applicable for **Autonomous Colleges**. If any changes are to be effected by Autonomous Colleges in the academic terms and examination schedule, they could do so with the approval of the University.
- If any clarification/correction, please email to - [sbhalbhavi@vtu.ac.in](mailto:sbhalbhavi@vtu.ac.in)

REGISTRAR  
✍



# ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟಿ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

(State University of Government of Karnataka Established as per the VTU Act, 1994)

"JnanaSangama" Belagavi-590018, Karnataka, India

Prof. Dr. B. E. Rangaswamy, Ph.D.  
REGISTRAR

Phone: (0831) 2498100  
Fax : (0831) 2405467

REF: VTU/BGM/ACA/2022-23/ 6566

DATE: 3 FEB 2023

### NOTIFICATION

- Subject:** Tentative Academic Calendar of VIII semesters of B.E./ B.Tech.,  
B.Arch., B. Plan programs of University regarding...
- Reference:** Hon'ble Vice-Chancellor's approval dated: 03.02.2023

The tentative academic calendar concerned to VIII semesters of B.E./B.Tech.,  
B. Arch., and B. Plan programs of University for academic year 2022-23 are hereby  
notified as mentioned below;

(Tentative) Academic Calendar for semesters of all VIII Semester UG Programs (Feb 2023)			
	B.E./B.Tech.	B.Arch	B.Plan
Commencement of 8 <sup>th</sup> semester Classes	13.02.2023	13.02.2023	13.02.2023
Last Working day of 8 <sup>th</sup> Semester	13.05.2023	13.05.2023	13.05.2023
Practical Examination/Viva Examination	05.06.2023 To 13.06.2023	16.05.2023 To 26.05.2023	----
Theory Examinations	16.05.2023 To 01.06.2023	29.05.2023 To 10.06.2023	16.05.2023 To 01.06.2023
Commencement of next Semester	---	-----	-----

#### Please Note:

- The academic sessions for VIII semester should commence on the **date mentioned** above.
- The Institute needs to function for **six days** a week with Saturday being half working day. #if required, the college can also plan to have extra classes on Saturday afternoons and Sundays full day to complete academic activities within the duration mentioned. This will facilitate the final year students for appearing competitive examination for their career and also helps in seeking admission abroad.

- The faculty/staff shall be available to undertake any work assigned by the university.
- Notification regarding the Calendar of Events relating to the conduct of University **Examinations** will be issued by the Registrar (Evaluation) from time to time.
- Academic Calendar **may be modified** based on guidelines/directions issued in the future by MHRD/UGC/AICTE/State Government.
- Academic Calendar is also applicable for **Autonomous Colleges**. If any changes are to be effected by Autonomous Colleges in the academic terms and examination schedule, they could do so with the approval of the University.
- If any clarification/correction, please email to - **sbhvtuso@yahoo.com**

The Principals/ Directors of Schools of Architecture, under the ambit of University are hereby informed to bring the academic calendar to the notice of all concerned.

Sd/-

REGISTRAR

To,

1. The Principals / Directors, Schools of Architecture under the ambit of VTU Belagavi.

Copy to.

1. To the Hon'ble Vice-Chancellor through the secretary to VC, VTU Belagavi for information
2. The Registrar (Evaluation), VTU Belagavi for information.
3. The Regional Directors (I/c) of all the regional offices of VTU for circulation.
4. The Director I/c. ITI SMU, VTU Belagavi for information and to make arrangements to upload Academic Calendar on the VTU web portal.
5. **The Director of Physical Education, VTU Belagavi for information**
6. All the concerned Special Officer/s and Caseworker/s of the academic section, VTU, Belagavi

  
REGISTRAR 3.2.23  




# K. S. INSTITUTE OF TECHNOLOGY, BENGALURU-560109

TENTATIVE CALENDAR OF EVENTS: IV EVEN SEMESTER (2022-2023)

SESSION: MAY TO SEP 2023

Week No.	Month	Day						Days	Activities
		Mon	Tue	Wed	Thu	Fri	Sat		
1	MAY			17*	18	19	20DH	3	17* - Commencement of IV Sem
2	MAY	22	23	24	25	26	27	6	27-Tuesday Time Table
3	MAY/JUN	29	30	31	1	2	3DH	5	
4	JUN	5	6	7	8	9	10	6	10-Wednesday Time Table
5	JUN	12	13	14	15	16 TA	17DH	5	
6	JUN	19 T1	20 T1	21 T1	22	23	24	6	24-Tuesday Time Table
7	JUN/JULY	26	27	28 BV	29H	30 * FFB1	1DH	4	29 - Bakrid 30 - First Faculty Feed Back
8	JULY	3 LT1	4 LT1	5 LT1	6 ASD	7	8	6	8-Wednesday Time Table
9	JULY	10	11	12	13	14	15DH	5	
10	JULY	17	18	19	20	21	22	6	22- Tuesday Time Table
11	JULY	24	25	26	27	28 TA	29H	5	29- Moharam
12	JULY/AUG	31 T2	1 T2	2 T2	3	4	5	6	5- Monday Time Table
13	AUG	7	8	9 BV	10	11 ASD	12 DH	5	
14	AUG	14	15 H	16	17 * FFB2	18	19	5	15 - Independence Day 17 - Second Faculty Feed Back 19- Monday Time Table
15	AUG	21	22	23	24	25	26 DH	5	
16	AUG/SEP	28	29	30	31	1	2	6	2- Wednesday
17	SEP	4	5	6 T3	7 T3	8 T3	9 DH	5	
18	SEP	11LT2	12LT2	13LT2	14	15	16*	6	16- Thursday Time Table 16* - Last Working day

**Total No of Working Days : 95**

Total Number of working days ( Excluding holidays and Tests)=80

H	Holiday
BV	Blue Book Verification
T1,T2,T3	Tests 1,2,3
ASD	Attendance & Sessional Display
DH	Declared Holiday
LTI, 2	Lab Test 1,2
TA	Test attendance

Monday	15
Tuesday	15
Wednesday	16
Thursday	17
Friday	17
<b>Total</b>	<b>80</b>

**PRINCIPAL**  
**K.S. INSTITUTE OF TECHNOLOGY**  
**BENGALURU - 560 109.**



**K. S. INSTITUTE OF TECHNOLOGY, BENGALURU-560109**  
**REVISED TENTATIVE CALENDAR OF EVENTS: VI EVEN SEMESTER (2022-2023)**  
**SESSION: MARCH TO JULY 2023**

Week No.	Month	Day						Days	Activities
		Mon	Tue	Wed	Thu	Fri	Sat		
1	MAR	20*	21	22 H	23	24	25	5	20* - Commencement of VI Sem 22- Ugadi 25-Monday Time Table
2	MAR/APR	27	28	29	30	31	1	6	1-Monday Time Table
3	APR	3H	4	5	6	7H	8DH	3	3-Mahaveera Jayanthi 7-Good Friday
4	APR	10	11	12	13	14H	15 TA	5	14-Dr. B R Ambedkar Jayanthi 15-Monday Time Table
5	APR	17T1	18T1	19T1	20	21	22DH	5	
6	APR	24BV	25* FFB1	26 ASD	27	28	29	6	25* - First Faculty Feed Back 29-Friday Time Table
7	MAY	1H	2	3	4	5	6	5	1-May Day 6 - Wednesday Time Table
8	MAY	8	9	10	11	12	13	6	13-Friday Time Table
9	MAY	15	16	17	18	19	20DH	5	
10	MAY	22 LT1	23 LT1	24 LT1	25	26	27	6	27-Tuesday Time Table
11	MAY/JUN	29	30	31	1	2 TA	3DH	5	
12	JUN	5T2	6T2	7T2	8	9	10	6	6 - Second Faculty Feed Back 10-Wednesday Time Table
13	JUN	12 BV	13* FFB2	14 ASD	15	16	17DH	5	
14	JUN	19	20	21	22	23	24	6	24-Tuesday Time Table
15	JUN/JULY	26	27	28	29H	30 LT2	1DH	4	29 - Bakrid
16	JULY	3 LT2	4 LT2	5 LT2	6 T3	7 T3	8 T3	6	8-Wednesday Time Table
17	JULY	10*						1	10* - Last Working day

**Total No of Working Days : 85**

Total Number of working days ( Excluding holidays and Tests)=70

<b>H</b>	Holiday
<b>BV</b>	Blue Book Verification
<b>T1,T2,T3</b>	Tests 1,2,3
<b>ASD</b>	Attendance & Sessional Display
<b>DH</b>	Declared Holiday
<b>LT1</b>	Lab Test 1
<b>TA</b>	Test attendance

Monday	13
Tuesday	13
Wednesday	13
Thursday	15
Friday	16
<b>Total</b>	<b>70</b>

  
**PRINCIPAL**  
**K.S. INSTITUTE OF TECHNOLOGY**  
**BENGALURU - 560 109.**





# K. S. INSTITUTE OF TECHNOLOGY, BENGALURU-560109

*TENTATIVE CALENDAR OF EVENTS: VIII EVEN SEMESTER (2022-2023)*

**SESSION: FEB 2023 – MAY 2023**

Week No.	Month	Day						Days	Activities
		Mon	Tue	Wed	Thu	Fri	Sat		
1	FEB	13	14	15	16	17	18 DH	5	18- Maha Shivaratri
2	FEB	20	21	22	23	24	25	6	25- Wednesday Time Table
3	FEB/MAR	27	28	1	2 BV	3 ASD	4 DH	5	
4	MAR	6	7	8	9	10	11TA	6	11 - Tuesday Time Table
5	MAR	13T1	14T1	15	16	17	18 DH	5	
6	MAR	20BV	21* FFB1	22 H	23ASD	24	25	5	21* - First Faculty Feed Back 22- Ugadi 25-Monday Time Table
7	MAR/APR	27	28	29	30	31	1	6	1-Monday Time Table
8	APR	3H	4	5	6	7H	8DH	3	3-Mahaveera Jayanthi 7-Good Friday 8-Friday Time Table
9	APR	10	11	12	13TA	14H	15	5	14-Dr. B R Ambedkar Jayanthi 15-Monday Time Table
10	APR	17T2	18T2	19	20	21	22DH	5	
11	APR	24BV	25* FFB2	26ASD	27	28	29	6	25* - Second Faculty Feed Back 29-Friday Time Table
12	MAY	1H	2	3	4	5	6DH	4	1-May Day
13	MAY	8	9	10	11T3	12T3	13*	6	13-Friday Time Table 13* - Last Working day
<b>Total No of Working Days : 67</b>									

Total Number of working days ( Excluding holidays and Tests)=61

<b>H</b>	Holiday
<b>BV</b>	Blue Book
<b>T1,T2,T3</b>	Tests 1,2,3
<b>ASD</b>	Attendance & Sessional Display
<b>DH</b>	Declared Holiday
<b>LTI</b>	Lab Test 1
<b>TA</b>	Test attendance

Monday	12
Tuesday	12
Wednesday	13
Thursday	12
Friday	12
<b>Total</b>	<b>61</b>

PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.



# K. S INSTITUTE OF TECHNOLOGY, BENGALURU-560109

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

**TENTATIVE CALENDAR OF EVENTS: VIII EVEN SEMESTER (2022-2023)**

**SESSION: FEB 2023 – MAY 2023**

Week No.	Month	Day						Days	Activities	Department Activities Tentative Dates
		Mon	Tue	Wed	Thu	Fri	Sat			
1	FEB	13	14	15	16	17	18 DH	5	18- Maha Shivaratri	
2	FEB	20	21	22	23	24	25	6	25- Wednesday Time Table	
3	FEB/MAR	27	28	1	2 BV	3 ASD	4 DH	5		
4	MAR	6	7	8	9	10	11 TA	6	11 - Tuesday Time Table	8th March Womens Day Under IEEE
5	MAR	13 T1	14 T1	15	16	17	18 DH	5		16th March Motivational Talk Under IEEE WIE, ASH
6	MAR	20 BV	21* FFB1	22 H	23 ASD	24	25	5	21* - First Faculty Feed Back 22- Ugadi 25-Monday Time Table	
7	MAR/APR	27	28	29	30	31	1	6	1-Monday Time Table	27th March to 1st April : Six Days FDP on Python and its Applications Under IEEE, ISTE, IETE, IEI
8	APR	3 H	4	5	6	7 H	8 DH	3	3-Mahaveera Jayanthi 7-Good Friday 8-Friday Time Table	6th April Humanitarian activity Under IEEE
9	APR	10	11	12	13 TA	14 H	15	5	14-Dr. B.R Ambedkar Jayanthi 15-Monday Time Table	
10	APR	17 T2	18 T2	19	20	21	22 DH	5		
11	APR	24 BV	25* FFB2	26 ASD	27	28	29	6	25* - Second Faculty Feed Back 29-Friday Time Table	28th April & 29th April : Paper Presentation Under IEEE, ISTE, IETE, IEI
12	MAY	1 H	2	3	4	5	6 DH	4	1-May Day	3rd, 4th & 5th May Student Development Programme On Python Coding
13	MAY	8	9	10	11 T3	12 T3	13*	6	13-Friday Time Table 13* - Last Working day	

Total No of Working Days : 67

Total Number of working days ( Excluding holidays and Tests)=61

H	Holiday
BV	Blue Book Verification
T1,T2, T3	Tests 1,2, 3
ASD	Attendance & Sessional Display
DH	Declared Holiday
LT	Lab Test 1
TA	Test attendance

Monday	12
Tuesday	12
Wednesday	13
Thursday	12
Friday	12
<b>Total</b>	<b>61</b>

**HEAD OF THE DEPARTMENT**  
 Dept. of Electronics & Communication Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109

**PRINCIPAL**  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.



# K. S INSTITUTE OF TECHNOLOGY, BENGALURU-560109

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

**TENTATIVE CALENDAR OF EVENTS: VI EVEN SEMESTER (2022-2023)**

**SESSION: MARCH 2023 - JULY 2023**

Week No.	Month	Day						Days	Activities	Department Activities Tentative Dates
		Mon	Tue	Wed	Thu	Fri	Sat			
1	MAR	20*	21	22 H	23	24	25	5	20* - Commencement of VI Sem 22- Ugadi 25-Monday Time Table	
2	MAR/ APR	27	28	29	30	31	1	6	1-Monday Time Table	27th March to 1st April : Six Days FDP on Python and its Applications Under IEEE, ISTE, IETE, IEI
3	APR	3H	4	5	6	7H	8DH	3	3-Mahaveera Jayanthi 7-Good Friday	6th April Humanitarian activity Under IEEE
4	APR	10	11	12	13	14H	15 TA	5	14-Dr. B R Ambedkar Jayanthi 15-Monday Time Table	
5	APR	17T1	18T1	19T1	20	21	22DH	5		
6	APR	24BV	25* FFB1	26 ASD	27	28	29	6	25* - First Faculty Feed Back 29-Friday Time Table	28th April & 29th April : Paper Presentation Under IEEE, ISTE, IETE, IEI
7	MAY	1H	2	3	4	5	6DH	4	1-May Day	3rd, 4th & 5th May Student Development Programme On Python Coding
8	MAY	8	9	10	11	12	13	6	13-Friday Time Table	
9	MAY	15	16	17	18	19	20 DH	5		
10	MAY	22 LT1	23 LT1	24 LT1	25	26 1A	27	6	27-Tuesday Time Table	27th May : Marathon Under IEEE, ISTE, IETE, IEI
11	MAY/J UN	29T2	30 T2	31 T2	1	2	3DH	4		1st June : Mini Project Under IEEE, ISTE, IETE, IEI 2nd June SPS DAY under IEEE
12	JUN	5 BV	6 * FFB2	7 ASD	8	9	10	6	6 - Second Faculty Feed Back 10-Wednesday Time Table	10th June Technical Talk Under IEEE, ISTE
13	JUN	12	13	14	15	16	17DH	5		
14	JUN	19	20	21	22	23	24	6	24-Tuesday Time Table	
15	JUN/ JULY	26 LT2	27 LT2	28 LT2	29H	30	1DH	5	29 - Bakrid	
16	JULY	3 T3	4 T3	5 T3	6	7	8	6	8-Wednesday Time Table	
17	JULY	10*						1	10* - Last Working day	

Total No of Working Days : 84

Total Number of working days ( Excluding holidays and Tests)=69

H	Holiday
BV	Blue Book Verification
T1, T2, T3	Tests 1, 2, 3
ASD	Attendance & Sessional Display
DH	Declared Holiday
LT	Lab Test
TA	Test attendance

Monday	13
Tuesday	13
Wednesday	12
Thursday	15
Friday	16
<b>Total</b>	<b>69</b>

*[Signature]*  
**HEAD OF THE DEPARTMENT**  
 Dept. of Electronics & Communication Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109

*[Signature]*  
**PRINCIPAL**  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.



# K. S INSTITUTE OF TECHNOLOGY, BENGALURU-560109

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

TENTATIVE CALENDAR OF EVENTS: IV EVEN SEMESTER (2022-2023)

SESSION: MAY TO SEP 2023

Week No.	Month	Day						Days	Activities	Department Activities Tentative Dates
		Mon	Tue	Wed	Thu	Fri	Sat			
1	MAY			17*	18	19	20 DH	3	17* - Commencement of IV Sem	
2	MAY	22	23	24	25	26	27	6	27-Tuesday Time Table	27th May : Marathon Under IEEE, ISTE, IETE, IEI
3	MAY/JUN	29	30	31	1	2	3 DH	5		1st June : Mini Project Under IEEE, ISTE, IETE, IEI 2nd June SPS DAY under IEEE
4	JUN	5	6	7	8	9	10	6	10-Wednesday Time Table	10th June Technical Talk Under IEEE, ISTE
5	JUN	12	13	14	15	16 TA	17 DH	5		
6	JUN	19 T1	20 T1	21 T1	22	23	24	6	24-Tuesday Time Table	
7	JUN/JULY	26	27	28 BV	29 H	30* FFB1	1 DH	4	29 - Bakrid 30 - First Faculty Feed Back	
8	JULY	3 LT1	4 LT1	5 LT1	6 ASD	7	8	6	8-Wednesday Time Table	
9	JULY	10	11	12	13	14	15 DH	5		
10	JULY	17	18	19	20	21	22	6	22- Tuesday Time Table	22nd July Technical Talk
11	JULY	24	25	26	27	28 TA	29 H	5	29- Moharam	
12	JULY/AUG	31 T2	1 T2	2 T2	3	4	5	6	5- Monday Time Table	3rd August to 8th August Placement Training
13	AUG	7	8	9 BV	10	11 ASD	12 DH	5		
14	AUG	14	15 H	16	17* FFB2	18	19	5	15 - Independence Day 17 - Second Faculty Feed Back 19- Monday Time Table	19th August Activities under NSS, Sports & Yoga
15	AUG	21	22	23	24	25	26 DH	5		
16	AUG/SEP	28	29	30	31	1	2	6	2- Wednesday	2nd September Mini Project Exhibition & Poster Presentation
17	SEP	4	5	6 T3	7 T3	8 T3	9 DH	5		
18	SEP	11LT 2	12LT 2	13LT 2	14	15	16*	6	16- Thursday Time Table 16* - Last Working day	

Total No of Working Days : 95

Total Number of working days ( Excluding holidays and Tests)=80

H	Holiday
BV	Blue Book Verification
T1, T2, T3	Tests 1, 2, 3
ASD	Attendance & Sessional Display
DH	Declared Holiday
LT	Lab Test 1, 2
TA	Test attendance

Monday	15
Tuesday	15
Wednesday	16
Thursday	17
Friday	17
<b>Total</b>	<b>80</b>

HEAD OF THE DEPARTMENT  
Dept. of Electronics & Communication Engg  
K.S. Institute of Technology  
Bengaluru - 560 109

PRINCIPAL  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109.



# K. S. INSTITUTE OF TECHNOLOGY, BANGALORE

IV SEM

FIRST SESSIONAL TEST TIME TABLE (2022-2023)  
(EVEN SEMESTER 2023)

Date : 15/06/2023

DATE	TIME	ARTIFICIAL INTELLIGENCE & MACHINE LEARNING	COMPUTER SCIENCE & DESIGN	COMPUTER SCIENCE & ENGG	ELECTRONICS & COMMUNICATION ENGG	MECHANICAL ENGG
26/06/2023 Monday	9:30 AM To 10:30 AM	<b>21CS41</b> Mathematical Foundations for Computing	<b>21CS41</b> Mathematical Foundations for Computing	<b>21CS41</b> Mathematical Foundations for Computing	<b>21EC41</b> Maths for Communication Engineers	<b>21ME41</b> Complex Analysis, Probability and Linear Programming.
	2:00 PM To 3:00 PM	<b>21CS42</b> Design and Analysis of Algorithms	<b>21CS42</b> Design and Analysis of Algorithms	<b>21CS42</b> Design and Analysis of Algorithms	<b>21EC42</b> Digital Signal Processing	<b>21ME42</b> Machining Science and Jigs & Fixtures
27/06/2023 Tuesday	9:30 AM To 10:30 AM	<b>21CS43</b> Microcontroller and Embedded Systems	<b>21CS43</b> Microcontroller and Embedded Systems	<b>21CS43</b> Microcontroller and Embedded Systems	<b>21EC43</b> Circuits & Controls	<b>21ME43</b> Fluid Mechanics
	1:30 PM To 2:30 PM	<b>21BE45</b> Biology For Engineers	<b>21BE45</b> Biology For Engineers	<b>21BE45</b> Biology For Engineers	<b>21BE45</b> Biology For Engineers	<b>21BE45</b> Biology For Engineers
28/06/2023 Wednesday	9:30 AM To 10:30 AM	<b>21CS44</b> Operating Systems	<b>21CS44</b> Operating Systems	<b>21CS44</b> Operating Systems	<b>21EC44</b> Communication Theory	<b>21ME44</b> Mechanics of Materials
	1:30 PM To 2:30 PM	<b>21CIP47</b> Constitution of India and Professional Ethics (CIP)	<b>21KSK37/47</b> Samskrutika Kannada / <b>21KKB47</b> Balake Kannada	<b>21KSK47</b> Samskrutika Kannada / <b>21KKB47</b> Balake Kannada	<b>21CIP47</b> Constitution of India and Professional Ethics (CIP)	<b>21KSK47</b> Samskrutika Kannada / <b>21KKB47</b> Balake Kannada
	3:00 PM To 4:00 PM	<b>21UH49</b> Universal Human Values	<b>21UH49</b> Universal Human Values	<b>21UH49</b> Universal Human Values	<b>21UH49</b> Universal Human Values	<b>21UH49</b> Universal Human Values

Note: All the students are strictly informed to wear Lab uniforms, and college ID card is compulsory during the test.

*Shanmug* 15/6/23  
Academic Coordinator  
Dept. of Mechanical Engg.  
K.S. Institute of Technology  
Bangalore - 560 109.

*Shanmug* 15/6/23  
Principal  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109.

**K. S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**II & IV SEMESTER - 1st CIE TEST INVIGILATION DUTY (2022-2023)**

Date	Timings	SEM	NB SH 008 (GF Floor)	NB 101	NB 102	NB SH 103 (1st Floor)	NB 104	NB 202	NB 203	NB SH 204 (2nd Floor)	NB 205	NB 301	NB 302	NB SH 303 (3rd Floor)	NB 304	NB SH 403 (4th Floor)	OB SH 307 (3rd Floor)
26/6/2023 MONDAY	9:30 am to 10:30 am	II	SS (ECE)	KBN (CSE)	NP (CSE)	NM (ME)	RH (CSE)	ST (CSE)	SA (CSD)	MBR (ME)	AS (AIML)	RKM (AIML)	BHA (ECE)	TML (ME)	BS (BS)	NP (AIML)	SVJ (ECE)
		IV	SD (CSE)			PHS (CSE)				SB (CSD)				SKB (ECE)			KRS (BS)
	2:00 pm to 3:00 pm	II	AR (ECE)	SS (AIML)	CJ (ECE)	NKS (ME)	VD (ECE)	AK (ME)	RN (ME)	LN (ME)	HU (ME)	KP (ME)	HS (BS)	KR (ECE)	KTN (BS)	DB (ECE)	KK (CSE)
		IV	ALB (CSE)			KBM (ECE)				MN (BS)				KG (CSE)			RC (BS)
27/6/2023 TUESDAY	9:30 am to 10:30 am	II	AP (ECE)	BHA (ECE)	SS (AIML)	AR (ECE)	RN (ME)	HU (ME)	TML (ME)	VD (ECE)	MN (BS)	SVJ (ECE)	SG (BS)	GTR (ME)	KR (ECE)	NP (AIML)	SRC (BS)
		IV	SSB (CSE)			LN (ME)				MV (BS)				LC (BS)			MS (BS)
	1:30 pm to 2:30 pm	II	KBM (ECE)	ST (CSE)	KBN (CSE)	AP (ECE)	PHS (CSE)	RH (CSE)	AS (AIML)	NM (ME)	SB (CSD)	SS (ECE)	RKM (AIML)	MBR (ME)	DB (ECE)	KK (CSE)	RJ (CSE)
		IV	SD (CSE)			NP (CSE)				SA (CSD)				LKK (CSE)			SGK (BS)
3:00 pm to 4:00 pm	II									SKB (ECE)	CJ (ECE)	AK (ME)	KP (ME)	RC (BS)	SRC (BS)	TR (BS)	
28/6/2023 WEDNESDAY	9:30 am to 10:30 am	II	NKS (ME)	SB (CSD)	SKB (ECE)	MV (BS)	CF (ECE)	AR (ECE)	ST (CSE)	KR (ECE)	KG (CSE)	LC (BS)	KRS (BS)	MS (BS)	SGK (BS)	TR (BS)	LKK (CSE)
		IV	SA (CSD)			SS (AIML)				KK (CSE)				RJ (CSE)			SG (BS)
	1:30 pm to 2:30 pm	II	AK (ME)	SS (ECE)	VD (ECE)	RN (ME)	HU (ME)	SVJ (ECE)	AP (ECE)	BS (BS)	SSB (CSE)	SD (CSE)	KTN (BS)	NP (AIML)	MV (BS)	NM (ME)	KP (ME)
		IV	MN (BS)			KRS (BS)				ALB (CSE)				KTN (BS)			HS (BS)
3:00 pm to 4:00 pm	II	MBR (ME)	TML (ME)	BHA (ECE)	LC (BS)	KBM (ECE)	RC (BS)	SRC (BS)	MS (BS)	SGK (BS)	TR (BS)	LKK (CSE)	RH (CSE)	NP (CSE)	SG (BS)	NKS (ME)	
IV	RKM (AIML)			DB (ECE)					RJ (CSE)				KG (CSE)			LN (ME)	

*[Signature]*  
 22/6/23  
 ACADEMIC COORDINATOR

*[Signature]*  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**II & IV SEMESTER**  
**FIRST SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER - 2023)**

**BLACK BOARD**


**Room No: NB LH 104 ( 1ST FLOOR )**

CS II 'C' SEC	ECE IV 'A' SEC	CS II 'C' SEC	ECE IV 'A' SEC	CS II 'C' SEC	ECE IV 'A' SEC	CS II 'C' SEC CSD II 'D' SEC	ECE IV 'A' SEC	CSD II 'D' SEC
1KS22CS169	1KS21EC001	1KS22CS175	1KS21EC007	1KS22CS181	1KS21EC014	1KS22CS187	1KS21EC020	1KS22CG004
1KS22CS170	1KS21EC002	1KS22CS176	1KS21EC008	1KS22CS182	1KS21EC015	1KS22CS188	1KS21EC021	1KS22CG005
1KS22CS171	1KS21EC003	1KS22CS177	1KS21EC009	1KS22CS183	1KS21EC016	1KS21CS013	1KS21EC023	1KS22CG006
1KS22CS172	1KS21EC004	1KS22CS178	1KS21EC010	1KS22CS184	1KS21EC017	<b>1KS22CG001</b>	1KS21EC024	1KS22CG007
1KS22CS173	1KS21EC005	1KS22CS179	1KS21EC011	1KS22CS185	1KS21EC018	1KS22CG002	1KS21EC025	1KS22CG008
1KS22CS174	1KS21EC006	1KS22CS180	1KS21EC013	1KS22CS186	1KS21EC019	1KS22CG003	1KS21EC026	1KS22CG009

ECE IV 'A' SEC Total = 24

CS II 'C' SEC=21 CSD II 'D' SEC =9 Total = 30

  
 21/6/23  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

  
**PRINCIPAL**  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**II & IV SEMESTER**

**FIRST SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER - 2023)**

**BLACK BOARD**

**Room No: NB LH 202 ( 2ND FLOOR )**

CSD II 'D' SEC	ECE IV 'A' SEC	CSD II 'D' SEC	ECE IV 'A' SEC	CSD II 'D' SEC	ECE IV 'A' SEC	CSD II 'D' SEC	ECE IV 'A' SEC	CSD II 'D' SEC
1KS22CG010	1KS21EC027	1KS22CG016	1KS21EC033	1KS22CG022	1KS21EC040	1KS22CG028	1KS21EC046	1KS22CG034
1KS22CG011	1KS21EC028	1KS22CG017	1KS21EC035	1KS22CG023	1KS21EC041	1KS22CG029	1KS21EC047	1KS22CG035
1KS22CG012	1KS21EC029	1KS22CG018	1KS21EC036	1KS22CG024	1KS21EC042	1KS22CG030	1KS21EC048	1KS22CG036
1KS22CG013	1KS21EC030	1KS22CG019	1KS21EC037	1KS22CG025	1KS21EC043	1KS22CG031	1KS21EC049	1KS22CG037
1KS22CG014	1KS21EC031	1KS22CG020	1KS21EC038	1KS22CG026	1KS21EC044	1KS22CG032	1KS21EC050	1KS22CG038
1KS22CG015	1KS21EC032	1KS22CG021	1KS21EC039	1KS22CG027	1KS21EC045	1KS22CG033	1KS21EC051	1KS22CG039

**ECE IV 'A' SEC Total = 24**

**CSD II 'D' SEC Total = 30**

*J. Hanumanth*  
 21/6/23  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*S. Kumar*  
**PRINCIPAL**  
**PRINCIPAL**  
**K.S. INSTITUTE OF TECHNOLOGY**  
**BENGALURU - 560 109**



**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**II & IV SEMESTER**

**FIRST SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER - 2023)**

**BLACK BOARD**

**ROOM No: NB LH 203 ( 2ND FLOOR )**

CSD II 'D' SEC	ECE IV 'A' SEC	CSD II 'D' SEC	ECE IV 'A' SEC	CSD II 'D' SEC	ECE IV 'A&B' SEC	CSD II 'D' SEC	ECE IV 'B' SEC	AIML II 'E' SEC
1KS22CG040	1KS21EC053	1KS22CG046	1KS21EC060	1KS22CG052	1KS21EC066	1KS22CG058	1KS21EC072	1KS22AI001
1KS22CG041	1KS21EC054	1KS22CG047	1KS21EC061	1KS22CG053	1KS21EC067	1KS22CG059	1KS21EC073	1KS22AI002
1KS22CG042	1KS21EC055	1KS22CG048	1KS21EC062	1KS22CG054	1KS21EC068	1KS22CG060	1KS21EC074	1KS22AI003
1KS22CG043	1KS21EC056	1KS22CG049	1KS21EC063	1KS22CG055	<b>1KS21EC069</b>	1KS22CG061	1KS21EC075	1KS22AI004
1KS22CG044	1KS21EC058	1KS22CG050	1KS21EC064	1KS22CG056	1KS21EC070	1KS22CG062	1KS21EC076	1KS22AI005
1KS22CG045	1KS21EC059	1KS22CG051	1KS21EC065	1KS22CG057	1KS21EC071		1KS21EC077	1KS22AI006

**ECE IV 'A & B' SEC Total = 24**

**CSD II 'D' SEC=23 AIML II 'E' Sec=6 Total = 29**

*J. Hanu*  
 21/6/23  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*S. Kumar*  
**PRINCIPAL**  
**PRINCIPAL**  
**K.S. INSTITUTE OF TECHNOLOGY**  
**BENGALURU - 560 109**

**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**II & IV SEMESTER**

**FIRST SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER - 2023)**

**BLACK BOARD**

**Room No: NB SH 204 (2ND FLOOR)**

AIML II 'E' SEC	ECE IV 'B' SEC	AIML II 'E' SEC	ECE IV 'B' SEC	AIML II 'E' SEC	ECE IV 'B' SEC	AIML II 'E' SEC	ECE IV 'B' SEC	AIML II 'E' SEC
1KS22AI007	1KS21EC078	1KS22AI017	1KS21EC089	1KS22AI027	1KS21EC100	1KS22AI037	1KS21EC110	1KS22AI047
1KS22AI008	1KS21EC080	1KS22AI018	1KS21EC090	1KS22AI028	1KS21EC101	1KS22AI038	1KS21EC111	1KS22AI048
1KS22AI009	1KS21EC081	1KS22AI019	1KS21EC091	1KS22AI029	1KS21EC102	1KS22AI039	1KS21EC112	1KS22AI049
1KS22AI010	1KS21EC082	1KS22AI020	1KS21EC092	1KS22AI030	1KS21EC103	1KS22AI040	1KS21EC113	1KS22AI050
1KS22AI011	1KS21EC083	1KS22AI021	1KS21EC093	1KS22AI031	1KS21EC104	1KS22AI041	1KS21EC114	1KS22AI051
1KS22AI012	1KS21EC084	1KS22AI022	1KS21EC095	1KS22AI032	1KS21EC105	1KS22AI042	1KS21EC115	1KS22AI052
1KS22AI013	1KS21EC085	1KS22AI023	1KS21EC096	1KS22AI033	1KS21EC106	1KS22AI043	1KS21EC116	1KS22AI053
1KS22AI014	1KS21EC086	1KS22AI024	1KS21EC097	1KS22AI034	1KS21EC107	1KS22AI044	1KS21EC117	1KS22AI054
1KS22AI015	1KS21EC087	1KS22AI025	1KS21EC098	1KS22AI035	1KS21EC108	1KS22AI045	1KS21EC118	1KS22AI055
1KS22AI016	1KS21EC088	1KS22AI026	1KS21EC099	1KS22AI036	1KS21EC109	1KS22AI046	1KS21EC120	1KS22AI056
								1KS22AI057

**ECE IV 'B' SEC Total = 40**

**AIML II 'E' Sec Total = 51**

*J. Manjunath*  
 21/6/23  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*D. Kumar*  
**PRINCIPAL**  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BANGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**II & IV SEMESTER**

**FIRST SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER - 2023)**

**BLACK BOARD**

**ROOM No: NB LH 205 (2ND FLOOR)**

AIML II 'E' SEC	ECE IV 'B' SEC	ECE II 'F' SEC	ECE IV 'B' SEC	ECE II 'F' SEC	ECE IV 'B' SEC AIML IV	ECE II 'F' SEC	AIML IV SEM	ECE II 'F' SEC
1KS22AI058	1KS21EC121	1KS22EC001	1KS22EC405	1KS22EC007	1KS22EC411	1KS22EC013	1KS21AI005	1KS22EC019
1KS22AI059	1KS22EC400	1KS22EC002	1KS22EC406	1KS22EC008	1KS22EC412	1KS22EC014	1KS21AI006	1KS22EC020
1KS22AI060	1KS22EC401	1KS22EC003	1KS22EC407	1KS22EC009	1KS21AI001	1KS22EC015	1KS21AI007	1KS22EC021
1KS22AI061	1KS22EC402	1KS22EC004	1KS22EC408	1KS22EC010	1KS21AI002	1KS22EC016	1KS21AI008	1KS22EC022
1KS22AI062	1KS22EC403	1KS22EC005	1KS22EC409	1KS22EC011	1KS21AI003	1KS22EC017	1KS21AI009	1KS22EC023
1KS22AI063	1KS22EC404	1KS22EC006	1KS22EC410	1KS22EC012	1KS21AI004	1KS22EC018	1KS21AI010	1KS22EC024

**ECE IV 'B' SEC=14 AIML IV =10 Total = 24**

**AIML II 'E' Sec=6 ECE II 'F' Sec=24 Total = 30**

*[Signature]*  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
**PRINCIPAL**  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BANGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of IV 'A' for First Internal Test (2022-2023)**

Room No: NB 104

SL.N O	REGISTER NO.	MATHS FOR COMMUNICA TION ENGINEERS (21EC41)	DEGITAL SIGNAL PROCESSING (21EC42)	CIRCUITS & CONTROLS (21EC43)	BIOLOGY FOR ENGINEERS (21BE45)	COMMUNIC ATION THEORY (21EC44)	CONSTITUTIONS OF INDIA AND PROFESSIONAL ETHICS (CIP) 21CIP47	UNIVERSAL HUMAN VALUES (21UH49)
1	IKS21EC001	Aadhya B	Aadhya B	Aadhya B	Aadhya B	Aadhya B	Aadhya B	Aadhya B
2	IKS21EC002	- ABSENT	- ABSENT	- AB-	- AB-	- AB-	- AB-	- AB-
3	IKS21EC003	Abhik	Abhik	Abhik	Abhik	Abhik	Abhik	Abhik
4	IKS21EC004	Abhishek	Abhishek	Abhishek	Abhishek	Abhishek	Abhishek	Abhishek
5	IKS21EC005	Adarsh	Adarsh	Adarsh	Adarsh	- AB-	- AB-	- AB-
6	IKS21EC006	Am	Am	Am	Am	Am	Am	Am
7	IKS21EC007	Akshay	Akshay	Akshay	Akshay	Akshay	Akshay	Akshay
8	IKS21EC008	Anagha	Anagha	Anagha	Anagha	Anagha	Anagha	Anagha
9	IKS21EC009	Arundha	Arundha	Arundha	Arundha	Arundha	Arundha	Arundha
10	IKS21EC010	Archana G.M	Archana G.M	Archana G.M	Archana G.M	Archana G.M	Archana G.M	Archana G.M
11	IKS21EC011	Archana M	Archana M	Archana M	Archana M	Archana M	Archana M	Archana M
12	IKS21EC013	Ashwini	Ashwini	Ashwini	Ashwini	Ashwini	Ashwini	Ashwini
13	IKS21EC014	Ashwin	Ashwin	Ashwin	Ashwin	Ashwin	Ashwin	Ashwin
14	IKS21EC015	Amit	Amit	Amit	Amit	Amit	Amit	Amit
15	IKS21EC016	- AB	- AB	- AB-	- AB-	- AB-	- AB-	- AB-
16	IKS21EC017	Ajay	Ajay	Ajay	Ajay	Ajay	Ajay	Ajay
17	IKS21EC018	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya
18	IKS21EC019	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya	Bhavya
19	IKS21EC020	Bindu	Bindu	Bindu	Bindu	Bindu	Bindu	Bindu
20	IKS21EC021	Chitra	Chitra	Chitra	Chitra	Chitra	Chitra	Chitra
21	IKS21EC023	Chiranth	Chiranth	Chiranth	Chiranth	Chiranth	Chiranth	Chiranth
22	IKS21EC024	Charitha	Charitha	Charitha	Charitha	Charitha	Charitha	Charitha
23	IKS21EC025	Danish	Danish	Danish	Danish	Danish	Danish	Danish
24	IKS21EC026	Dipika	Dipika	Dipika	Dipika	Dipika	Dipika	Dipika
DATE:		26/06/23	26/6/23	27/6/23	27/6/23	28/6/23	28/6/23	28/6/23
NO. OF STUDENTS PRESENT		22	21	22	23	22	22	22
NO. OF STUDENTS ABSENT		02	01	02	01	02	02	02
NAME OF INVIGILATOR		RASHMI	Vishal	RN	Krishna G	Chob	HU	Kavya A.M
SIGNATURE OF INVIGILATOR		Rashmi	Vishal	RN	Krishna G	Chob	HU	Kavya A.M

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of IV 'A' for First Internal Test (2022-2023)**

Room No: NB 202

SLNO	REGISTER NO.	MATHS FOR COMMUNICATION ENGINEERS (21EC41)	DIGITAL SIGNAL PROCESSING (21EC42)	CIRCUITS & CONTROLS (21EC43)	BIOLOGY FOR ENGINEERS (21BE45)	COMMUNICATION THEORY (21EC44)	CONSTITUTIONS OF INDIA AND PROFESSIONAL ETHICS (CIP) 21CIP47	UNIVERSAL HUMAN VALUES (21UH49)
1	IKS21EC027	Keepika	Keepika	Keepika	Keepika	Keepika	Keepika	Keepika
2	IKS21EC028	Cygl	Cygl	Cygl	AB	Cygl	Cygl	Cygl
3	IKS21EC029	Good N	Good N	Good N	Gagan	Good N	Gagan	Good N
4	IKS21EC030	-AB-	-AB-	(AB)	AB	-AB-	-AB-	-AB-
5	IKS21EC031	Ganesh	Ganesh	Ganesh	Ganesh	Ganesh	Ganesh	Ganesh
6	IKS21EC032	haini Rajul	haini Rajul	haini Rajul	haini Rajul	haini Rajul	haini Rajul	haini Rajul
7	IKS21EC033	Hemath D R	Hemath D R	Hemath D R	Hemath D R	Hemath D R	Hemath D R	Hemath D R
8	IKS21EC035	PKJ	PKJ	PKJ	PKJ	PKJ	PKJ	PKJ
9	IKS21EC036	Karand	Karand	Karand	Karand	Karand	Karand	Karand
10	IKS21EC037	Keethara	Keethara	Keethara	Keethara	Keethara	Keethara	Keethara
11	IKS21EC038	Komalani	Komalani	Komalani	Komalani	Komalani	Komalani	Komalani
12	IKS21EC039	Ku	Ku	Ku	AB	Ku	Ku	Ku
13	IKS21EC040	Kusuma M	Kusuma M	Kusuma M	Kusuma M	Kusuma M	Kusuma M	Kusuma M
14	IKS21EC041	Likitha	Likitha	Likitha	Likitha	Likitha	Likitha	Likitha
15	IKS21EC042	A	A	A	A	A	A	A
16	IKS21EC043	Lohith B	Lohith B	(AB)	Lohith B	Lohith B	Lohith B	Lohith B
17	IKS21EC044	Lohith	Lohith	Lohith	Lohith	Lohith	Lohith	Lohith
18	IKS21EC045	manal	manal	manal	manal	manal	manal	manal
19	IKS21EC046	Mayan	Mayan	Mayan	Mayan	Mayan	Mayan	Mayan
20	IKS21EC047	Megha	Megha	Megha	Megha	Megha	Megha	Megha
21	IKS21EC048	Mith	Mith	Mith	Mith	Mith	Mith	Mith
22	IKS21EC049	Mishra	Mishra	Mishra	Mishra	Mishra	Mishra	Mishra
23	IKS21EC050	(AB)	(AB)	(AB)	(AB)	(AB)	(AB)	(AB)
24	IKS21EC051	P. Daul	P. Daul	P. Daul	P. Daul	P. Daul	P. Daul	P. Daul
DATE:	26/6/23		26/6/2023	26/6/2023	27/6/23	28/06/23	29/6/23	28/6/23
NO. OF STUDENTS PRESENT	22		23	22	21	23	23	23
NO. OF STUDENTS ABSENT	2		1	02	03	01	01	01
NAME OF INVIGILATOR	G. Somashekhar		Anil	Dr. Nagaraj	RASHMITH	Amrutha P	Kavya B M	Kavya J N
SIGNATURE OF INVIGILATOR	G. Somashekhar		Anil	Dr. Nagaraj	Rashmith	Amrutha P	Kavya B M	Kavya J N

28/06/23

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of IV 'A & B' for First Internal Test (2022-2023)**

Room No: NB 203

SL.N O	REGISTER NO.	MATHS FOR COMMUNICA TION ENGINEERS (21EC41)	DEGITAL SIGNAL PROCESSING (21EC42)	CIRCUITS & CONTROLS (21EC43)	BIOLOGY FOR ENGINEERS (21BE45)	COMMUNIC ATION THEORY (21EC44)	CONSTITUTIONS OF INDIA AND PROFESSIONAL ETHICS (CIP) 21CIP47	UNIVERSAL HUMAN VALUES (21UH49)
1	IKS21EC053	Anj	Anj	Anj	Anj	Anj	Anj	Anj
2	IKS21EC054	Ms:	A	Navya	A	M	Navya S	Navya S
3	IKS21EC055	Navya	Navya	Navya	Navya	Navya	Navya S	Navya
4	IKS21EC056	ABSENT	Navya	Navya	Navya	Navya	Navya	Navya
5	IKS21EC058	ABSEN	Omkar MB	Omkar MB	Omkar MB	Omkar MB	Omkar MB	Omkar MB
6	IKS21EC059	ABSEN	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja
7	IKS21EC060	maayath	maayath	maayath	maayath	maayath	maayath	maayath
8	IKS21EC061	Pooja R	Pooja R	Pooja R	Pooja R	Pooja R	Pooja R	Pooja R
9	IKS21EC062	Pragathi D	Pragathi D	Pragathi D	Pragathi D	Pragathi D	Pragathi D	Pragathi D
10	IKS21EC063	ABSENT	-AB-	(AB)	ABSENT	-AB-	-AB-	-AB-
11	IKS21EC064	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja
12	IKS21EC065	Pragathi D	Pragathi D	Pragathi D	Pragathi D	Pragathi D	Pragathi D	Pragathi D
13	IKS21EC066	X	X	X	X	X	X	X
14	IKS21EC067	Pragathi	Pragathi	Pragathi	Pragathi	Pragathi	Pragathi	Pragathi
15	IKS21EC068	Preetham	Preetham	Preetham	Preetham	Preetham	Preetham	Preetham
16	IKS21EC069	Preetham	Preetham	Preetham	Preetham	Preetham	Preetham	Preetham
17	IKS21EC070	Rumitha	Rumitha	Rumitha	Rumitha	Rumitha	Rumitha	Rumitha
18	IKS21EC071	R...	R...	R...	R	R	R	R
19	IKS21EC072	ABSENT	-AB-	(AB)	ABSENT	-AB-	-AB-	-AB-
20	IKS21EC073	Rumitha M	Rumitha M	Rumitha M	Rumitha M	Rumitha M	Rumitha M	Rumitha M
21	IKS21EC074	ABSENT	-AB-	(AB)	ABSENT	-AB-	-AB-	-AB-
22	IKS21EC075	Ritesh	Ritesh	Ritesh	Ritesh	Ritesh	Ritesh	Ritesh
23	IKS21EC076	Ritesh	Ritesh	Ritesh	Ritesh	Ritesh	Ritesh	Ritesh
24	IKS21EC077	Abham	Abham	Abham	Abham	Abham	Abham	Abham
DATE:		26/06/23	26/06/23	27/6/23	27/6/23	28/6/23	28/06/23	28/6/23
NO. OF STUDENTS PRESENT		18	21	20 (21)	21	21	21	21
NO. OF STUDENTS ABSENT		06	03	03	03	03	03	03
NAME OF INVIGILATOR		Sushma	Ranganath	Tejaswini	Amulya	Sushma	Sushma	DR. VIVEKAS
SIGNATURE OF INVIGILATOR		Sushma	R	Tejaswini	Amulya	Sushma	Sushma	DR. VIVEKAS

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of IV 'B' for First Internal Test (2022-2023)**

Room No: NB SH 204

SLNO	REGISTER NO.	MATHS FOR COMMUNICATION ENGINEERS (21EC41)	DIGITAL SIGNAL PROCESSING (21EC42)	CIRCUITS & CONTROLS (21EC43)	BIOLOGY FOR ENGINEERS (21BE45)	COMMUNICATION THEORY (21EC44)	CONSTITUTIONS OF INDIA AND PROFESSIONAL ETHICS (CIP) 21CIP47	UNIVERSAL HUMAN VALUES (21UH49)
1	IKS21EC078	<del>Hand</del>	<del>Hand</del>	<del>Hand</del>	<del>Hand</del>	<del>Hand</del>	<del>Hand</del>	<del>Hand</del>
2	IKS21EC080	SHZ	SHZ	SHZ	SHZ	SHZ	SHZ	SHZ
3	IKS21EC081	←AR→	←AB→	(AB)	AB	AB	←AB→	←AB→
4	IKS21EC082	Pavull	Pavull	Pavull	Pavull	Pavull	Pavull	Pavull
5	IKS21EC083	Sambhita	Sambhita	Sambhita	Sambhita	Sambhita	Sambhita	Sambhita
6	IKS21EC084	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana	Sanjana
7	IKS21EC085	←AR→	←AB→	(AB)	AB	AB	←AB→	←AB→
8	IKS21EC086	YSu	YSu	YSu	YSu	YSu	YSu	YSu
9	IKS21EC087	←AR→	←AB→	(AB)	AB	AB	←AB→	←AB→
10	IKS21EC088	Lithu	Lithu	Lithu	Lithu	Lithu	Lithu	Lithu
11	IKS21EC089	SKA	SKA	SKA	SKA	SKA	SKA	SKA
12	IKS21EC090	Shashank	Shashank	Shashank	Shashank	Shashank	Shashank	Shashank
13	IKS21EC091	\$	\$	\$	\$	\$	\$	\$
14	IKS21EC092	←AB→	←AB→	(AB)	AB	AB	←AB→	←AB→
15	IKS21EC093	su	su	su	su	su	su	su
16	IKS21EC095	←AR→	←AB→	(AB)	AB	AB	←AB→	←AB→
17	IKS21EC096	Abakshmi	Abakshmi	Abakshmi	Abakshmi	Abakshmi	Abakshmi	Abakshmi
18	IKS21EC097	Princy	Princy	Princy	Princy	Princy	Princy	Princy
19	IKS21EC098	su	su	su	su	su	su	su
20	IKS21EC099	Sumeth	Sumeth	Sumeth	Sumeth	Sumeth	Sumeth	Sumeth
21	IKS21EC100	Suneel	Suneel	Suneel	Suneel	Suneel	Suneel	Suneel
22	IKS21EC101	←AR→	←AB→	(AB)	AB	AB	←AB→	←AB→
23	IKS21EC102	su	su	su	su	su	su	su
24	IKS21EC103	←AB→	←AB→	(AB)	AB	AB	←AB→	←AB→
25	IKS21EC104	←AR→	←AB→	(AB)	AB	AB	←AB→	←AB→









**K.S. INSTITUTE OF TECHNOLOGY, BENGALURU - 560109**  
**FIRST INTERNAL TEST QUESTION PAPER 2022-23 EVEN SEMESTER**

**KSIT**

**SET: A**

Degree : B.E  
 Branch - Stream : ECE  
 Course Title : Circuits & Controls  
 Duration : 60 Minutes

USN 

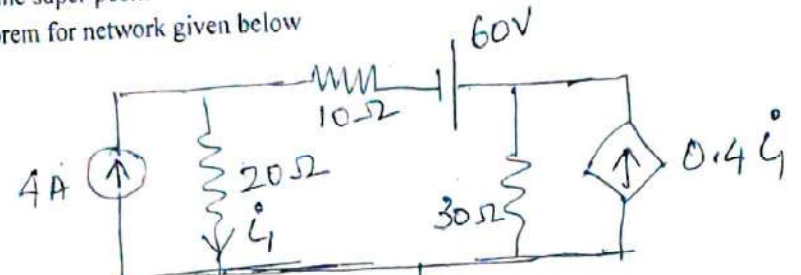
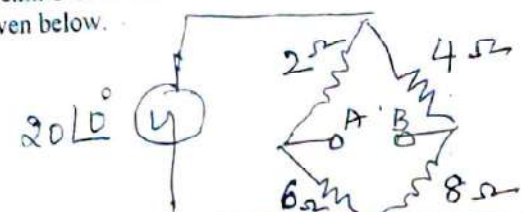
--	--	--	--	--	--	--	--	--	--

Semester : 4<sup>th</sup>  
 Course Type / Code : Core/21EC43  
 Date : 27<sup>th</sup> June 2023  
 Max Marks : 20

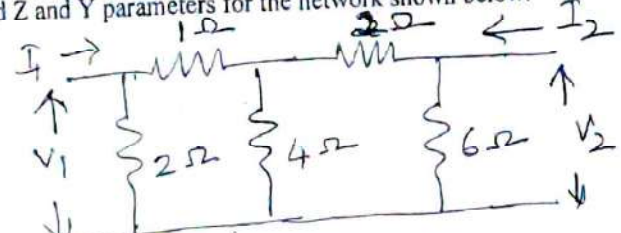
Note: Answer ONE full question from each part.

K-Levels: K1-Remembering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Questions	Marks	CO	K-Level
<b>PART-A</b>				
1(a)	Determine current through $2\ \Omega$ resistor using mesh analysis 	4	CO1	K3
1(b)	State Thevenin's & Norton's theorem. Obtain Thevenin's equivalent network across the terminal AB for the circuit shown below. 	4	CO1	K3
1(c)	State maximum power transfer theorem & find the value of R such that maximum power transfer can take place from the network to R. Also find the maximum power delivered to R. 	4	CO1	K3
<b>OR</b>				
2(a)	For the network given below determine node voltages $V_1, V_2, V_3$ and $V_4$ using nodal analysis. 	4	CO1	K3

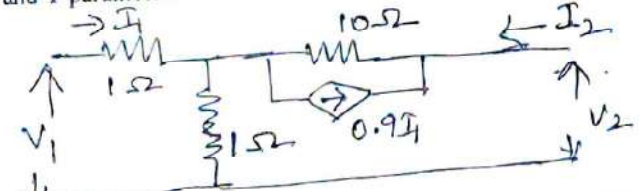
(b)	<p>Define super position theorem. Find the current through <math>20\Omega</math> resistor using Super position theorem for network given below</p> 	4	CO1	K3
(c)	<p>State Thevenin's &amp; Norton's theorem and obtain Norton's equivalent circuit for the network given below.</p> 	4	CO1	K3

**PART - B**

3(a)	<p>Find Z and Y parameters for the network shown below.</p> 	4	CO2	K3
------	--	---	-----	----

(b)	<p>For a certain two port network <math>V_1</math> and <math>V_2</math> are given by  <math>V_1 = 60I_1 + 20I_2</math>  <math>V_2 = 20I_1 + 40I_2</math>          Find Z &amp; Y parameters.</p>	4	CO2	K3
-----	--	---	-----	----

**OR**

4(a)	<p>Find Z and Y parameters for the network shown below.</p> 	4	CO2	K3
------	---	---	-----	----

(b)	<p>For a certain two port network <math>I_1</math> and <math>I_2</math> are given by  <math>I_1 = 2V_1 + V_2</math>  <math>I_2 = 10V_1 + 11V_2</math>          Find Y &amp; Z parameters.</p>	4	CO2	K3
-----	---	---	-----	----

*[Signature]*  
 Name & Signature of  
 Course In charge:

*[Signature]*  
 Name & Signature of  
 Module Coordinator:

*[Signature]*  
 HOD ECE

*[Signature]*  
 Principal



**K.S. INSTITUTE OF TECHNOLOGY, BENGALURU - 560109**  
**FIRST INTERNAL TEST QUESTION PAPER 2022-23 EVEN SEMESTER**

**SET: B**

USN

Degree : B.E  
 Branch - Stream : ECE  
 Course Title : Circuits and Controls  
 Duration : 60 Minutes

Semester : IV  
 Course Type / Code : 21EC43  
 Date : 27-06-23  
 Max Marks : 20

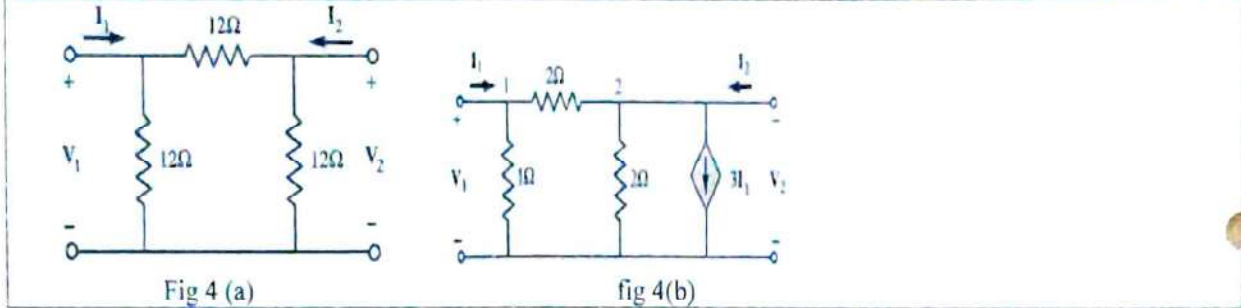
Note: Answer ONE full question from each part.

Q No.	Questions	Marks	CO	K-Level
<b>PART-A</b>				
1(a)	For the network shown in fig 1(a), determine the $I_x$ using superposition theorem.	4	CO1	K3-Applying
(b)	Determine the thevenin equivalent network between A-B for the given network shown in fig 1(b).	4	CO1	K3-Applying
(c)	Determine the mesh current for the network shown in fig 1(c) using mesh analysis method.	4	CO1	K3-Applying
<b>OR</b>				
2(a)	Determine the node voltages for the network shown in fig 2(a) using nodal analysis.	4	CO1	K3-Applying
(b)	Determine $V_x$ in the circuit shown fig 2(b) such that the current through $-3j$ impedance is zero.	4	CO1	K3-Applying
(c)	Determine the value of $R_L$ when maximum power is transferred across the load and also find maximum power transferred for the network shown in fig 2(c).	4	CO1	K3-Applying
<b>PART-B</b>				
3(a)	Determine Y parameters of the given network shown in fig 3(a).	4	CO2	K3-Applying
(b)	Determine Z parameters of the given network shown in fig 3(b).	4	CO2	K3-Applying



OR

4(a)	Determine Y parameters of the given network shown in fig 4(a).	5	CO2	K3-Applying
(b)	Determine Z parameters of the given network shown in fig 4(b).	5	CO2	K3-Applying



*CJ-GB*  
 Name & Signature of  
 Course In charge:

*Pur*  
 Name & Signature of  
 Module Coordinator:

*Pur*  
 HOD

*Shrinagar.C*  
 Principal  
*Select*



# K. S. INSTITUTE OF TECHNOLOGY, BANGALORE


IV SEM


SECOND SESSIONAL TEST TIME TABLE (2022-2023)  
(EVEN SEMESTER 2023)

Date : 22/07/2023

DATE	TIME	ARTIFICIAL INTELLIGENCE & MACHINE LEARNING	COMPUTER SCIENCE & DESIGN	COMPUTER SCIENCE & ENGG	ELECTRONICS & COMMUNICATION ENGG	MECHANICAL ENGG
31/07/2023 Monday	9:30 AM To 10:30 AM	<b>21CS41</b> Mathematical Foundations for Computing	<b>21CS41</b> Mathematical Foundations for Computing	<b>21CS41</b> Mathematical Foundations for Computing	<b>21EC41</b> Maths for Communication Engineers	<b>21ME41</b> Complex Analysis, Probability and Linear Programming.
	2:00 PM To 3:00 PM	<b>21CS42</b> Design and Analysis of Algorithms	<b>21CS42</b> Design and Analysis of Algorithms	<b>21CS42</b> Design and Analysis of Algorithms	<b>21EC42-</b> Digital Signal Processing	<b>21ME42</b> Machining Science and Jigs & Fixtures
1/08/2023 Tuesday	9:30 AM To 10:30 AM	<b>21CS43</b> Microcontroller and Embedded Systems	<b>21CS43</b> Microcontroller and Embedded Systems	<b>21CS43</b> Microcontroller and Embedded Systems	<b>21EC43</b> Circuits & Controls	<b>21ME43</b> Fluid Mechanics
	1:30 PM To 2:30 PM	<b>21BE45</b> Biology For Engineers	<b>21BE45</b> Biology For Engineers	<b>21BE45</b> Biology For Engineers	<b>21BE45</b> Biology For Engineers	<b>21BE45</b> Biology For Engineers
2/08/2023 Wednesday	9:30 AM To 10:30 AM	<b>21CS44</b> Operating Systems	<b>21CS44</b> Operating Systems	<b>21CS44</b> Operating Systems	<b>21EC44</b> Communication Theory	<b>21ME44</b> Mechanics of Materials
	1:30 PM To 2:30 PM	<b>21CIP47</b> Constitution of India and Professional Ethics (CIP)	<b>21KSK37/47</b> Samskrutika Kannada / <b>21KKBK47</b> Balake Kannada	<b>21KSK47</b> Samskrutika Kannada / <b>21KKBK47</b> Balake Kannada	<b>21CIP47</b> Constitution of India and Professional Ethics (CIP)	<b>21KSK47</b> Samskrutika Kannada / <b>21KKBK47</b> Balake Kannada
	3:00 PM To 4:00 PM	<b>21UH49</b> Universal Human Values	<b>21UH49</b> Universal Human Values	<b>21UH49</b> Universal Human Values	<b>21UH49</b> Universal Human Values	<b>21UH49</b> Universal Human Values

Note : All the students are strictly informed to wear Lab uniforms, and college ID card is compulsory during the test.

  
Academic Coordinator  
Head of the Department  
Dept. of Mechanical Engg  
K.S. Institute of Technology  
Bengaluru - 560 109.

  
Principal  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109

**K. S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**II & IV SEMESTER - 2nd CIE TEST INVIGILATION DUTY (2022-2023)**

Date	Timings	SEM	NB SH 008 (GF Floor)	NB 101	NB 102	NB SH 103 (1st Floor)	NR 104	NB 202	NB 203	NB SH 204 (2nd Floor)	NB 205	NB 301	NB 302	NB SH 303 (3rd Floor)	NB 304	NB SH 403 (4th Floor)	OB SH 307 (3rd Floor)
31/7/2023 MONDAY	9:30 am to 10:30 am	II	SS (ECE)	VD (ECE)	NP (CSE)	NM (ME)	RH (CSE)	ST (CSE)	SA (CSD)	MBR (ME)	AS (AIML)	RKM (AIML)	BHA (ECE)	TML (ME)	BS (BS)	LKK (AIML)	SVJ (ECE)
		IV	SD (CSE)			PHS (CSE)				SB (CSD)				SKB (ECE)			KRS (BS)
	2:00 pm to 3:00 pm	II	AR (ECE)	SS (AIML)	CJ (ECE)	NKS (ME)	VD (ECE)	NV (BS)	RN (ME)	LN (ME)	HU (ME)	KP (ME)	SN (BS)	KR (ECE)	KTN (BS)	DB (ECE)	KK (CSE)
		IV	ALB (CSE)			KBM (ECE)				MN (BS)				STS (CSE)			RC (BS)
1/8/2023 TUESDAY	9:30 am to 10:30 am	II	AP (ECE)	BHA (ECE)	SS (AIML)	AR (ECE)	AK (ME)	HU (ME)	TML (ME)	VD (ECE)	MN (BS)	SVJ (ECE)	SG (BS)	GTR (ME)	KR (ECE)	LKK (AIML)	SRC (BS)
		IV	SSB (CSE)			LN (ME)				MV (BS)				LC (BS)			MS (BS)
	1:30 pm to 2:30 pm	II	KBM (ECE)	ST (CSE)	STS (CSE)	AP (ECE)	NV (BS)	RH (CSE)	AS (AIML)	NM (ME)	SB (CSD)	SS (ECE)	RKM (AIML)	MBR (ME)	DB (ECE)	JKK (CSE)	RJ (CSE)
		IV	SD (CSE)			NP (CSE)				SA (CSD)				LKK (CSE)			SGK (BS)
3:00 pm to 4:00 pm	II									SKB (ECE)	CJ (ECE)	AK (ME)	KP (ME)	RC (BS)	SRC (BS)	TR (BS)	
2/8/2023 WEDNESDAY	9:30 am to 10:30 am	II	NKS (ME)	SB (CSD)	SKB (ECE)	MV (BS)	CJ (ECE)	AR (ECE)	ST (CSE)	KR (ECE)	KTN (BS)	LC (BS)	KRS (BS)	MS (BS)	SGK (BS)	TR (BS)	LKK (CSE)
		IV	SA (CSD)			SS (AIML)				KK (CSE)				RJ (CSE)			SG (BS)
	1:30 pm to 2:30 pm	II	AK (ME)	SS (ECE)	KBN (CSE)	RN (ME)	HU (ME)	SVJ (ECE)	AP (ECE)	BS (BS)	SSB (CSE)	SD (CSE)	KTN (BS)	LKK (AIML)	MV (BS)	NM (ME)	KP (ME)
		IV	MN (BS)			KRS (BS)				ALB (CSE)				KG (CSE)			SN (BS)
3:00 pm to 4:00 pm	II	MBR (ME)	TML (ME)	BHA (ECE)	LC (BS)	KBM (ECE)	NV (BS)	SRC (BS)	MS (BS)	SGK (BS)	TR (BS)	LKK (CSE)	RH (CSE)	NP (CSE)	SG (BS)	NKS (ME)	
	IV	RKM (AIML)			DB (ECE)				RJ (CSE)				PHS (CSE)			LN (ME)	

*[Signature]*  
 26/7/23  
 ACADEMIC COORDINATOR

*[Signature]*  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 - BENGALURU - 560 109.

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**

**II & IV SEMESTER**

**SECOND SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER - 2023)**

**BLACK BOARD**

**ROOM No: NB LH 104 (1ST FLOOR)**

CS II 'C' SEC	ECE IV 'A' SEC	CS II 'C' SEC
1KS22CS169	1KS21EC001	1KS22CS175
1KS22CS170	1KS21EC002	1KS22CS176
1KS22CS171	1KS21EC003	1KS22CS177
1KS22CS172	1KS21EC004	1KS22CS178
1KS22CS173	1KS21EC005	1KS22CS179
1KS22CS174	1KS21EC006	1KS22CS180

ECE IV 'A' SEC	CS II 'C' SEC	ECE IV 'A' SEC
1KS21EC007	1KS22CS181	1KS21EC014
1KS21EC008	1KS22CS182	1KS21EC015
1KS21EC009	1KS22CS183	1KS21EC016
1KS21EC010	1KS22CS184	1KS21EC017
1KS21EC011	1KS22CS185	1KS21EC018
1KS21EC013	1KS22CS186	1KS21EC019

CS II 'C' SEC CSD II 'D' SEC	ECE IV 'A' SEC	CSD II 'D' SEC
1KS22CS187	1KS21EC020	1KS22CG004
1KS22CS188	1KS21EC021	1KS22CG005
1KS21CS013	1KS21EC023	1KS22CG006
<b>1KS22CG001</b>	1KS21EC024	1KS22CG007
1KS22CG002	1KS21EC025	1KS22CG008
1KS22CG003	1KS21EC026	1KS22CG009

**ECE IV 'A' SEC Total = 24**

**CS II 'C' SEC=21 CSD II 'D' SEC =9 Total = 30**

*[Signature]*  
22/7/23  
**ACADEMIC COORDINATOR**  
Head of the Department  
Dept. of Mechanical Engg  
K.S. Institute of Technology  
Bengaluru - 560 109

*[Signature]*  
**PRINCIPAL**  
PRINCIPAL  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109



**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**II & IV SEMESTER**  
**SECOND SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER - 2023)**

BLACK BOARD

ROOM No: NB LH 202 ( 2ND FLOOR )

CSD II 'D' SEC	ECE IV 'A' SEC	CSD II 'D' SEC
1KS22CG010	1KS21EC027	1KS22CG016
1KS22CG011	1KS21EC028	1KS22CG017
1KS22CG012	1KS21EC029	1KS22CG018
1KS22CG013	1KS21EC030	1KS22CG019
1KS22CG014	1KS21EC031	1KS22CG020
1KS22CG015	1KS21EC032	1KS22CG021

ECE IV 'A' SEC	CSD II 'D' SEC	ECE IV 'A' SEC
1KS21EC033	1KS22CG022	1KS21EC040
1KS21EC035	1KS22CG023	1KS21EC041
1KS21EC036	1KS22CG024	1KS21EC042
1KS21EC037	1KS22CG025	1KS21EC043
1KS21EC038	1KS22CG026	1KS21EC044
1KS21EC039	1KS22CG027	1KS21EC045

CSD II 'D' SEC	ECE IV 'A' SEC	CSD II 'D' SEC
1KS22CG028	1KS21EC046	1KS22CG034
1KS22CG029	1KS21EC047	1KS22CG035
1KS22CG030	1KS21EC048	1KS22CG036
1KS22CG031	1KS21EC049	1KS22CG037
1KS22CG032	1KS21EC050	1KS22CG038
1KS22CG033	1KS21EC051	1KS22CG039

ECE IV 'A' SEC Total = 24

CSD II 'D' SEC Total = 30

*[Signature]*  
 22/7/23  
**ACADEMIC COORDINATOR**

Head of the Department  
 Dept. of Mechanical Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
**PRINCIPAL**  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**II & IV SEMESTER**  
**SECOND SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER - 2023)**

BLACK BOARD

Room No: NB LH 203 ( 2ND FLOOR )

CSD II 'D' SEC	ECE IV 'A' SEC	CSD II 'D' SEC
1KS22CG040	1KS21EC053	1KS22CG046
1KS22CG041	1KS21EC054	1KS22CG047
1KS22CG042	1KS21EC055	1KS22CG048
1KS22CG043	1KS21EC056	1KS22CG049
1KS22CG044	1KS21EC058	1KS22CG050
1KS22CG045	1KS21EC059	1KS22CG051

ECE IV 'A' SEC	CSD II 'D' SEC	ECE IV 'A&B' SEC
1KS21EC060	1KS22CG052	1KS21EC066
1KS21EC061	1KS22CG053	1KS21EC067
1KS21EC062	1KS22CG054	1KS21EC068
1KS21EC063	1KS22CG055	<b>1KS21EC069</b>
1KS21EC064	1KS22CG056	1KS21EC070
1KS21EC065	1KS22CG057	1KS21EC071

CSD II 'D' SEC	ECE IV 'B' SEC	AIML II 'E' SEC
1KS22CG058	1KS21EC072	1KS22AI001
1KS22CG059	1KS21EC073	1KS22AI002
1KS22CG060	1KS21EC074	1KS22AI003
1KS22CG061	1KS21EC075	1KS22AI004
1KS22CG062	1KS21EC076	1KS22AI005
	1KS21EC077	1KS22AI006

ECE IV 'A & B' SEC Total = 24  
 CSD II 'D' SEC=23 AIML II 'E' Sec=6 Total = 29

*[Signature]*  
 22/7/23  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
**PRINCIPAL**  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**

**II & IV SEMESTER**

**SECOND SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER - 2023)**

**BLACK BOARD**

**ROOM No: NB SH 204 ( 2ND FLOOR )**

AIML II 'E' SEC	ECE IV 'B' SEC	AIML II 'E' SEC
1KS22AI007	1KS21EC078	1KS22AI017
1KS22AI008	1KS21EC080	1KS22AI018
1KS22AI009	1KS21EC081	1KS22AI019
1KS22AI010	1KS21EC082	1KS22AI020
1KS22AI011	1KS21EC083	1KS22AI021-
1KS22AI012	1KS21EC084	1KS22AI022
1KS22AI013	1KS21EC085	1KS22AI023
1KS22AI014	1KS21EC086	1KS22AI024
1KS22AI015	1KS21EC087	1KS22AI025
1KS22AI016	1KS21EC088	1KS22AI026

ECE IV 'B' SEC	AIML II 'E' SEC	ECE IV 'B' SEC
1KS21EC089	1KS22AI027	1KS21EC100
1KS21EC090	1KS22AI028	1KS21EC101
1KS21EC091	1KS22AI029	1KS21EC102
1KS21EC092	1KS22AI030	1KS21EC103
1KS21EC093	1KS22AI031	1KS21EC104
1KS21EC095	1KS22AI032	1KS21EC105
1KS21EC096	1KS22AI033	1KS21EC106
1KS21EC097	1KS22AI034	1KS21EC107
1KS21EC098	1KS22AI035	1KS21EC108
1KS21EC099	1KS22AI036	1KS21EC109

AIML II 'E' SEC	ECE IV 'B' SEC	AIML II 'E' SEC
1KS22AI037	1KS21EC110	1KS22AI047
1KS22AI038	1KS21EC111	1KS22AI048
1KS22AI039	1KS21EC112	1KS22AI049
1KS22AI040	1KS21EC113	1KS22AI050
1KS22AI041	1KS21EC114	1KS22AI051
1KS22AI042	1KS21EC115	1KS22AI052
1KS22AI043	1KS21EC116	1KS22AI053
1KS22AI044	1KS21EC117	1KS22AI054
1KS22AI045	1KS21EC118	1KS22AI055
1KS22AI046	1KS21EC120	1KS22AI056
		1KS22AI057

**ECE IV ' B ' SEC Total = 40**

**AIML II 'E' Sec Total = 51**

*[Signature]*  
22/7/23  
**ACADEMIC COORDINATOR**

Head of the Department  
Dept. of Mechanical Engg  
K.S. Institute of Technology  
Bengaluru - 560 109

*[Signature]*  
**PRINCIPAL**  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**II & IV SEMESTER**  
**SECOND SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER - 2023)**

BLACK BOARD

Room No: NB LH 205 ( 2ND FLOOR )

AIML II 'E' SEC	ECE IV 'B' SEC	ECE II 'F' SEC
1KS22AI058	1KS21EC121	1KS22EC001
1KS22AI059	1KS22EC400	1KS22EC002
1KS22AI060	1KS22EC401	1KS22EC003
1KS22AI061	1KS22EC402	1KS22EC004
1KS22AI062	1KS22EC403	1KS22EC005
1KS22AI063	1KS22EC404	1KS22EC006


ECE IV 'B' SEC	ECE II 'F' SEC	ECE IV 'B' SEC AIML IV
1KS22EC405	1KS22EC007	1KS22EC411
1KS22EC406	1KS22EC008	1KS22EC412
1KS22EC407	1KS22EC009	1KS21AI001
1KS22EC408	1KS22EC010	1KS21AI002
1KS22EC409	1KS22EC011	1KS21AI003
1KS22EC410	1KS22EC012	1KS21AI004

ECE II 'F' SEC	AIML IV SEM	ECE II 'F' SEC
1KS22EC013	1KS21AI005	1KS22EC019
1KS22EC014	1KS21AI006	1KS22EC020
1KS22EC015	1KS21AI007	1KS22EC021
1KS22EC016	1KS21AI008	1KS22EC022
1KS22EC017	1KS21AI009	1KS22EC023
1KS22EC018	1KS21AI010	1KS22EC024

ECE IV ' B ' SEC=14 AIML IV =10 Total = 24  
 AIML II 'E' Sec=6 ECE II 'F' Sec=24 Total = 30

  
 22/7/23  
 ACADEMIC COORDINATOR

Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

  
 PRINCIPAL  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of IV 'A' for Second Internal Test (2022-2023)**

Room No: NB 104

SL. NO	REGISTER NO.	MATHS FOR COMMUNICATION ENGINEERS (21EC41)	DIGITAL SIGNAL PROCESSING (21EC42)	CIRCUITS & CONTROLS (21EC43)	BIOLOGY FOR ENGINEERS (21EC45)	COMMUNICATION THEORY (21EC44)	CONSTITUTIONS OF INDIA AND PROFESSIONAL ETHICS (CIP) 21CIP47	UNIVERSAL HUMAN VALUES (21UH49)
1	IKS21EC001	Aadhya B A	Aadhya B A	Aadhya B A	Aadhya B A	Aadhya B A	Aadhya B A	Aadhya B A
2	IKS21EC002	R Abhijith	R Abhijith	R Abhijith	R Abhijith	R Abhijith	R Abhijith	R Abhijith
3	IKS21EC003	Abhitej K	Abhitej K	Abhitej K	Abhitej K	Abhitej K	Abhitej K	Abhitej K
4	IKS21EC004	Abhitej K	Abhitej K	Abhitej K	Abhitej K	Abhitej K	Abhitej K	Abhitej K
5	IKS21EC005	Ashray A	Ashray A	Ashray A	Ashray A	Ashray A	Ashray A	Ashray A
6	IKS21EC006	Aam	Aam	Aam	Aam	Aam	Aam	Aam
7	IKS21EC007	Akshay B	Akshay B	Akshay B	Akshay B	Akshay B	Akshay B	Akshay B
8	IKS21EC008	Anagha	Anagha	Anagha	Anagha	Anagha	Anagha	Anagha
9	IKS21EC009	Arundha	Arundha	Arundha	Arundha	Arundha	Arundha	Arundha
10	IKS21EC010	Archanam	Archanam	Archanam	Archanam	Archanam	Archanam	Archanam
11	IKS21EC011	Archanam	Archanam	Archanam	Archanam	Archanam	Archanam	Archanam
12	IKS21EC013	Ashwiny	Ashwiny	Ashwiny	Ashwiny	Ashwiny	Ashwiny	Ashwiny
13	IKS21EC014	Ashwin S	Ashwin S	Ashwin S	Ashwin S	Ashwin S	Ashwin S	Ashwin S
14	IKS21EC015	Ashwin S	Ashwin S	Ashwin S	Ashwin S	Ashwin S	Ashwin S	Ashwin S
15	IKS21EC016	-AB-	-AB-	-AB-	-AB-	(AB)	(AB)	-AB-
16	IKS21EC017	Arjav	Arjav	Arjav	Arjav	Arjav	Arjav	Arjav
17	IKS21EC018	Bhavya K	Bhavya K	Bhavya K	Bhavya K	Bhavya K	Bhavya K	Bhavya K
18	IKS21EC019	Bindu	Bindu	Bindu	Bindu	Bindu	Bindu	Bindu
19	IKS21EC020	Bindu	Bindu	Bindu	Bindu	Bindu	Bindu	Bindu
20	IKS21EC021	Chintan	Chintan	Chintan	Chintan	Chintan	Chintan	Chintan
21	IKS21EC023	Chiranth V V	Chiranth V V	Chiranth V V	Chiranth V V	Chiranth V V	Chiranth V V	Chiranth V V
22	IKS21EC024	Charitha	Charitha	Charitha	Charitha	Charitha	Charitha	Charitha
23	IKS21EC025	Charitha	Charitha	Charitha	Charitha	Charitha	Charitha	Charitha
24	IKS21EC026	Daksh	Daksh	Daksh	Daksh	Daksh	Daksh	Daksh
DATE:		31/07/2023	31/7/23	01/8/23	1/8/23	2/8/23	2/8/23	2/8/23
NO. OF STUDENTS PRESENT		23	22	23	23	23	23	23
NO. OF STUDENTS ABSENT		01	02	01	01	01	01	01
NAME OF INVIGILATOR		RASHMI.H	Vishalini	M V	Naveen V	PHS	Harish	Kavya B M
SIGNATURE OF INVIGILATOR		Rashmi H	Vishalini	M V	Naveen V	PHS	Harish	Kavya B M

**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of IV 'A' for Second Internal Test (2022-2023)**

Room No: NB 202

SL.N O	REGISTER NO.	MATHS FOR COMMUNICA TION ENGINEERS (21EC41)	DEGIFAL SIGNAL PROCESSING (21EC42)	CIRCUITS & CONTROLS (21EC43)	BIOLOGY FOR ENGINEERS (21BF45)	COMMUNIC ATION THEORY (21EC44)	CONSTITUTIONS OF INDIA AND PROFESSIONAL ETHICS (CIP) 21CIP47	UNIVERSAL HUMAN VALUES (21UH49)
1	IKS21EC027	Keepita	keepita	keepita	keepita	keepita	keepita	keepita
2	IKS21EC028	Gyath	Gyath	Gyath	Gyath	Gyath	Gyath	Gyath
3	IKS21EC029	G.N	G.N	G.N	G.N	G.N	G.N	G.N
4	IKS21EC030	-AB-	-AB-	-AB-	-AB-	←AB→	(A)	←AB→
5	IKS21EC031	-AB-	-AB-	Gundhara	Gundhara	Gundhara	Gundhara	Gundhara
6	IKS21EC032	harni Rajul	harni Rajul	harni Rajul	harni Rajul	harni Rajul	harni Rajul	harni Rajul
7	IKS21EC033	Hemath O A	Hemath O A	Hemath O A	Hemath O A	Hemath O A	Hemath O A	Hemath O A
8	IKS21EC035	A.K.S	A.K.S	A.K.S	A.K.S	A.K.S	A.K.S	A.K.S
9	IKS21EC036	Karansh	Karansh	Karansh	Karansh	←AB→	Karansh	Karansh
10	IKS21EC037	Keethanas	Keethanas	Keethanas	Keethanas	Keethanas	Keethanas	Keethanas
11	IKS21EC038	Komalant	Komalant	Komalant	Komalant	Komalant	Komalant	Komalant
12	IKS21EC039	<del>Keethanas</del>	<del>Keethanas</del>	<del>Keethanas</del>	<del>Keethanas</del>	<del>Keethanas</del>	<del>Keethanas</del>	<del>Keethanas</del>
13	IKS21EC040	Kusuma M.S	Kusuma M.S	Kusuma M.S	Kusuma M.S	Kusuma M.S	Kusuma M.S	Kusuma M.S
14	IKS21EC041	Likitha	Likitha	Likitha	Likitha	Likitha	Likitha	Likitha
15	IKS21EC042	J	J	J	J	←AB→	J	J
16	IKS21EC043	Lohith.B	Lohith.B	Lohith.B	Lohith.B	Lohith.B	Lohith.B	Lohith.B
17	IKS21EC044	Lohithy	Lohithy	Lohithy	Lohithy	Lohithy	Lohithy	Lohithy
18	IKS21EC045	<del>manal</del>	<del>manal</del>	<del>manal</del>	<del>manal</del>	←AB→	<del>manal</del>	<del>manal</del>
19	IKS21EC046	-AB-	-AB-	-AB-	-AB-	Meghana	Meghana	Meghana
20	IKS21EC047	Mizban	Mizban	Mizban	Mizban	Mizban	Mizban	Mizban
21	IKS21EC048	Mith	Mith	Mith	Mith	Mith	Mith	Mith
22	IKS21EC049	Nashan	Nashan	Nashan	Nashan	Nashan	Nashan	Nashan
23	IKS21EC050	Fathy	Fathy	Fathy	Fathy	Fathy	Fathy	Fathy
24	IKS21EC051	P.Dan	P.Dan	P.Dan	P.Dan	P.Dan	P.Dan	P.Dan
DATE:			5/7/23	01/08/23	01/08/23	2/8/23	2/8/23	2/8/23
NO. OF STUDENTS PRESENT		21	21	22	22	20	23	23
NO. OF STUDENTS ABSENT		03	03	02	02	04	01	01
NAME OF INVIGILATOR		Naveen ✓	Naveen ✓	Harish	Lakshmi KK	Devika B	Shruti Ishi	Naveen ✓
SIGNATURE OF INVIGILATOR		Naveen	Naveen	Harish	Lakshmi	Devika	Shruti	Naveen







26	IKS2IEC105	Bijashree	Bijashree	Bijashree	Bijashree	Bijashree	Bijashree	Bijashree
27	IKS2IEC106	Tharun KV	Tharun KV	Tharun KV	Tharun KV	Tharun KV	Tharun KV	Tharun KV
28	IKS2IEC107	Thejas HV	Thejas HV	Thejas HV	Thejas HV	Thejas HV	Thejas HV	Thejas HV
29	IKS2IEC108	Udit	Udit	Udit	Udit	Udit	Udit	Udit
30	IKS2IEC109	Udit	Udit	Udit	Udit	Udit	Udit	Udit
31	IKS2IEC110	Vaishnavi	Vaishnavi	AB	AB	Vaishnavi	Vaishnavi	Vaishnavi
32	IKS2IEC111	Vidya	Vidya	Vidya	Vidya	Vidya	Vidya	Vidya
33	IKS2IEC112	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi
34	IKS2IEC113	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi
35	IKS2IEC114	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi
36	IKS2IEC115	Vidya	Vidya	Vidya	Vidya	AB	Vidya	Vidya
37	IKS2IEC116	Vidya	Vidya	Vidya	Vidya	Vidya	Vidya	Vidya
38	IKS2IEC117	Vidya	Vidya	Vidya	Vidya	Vidya	Vidya	Vidya
39	IKS2IEC118	Vidya	Vidya	Vidya	Vidya	Vidya	Vidya	Vidya
40	IKS2IEC120	Vidya	Vidya	Vidya	Vidya	Vidya	Vidya	Vidya
DATE:		31/7/2023	31/7/23	1/8/23	1/8/23	2/8/23	02/08/23	2/8/23
NO. OF STUDENTS PRESENT		38	38	38	37	37	39	39
NO. OF STUDENTS ABSENT		02	02	02	03	03	01	01
NAME OF INVIGILATOR		Sneha R	LN	Aarushi	Sushruti	Sumit	Akhilash R	PANAMMA NAMMA
SIGNATURE OF INVIGILATOR								





# K.S. INSTITUTE OF TECHNOLOGY, BENGALURU - 560109

## SECOND INTERNAL TEST QUESTION PAPER 2022-23 EVEN SEMESTER

**SET: A**

Degree : B.E  
 Branch - Stream : ECE  
 Course Title : Circuits & Controls  
 Duration : 60 Minutes

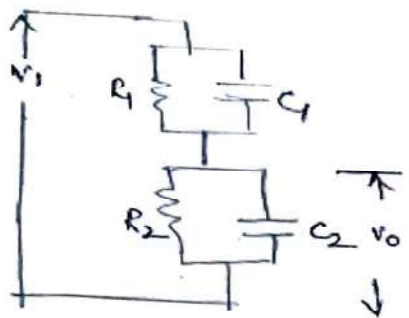
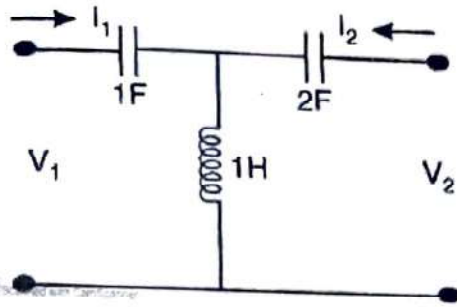
USN

Semester : 4<sup>th</sup>  
 Course Type / Code : Core/21EC43  
 Date : 1<sup>st</sup> Aug 2023  
 Max Marks : 20

Note: Answer **ONE** full question from each part.

K-Levels: K1-Remebering, K2-Understanding, K3-Appling, K4-Analyzing, K5-Evaluating, K6-Creating


Q No.	Questions	Marks	CO	K-Level
<b>PART-A</b>				
1(a)	Obtain transfer function for given signal flow graph 	4	CO3	K3
(b)	Reduce the given block using block reduction technique and obtain transfer function 	4	CO3	K3
(c)	Write differential equations for the network given below and find transfer function for the same 	4	CO3	K3
<b>OR</b>				
2(a)	Draw signal flow graph and obtain transfer function 	4	CO3	K3
(b)	Find the transfer function using block reduction method for the given block 	4	CO3	K3

(c)	<p>Write differential equations for the network given below and find transfer function for the same</p> 	4	CO3	K3
<b>PART - B</b>				
3(a)	<p>Voltages <math>V_1</math> and <math>V_2</math> at the port of a 2-port network are given by the equations  <math>V_1 = 6I_1 + 20I_2</math>  <math>V_2 = 20I_1 + 40I_2</math>          Find ABCD &amp; Y parameters</p>	4	CO2	K3
(b)	<p>Check the stability of the given characteristic equation using Routh Hurwitz criteria  <math>S^6 + 2S^5 + 8S^4 + 12S^3 + 20S^2 + 16S + 16</math>. Find roots on RHS, LHS and on imaginary axis</p>	4	CO4	K3
<b>OR</b>				
4(a)	<p>Determine the h parameter &amp; Z parameter for the network given below</p> 	4	CO2	K3
(b)	<p>The polynomial <math>P(s) = S^2 + 4S + 4</math>. Using RH criteria determine the stability of the system and also determine roots lying between <math>S=0</math> and <math>S=-1</math></p> <p>and</p> <p>For the system with characteristic equation <math>S^4 + 22S^3 + 10S^2 + S + K = 0</math> find <math>K_{mar}</math> and 'w' at <math>K_{mar}</math></p>	4	CO4	K3

  
 Name & Signature of  
 Course In charge

  
 Name & Signature of  
 Module Coordinator

  
 HOD ECE

  
 Principal  
 Sulech d.



**K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109**  
**SECOND INTERNAL TEST QUESTION PAPER 2022 – 23, EVEN SEMESTER**

Set B

USN	1	K	S			E	C		
-----	---	---	---	--	--	---	---	--	--

Degree : B.E  
 Branch : Electronics and Communication Engineering  
 Course Title : Circuits and Controls  
 Duration : 60 Minutes

Semester : IVA & B  
 Course Code : 21EC43  
 Date : 1.8.2023  
 Max Marks : 25

**Note: Answer ONE full question from each part.**

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	Identify and define control System? Distinguish between closed loop and open loop system with example. .	5	CO3	Applying-K3
(b)	Make Use of Block diagram reduction techniques to find transfer function of given Block 	5	CO3	Applying-K3
(c)	Make use of Mason Gain formula to find Transfer of the given SFG. 	5	CO3	Applying-K3
2(a)	Make use of differential model equation to find the transfer function of the given electrical Network . 	5	CO3	Applying-K3
(b)	Make Use of Block diagram reduction techniques to find transfer function of given Block	5	CO3	Applying-K3

(c)	<p>Make use of Mason Gain formula to find Transfer of the given SFG.</p>	5	CO3	Applying-K3
3(a)	<p>Identify the T-parameters of the given Network</p>	5	CO2	Applying-K3
(b)	<p>Identify the stability of given Characteristic using Routh method <math>S^3+S^2+S+4=0</math></p>	5	CO4	Applying-K3
4(a)	<p>Identify the H-parameters of the given Network</p>	5	CO2	Applying-K3
(b)	<p>Identify the stability of given Characteristic using Routh method <math>S^4+8S^3+18S^2+16S+5=0</math></p>	5	CO4	Applying-K3

Chaito [Signature]

Name & Signature of Course In charge

[Signature]

Name & Signature of Module Coordinator

[Signature]

HOD ECE

[Signature]

Principal



# K. S. INSTITUTE OF TECHNOLOGY, BANGALORE

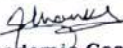
IV SEM

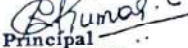
THIRD SESSIONAL TEST TIME TABLE (2022-2023)  
(EVEN SEMESTER 2023)

Date : 28/08/2023

DATE	TIME	ARTIFICIAL INTELLIGENCE & MACHINE LEARNING	COMPUTER SCIENCE & DESIGN	COMPUTER SCIENCE & ENGG	ELECTRONICS & COMMUNICATION ENGG	MECHANICAL ENGG
6/09/2023 Wednesday	9:30 AM To 10:30 AM	21CS41 Mathematical Foundations for Computing	21CS41 Mathematical Foundations for Computing	21CS41 Mathematical Foundations for Computing	21EC41 Maths for Communication Engineers	21ME41 Complex Analysis, Probability and Linear Programming.
	2:00 PM To 3:00 PM	21CS42 Design and Analysis of Algorithms	21CS42 Design and Analysis of Algorithms	21CS42 Design and Analysis of Algorithms	21EC42- Digital Signal Processing	21ME42 Machining Science and Jigs & Fixtures
7/09/2023 Thursday	9:30 AM To 10:30 AM	21CS43 Microcontroller and Embedded Systems	21CS43 Microcontroller and Embedded Systems	21CS43 Microcontroller and Embedded Systems	21EC43 Circuits & Controls	21ME43 Fluid Mechanics
	1:30 PM To 2:30 PM	21BE45 Biology For Engineers	21BE45 Biology For Engineers	21BE45 Biology For Engineers	21BE45 Biology For Engineers	21BE45 Biology For Engineers
8/09/2023 Friday	9:30 AM To 10:30 AM	21CS44 Operating Systems	21CS44 Operating Systems	21CS44 Operating Systems	21EC44 Communication Theory	21ME44 Mechanics of Materials
	1:30 PM To 2:30 PM	21CIP47 Constitution of India and Professional Ethics (CIP)	21KSK37/47 Samskrutika Kannada / 21KKBK47 Balake Kannada	21KSK47 Samskrutika Kannada / 21KKBK47 Balake Kannada	21CIP47 Constitution of India and Professional Ethics (CIP)	21KSK47 Samskrutika Kannada / 21KKBK47 Balake Kannada
	3:00 PM To 4:00 PM	21UH49 Universal Human Values	21UH49 Universal Human Values	21UH49 Universal Human Values	21UH49 Universal Human Values	21UH49 Universal Human Values

Note : All the students are strictly informed to wear Lab uniforms, and college ID card is compulsory during the test.

  
Academic Coordinator  
Head of the Department  
Dept. of Mechanical Engg  
K.S. Institute of Technology  
Bangalore - 560 109.

  
Principal  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109

**K. S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**IV SEMESTER - 3rd CIE TEST INVIGILATION DUTY (2022-2023)**

Date	Timings	NB 101	NB SH 303 (3rd Floor)	NB 104	NB 202	NB 203	NB SH 204 (2nd Floor)	NB 205	NB 301	NB 302	NB 304
6/9/2023 WEDNESDAY	9:30 am to 10:30 am	BS (BS)	SS (AIML) SA (CSD)	MN (BS)	STS (CSE)	RR (CSE)	SKB (ECE) AS (AIML)	SG (BS)	NP (AIML)	KBM (ECE)	BHA (ECE)
	2:00 pm to 3:00 pm	SG (BS)	RH (CSE) SKB (ECE)	GK (CSD)	MV (BS)	SGK (BS)	TR (BS) AP (ECE)	ALB (CSE)	SSB (CSE)	CJ (ECE)	NP (AIML)
7/9/2023 THURSDAY	9:30 am to 10:30 am	SRC (BS)	RR (CSE) SCH (CSE)	SG (BS)	RH (CSE)	SD (CSE)	BHA (ECE) SA (CSD)	SKB (ECE)	NV (BS)	ALB (CSE)	SSB (CSE)
	1:30 pm to 2:30 pm	KBN (CSE)	AP (ECE) HU (ME)	KBM (ECE)	CJ (ECE)	TML (ME)	RKM (AIML) LC (BS)	LN (ME)	GK (CSD)	LKK (AIML)	SS (AIML)
8/9/2023 FRIDAY	9:30 am to 10:30 am	KT (CSE)	BHA (ECE) RKM (AIML)	AP (ECE)	KBM (ECE)	PHS (CSE)	AS (AIML) HU (ME)	KBN (CSE)	CJ (ECE)	GK (CSD)	LKK (AIML)
	1:30 pm to 2:30 pm	SSB (CSE)	NM (ME) LKK (AIML)	ALB (CSE)	SKB (ECE)	LN (ME)	SA (CSD) SG (BS)	NP (CSE)	SD (CSE)	TML (ME)	GK (CSD)
	3:00 pm to 4:00 pm	CJ (ECE)	SA (CSD) NP (AIML)	AS (AIML)	RKM (AIML)	RH (CSE)	SS (AIML) MS (BS)	KBM (ECE)	AP (ECE)	BHA (ECE)	PHS (CSE)

*[Signature]*  
 5/9/23  
 ACADEMIC COORDINATOR  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
 PRINCIPAL  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109.



K. S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109

IV SEMESTER

THIRD SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER)


BLACK BOARD

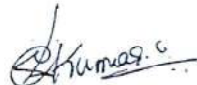
ROOM No: NB LH 101 ( 1ST FLOOR )

CS IV 'A' SEC	EC IV 'A' SEC	CS IV 'A' SEC	EC IV 'A' SEC	CS IV 'A' SEC	EC IV 'A' SEC
1KS21CS001	1KS21EC001	1KS21CS007	1KS21EC007	1KS21CS014	1KS21EC014
1KS21CS002	1KS21EC002	1KS21CS008	1KS21EC008	1KS21CS015	1KS21EC015
1KS21CS003	1KS21EC003	1KS21CS009	1KS21EC009	1KS21CS016	1KS21EC016
1KS21CS004	1KS21EC004	1KS21CS010	1KS21EC010	1KS21CS017	1KS21EC017
1KS21CS005	1KS21EC005	1KS21CS011	1KS21EC011	1KS21CS018	1KS21EC018
1KS21CS006	1KS21EC006	1KS21CS012	1KS21EC013	1KS21CS020	1KS21EC019

CS 'A' SEC Total = 18

EC 'A' SEC Total = 18

  
28/8/23  
ACADEMIC COORDINATOR  
Head of the Department  
Dept. of Mechanical Engg.  
K.S. Institute of Technology  
Bengaluru - 560 109.

  
PRINCIPAL  
PRINCIPAL  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109

# K. S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109

IV SEMESTER

THIRD SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER)

303

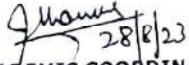
BLACK BOARD


ROOM No: NB 103 SEMINAR HALL (1ST FLOOR)

CS IV 'A' SEC	EC IV 'A' SEC	CS IV 'A' SEC	EC IV 'A' SEC	CS IV 'A' SEC	EC IV 'A' SEC
1KS21CS021	1KS21EC020	1KS21CS031	1KS21EC031	1KS21CS041	1KS21EC042
1KS21CS022	1KS21EC021	1KS21CS032	1KS21EC032	1KS21CS042	1KS21EC043
1KS21CS023	1KS21EC023	1KS21CS033	1KS21EC033	1KS21CS043	1KS21EC044
1KS21CS024	1KS21EC024	1KS21CS034	1KS21EC035	1KS21CS045	1KS21EC045
1KS21CS025	1KS21EC025	1KS21CS035	1KS21EC036	1KS21CS046	1KS21EC046
1KS21CS026	1KS21EC026	1KS21CS036	1KS21EC037	1KS21CS047	1KS21EC047
1KS21CS027	1KS21EC027	1KS21CS037	1KS21EC038	1KS21CS048	1KS21EC048
1KS21CS028	1KS21EC028	1KS21CS038	1KS21EC039	1KS21CS049	1KS21EC049
1KS21CS029	1KS21EC029	1KS21CS039	1KS21EC040	1KS21CS050	1KS21EC050
1KS21CS030	1KS21EC030	1KS21CS040	1KS21EC041	1KS21CS051	1KS21EC051

CS 'A' SEC Total = 30

EC 'A' SEC Total = 30

  
28/8/23  
**ACADEMIC COORDINATOR**  
Head of the Department  
Dept. of Mechanical Engg  
K.S. Institute of Technology  
Bangalore - 560 109

  
**PRINCIPAL**  
PRINCIPAL  
K.S. INSTITUTE OF TECHNOLOGY  
BANGALURU - 560 109

**K. S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**IV SEMESTER**  
**THIRD SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER)**

BLACK BOARD

ROOM No: NB LH 104 ( 1ST FLOOR )

CS IV 'A' SEC	EC IV 'A' SEC	CS IV 'A' SEC	EC IV 'A' SEC	CS IV 'A' SEC	EC IV 'A' SEC
1KS21CS052	1KS21EC053	1KS21CS058	1KS21EC060	1KS22CS403	1KS21EC066
1KS21CS053	1KS21EC054	1KS21CS059	1KS21EC061	1KS22CS404	1KS21EC067
1KS21CS054	1KS21EC055	1KS21CS060	1KS21EC062	1KS22CS405	1KS21EC068
1KS21CS055	1KS21EC056	1KS21CS119	1KS21EC063	1KS22CS408	
1KS21CS056	1KS21EC058	1KS21CS120	1KS21EC064	1KS22CS411	1KS22CS414
1KS21CS057	1KS21EC059	1KS22CS401	1KS21EC065	1KS22CS413	

CS 'A' SEC Total = 19

EC 'A' SEC Total = 15

*[Signature]*  
 28/8/23  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
**PRINCIPAL**  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K. S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**IV SEMESTER**  
**THIRD SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER)**

BLACK BOARD

ROOM NO: NB LH 202 (2ND FLOOR)

CS IV 'B' SEC	EC IV 'B' SEC	CS IV 'B' SEC	EC IV 'B' SEC	CS IV 'B' SEC	EC IV 'B' SEC
1KS21CS061	1KS21EC069	1KS21CS067	1KS21EC075	1KS21CS074	1KS21EC082
1KS21CS062	1KS21EC070	1KS21CS068	1KS21EC076	1KS21CS075	1KS21EC083
1KS21CS063	1KS21EC071	1KS21CS069	1KS21EC077	1KS21CS076	1KS21EC084
1KS21CS064	1KS21EC072	1KS21CS070	1KS21EC078	1KS21CS077	1KS21EC085
1KS21CS065	1KS21EC073	1KS21CS071	1KS21EC080	1KS21CS078	1KS21EC086
1KS21CS066	1KS21EC074	1KS21CS072	1KS21EC081	1KS21CS079	1KS21EC087

CS 'B' SEC Total = 18

EC 'B' SEC Total = 18

*[Signature]*  
 28/8/23  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
**PRINCIPAL**  
 PRINCIPAL  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109

**K. S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**IV SEMESTER**  
**THIRD SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER)**

BLACK BOARD

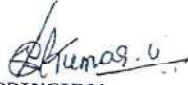
ROOM No: NB LH 203 (2ND FLOOR)

CS IV 'B' SEC	EC IV 'B' SEC	CS IV 'B' SEC	EC IV 'B' SEC	CS IV 'B' SEC	EC IV 'B' SEC
1KS21CS080	1KS21EC088	1KS21CS086	1KS21EC095	1KS21CS092	1KS21EC101
1KS21CS081	1KS21EC089	1KS21CS087	1KS21EC096	1KS21CS093	1KS21EC102
1KS21CS082	1KS21EC090	1KS21CS088	1KS21EC097	1KS21CS094	1KS21EC103
1KS21CS083	1KS21EC091	1KS21CS089	1KS21EC098	1KS21CS095	1KS21EC104
1KS21CS084	1KS21EC092	1KS21CS090	1KS21EC099	1KS21CS096	1KS21EC105
1KS21CS085	1KS21EC093	1KS21CS091	1KS21EC100	1KS21CS097	1KS21EC106

CS 'B' SEC Total = 18

EC 'B' SEC Total = 18

  
**ACADEMIC COORDINATOR**  
 Dept. of Mechanical Engg.  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

  
**PRINCIPAL**  
 \* PRINCIPAL  
**K.S. INSTITUTE OF TECHNOLOGY**  
 \* BENGALURU - 560 109

**K. S. INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**IV SEMESTER**  
**THIRD SESSIONAL TEST SEATING ARRANGEMENT - 2022-23 (EVEN SEMESTER)**

**BLACK BOARD**

**ROOM No: NB 204 SEMINAR HALL (2ND FLOOR)**

CS IV 'B' SEC	MECH IV SEM	EC IV 'B' SEC	CS IV 'B' SEC	MECH IV SEM	EC IV 'B' SEC	CS IV 'B' SEC	EC IV 'B' SEC
1KS21CS098	1KS21ME001	1KS21EC107	1KS21CS108	1KS21ME010	1KS21EC117	1KS22CS400	1KS22EC406
1KS21CS099	1KS21ME002	1KS21EC108	1KS21CS109	1KS21ME011	1KS21EC118	1KS22CS402	1KS22EC407
1KS21CS100	1KS21ME003	1KS21EC109	1KS21CS110	1KS22ME400	1KS21EC120	1KS22CS406	1KS22EC408
1KS21CS101	1KS21ME004	1KS21EC110	1KS21CS111	1KS22ME401	1KS21EC121	1KS22CS407	1KS22EC409
1KS21CS102	1KS21ME005	1KS21EC111	1KS21CS112	1KS22ME402	1KS22EC400	1KS22CS409	1KS22EC410
1KS21CS103	1KS21ME006	1KS21EC112	1KS21CS113	1KS22ME403	1KS22EC401	1KS22CS410	1KS22EC411
1KS21CS104	1KS21ME007	1KS21EC113	1KS21CS114	1KS22ME404	1KS22EC402	1KS22CS412	1KS22EC412
1KS21CS105	1KS21ME008	1KS21EC114	1KS21CS115	1KS22ME405	1KS22EC403	1KS22CS415	
1KS21CS106	1KS21ME009	1KS21EC115	1KS21CS116		1KS22EC404	1KS22CS416	
1KS21CS107		1KS21EC116	1KS21CS117		1KS22EC405		

CS 'B' SEC Total = 29

EC 'B' SEC Total = 27

ME Total = 17

*[Signature]*  
**ACADEMIC COORDINATOR**  
 Head of the Department  
 Dept. of Mechanical Engg  
 K.S. Institute of Technology  
 Bengaluru - 560 109.

*[Signature]*  
**PRINCIPAL**  
 K.S. INSTITUTE OF TECHNOLOGY  
 BENGALURU - 560 109









**K.S.INSTITUTE OF TECHNOLOGY, BANGALORE - 109**  
**Department of Electronics and Communication Engineering**  
**Attendance of IV 'B' for Third Internal Test (2022-2023)**

Room No: NB LH 203

SLNO	REGISTER NO.	MATHS FOR COMMUNICATION ENGINEERS (21EC41)	DIGITAL SIGNAL PROCESSING (21EC42)	CIRCUITS & CONTROLS (21EC43)	BIOLOGY FOR ENGINEERS (21BE45)	COMMUNICATION THEORY (21EC44)	CONSTITUTIONS OF INDIA AND PROFESSIONAL ETHICS (CIP) 21CIP47	UNIVERSAL HUMAN VALUES (21UH49)
1	1KS21EC088	Lethu	Lethu	Lethu	Lethu	Lethu	Lethu	Lethu
2	1KS21EC089	<del>Shobha</del>	<del>Shobha</del>	<del>Shobha</del>	<del>Shobha</del>	<del>Shobha</del>	<del>Shobha</del>	<del>Shobha</del>
3	1KS21EC090	Shobha C.U	Shobha C.U	Shobha C.U	Shobha C.U	Shobha C.U	Shobha C.U	Shobha C.U
4	1KS21EC091	\$	\$	\$	(AB)	\$	\$	\$
5	1KS21EC092	Shobha	Shobha	Shobha	Shobha	Shobha	Shobha	Shobha
6	1KS21EC093	Shobha	Shobha	Shobha	Shobha	Shobha	Shobha	Shobha
7	1KS21EC095	Spoorthya	Spoorthya	Spoorthya	Spoorthya	Spoorthya	Spoorthya	Spoorthya
8	1KS21EC096	Silakshmi	Silakshmi	Silakshmi	Silakshmi	Silakshmi	Silakshmi	Silakshmi
9	1KS21EC097	Princy	Princy	Princy	Princy	Princy	Princy	Princy
10	1KS21EC098	Princy	Princy	Princy	Princy	Princy	Princy	Princy
11	1KS21EC099	Smriti	Smriti	Smriti	Smriti	Smriti	Smriti	Smriti
12	1KS21EC100	Smriti	Smriti	Smriti	Smriti	Smriti	Smriti	Smriti
13	1KS21EC101	Supriya	Supriya	Supriya	Supriya	Supriya	Supriya	Supriya
14	1KS21EC102	Supriya	Supriya	Supriya	Supriya	Supriya	Supriya	Supriya
15	1KS21EC103	Supriya	Supriya	Supriya	Supriya	Supriya	Supriya	Supriya
16	1KS21EC104	Tarun M	Tarun M	Tarun M	Tarun M	Tarun M	Tarun M	Tarun M
17	1KS21EC105	Diyashree	Diyashree	Diyashree	Diyashree	Diyashree	Diyashree	Diyashree
18	1KS21EC106	Tharunika	Tharunika	Tharunika	Tharunika	Tharunika	Tharunika	Tharunika
DATE:		6/9/22	6/9/2023	7/9/23	7/9/23	8/9/23	8/9/23	8/9/23
NO. OF STUDENTS PRESENT		18	18	18	17	18	18	18
NO. OF STUDENTS ABSENT		NIL	00	NIL	01	NIL	NIL	NIL
NAME OF INVIGILATOR		Romya R	ROOPAK MURTHY	SANJAY DAS	Tejaswini M.L	PHS	Satish	RASHMI
SIGNATURE OF INVIGILATOR		Romya	<del>Roopak</del>	<del>Sanjay</del>	Tejaswini	<del>PHS</del>	<del>Satish</del>	<del>RASHMI</del>







**K.S. INSTITUTE OF TECHNOLOGY, BENGALURU - 560109**  
**THIRD INTERNAL TEST QUESTION PAPER 2022-23 EVEN SEMESTER**

**SET: A**

USN 

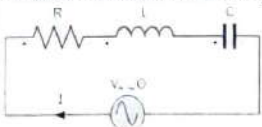
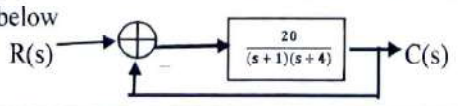
--	--	--	--	--	--	--	--	--	--

Degree : B.E  
 Branch- Stream : ECE  
 Course Title : Circuits & Controls  
 Duration : 60 Minutes

Semester : 4<sup>th</sup>  
 Course Type / Code : Core/21EC43  
 Date : 7<sup>th</sup> Sep 2023  
 Max Marks : 20

Note: Answer ONE full question from each part.

K-Levels: K1-Remembering, K2-Understanding, K3-Appling, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Questions	Marks	CO	K-Level
<b>PART-A</b>				
1(a)	Obtain the State model equation for the given electrical system  Note: Output is taken across capacitor & Define State, State Vector, State variable & State transition matrix	4	CO5	K3
(b)	The open loop transfer function of a unity feedback system is $G(s) = \frac{1}{s((0.5s+1)(0.1s+1)}$ Draw Bode plot and find $W_{gc}$ , $W_{pc}$ , GM and PM comment on system stability	4	CO5	K3
(c)	Obtain the Root locus for the for the give transfer function $G(s)H(s) = \frac{K}{s((s+3)(s^2+3s+11.25)}$	4	CO5	K3
<b>OR</b>				
2(a)	Mention all the rules of root locus and obtain the root locus for the open loop transfer function $G(s)H(s) = \frac{K}{s((s+5)(s+10)}$ Find the range of K for system stability and K value for $\zeta = 0.707$	4	CO5	K3
(b)	Sketch Bode plot for the given $G(s)H(s) = \frac{K}{s((0.1s+1)(0.05s+1)}$ . Find the value of K for gain margin of 10db.	4	CO5	K3
(c)	Find the state transition matrix for $A = \begin{bmatrix} 0 & -1 \\ 2 & -3 \end{bmatrix}$ .	4	CO5	K3
<b>PART-B</b>				
3(a)	Obtain the time response of a second order system subjected to unit step input for under damped condition.	4	CO4	K3
(b)	Obtain the close loop transfer function, damping ratio and output response for step input for the system given below 	4	CO4	K3
<b>OR</b>				
4(a)	A second order system is given by $\frac{C(s)}{R(s)} = \frac{25}{s^2+6s+25}$ . Find Rise Time, settling time Peak over shoot and Peak Time. Also find the output response: $C(t)$ .	4	CO4	K3
(b)	A system has 30% overshoot and settling time of 5 seconds for a Unit step input. Determine <ul style="list-style-type: none"> <li>• 2<sup>nd</sup> order Transfer function</li> <li>• Peak time</li> <li>• 3) Output response</li> </ul>	4	CO4	K3

Name & Signature of Course In charge:

Name & Signature of Module Coordinator

HOD ECE

Principal

*Selected*



**K.S. INSTITUTE OF TECHNOLOGY, BENGALURU - 560109**  
**THIRD INTERNAL TEST QUESTION PAPER 2022-23 EVEN SEMESTER**

**SET: B**

USN

**Degree :** B.E  
**Branch- Stream :** ECE  
**Course Title :** Circuits & Controls  
**Duration :** 60 Minutes

**Semester :** 4<sup>th</sup>  
**Course Type / Code :** Core/21EC43  
**Date :** 7<sup>th</sup> Sep 2023  
**Max Marks :** 20

Note: Answer **ONE** full question from each part.

K-Levels: K1-Remebering, K2-Understanding, K3-Applying, K4-Analyzing, K5-Evaluating, K6-Creating

Q No.	Questions	Mar ks	CO	K- Level
<b>PART-A</b>				
1(a)	<b>Identify</b> the state model of the given electrical network and find the output as current through resistor. 	4	CO5	K3
(b)	<b>Make use of</b> open loop transfer function of a unity feedback system is $G(s) = \frac{80}{s((s+2)(s+20))}$ Draw Bode plot and find $W_{gc}$ , $W_{pc}$ , GM and PM comment on system stability	4	CO5	K3
(c)	<b>Make use of</b> transfer function $G(s)H(s) = \frac{k(s+2)(s+3)}{s(s+1)}$ and find the Root locus of given system.	4	CO5	K3
<b>OR</b>				
2(a)	Mention all the rules of root locus and obtain the root locus for the open loop transfer function $G(s)H(s) = \frac{K}{s((s+3)(s^2+3s+11.2))}$	4	CO5	K3
(b)	Sketch Bode plot for the given $G(s)H(s) = \frac{K}{s(s+2)(s+4)}$ . <b>Identify</b> the value of K for gain margin of 20db.	4	CO5	K3
(c)	<b>Identify</b> the state transition matrix for $A = \begin{bmatrix} 1 & 0 \\ 1 & 1 \end{bmatrix}$ . & find the state model equation for the differential equation give below $\frac{d^4y}{dt^4} + 7\frac{d^3y}{dt^3} + 8\frac{d^2y}{dt^2} + y(t) = 3u(t)$	4	CO5	K3
<b>PART -B</b>				
3(a)	<b>Make use of</b> second order system to Express rise time, peak time ,peak overshoot, settling Time subjected to unit step input for under damped condition.	4	CO4	K3
(b)	<b>Identify</b> the close loop transfer function, damping ratio and output response for step input for the system given below $G(s) = 9/s(s + 2)$	4	CO4	K3
<b>OR</b>				
4(a)	A second order system is given by $\frac{C(s)}{R(s)} = \frac{100}{s(s+10)}$ . <b>Identify</b> Rise Time, settling time Peak overshoot and Peak Time. Also find the output response C(t).	4	CO4	K3
(b)	<b>Model</b> transient characteristics of a control system to a unit step input and define the following i)delay time ii)rise time iii)peak time iv)peak overshoot iv)settling Time	4	CO4	K3

*[Signature]*  
 Name & Signature of  
 Course In charge:

*[Signature]*  
 Name & Signature of  
 Module Coordinator

*[Signature]*  
 HOD ECE

*[Signature]*  
 Principal



(20)

**K. S. INSTITUTE OF TECHNOLOGY, BENGALURU - 560109**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**LESSON PLAN 2022-23 EVEN SEMESTER**

**COURSE INCHARGE** : BHANUMATHI A  
**COURSE CODE/TITLE** : 21EC42/ DIGITAL SIGNAL PROCESSING  
**YEAR/ SEMESTER/SECTION** : II/IV/A  
**BRANCH** : ECE

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date
<b>MODULE 1: Discrete Fourier Transforms (DFT)</b>						
1.	Discrete Fourier Transforms (DFT). Frequency domain sampling and reconstruction of discrete time signals	L+D	BB	1	1	17/05/23
2.	The Discrete Fourier Transform	L+D	BB	1	2	18/05/23
3.	DFT as a linear transformation	L+D	BB	1	3	19/05/23
4.	Properties of DFT-Linearity and problems on same	L+D	BB	1	4	22/05/23
5.	Properties of DFT-Periodicity	L+D	BB	1	5	24/05/23
6.	Properties of DFT-Symmetry properties	L+D	BB	1	6	25/05/23
7.	Problems on symmetry properties	L+D	BB	1	7	26/05/23
8.	Properties- Multiplication of two DFTs	L+D	BB	1	8	29/05/23
9.	Problems on Multiplication properties	L+D	BB	1	9	31/05/23

10.	Circular convolution property	L+D	BB	1	10	01/06/23
11.	Problems on Circular convolution property	L+D	BB	1	11	02/06/23
12.	Problems on Circular convolution property	L+D	BB		12	05/06/23
<b>MODULE 2: Linear Filtering methods based on the DFT</b>						
13.	Additional DFT Properties-Circular Time, Circular frequency shift	L+D	BB	1	13	07/06/23
14.	Problems on circular time shift and circular frequency shift.	L+D	BB	1	14	08/06/23
15.	Problems on circular time shift and circular frequency shift.	L+D	BB	1	15	09/06/23
16.	Parseval's Theorem	L+D	BB	1	16	10/06/23
17.	Use of DFT in linear filtering	L+D	BB	1	17	12/06/23
18.	Filtering of long data sequences	L+D	BB	1	18	14/06/23
19.	Fast Fourier Transform Algorithms	L+D	BB	1	19	15/06/23
20.	Overlap-save problems	L+D	BB	1	20	16/06/23
21.	Overlap-add method problems	L+D		1	21	19/06/23
22.	Direct computation of DFT, need for efficient computation of the DFT (FFT algorithms)	L+D	BB	1	22	21/06/23
23.	Radix-2 FFT algorithm for the computation of DFT and IDFT-, decimation-in-time and decimation-in-frequency algorithms	L+D	BB	1	23	22/06/23
24.	Problems on DIT FFT	L+D	BB	1	24	23/06/23
25.	Problems on DIF FFT	L+D	BB	1	25	30/06/23
26.	Problems on DIT,DIF FFT	L+D	BB	1	26	03/07/23
<b>MODULE 3: Design of FIR Filters</b>						
27.	Characteristics of practical frequency selective filters	L+D	BB	1	27	05/07/23
28.	Symmetric and Anti symmetric FIR filters	L+D	BB	1	28	06/07/23



29.	Design of low pass FIR filter using Rectangular and Hamming window	L+D	BB	1	29	07/07/23
30.	Design of low pass FIR filter using Hanning and Bartlett window	L+D	BB	1	30	08/07/23
31.	Design of high pass FIR filter using Rectangular and Hamming window	L+D	BB	1	31	10/07/23
32.	Design of high pass FIR filter using Hanning and Bartlett window	L+D	BB	1	32	12/07/23
33.	Problems on Hamming window	L+D	BB	1	33	13/07/23
34.	Problems on Hanning window	L+D	BB	1	34	14/07/23
35.	Problems on Bartlett window	L+D	BB	1	35	17/07/23
36.	Structure for FIR Systems: Direct form	L+D	BB	1	36	19/07/23
37.	Cascade form structure	L+D	BB	1	37	20/07/23
38.	Lattice structures	L+D	BB	1	38	21/07/23
39.	Problems on FIR systems	L+D	BB	1	39	24/07/23
40.	Problems on cascade and lattice structure		BB	1	40	26/07/23
<b>MODULE 4: IIR Filter Design</b>						
41.	Infinite impulse response filter format	L+D	BB	1	41	27/07/23
42.	Bilinear transformation design method	L+D	BB	1	42	28/07/23
43.	Design of analog filters	L+D	BB	1	43	03/08/23
44.	Design of analog filters using low pass prototype transformation.	L+D	BB	1	44	04/08/23
45.	Design of Butterworth and Chebyshev filters.	L+PS	BB	1	45	05/08/23
46.	Bilinear transformation	L+PS	BB	1	46	07/08/23
47.	Problems on Butterworth filters.	L+D	BB	1	47	09/08/23
48.	Problems on Chebyshev filters	L+PS	BB	1	48	10/08/23
49.	Problems on Impulse invariance	L+PS	BB	1	49	11/08/23
50.	Problems on Bilinear transformation	L+PS	BB	1	50	14/08/23
51.	Frequency wrapping	L+D	BB	1	51	16/08/23
52.	Realization of IIR filters in direct form I and II	L+D	BB	1	52	17/08/23
53.	Realization of IIR filters in direct form I and II	L+D	BB	1	53	18/08/23

54.	Problems on IIR Filter Structure	L+PS	BB	1	54	19/08/23
<b>MODULE 5: Digital Signal Processors</b>						
55.	DSP Architecture	L+D	BB	1	55	21/08/23
56.	DSP Hardware Units	L+D	BB	1	56	23/08/23
57.	Fixed point format	L+D	BB	1	57	24/08/23
58.	Problems on Fixed point format	L+D	BB	1	58	25/08/23
59.	Floating point Format	L+D	BB	1	59	28/08/23
60.	Problems on Floating point Format	L+D	BB	1	60	30/08/23
61.	IEEE Floating point formats,	L+D	BB	1	61	31/08/23
62.	Fixed point digital signal processors	L+D	BB	1	62	01/09/23
63.	Floating point processors	L+D	BB	1	63	02/09/23
64.	FIR filter implementations in Fixed point systems	L+D	BB	1	64	04/09/23
65.	IIR filter implementations in Fixed point systems	L+D	BB	1	65	11/09/23
66.	Revision of module 1,2	L+D	BB	1	66	13/09/23
67.	Revision of module 3,4	L+D	BB	1	67	14/09/23
68.	Revision of module 5	L+D	BB	1	68	15/09/23
69.	Revision of University QP	L+D	BB	1	69	16/09/23


**Text Books:**

1. Digital signal processing – Principles Algorithms & Applications, Proakis&Monalakis, Pearson education, 4th Edition, New Delhi, 2007.
2. Li Tan, Jean Jiang." Digital Signal processing-Fundamentals and Applications", Academic press, 2013, ISBN-978-0-12-415893

**Reference Books:**

1. Sanjit K Mitra,"Digital Signal Processing, A Computer Based Approach",4<sup>th</sup> Edition, McGraw Hill education,2013
2. Oppenheim &schaffer,"Discrete Time Signal Processing ", PHI, 2003.
3. D. GaneshRao and Vineeth P Gejji,"Digital Signal processing" Cengage India Private Limited,2017,ISBN"9386858231

  
Course In-charge

  
Module coordinator

  
HOD-ECE

  
Principal



**K. S. INSTITUTE OF TECHNOLOGY, BENGALURU - 560109**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**COURSE PLAN 2023-23 EVEN SEMESTER**

**COURSE INCHARGE** : Dr P. N. Sudha  
**COURSE CODE/TITLE** : 21EC43/ Circuits & Controls  
**YEAR/ SEMESTER/SECTION** : 2<sup>nd</sup>/4<sup>th</sup> /  
**BRANCH** : ECE

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date
<b>MODULE 1</b>						
1	Types of Sources, Loop analysis & Problems for DC circuits	L+D	BB	1	1	17 <sup>th</sup> May 2023
2	Loop analysis & Problems for DC circuits	L+D	BB	1	2	18 <sup>th</sup> May 2023
3	Loop analysis & Problems for AC circuits	L+D	BB	2	4	18 <sup>th</sup> May 2023
4	Nodal analysis & Problems for DC circuits	L+D	BB	1	5	19 <sup>th</sup> May 2023
5	Nodal analysis & Problems for AC circuits	L+D	BB	2	7	22 <sup>nd</sup> May 2023
6	Concept of Super position theorem & Problems	L+D	BB	2	9	23 <sup>rd</sup> May 2023
7	Maximum Power transfer Theorem & Problems	L+D	BB	2	11	24 <sup>th</sup> May 2023
8	Concept of Thevenin's theorem & Problems	L+D	BB	2	13	25 <sup>th</sup> May 2023
9	Concept of Norton's Theorem & Problems	L+D	BB	2	15	25 <sup>th</sup> May 2023
10	Solving Question paper Problems & Pedagogy: Unit Test	L+D	BB	1	16	26 <sup>th</sup> May 2023
<b>MODULE 2</b>						
11	Two port networks: Short- circuit Admittance parameters	L+PS	BB	3	19	29 <sup>th</sup> -May 2023 to 1 <sup>st</sup> June 2023
12	Two port networks: Open- circuit Impedance parameters	L+ D	BB	2	21	1 <sup>st</sup> to 2 <sup>nd</sup> June 2023
13	Transmission parameters	L+D	BB	2	23	5 <sup>th</sup> -7 <sup>th</sup> June 2023

14	Hybrid parameters	L+D	BB	2	25	8 <sup>th</sup> June 2023
15	Laplace transform and its applications: Step Ramp, Impulse, Solution of networks using Laplace transform	L+D	BB	3	28	9 <sup>th</sup> -12 <sup>th</sup> June 2023
16	Initial value Theorem	L+D	BB	2	30	14 <sup>th</sup> -15 <sup>th</sup> June 2023
17	Final value Theorem	L+D	BB	1	31	16 <sup>th</sup> June 2023
18	Solving Question paper Problems & Pedagogy	L+D	BB	1	31	16 <sup>th</sup> June 2023
<b>MODULE 3</b>						
19	Types of control systems, effect of feedback systems, differential equation of physical systems	L+D	BB	4	35	22 <sup>nd</sup> -26 <sup>th</sup> June 2023
20	Introduction to block diagrams & to find transfer functions	L+D	BB	8	43	28 <sup>th</sup> June-7 <sup>th</sup> July 2023
21	Introduction to Signal Flow Graphs & to find transfer functions	L+D	BB	3	46	8 <sup>th</sup> -12 <sup>th</sup> July 2023
22	Solving Question paper Problems & Pedagogy			1	47	13 <sup>th</sup> July 2023
<b>MODULE 4</b>						
23	<b>Time Response analysis:</b> Time response of first order systems.	L+D		2	49	13 <sup>th</sup> -14 <sup>th</sup> July 2023
24	Time response of second ordersystems: Steady State Analysis	L+D	BB	3	52	17 <sup>th</sup> – 20 <sup>th</sup> July 2023
25	Time response of second ordersystems: Transient Analysis	L+D	BB	5	57	21 <sup>st</sup> -27 <sup>th</sup> July 2023
26	Concepts of stability necessary condition for stability, Routh stability criterion,	L+D	BB	1	58	28 <sup>th</sup> July 2023
27	Relative stability Analysis using RH criteria	L+D	BB	4	62	3 <sup>rd</sup> -5 <sup>th</sup> August 2023
<b>MODULE 5</b>						
28	Introduction the root locus concepts, construction of root loci	L+D	BB	4	66	7 <sup>th</sup> -10 <sup>th</sup> Aug 2023
29	Introduction to state variable analysis: Concepts of state, state variable and state models.	L+D	BB	4	70	11 <sup>th</sup> -17 <sup>th</sup> Aug 2023
30	State model for Linear continuous – Time systems	L+D	BB	2	72	18 <sup>th</sup> -19 <sup>th</sup> Aug 2023
31	Solution of state equations.	L+D	BB	2	74	21 <sup>st</sup> -23 <sup>rd</sup> Aug 2023
32	Frequency Domain analysis and stability using Bode plot Solving Question paper Problems & Pedagogy	L+D	BB	8	82	24 <sup>th</sup> Aug – 5 <sup>th</sup> Sep 2023

**Text Books:**

1. Engineering circuit analysis, William H Hayt, Jr, Jack E Kemmerly, Steven M Durbin, Mc Graw Hill Education, Indian Edition 8e.
2. Networks and Systems, D Roy Choudhury, New age international Publishers, second edition.
3. Network Analysis, M E Van Valkenburg, Pearson, 3e.
4. Control Systems Engineering, I J Nagrath, M. Gopal, New age international Publishers, Fifth edition.

**Reference Books:**

- Control System Engineering, Nagrath & Gopal

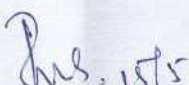
**Details for Teaching Aids:**


1. Black Board
2. Laptop, LCD Projector

**Web links and Video Lectures (e-Resources):**

- <https://nptel.ac.in/courses/108106098>
- <https://nptel.ac.in/courses/108102042>

  
Signature of Course In charge

  
Signature of Module Coordinator

  
Signature of HOD



KS INSTITUTE OF TECHNOLOGY BANGALORE

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

NAME OF THE STAFF : SATISH KUMAR B

SUBJECT CODE/NAME : 21EC41/COMMUNICATION THEORY

SEMESTER/YEAR/SEC : IV/ II/ A

ACADEMIC YEAR : 2022-23

SL No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date (B)
1	Introduction	L	BB+P	1	1	17/05/23
2	Time & Frequency Domain	L	BB+P	1	2	18/05/23
3	description, Switching modulator,	L	BB+P	1	3	22/05/23
4	Envelop detector.	L	BB+P	1	4	23/05/23
5	DOUBLE SIDE BAND-SUPPRESSED CARRIER MODULATION: Time and Frequency Domain	L	BB+P	1	5	24/05/23
6	DOUBLE SIDE BAND-SUPPRESSED CARRIER MODULATION: Time and Frequency Domain	L	BB+P	1	6	25/05/23
7	description, Ring modulator,	L	BB+P	1	7	27/05/23
8	Coherent detection,	L	BB+P	1	8	29/05/23
9	Costas Receiver, Quadrature Carrier Multiplexing	L	BB+P	1	9	30/05/23
10	SINGLE SIDE BAND AND VESTIGIAL SIDEBAND METHODS OF MODULATION: SSB Modulation,	L	BB+P	1	10	31/05/23

11	VSB, Modulation, Frequency Translation	L	BB+P	1	11	01/06/23
12	Frequency Division Multiplexing.	L	BB+P	1	12	05/06/23
13	Example: VSB, Transmission of Analog and Digital Television.	L	BB+P	1	13.	6/06/23
<b>MODULE 2: ANGLE MODULATION</b>						
14	Basic definitions, Frequency Modulation:	L	BB+P	1	14	7/06/23
15	Narrow Band FM, Wide Band FM,	L	BB+P	1	15	8/06/23
16	Narrow Band FM, Wide Band FM,				16	10 /06/23
17	Transmission bandwidth of FM Signals,	L	BB+P	1	17	12/06/23
18	Transmission bandwidth of FM Signals,				18	13 /06/23
19	Generation of FM Signals, Demodulation of FM Signals,	L	BB+P	1	19	14 /06/23
20	FM, Stereo Multiplexing, Phase-Locked Loop:	L	BB+P	1	20	15/06/23
21	Nonlinear model of PLL, Linear model of PLL,	L	BB+P	1	21	22 /06/23
22	Nonlinear Effects in FM Systems.	L	BB+P	1	22	24/06/23
23	The Super heterodyne Receiver	L	BB+P	1	23	26 /06/23
<b>MODULE 3: NOISE</b>						
24	NOISE: Shot Noise, Thermal noise, White Noise, Noise Equivalent Bandwidth.	L	BB+P	1	24	27 /06/23
25	Noise Equivalent Bandwidth.	L	BB+P	1	25	28 /06/23
26	NOISE IN ANALOG MODULATION: Introduction, Receiver Model,	L	BB+P	1	26	6 /07/23
27	Noise in DSB SC receivers, Noise in AM receivers, Threshold effect	L	BB+P	1	27	10/07/23
28	Noise in FM receivers, Capture effect,	L	BB+P	1	28	11/07/23
29	Noise in FM receivers, Capture effect,	L	BB+P	1	29	12/07/23
30	Capture effect, FM threshold effect,	L	BB+P	1	30	13/07/23
31	FM threshold reduction,	L	BB+P	1	31	17/07/23

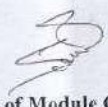
11	VSB, Modulation, Frequency Translation	L	BB+P	1	11	01/06/23
12	Frequency Division Multiplexing.	L	BB+P	1	12	05/06/23
13	Example: VSB, Transmission of Analog and Digital Television.	L	BB+P	1	13.	6/06/23
<b>MODULE 2: ANGLE MODULATION</b>						
14	Basic definitions, Frequency Modulation:	L	BB+P	1	14	7/06/23
15	Narrow Band FM, Wide Band FM,	L	BB+P	1	15	8/06/23
16	Narrow Band FM, Wide Band FM,				16	10 /06/23
17	Transmission bandwidth of FM Signals.	L	BB+P	1	17	12/06/23
18	Transmission bandwidth of FM Signals,				18	13 /06/23
19	Generation of FM Signals, Demodulation of FM Signals,	L	BB+P	1	19	14 /06/23
20	FM, Stereo Multiplexing, Phase-Locked Loop:	L	BB+P	1	20	15/06/23
21	Nonlinear model of PLL, Linear model of PLL.	L	BB+P	1	21	22 /06/23
22	Nonlinear Effects in FM Systems.	L	BB+P	1	22	24/06/23
23	The Super heterodyne Receiver	L	BB+P	1	23	26 /06/23
<b>MODULE 3: NOISE</b>						
24	NOISE: Shot Noise, Thermal noise, White Noise, Noise Equivalent Bandwidth.	L	BB+P	1	24	27 /06/23
25	Noise Equivalent Bandwidth.	L	BB+P	1	25	28 /06/23
26	NOISE IN ANALOG MODULATION: Introduction, Receiver Model.	L	BB+P	1	26	6 /07/23
27	Noise in DSB-SC receivers, Noise in AM receivers, Threshold effect	L	BB+P	1	27	10/07/23
28	Noise in FM receivers, Capture effect,	L	BB+P	1	28	11/07/23
29	Noise in FM receivers, Capture effect,	L	BB+P	1	29	12/07/23
30	Capture effect, FM threshold effect,	L	BB+P	1	30	13/07/23
31	FM threshold reduction,	L	BB+P	1	31	17/07/23




32	FM threshold reduction.				32	18/07/23
33	Preemphasis and De-emphasis in FM	L	BB+P	1	33	19/07/23
34	De-emphasis in FM	L	BB+P	1	34	20/07/23
<b>MODULE 4: SAMPLING AND QUANTIZATION</b>						
35	Introduction, Why Digitize Analog Sources?	L	BB+P	1	35	22/07/23
36	The Low pass Sampling process Pulse Amplitude Modulation.	L	BB+P	1	36	24/07/23
37	The Low pass Sampling process Pulse Amplitude Modulation.	L	BB+P	1	37	25/07/23
38	Time Division Multiplexing	L	BB+P	1	38	26/07/23
39	Time Division Multiplexing				39	27/07/23
40	Pulse-Position Modulation	L	BB+P	1	40	3/08/23
41	Generation of PPM Waves				41	4/08/23
42	Generation of PPM Waves	L	BB+P	1	42	6/08/23
43	Detection of PPM Waves	L	BB+P	1	43	7/08/23
44	Detection of PPM Waves	L	BB+P	1	44	8/08/23
45	problems	L	BB+P	1	45	9/08/23
46	problems	L	BB+P	1	46	10/08/23
<b>Module 5: SAMPLING AND QUANTIZATION)</b>						
47	SAMPLING AND QUANTIZATION): The Quantization Random Process	L	BB+P	1	47	14/08/23
48	The Quantization Random Process	L	BB+P	1	48	16/08/23
49	problems	L	BB+P	1	49	17/08/23
50	Quantization Noise	L	BB+P	1	50	19/08/23
51	Quantization Noise	L	BB+P	1	51	21/08/23
52	Pulse-Code Modulation: Sampling	L	BB+P	1	52	21/08/23
53	Pulse-Code Modulation: Sampling	L	BB+P	1	53	23/08/23
54	Quantization, Encoding, Regeneration	L	BB+P	1	54	24/08/23
55	Quantization, Encoding, Regeneration	L	BB+P	1	55	28/08/23

56	Encoding, Regeneration	L	BB+P	1	56	29/08/23
57	Encoding, Regeneration	L	BB+P	1	57	30/08/23
58	Decoding, Filtering	L	BB+P	1	58	31/08/23
59	Decoding, Filtering	L	BB+P	1	59	2/09/23
60	Filtering, Multiplexing, Delta Modulation	L	BB+P	1	60	4/09/23
61	Filtering, Multiplexing, Delta Modulation	L	BB+P	1	61	5/09/23
62	Problems	L	BB+P	1	62	14/09/23
63	Problems	L	BB+P	1	63	16/09/23

  
Signature of Course Incharge

  
Signature of Module Coordinator

  
Signature of HOD



KS INSTITUTE OF TECHNOLOGY, BANGALORE  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

NAME OF THE STAFF : Dr. REKHA N  
SUBJECT CODE/NAME : 18EC61/DIGITAL COMMUNICATION  
SEMESTER/YEAR : VI-A / III  
ACADEMIC YEAR : 2022-2023

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date
<b>MODULE 1: Bandpass Signal to Equivalent Low pass</b>						
1	Bandpass Signal to Equivalent Lowpass: Introduction	L+D	BB	1	1	20/3/23
2	Hilbert Transform and problems	L+D+PS	BB	1	2	21/3/23
3	Pre-envelopes, Complex envelopes	L+D	BB	1	3	23/3/23
4	Canonical representation of bandpass signals	L+D	BB	1	4	25/3/23
5	Complex low pass representation of bandpass systems and systems	L+D	BB	1	5	27/3/23
6	Line codes: Unipolar, Polar, Bipolar, Manchester code	L+D	BB	1	6	28/3/23
7	Unipolar & their spectral densities	L+D	BB	1	7	29/3/23
8	Polar, Bipolar (AMI) & their spectral densities	L+D	BB	1	8	30/3/23
9	Manchester code & their spectral densities	L+D	BB	1	9	1/4/23
10	Overview of HDB3, B3ZS, B6ZS	L+D+PS	BB	1	10	4/4/23
<b>MODULE 2: Signaling over AWGN Channels</b>						
11	Signaling over AWGN Channels- Introduction	L+ D	BB	1	11	5/4/23
12	Geometric representation of signals	L+D	BB	1	12	6/4/23

13	Gram-Schmidt Orthogonalization procedure	L+D	BB	1	13	10/4/23
14	Conversion of the continuous AWGN channel into a vector channel	L+D	BB	1	14	11/4/23
15	Optimum receivers using coherent detection: ML Decoding	L+D	BB	1	15	12/4/23
16	Correlation receiver	L+D	BB	1	16	13/4/23
17	matched filter receiver	L+D	BB	1	17	15/4/23
18	Numerical Problems	L+D+PS	BB	1	18	20/4/23
<b>MODULE 3: Digital Modulation Techniques</b>						
19	Digital Modulation Techniques: Phase shift Keying techniques using coherent detection:	L+D	BB	1	19	24/4/23
20	generation, detection and error probabilities of BPSK	L+D	BB	1	20	25/4/23
21	generation, detection and error probabilities of QPSK	L+D	BB	1	21	26/4/23
22	Numericals		BB		22	27/4/23
23	generation, detection and error probabilities of M-ary PSK	L+D	BB	1	23	2/5/23
24	generation, detection and error probabilities of M-ary QAM	L+D	BB	1	24	3/5/23
25	Frequency shift keying techniques using Coherent detection: BFSK generation, detection and error probability	L+D	BB	1	25	4/5/23
26	M-ary PSK, M-ary QAM	L+D	BB	1	26	8/5/23
27	QPSK probability Error	L+D	BB	1	27	9/5/23
28	Non coherent orthogonal modulation techniques: BFSK & probability of error.	L+D	BB	1	28	10/5/23
29	DPSK Symbol representation, Block diagrams treatment of Transmitter and Receiver, Probability of error (without derivation of probability of error equation)	L+D	BB	1	29	11/5/23
30	Numerical Problems on Coherent Detection	L+D+PS	BB	1	30	15/5/23

	techniques					
31	Numerical Problems on BPSK,FSK	L+D+PS	BB	1	31	16/5/23
32	Numerical Problems on QPSK,DPSK	L+D+PS	BB	1	32	17/5/23
<b>MODULE 4: Communication through Band Limited Channels</b>						
33	Communication through Band Limited Channels: Digital Transmission through Band limited channels:	L+D	BB	1	33	18/5/23
34	Digital PAM Transmission through Band limited Channels	L+D	BB	1	34	25/5/23
35	Signal design for Band limited Channels: Design of band limited signals for zero ISI-The Nyquist Criterion (statement only)	L+D	BB	1	35	27/5/23
36	The Nyquist Criterion (statement only)	L+D	BB	1	36	1/6/23
37	Design of band limited signals with controlled ISI-Partial Response signals	L+D	BB	1	37	5/6/23
38	Probability of error for detection of Digital PAM: Probability of error for detection of Digital PAM with Zero ISI	L+D	BB	1	38	6/6/23
39	Symbol-by-Symbol detection of data with controlled ISI	L+D	BB	1	39	7/6/23
40	Channel Equalization: Linear Equalizers (ZFE, MMSE)	L+D	BB	1	40	8/6/23
41	Adaptive Equalizers	L+D	BB	1	41	10/6/23
42	Numerical Problems	L+D+PS	BB	1	42	12/6/23
<b>MODULE 5: Principles of Spread Spectrum</b>						
43	Principles of Spread Spectrum: Spread Spectrum Communication Systems: Model of a Spread Spectrum Digital Communication System,	L+D	BB	1	43	13/6/23
44	Direct Sequence Spread Spectrum Systems	L+D	BB	1	44	14/6/23
45	Effect of De-spreading on a narrowband Interference	L+D	BB	1	45	15/6/23
46	Probability of error (statement only),	L+D	BB	1	46	19/6/23
47	Some applications of DS Spread Spectrum Signals	L+D	BB	1	47	20/6/23

48	Generation of PN Sequences	L+D	BB	1	48	21/6/23
49	Frequency Hopped Spread Spectrum	L+D	BB	1	49	22/6/23
50	CDMA based on IS-95	L+D	BB	1	50	24/6/23
51	Numerical Problems on PN sequence	L+D+PS	BB	1	51	26/6/23
52	Revision of Module 1	L+D	BB	1	52	27/6/23
53	Revision of Module 2	L+D	BB	1	53	28/6/23
54	Revision of Module 3	L+D	BB	1	54	6/7/23
55	Revision of Module 4	L+D	BB	1	55	8/7/23
56	Revision of Module 5	L+D	BB	1	56	10/7/23

**Text Books:**


1. Simon Haykin, "Digital Communication Systems", John Wiley & sons, First Edition, 2014, ISBN 978-0-471-64735-5
2. John G Proakis and Masoud Salehi, "Fundamentals of Communication Systems", 2014 Edition, Pearson Education, ISBN 978-8-131-70573-5.

**Reference Books:**

1. B.P.Lathi and Zhi Ding, "Modern Digital and Analog communication Systems", Oxford University Press, 4th Edition, 2010, ISBN: 978-0-198-07380-2.
2. Ian A Glover and Peter M Grant, "Digital Communications", Pearson Education, Third Edition, 2010, ISBN 978-0-273-71830-7.
3. John G Proakis and Masoud Salehi, "Communication Systems Engineering", 2nd Edition, Pearson Education, ISBN 978-93-325-5513-6.

**WEB Materials:**

- [nptel.ac.in/courses/117105077/pdf-m-7/m7l38.pdf](https://nptel.ac.in/courses/117105077/pdf-m-7/m7l38.pdf)
- [nptel.ac.in/courses/117105077/20](https://nptel.ac.in/courses/117105077/20)
- [https://www.tutorialspoint.com/digital\\_communication/index.htm](https://www.tutorialspoint.com/digital_communication/index.htm)

  
Course In-charge  
Dr. Rekha .N .

  
Module Coordinator

  
Signature of HOD-ECE





5

**K S INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

**COURSE PLAN**

**NAME OF THE STAFF : Dr. B Sudarshan**

**COURSE CODE/NAME : 18EC62/EMBEDDED**

**SYSTEMS SEMESTER/YEAR : Vi / III (A Section)**

**ACADEMIC YEAR : 2022-2023**


Sl.No	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date
<b>MODULE 1 ARM -32 bit Microcontroller</b>						
1	Thumb-2 technology and applications of ARM	L+D	LCD/BB	1	1	20-3-23
2	Architecture of ARM Cortex M3	L+D	LCD/BB	1	2	23-3-23
3	Various Units in the architecture	L+D	LCD/BB	1	3	24-3-23
4	Debugging support	L+D	LCD/BB	1	4	27-3-23
5	General Purpose Registers	L+D	LCD/BB	1	5	29-3-23
6	Special Registers	L+D	LCD/BB	1	6	30-3-23
7	Operation modes	L+D	LCD/BB	1	7	31-3-23
8	Exceptions, interrupts	L+D	LCD/BB	1	8	5-4-23

9	Stack operation	L+D	LCD/BB	1	9	6-4-23
10	Reset sequence	L+D	LCD/BB	1	10	10-4-23
<b>MODULE 2 ARM cortex M3 Instruction set and Programming</b>						
11	Assembly basics	L+D	LCD/BB	1	11	12-4-23
12	Instruction list and description	L+D	LCD/BB	1	12	13-4-23
13	Instruction list and description	L+D	LCD/BB	1	13	20-4-23
14	Thumb and ARM instructions	L+D	LCD/BB	1	14	21-4-23
15	Special instructions	L+D	LCD/BB	1	15	24-4-23
16	Useful instructions	L+D	LCD/BB	1	16	26-4-23
17	Assembly and Clanguage Programming	L+D	LCD/BB	1	17	27-4-23
18	Assembly and Clanguage Programming	L+D	LCD/BB	1	18	28-4-23
19	Assembly and Clanguage Programming	L+D	LCD/BB	1	19	29-4-23
20	CMSIS	L+D	LCD/BB	1	20	3-5-23
<b>MODULE 3 Embedded System Components</b>						
21	Embedded Vs General computingSystem	L+D	LCD/BB	1	21	4-5-23
22	Classification of Embedded systems,	L+D	LCD/BB	1	22	5-5-23
23	Major applications and purpose of ES, Elements of Embedded System	L+D	LCD/BB	1	23	8-5-23
24	Differences between RISC and CISC, Harvard and Princeton, Big and Little Endian formats	L+D	LCD/BB	1	24	10-5-23
25	Memory(ROM and RAM Types)	L+D	LCD/BB	1	25	11-5-23
26	Sensors, Actuators	L+D	LCD/BB	1	26	12-5-23



27	Opt coupler, Relay, Piezo buzzer, Push button switch	L+D	LCD/BB	1	27	13-5-23
28	Communication Interface (on-board and external types),	L+D	LCD/BB	1	28	15-5-23
29	I2C, SPI, IrDA	L+D	LCD/BB	1	29	17-5-23
30	Bluetooth, Zigbee and WI-FI	L+D	LCD/BB	1	30	18-5-23
<b>MODULE 4 Embedded System Design Concepts</b>						
31	Characteristics and Quality Attributes of Embedded Systems	L+D	LCD/BB	1	31	19-5-23
32	Operational and non-operational quality attributes	L+D	LCD/BB	1	32	25-5-23
33	Embedded Systems-Application and Domain specific	L+D	LCD/BB	1	33	26-5-23
34	Hardware software Co- design and program	L+D	LCD/BB	1	34	1-6-23
35	Hardware software Co- design and program modelling	L+D	LCD/BB	1	35	2-6-23
36	Embedded firmware design and development - Embedded firmware design Approaches	L+D	LCD/BB	1	36	5-6-23
37	Embedded firmware Development	L+D	LCD/BB	1	37	7-6-23
38	Embedded firmware Development	L+D	LCD/BB	1	38	8-6-23
39	Embedded firmware Development	L+D	LCD/BB	1	39	9-6-23
40	Embedded firmware Development	L+D	LCD/BB	1	40	10-6-23
<b>MODULE 5 Operating Systems</b>						
41	Operating System basics, Types of operating systems	L+D	LCD/BB	1	41	12-6-23
42	Task, process and threads	L+D	LCD/BB	1	42	14-6-23
43	Thread pre-emption, Pre-emptive Task scheduling techniques	L+D	LCD/BB	1	43	15-6-23
44	Task Communication, Task synchronization issues – Racing and Deadlock	L+D	LCD/BB	1	44	16-6-23

45	Concept of Binary and counting semaphores (Mutex example without any program).	L+D	LCD/BB	1	45	19-6-23
46	How to choose an RTOS, Integration and testing of Embedded hardware and firmware	L+D	LCD/BB	1	46	21-6-23
47	Embedded system Development Environment	L+D	LCD/BB	1	47	22-6-23
48	Block diagram (excluding Keil), Disassembler/decompiler, simulator	L+D	LCD/BB	1	48	23-6-23
49	emulator and debugging techniques	L+D	LCD/BB	1	49	30-6-23
50	emulator and debugging techniques	L+D	LCD/BB	1	50	6-7-23
51	Revision	L+D	LCD/BB	1	51	7-7-23

  
Course Incharge

  
Module coordinator

  
HOD

  
PRINCIPAL



K. S. INSTITUTE OF TECHNOLOGY BANGALORE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

NAME OF THE STAFF : DR. CHANDA V REDDY  
SUBJECT CODE/NAME : 18EC63 MICROWAVE THEORY AND ANTENNA  
SEMESTER/YEAR : VI / III  
ACADEMIC YEAR : 2022-2023

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date
<b>MODULE 1: Microwave Tubes</b>						
1	Microwave Transmission Lines: Transmission Line equations and solutions with problems	L+D	BB	1	1	20/3/2023, 23/3/2023, 23/3/2023, 24/3/2023
2	Reflection Coefficient and Transmission Coefficient with Problems	L+D, PS	BB	3	4	27/3/2023, 29/3/2023, 30/3/2023,
3	Standing Wave and Standing Wave Ratio,	L+D	BB	1	5	30/3/2023,
4	Smith Chart - problems	L+D, PS	BB, PPT	2	7	31/3/2023, 1/4/2023,
5	Single Stub matching – problems	L+D, PS	BB, PPT	1	8	5/4/2023,
6	Microwave Tubes: Microwave Frequencies, Microwave devices, Microwave Systems,	L+D	BB, PPT	1	9	6/4/2023
7	Introduction Reflex Klystron oscillator	L+D	BB, PPT	3	12	6/4/2023
8	Mechanism of Oscillations	L+D	BB, PPT	1	13	10/4/2023
9	Modes of Oscillations, Mode Curve (Qualitative Analysis only)	L+D	BB, PPT	2	15	12/4/2023
<b>MODULE 2: Microwave Network theory</b>						
9	Introduction, Symmetrical Z and Y-Parameters for Reciprocal Networks	L+D, PS	BB	1	16	13/4/2023
10	S matrix representation of Multi-Port Networks	L+D	BB	2	18	13/4/2023, 15/4/2023
11	Properties and Comparison of S matrix with Z	L+D	BB	1	19	20/4/2023

	and Y matrices					
12	<b>Microwave Passive Devices: Coaxial Connectors and Adapters</b>	L+D	BB, PPT	1	20	20/4/2023
13	Attenuators, Phase Shifters	L+D	BB, PPT	1	21	21/4/2023
14	Waveguide Tees – E TEE	L+D	BB, PPT	1	22	24/4/2023
15	H TEE	L+D	BB, PPT	1	23	26/4/2023
116	Magic tees	L+D	BB, PPT	1	24	27/4/2023
<b>Module 3: Strip Lines</b>						
19	Introduction, Micro Strip lines,	L+D, PS	BB, PPT	1	25	27/4/2023
20	Parallel strip lines	L+D, PS	BB, PPT	1	26	28/4/2023
21	Coplanar strip lines, Shielded strip Lines	L+D	BB, PPT	1	27	29/4/2023
22	<b>Antenna Basics: Introduction, Basic Antenna Parameters</b>	L+D, PS	BB, PPT	1	28	3/5/2023
23	Patterns, Beam Area, Beam Efficiency	L+D	BB, PPT	1	29	4/5/2023
24	Radiation Intensity	L+D, PS	BB, PPT	1	30	4/5/2023
25	Directivity and Gain, Antenna Apertures	L+D, PS	BB, PPT	1	31	5/5/2023
26	Effective Height	L+D, PS	BB, PPT	1	32	8/5/2023
27	Radio Communication Link	L+D, PS	BB, PPT	1	33	10/5/2023
28	Problems	L+D, PS	BB, PPT	1	34	11/5/2023
29	Antenna Field Zones	L+D, PS	BB, PPT	2	36	11/5/2023, 12/5/2023
<b>Module 4: Point Sources and Arrays</b>						
30	Introduction, Point Sources	L+D	BB	1	37	13/5/2023
31	Power Patterns, Power Theorem	L+D, PS	BB	1	38	15/5/2023
32	Radiation Intensity, Field Patterns, Phase Patterns	L+D, PS	BB	1	39	17/5/2023
33	Arrays of Two Isotropic Point Sources	L+D	BB	1	40	18/5/2023
34	Pattern Multiplication	L+D, PS	BB	1	41	18/5/2023
35	Linear Arrays of n Isotropic Point Sources of equal Amplitude and Spacing	L+D, PS	BB	1	42	19/5/2023
36	<b>Electric Dipoles: Introduction, Short Electric Dipole</b>	L+D	BB	1	43	25/5/2023
37	Fields of a Short Dipole (General and Far Field Analyses)	L+D, PS	BB	1	44	25/5/2023
38	Radiation Resistance of a Short Dipole	L+D	BB	1	45	26/5/2023
39	Thin Linear Antenna (Field Analyses)	L+D	BB	1	46	1/6/2023
40	Radiation Resistances of Lambda/2 Antenna	L+D, PS	BB	1	47	1/6/2023


Module 5: Loop and Horn Antenna10-5						20
41	Introduction, Small loop	L+D, PS	BB, PPT	1	48	2/6/2023
42	Comparison of Far fields of Small Loop and Short Dipole	L+D	BB, PPT	1	49	5/6/2023
43	The Loop Antenna General Case	L+D	BB, PPT	1	50	7/6/2023
44	Far field Patterns of Circular Loop Antenna with Uniform Current	L+D	BB, PPT	1	51	8/6/2023
45	Radiation Resistance of Loops	L+D, PS	BB, PPT	1	52	8/6/2023
46	Directivity of Circular Loop Antennas with Uniform Current	L+D, PS	BB, PPT	1	53	9/6/2023
47	Horn antennas: Rectangular Horn Antennas	L+D, PS	BB, PPT	1	54	10/6/2023
48	Antenna Types: Helical Antenna	L+D, PS	BB, PPT	1	55	12/6/2023
49	Helical Geometry	L+D, PS	BB, PPT	1	56	14/6/2023
50	Practical Design Considerations of Helical Antenna	L+D, PS	BB, PPT	1	57	15/6/2023
51	Yagi-Uda array	L+D	BB, PPT	1	58	15/6/2023
52	Parabola General Properties	L+D	BB, PPT	1	59	16/6/2023
53	Log Periodic Antenna	L+D	BB, PPT	1	60	19/6/2023
54	Revision Mod 1	D	BB, PPT	1	61	21/6/2023
55	Revision Mod 2	D	BB, PPT	1	62	22/6/2023
56	Revision Mod 3	D	BB, PPT	1	63	22/6/2023
57	Revision Mod 4	D	BB, PPT	1	64	23/6/2023
58	Revision Mod 5	D	BB, PPT	1	65	30/6/2023

**Text Books:**

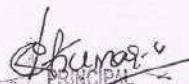
1. **Microwave Engineering** – Annapurna Das, Sisir K Das, TMH, Publication, 2nd, 2010.
2. **Microwave Devices and circuits**- Samuel Y Liao, Pearson Education
3. **Antennas and Wave Propagation**- John D. Krauss, Ronald J Marhefka, Ahmad S Khan, 4th Edition, McGraw Hill Education, 2013

Details of the teaching aids: 1. BB – Black Board  
2. PPT Power Point Presentation  
3. PS – Problem Solving

  
Course Incharge

  
Module coordinator

  
HOD ECE

  
Principal  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109.



2

**K. S. INSTITUTE OF TECHNOLOGY BANGALORE**  
**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**LESSON PLAN 2022-23 EVEN SEMESTER**

**COURSE INCHARGE** : Dr. Surekha Borra  
**COURSE CODE/TITLE** : 18EC646/ Python Application Programming  
**YEAR/ SEMESTER/SECTION** : 4/6 / A  
**BRANCH** : ECE

Sl. No.	Topic to be delivered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date
<b>Module 1: INTRODUCTION</b>						
1	Introduction: Why should you learn to write programs? Computer hardware architecture	L+D	BB+PPT	1	1	20/3/23
2	Terminology: Interpreter and compiler, programs, building blocks, Debugging	L+D	BB+PPT	1	2	21/3/23
3	Variables, expressions, and statements	L+D	BB+PPT	1	3	23/3/23
4	Variables, expressions, and statements	L+D	BB+PPT		4	24/3/23
5	Variables, expressions, and statements: Exercises	L+D	BB+PPT	1	5	25/3/23
6	Variables, expressions, and statements: Exercises	L+D	BB+PPT	1	6	27/3/23
7	Conditional execution	L+D	BB+PPT	1	7	28/3/23
8	Conditional execution: Exercises	L+D	BB+PPT	1	8	30/3/23
9	Functions	L+D	BB+PPT	1	9	31/3/23
10	Functions: Exercises	L+D	BB+PPT	1	10	1/4/23
<b>Module 2: ITERATIONS</b>						
11	Iteration	L+D	BB+PPT	1	11	4/4/23
12	Iteration: Exercises	L+D	BB+PPT	1	12	6/4/23
13	Strings	L+D	BB+PPT	1	13	10/4/23
14	Strings: Exercises	L+D	BB+PPT	1	14	11/4/23
15	Strings: Exercises	L+D	BB+PPT	1	15	13/4/23
16	Files	L+D	BB+PPT	1	16	15/4/23

17	IA-1				17	18/4/23
18	Files: Exercises	L+D	BB+PPT	1	18	20/4/23
19	Files; Exercises			1	19	21/4/23
<b>Module 3: LISTS</b>						
20	Lists	L+D	BB+PPT	1	20	24/4/23
21	Lists: Exercises	L+D	BB+PPT	1	21	25/4/23
22	Lists: Exercises	L+D	BB+PPT	1	22	27/4/23
23	Dictionaries	L+D	BB+PPT	1	23	28/4/23
24	Dictionaries: Exercises	L+D	BB+PPT	1	24	29/4/23
25	Dictionaries: Exercises	L+D	BB+PPT	1	25	2/5/23
26	Tuples	L+D	BB+PPT	1	26	4/5/23
27	Tuples: Exercises	L+D	BB+PPT	1	27	5/5/23
28	Regular Expressions	L+D	BB+PPT	1	28	8/5/23
29	Regular Expressions: Exercises	L+D	BB+PPT	1	29	9/5/23
<b>Module 4: CLASSES AND OBJECTS</b>						
30	Classes and objects	L+D	BB+PPT	1	30	11/5/23
31	Classes and objects	L+D	BB+PPT	1	31	12/5/23
32	Classes and objects: Exercises	L+D	BB+PPT	1	32	13/5/23
33	Classes and Functions	L+D	BB+PPT	1	33	15/5/23
34	Classes and Functions: Exercises	L+D	BB+PPT	1	34	16/5/23
35	Classes and Methods	L+D	BB+PPT	1	35	18/5/23
36	Classes and Methods: Exercises	L+D	BB+PPT	1	36	19/5/23
<b>Module 5: NETWORKED PROGRAMS</b>						
37	Networked programs	L+D	BB+PPT	1	37	22/5/23
38	Networked Programs: Exercises	L+D	BB+PPT	1	38	23/5/23
39	Using Web Services	L+D	BB+PPT	1	39	25/5/23
40	Using Web Services: Exercises	L+D	BB+PPT	1	40	26/5/23
41	Using Web Services: Exercises	L+D	BB+PPT	1	41	27/5/23
42	IA-2				42	30/5/23
43	Using databases Exercises	L+D	BB+PPT	1	43	1/6/23
44	Using databases Exercises	L+D	BB+PPT	1	44	2/6/23
45	SQL	L+D	BB+PPT	1	45	5/6/23
46	SQL Exercises	L+D	BB+PPT	1	46	6/6/23
47	Additional Exercises	L+D	BB+PPT	1	47	8/6/23

48	Additional Exercises	L+D	BB+PPT	1	48	9/6/23
49	Additional Exercises	L+D	BB+PPT	1	49	12/6/23
50	Additional Exercises	L+D	BB+PPT	1	50	13/6/23
51	Additional Exercises	L+D	BB+PPT	1	51	15/6/23
52	Additional Exercises	L+D	BB+PPT	1	52	16/6/23
53	Additional Exercises	L+D	BB+PPT	1	53	19/6/23
54	Mini-Project Presentations	L+D	BB+PPT	1	54	20/6/23
55	Mini-Project Presentations	L+D	BB+PPT	1	55	22/6/23
56	Mini-Project Presentations	L+D	BB+PPT	1	56	23/6/23
57	Mini-Project Presentations	L+D	BB+PPT	1	57	24/6/23
58	Mini-Project Presentations	L+D	BB+PPT	1	58	26/6/23
59	Mini-Project Presentations	L+D	BB+PPT	1	59	27/6/23
60	Mini-Project Presentations	L+D	BB+PPT	1	60	30/6/23
61	IA-3				61	4/7/23
62	Mini-Project Presentations	L+D	BB+PPT	1	62	6/7/23
63	Mini-Project Presentations	L+D	BB+PPT	1	63	7/7/23
64	Mini-Project Presentations	L+D	BB+PPT	1	64	10/7/23

**Textbooks:**

1. Charles R. Sseverance, "Python for Everybody: Exploring Data Using Python 3", 1 Edition, Create Space Independent Publishing Platform, 2016 (Chapters 1 – 13, 15).
2. Allen B. Doey, "Think Python: How to Think Like a Computer Scientist", 2n Edition, Green Tea Press, 2015 (Chapters 15.16.17)

**Reference Books:**

1. Mark Lutz, "Programming Python", 4th Edition, O'Reilly Media, 2011 ISBN-13: 978-9350232873.
2. Wesley J Chun, "Core Python Applications Programming", 3rd Edition, Pearson Education India, 2015. ISBN—13: 978—9332555365.
3. Reema Thareja, "Python Programming using problem solving approach", Oxford university press, 2017

**Web Materials:**

- W1: <https://nptel.ac.in/courses/106106145/>  
W2: <https://nptel.ac.in/courses/117106113/34>  
W3: <https://nptel.ac.in/courses/106105166/26>

**Details of the teaching aids:**

Black Board and Power Point Presentations, Python IDE, Jupyter Notebook

  
**Course Incharge**

  
**Module Coordinator**

  
**HOD-CE**

  
**PRINCIPAL**





K S INSTITUTE OF TECHNOLOGY BANGALORE  
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

NAME OF THE STAFF : BHARGAVI ANANTH  
SUBJECT CODE/NAME : 18ME653/SUPPLY CHAIN MANAGEMENT  
SEMESTER/YEAR/SEC : VI / III/A&B  
ACADEMIC YEAR : 2022-23

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date
<b>MODULE 1: Introduction: Supply Chain</b>						
1	Fundamental	L	P	1	1	20/3/23
2	Evolution	L	P	1	2	21/3/23
3	Role in Economy	L	P	1	3	24/3/23
4	Importance	L	P	1	4	27/3/23
5	Decision Phases	L	P	1	5	28/3/23
6	Supplier Manufacturer Customer Chain	L	P	1	6	29/3/23
7	Enablers/Drivers of supply chain performance	L	P	1	7	31/3/23
8	supply chain strategy	L	P	1	8	1/4/23
9	supply chain performance measures	L	P	1	9	4/4/23
10	Case Study	L	P	1	10	5/4/23
11	Examples	L	P	1	11	10/4/23
<b>MODULE 2: Strategic Sourcing Outsourcing</b>						

12	Strategic Sourcing - Introduction	L	P	I	12	11/4/23
13	Make vs Buy	L	P	I	13	12/4/23
14	Identifying Core processes	L	P	I	14	15/4/23
15	Market vs Hierarchy	L	P	I	15	21/4/23
16	Make vs Buy continuum	L	P	I	16	24/4/23
17	sourcing strategy	L	P	I	17	25/4/23
18	supplier selection and contract negotiation	L	P	I	18	26/4/23
19	creating a world class supply base	L	P	I	19	28/4/23
20	supplier development	L	P	I	20	29/4/23
21	world wide sourcing.	L	P	I	21	2/5/23
22	Case Study	L	P	I	22	3/5/23
<b>Module 3: Warehouse Management and Supply Chain Distribution Network Design</b>						
23	Warehouse management Stores management – Introduction	L	P	I	23	5/5/23
24	stores systems and procedures	L	P	I	24	8/5/23
25	incoming materials control – stores accounting and stock verification obsolete	L	P	I	25	9/5/23
26	surplus and scrap value analysis	L	P	I	26	10/5/23
27	material handling transportation and traffic management	L	P	I	27	11/5/23
28	operational efficiency	L	P	I	28	13/5/23
29	productivity – cost effectiveness	L	P	I	29	15/5/23
30	performance measurement	L	P	I	30	16/5/23
31	Supply Chain Network Distribution Network Design – Role – factors influencing options	L	P	I	31	17/5/23
32	value addition – distribution strategies	L	P	I	32	19/5/23
33	models for facility location and capacity allocation. Distribution Centre Location Models	L	P	I	33	22/5/23
<b>Module 4: Supply Chain Network Optimization Models</b>						
34	Supply Chain Network Optimization Models – Introduction	L	P	I	34	23/5/23

35	Impact of Uncertainty on Network Design	L	P	1	35	24/5/23
36	Network Design decisions using decision tree	L	P	1	36	26/5/23
37	Network Design decisions using decision tree	L	P	1	37	27/5/23
38	Planning demand	L	P	1	38	27/4/23
39	multiple item	L	P	1	39	1/6/23
40	multiple location inventory management	L	P	1	40	5/6/23
41	pricing management	L	P	1	41	6/6/23
42	Revenue management	L	P	1	42	7/6/23
43	Case Study	L	P	1	43	9/6/23
44	Examples	L	P	1	44	10/6/23
<b>MODULE 5: Current Trends in Supply Chain Integration</b>						
45	Current Trends - Introduction	L	P	1	45	12/6/23
46	Supply Chain Integration	L	P	1	46	13/6/23
47	Building partnership and trust in supply chain.	L	P	1	47	14/6/23
48	Value of information: Bullwhip effect	L	P	1	48	16/6/23
49	Effective Forecasting – coordinating the supply chain.	L	P	1	49	19/6/23
50	Supply Chain restructuring	L	P	1	50	20/6/23
51	supply chain mapping – supply chain process restructuring	L	P	1	51	21/6/23
52	postpone the point of differentiation	L	P	1	52	23/6/23
53	IT in Supply Chain – Agile Supply Chains	L	P	1	53	24/6/23
54	Reverse Supply chain. Future of IT in supply chain	L	P	1	54	30/6/23
55	E-business in supply chain	L	P	1	55	7/7/23



Signature of Course Incharge



Signature of Module Coordinator



Signature of HOD/ECE



12

**K. S. INSTITUTE OF TECHNOLOGY, BENGALURU - 560109**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**COURSE PLAN 2022-23 EVEN SEMESTER**

**COURSE INCHARGE** : Mrs.V.SANGEETHA  
**COURSE CODE/TITLE** : 18EC81/Wireless and Cellular communication  
**YEAR/ SEMESTER/SECTION** : IV/VIII/A  
**BRANCH** : ECE

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date
<b>MODULE 1: Mobile Radio Propagation</b>						
1	Mobile Radio Propagation – Large Scale Path Loss – Free Space Propagation Model	L+D	BB	1	1	13.02.2023
2	Relating Power to Electric Field, Three Basic Propagation Mechanisms – Reflection (Ground Reflection), Diffraction, Scattering	L+D	BB	1	2	13.02.2023
3	Practical Link Budget, Fading and Multipath – Broadband wireless channel	L+D	BB	1	3	14.02.2023
4	Delay Spread and Coherence Bandwidth, Doppler Spread and Coherence Time	L+D	BB	1	4	14.02.2023
5	Angular spread and Coherence	L+D,AV	BB,LCD	1	5	20.02.2023
6	Distance Statistical Channel Model of a Broadband Fading Channel	L+D	BB	1	6	20.02.2023
7	The Cellular Concept – Cellular Concept	L+D,AV	BB,LCD	1	7	21.02.2023
8	Analysis of Cellular Systems	L+D	BB	1	8	21.02.2023
9	Sectoring	L+D	BB	1	9	27.02.2023
10	Problems	L+PS	BB	1	10	27.02.2023

MODULE 2: GSM and TDMA Technology						
11	GSM System overview – Introduction	L+D	BB	1	11	28.02.2023
12	GSM Channel Concept	L+D	BB	1	12	28.02.2023
13	GSM Channel Concept	L+D	BB	1	13	06.03.2023
14	GSM System Operations	L+AV	LCD	1	14	06.03.2023
15	GSM System Operations	L+D	BB	1	15	07.03.2023
16	GSM Identities	L+D	BB	1	16	07.03.2023
17	Internal Assessment-1			1	17	13.03.2023
18	Infrastructure Communications (Um Interface)	L+D	BB	1	18	14.03.2023
19	Network and System Architecture	L+D	BB	1	19	14.03.2023
20	GSM System Operations	L+AV	LCD	1	20	20.03.2023
21	Traffic cases, GSM	L+AV	LCD	1	21	20.03.2023
MODULE 3: CDMA Technology						
22	CDMA System Over view- Introduction	L+AV	LCD	1	22	21.03.2023
23	CDMA Network and system Architecture	L+D	BB	1	23	21.03.2023
24	CDMA Basics	L+AV	LCD	1	24	27.03.2023
25	CDMA Basics	L+D	BB	1	25	27.03.2023
26	CDMA Channel Concepts	L+D	BB	1	26	28.03.2023
27	CDMA Channel Concepts	L+D	BB	1	27	28.03.2023
28	CDMA System(Layer 3)operations 3G CDMA	L+D	BB	1	28	04.04.2023
MODULE 4: LTE – 4G						
29	Key Enablers for LTE 4G – OFDM	L+D	BB	1	29	04.04.2023
30	SC-FDE, SC-FDMA	L+AV	LCD	1	30	10.04.2023
31	Channel Dependent Multiuser Resource Scheduling	L+D	LCD, BB	1	31	10.04.2023
32	Multi-Antenna Techniques, Flat IP Architecture	L+AV	LCD	1	32	11.04.2023
33	LTE Network Architecture	L+D	BB	1	33	11.04.2023
34	Internal Assessment-2				34	17.04.2023
35	Multi-Carrier Modulation – Multicarrier concepts	L+D	BB	1	35	24.04.2023
36	OFDM Basics, OFDM in LTE	L+D	BB	1	36	24.04.2023
37	Timing and Frequency Synchronization	L+D	BB	1	37	25.04.2023
38	Peak to Average Ratio	L+D	BB	1	38	25.04.2023
39	SC-Frequency Domain Equalization, Computational Complexity Advantage of OFDM and SC-FDE	L+D	BB	1	39	02.05.2023

MODULE 5: LTE - 4G						
40	LTE - 4G OFDMA and SC-FDMA , Multiple Access for OFDM Systems, OFDMA, SCFDMA	L+AV,D	LCD,BB	1	40	02.05.2023
41	Multiuser Diversity and Opportunistic Scheduling. OFDMA and SC-FDMA in LTE, OFDMA system Design Considerations,	L+AV	LCD	1	41	08.05.2023
42	The LTE Standard - Introduction to LTE	L+AV	LCD	1	42	08.05.2023
43	Hierarchical Channel Structure of LTE	L+AV,D	LCD,BB	1	43	09.05.2023
44	Downlink OFDMA Radio Resources, Uplink SC-FDMA Radio Resources	L+D	BB	1	44	09.05.2023
45	Internal Assessment-3			1	45	11.05.2023

**Text Books:**

1. Fundamentals of LTE Arunabha Ghosh, Jan Zhang, Jeffercy Andrews, Riaz Mohammed, Pearson education (Formerly Prentice Hall, Communications Engg and Emerging Technologies), ISBN-13: 978-0-13-703311-9.
2. Introduction to Wireless Telecommunications Systems and Networks, Gary Mullet, First Edition, Cengage Learning India Pvt Ltd., 2006, ISBN - 13: 978-81-315-0559-5.


**Reference Books:**


1. "Wireless Communications: Principles and Practice" Theodore Rappaport, 2<sup>nd</sup> Edition ,Prentice Hall Communications Engineering and Emerging Technologies Series, 2002, ISBN 0-13-042232-0.
2. LTE for UMTS Evolution to LTE -Advanced ' Harri Holma and Antti Toskala, Second Edition-2011, John Wiley & Sons, Ltd. Print ISBN:9780470660003.2

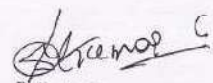
**Details for Teaching Aids:**

1. Black Board
2. Laptop, LCD Projector

  
Course In-charge

  
Module coordinator

  
HOD-ECE  
HEAD OF THE DEPARTMENT  
Dept. of Electronics & Communication Engg  
K.S. Institute of Technology  
Bengaluru - 560 108

  
Principal  
PRINCIPAL  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 108.



15

K S INSTITUTE OF TECHNOLOGY BANGALORE  
DEPARTMENT OF ELECTONICS AND COMMUNICATION ENGINEERING

COURSE PLAN EVEN SEM-2022-23

NAME OF THE STAFF : Mr. Saleem S Tevaramani  
SUBJECT CODE/NAME : 18EC823/ RADAR ENGINEERING  
SEMESTER/SEC : VIII /A  
ACADEMIC YEAR : 2022-2023

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date
<b>Module -1: Basics of Radar &amp; Simple form of Radar Equation</b>						
1	Basics of Radar: Introduction, Maximum Unambiguous Range	L+AV	LCD	1	1	13/02/2023
2	Radar Waveforms, Definitions w.r.t pulse waveforms- PRF, PRI, Duty Cycle,	L+ D	LCD +BB	1	2	13/02/2023
3	Peak Transmitter Power, Average Transmitter Power	L+ D	LCD +BB	1	3	14/02/2023
4	Simple form of Radar Equation	L+D	LCD +BB	1	4	14/02/2023
5	Radar Block Diagram & Operation	L+D	LCD +BB	1	5	20/02/2023
6	Radar Frequencies	L+D	LCD +BB	1	6	20/02/2023
7	Applications of Radar, The Origins of Radar	L+D	LCD +BB	1	7	21/02/2023
8	Problems	L+D	LCD +BB	1	8	21/02/2023
9	Problems	L+D	LCD +BB	1	9	27/02/2023
<b>Module -2: The Radar Equation &amp; Radar Cross Section of Targets</b>						
10	Prediction of Radar Range Performance	L+ D	LCD +BB	1	10	27/02/2023
11	Detection of signal in Noise, Minimum Detectable Signal, Receiver Noise, SNR	L+D	LCD +BB	1	11	28/02/2023

12	Modified Radar Range Equation	L+D, PS	LCD +BB	1	12	28/02/2023
13	Envelope Detector – False Alarm Time & Probability, probability of detection	L+D, PS	LCD +BB	1	13	06/03/2023
14	Radar Cross Section	L+D, PS	LCD +BB	1	14	06/03/2023
15	Simple Targets- sphere, conc sphere	L+D, PS	LCD +BB	1	15	07/03/2023
16	Transmitter Power, PRF & Range Ambiguities	L+D, PS	LCD +BB	1	16	07/03/2023
17	System Losses	L+D	LCD +BB	1	17	20/03/2023
18	Problems	L+D	LCD +BB	1	18	20/03/2023
<b>Module -3: MTI &amp; Pulse Doppler Radar &amp; Digital MTI Processing</b>						
19	Introduction, Principle, Doppler Frequency Shift	L+D	LCD +BB	1	19	21/03/2023
20	Simple CW Radar, sweep to sweep subtraction Delay Line Canceler	L+D	LCD +BB	1	20	21/03/2023
21	MTI Radar with Power amplifier transmitter, Delay line canceler	L+D	LCD +BB	1	21	27/03/2023
22	Frequency Response of single delay line, blind speeds, clutter attenuation	L+D	LCD +BB	1	22	27/03/2023
23	MTI improvement factor	L+D	LCD +BB	1	23	28/03/2023
24	N pulse delay line canceler	L+D	LCD +BB	1	24	28/03/2023
25	Digital MTI Processing: Blind Phases, I & Q channels,	L+D	LCD +BB	1	25	04/04/2023
26	Digital MTI Doppler signal Processor	L+D	LCD +BB	1	26	04/04/2023
27	Moving Target Detector, Original MTD	L+D	LCD +BB	1	27	10/04/2023
<b>Module -4: Tracking Radar &amp; Sequential Lobing</b>						
28	Types of Radar tracking systems	L+AV	LCD +BB	1	28	10/04/2023
29	Monopulse tracking- Amplitude Comparison Monopulse (1D)	L+D	LCD +BB	1	29	11/04/2023
30	Monopulse (2D)	L+D	LCD +BB	1	30	11/04/2023
31	Phase comparison Monopulse	L+D	LCD +BB	1	31	24/04/2023
32	Sequential Lobing	L+D	LCD +BB	1	32	24/04/2023
33	Conical Scan Tracking Radar	L+D	LCD +BB	1	33	25/04/2023
34	Tracking in Range, Comparison of trackers	L+D	LCD +BB	1	34	25/04/2023
<b>Module -5: Radar Antenna &amp; Radar Receiver</b>						




35	Functions of the Radar Antenna	L+AV	LCD +BB	1	35	02/05/2023
36	Antenna Parameters	L+D	LCD +BB	1	36	02/05/2023
37	Electronically steered phased array antennas	L+D	LCD +BB	1	37	08/05/2023
38	The Radar Receiver, Receiver Noise Figure	L+D	LCD +BB	1	38	08/05/2023
39	Superheterodyne receiver, Duplexers	L+D	LCD +BB	1	39	09/05/2023
40	Receivers Protectors	L+D	LCD +BB	1	40	09/05/2023
41	Question Paper discussion	L+D	LCD +BB	1	41	13/05/2023

**Text Book:**

Introduction to Radar Systems- Merrill I Skolink, 3e, TMH, 2001

**Reference Books:**

1. Radar Principles, Technology, Applications – Byron Eddc Pearson Education, 2004.
2. Radar Principles – Pccbles. Jr. P.Z. Wiley, New York,1998
3. Principles of Modern Radar: Basic Principles -Mark A. Rkhards, James A. Scheer, William A, Holm. Yesdee, 2013

  
Course In charge

  
Module Coordinator

  
HOD-ECE