K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

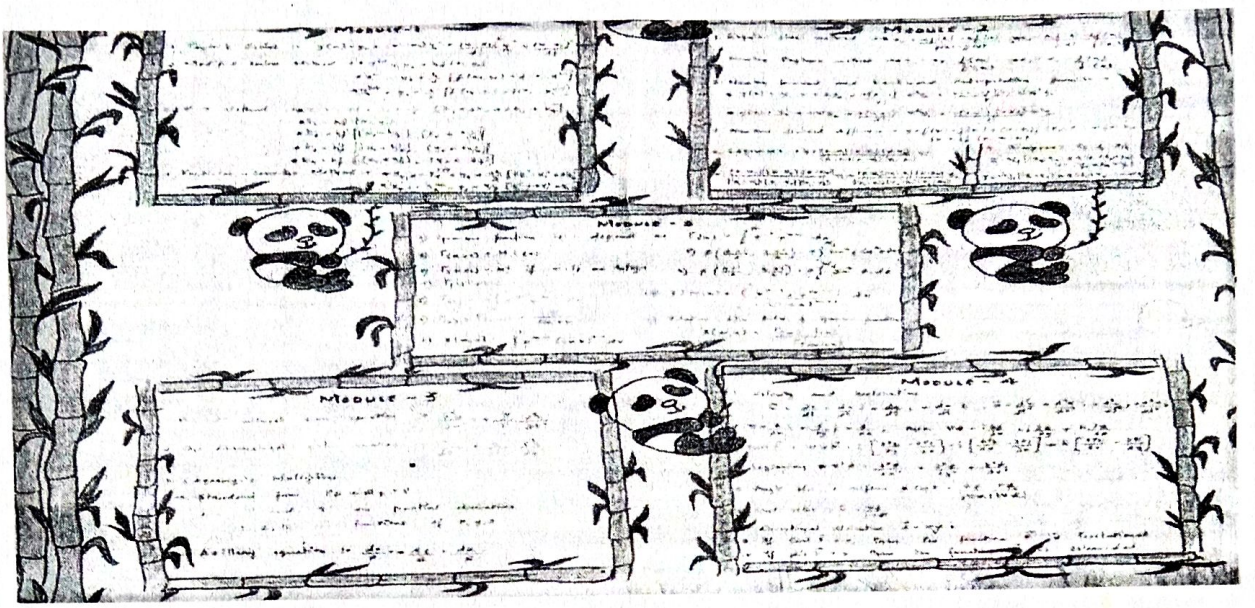
DEARTMENT OF MATHEMATICS

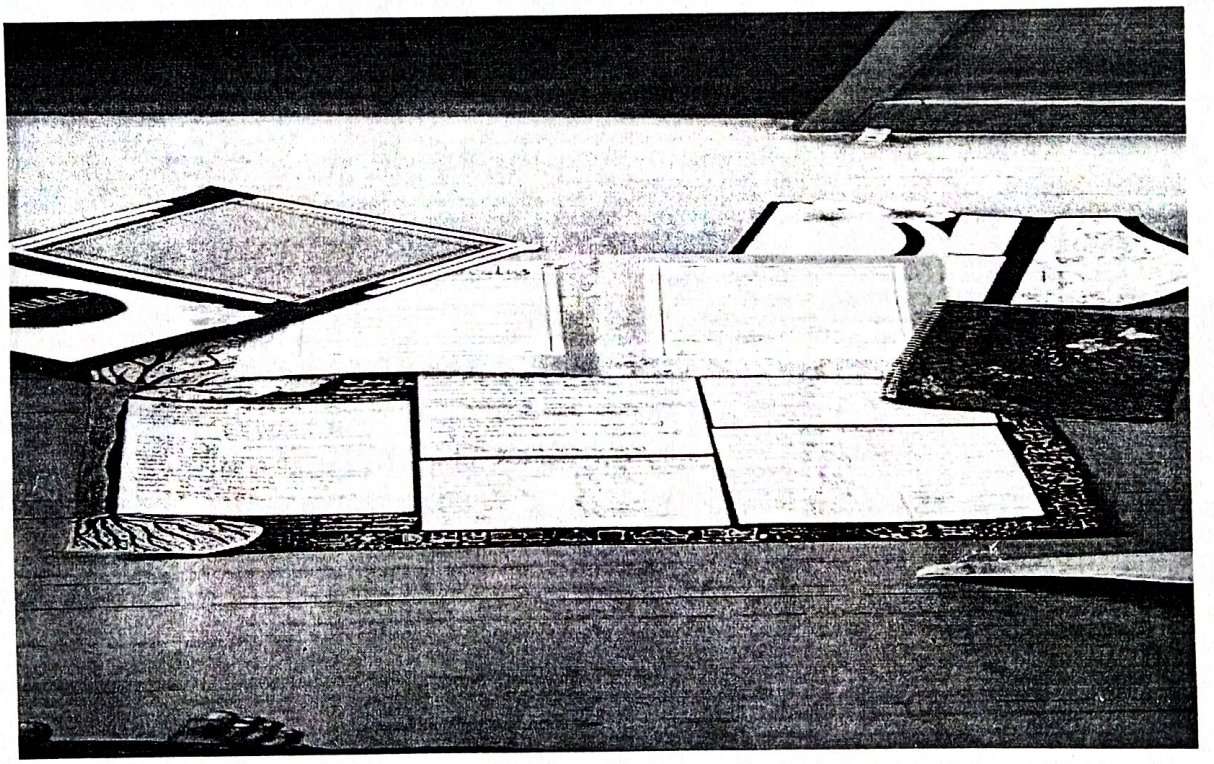
TEACHING AND LEARNING

CONTENT BEYOND THE SYLLABUS

Academic Year	2021-22 (EVEN)
Name of the Faculty	Dr VENKATARAMANA B S/ LAKSHMI C
Course Name /Code	Course: COMPLEX ANALYSIS, PROBABILITY AND STATISTICAL METHODS / 18MAT41
Semester/Section	IV/A & B(ECE)
Activity Name	Poster Presentation
Topic Covered	COMPLEX ANALYSIS, PROBABILITY AND STATISTICAL METHODS
Date	22/8/2022
No. of Participants	112
Objectives/Goals	• To improve the self-learning skills ofstudents • To improve the communication skills ofstudents. • To improve the confidence level and memory of students
ICT Used	Classroom
Appropriate Method/Instructional materials/Exam Questions • Initially prepared charts. • Later students were asked to explain. • Students are informed to prepareinnovatively so that we can analysis their creativity.	
Relevant PO's	9,10,12
Significance of Results/Outcomes	• Students tried to open up and improve their communication skills. • Around60Students prepared charts and delivered theirpresentation.
Reflective Critique	• The activity improved the learning, andcommunication skills ofstudents • The activity provided a platform for students to interact with peers, improve their communication skills and work as individuals.

Proofs :





Signature of Course In charge

Signature of HOD

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engg.

CONTENT BEYOND SYLLABUS **POSTER PRESENTATION**

Batch No.	Students in the batch		Assignment topic
	Roll No.	Name	
1	1KS20EC052	KUSUMA	LPF & HPF
2	1KS20EC048	KIRAN DEV	
3	1KS20EC026	ESHWAR BIRADAR	
4	1KS20EC055	MAHESH BIRADAR	
5	1KS20EC047	KEERTHANA	MONOSTABLE MULTIVIBRATOR
6	1KS20EC014	SAI SRUJITHA	
7	1KS20EC050	K PRATHIMA	
8	1KS20EC053	M ARCHANA	
9	1KS20EC042	JEEVITHA	INSTRUMENTATION AMPLIFIER
10	1KS20EC046	KAVYA	
11	1KS19EC026	ERAM	
12	1KS20EC054	MADIHA	
13	1KS20EC004	AJAY BG	COLPITS OSCILLATOR CRYSTAL OSCILLATOR
14	1KS20EC006	AKASH M	
15	1KS20EC009	BHARATH M	
16	1KS20EC021	DARSHAN KUMAR S	
17	1KS20EC002	ADITI DUBEY	SCHMITT TIGGER
18	1KS20EC008	BS HEMASHREE	
19	1KS20EC030	GANDHAMANI CM	
20	1KS20EC057	MEGHASHREE M	
21		HARSHITHA.J	
22	1KS20EC023	DHAMINI J	BAND PASS

23	1KS20EC025	DIVYA N	BAND REJECT
24	1KS20EC010	BHAVITHA B	
25	1KS19EC034	HIMA SHWETHA	
26	1KS20EC036	HARSHITHA N	INVERTING AND NON INVERTING AMPLIFIERS
27	1KS20EC034	HARSHITHA B L	
28		HARSHITHA N	
29	1KS20EC003	AFEEFA SHARIEFF	RC PAHSE SHIFT OSCILLATOR HARTLEY OSCILLATOR
30	1KS20EC011	BHUVANESHWARI.K	
31	1KS20EC015	UMADEVI	
32	1KS20EC032	HARINI.K	
33	1KS20EC033	HARSHITH GOWDA AR	555 TIMER
34	1KS20EC041	JAYANTH H	
35	1KS20EC028	GAGAN HC	
36	1KS20EC012	CHAITANYA REDDY K	
37	1KS20EC043	AMSHUMANTH	DAC,
38	1KS20EC051	KUMAR K	
39	1KS20EC049	KIRAN V	
40	1KS20EC058	MOHAN	
41	1KS20EC020	DARSHAN K	CLASSIFICATION OF OUTPUT STAGES,CLASSA,B,AB,C
42	1KS20EC037	INCHARA P	
43	1KS20EC029	GAGANA B S	
44	1KS20EC038	CHAITANYA KRISHNA	
45	1KS20EC016	CHAYA S	APPLICATIONS OF 555 TIMER
46	1KS20EC013	CHAITRA	
47	1KS20EC027	BHAVANA	
48	1KS20EC031	GOMITHA	
49	1KS20EC040	JANHAVI	ASTABLE MULTIVIBRATOR

50	1KS20EC039	JAMUNA	
51	1KS20EC045	KAVANA	
52	1KS20EC017	CHETHAN G	ADC
53	1KS20EC018	CHETHAN KUMAR J	
54	1KS20EC019	CHETHAN KUMAR T	
55	1KS20EC01	ABHISHEK J	
56	1KS20EC0	BHARATH	

PO: Addressed : PO9, PO10, PO12

Important dates:

Sl.No	Details	Date
1.	Date of issue of topics for presentation	Date: 21/5/2022
2.	If it is a poster presentation, the posters should be submitted in person by the batch of students.	Submission date : 8/7/22
3.	Presentation date [as per schedule shared]	Shared below
4.	Dates for Appeal/challenge(on or before)	16/8/22

Sl. No.	Details	Date
1.	Last date/time for submission of presentations (assignment)	Date : 8/7/22 Time : 8.30 Before (sharp)
2.	Presentation days	09/7/22, 16/7/22, 30/7/22
3.	If it is a poster presentation, the posters should be submitted in person by the batch of students on or before the mentioned date.	Date: 8/7/22

Course in charge

HoD

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Department of Electronics & Communication Engg.

CONTENT BEYOND SYLLABUS – Analog Ckts- B section

POSTER PRESENTATION

Objective: Poster presentation Based on the Miniprojects

Batch No.	Roll No.	Assignmenttopic
1	1KS20EC78,69,74,82,115	Touch Indicator
2	1KS20EC79,83,94,97,98	Depth Measuring sensor
3	1KS20EC84,87,109, 114	Robot using Aurdino
4	1KS20EC80, 112, 1ks21EC401	Train Accident prevention using Aurdino
5	1KS20EC92,93,95,108	Temperature sensor using Arduino
6	1KS20EC 61,62,65,71	Lasor Security alarm system
7	1KS20EC 70,72,68,60	Rain Detection System
8	1KS20EC 102,110	Fire Alarm using Aurdino
9	1KS20EC103,105,10673	Motion Sensor
10	1KS20EC 111,113,117	Automatic Obstacle detection
11	1KS20EC 63,64,67	Automatic sensing light
12	1KS20EC 101,104,055	Automatic sanitizer dispenser
13	1KS20EC 76,77,107	Traffic light circuit
14	1KS20EC99,96,85	Security Alarm system

Important dates:

Sl.No	Details	Date
1.	Date of issue of topics for presentation	30-5-2022
2.	Lastdate for the submission of the presentation report OR If it is a poster presentation, the posters should be submitted in person by the batch of students.	13-8-2022
3	Presentation date [as per schedule shared]	16-8-22 17-8-22 18-8-22
4	Date of announcement of evaluation details for oral presentation/ poster presentation	Date: Groupemailid:
5	DatesforAppeal/challenge(onorbefore)	

Sl. No.	Details	Date
1.	Lastdate/timeforsubmissionofpresentations(assignment)	Date:13-8-2022 Time:Before 4p.m.
2.	Presentationdays	16-8-22 17-8-22 18-8-22
3.	Ifitisaposterpresentation,theposters should be submitted in personby the batch of students on or beforethementioneddate.	Date:13-8-2022
4.	Date ofannouncement ofresults onthenoticeboardandsenttoyourgroupemail	Date: 22-8-2022
5.	Dates for Appeal/challenge (on orbefore)	24-8-2022

STAFF INCHARGE

H.O.D. (ECE)

(CONTENT BEYOND) SYLLABUS : Control System

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engg.

3rd Assignment

ASSIGNMENTS FORMAT & RUBRIC DETAILS

ASSIGNMENT TYPE: MINI PROJECT ASSIGNMENTFOR CONTROL SYSTEMS

Objective: Demonstration of working prototype using the concepts of Control System Engineering

Instruction to be followed:

1. The topic allotted or assigned must be from the course
2. The work given must be from Apply level onwards
3. This will address PO6, PO7 (*DEPENDING ON THE TOPIC*) PO9, PO10, PO11& PO12
4. **Types of minor projects**

Project type	Details
Mini project	To demonstrate working prototype or a model learnt in the course for a specific application

5. Process to assign and evaluate the assignments steps.

- Divide the students into batch of five
- Officially announce the batches & assignment topic for each batch. The topic selected must be from course.

Batch No.	Students in the batch	Assignment topic
	Roll No.	
1	1KS 20EC0012,030,057	Obstacle Avoiding Robot using Arduino
2	1KS20EC004,06,09,021	Signal Jam
3	1KS20EC035,036,034,008	Automatic Street Light
4	1KS20EC042,046,054,026	Finger Print Based Bank Locker System
5	1KS20EC089,91,27,37	Traffic Alert System for Blind
6	1KS20EC043,49,51,34	Letter Identification
7	1KS20EC023,25,10	Binary Counters using LED
8	1KS20EC013,16,31,27	Water Level Indicator
9	1KS20EC032,15,38,17	Open Loop System
10	1KS20EC041,33,28,58	RFID Door Lock
11	1KS20EC011,03,12,20	Magnetic Elevator
12	1KS20EC040,39,45,19	3D Hologram Screen
13	1KS20EC014,47,50,53	Wireless Mobile Charger

14	1KS20EC026,48,52,56,55	Wireless Notice Board Using Bluetooth
15	1KS20EC078,69,74,82,115	Touch Indicator
16	1KS20EC079,83,94,97,98	Depth Measuring Sensor
17	1KS20EC084,87,109,114	Auridon 4in 1 Robot
18	1KS20EC080,112, 1KS21EC401	Train Accident Prevention Using Arduino
19	1KS20EC092,93,95108	Temperature Sensor Using Ardiuno
20	1KS20EC061,62,65,71	Laser Security Alarm system
21	1KS20EC070,72,68,60	Rain Detection
22	1KS20EC0110,102	Arduino Fire Alarm
23	1KS20EC0103,105,106,73	Motion Sensor
24	1KS20EC111,113,117	Automatic Obstacle Detection
25	1KS20EC063,64,67	Automatic Sensing Light
26	1KS20EC101,104,055	Automatic Sanitizer Dispenser
27	1KS20EC076,77,107	Traffic Light Circuit
28	1KS20EC099,96,85	Security Alarm System

6. Preparation of project report

The project report should be of the following formats.

7. Cover page
8. Bonafide certificate
9. Content
10. Abstract
11. Introduction
12. The details of the project
13. Inferences and results
14. Conclusion
15. References

Course Incharge

HOD

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engg.

Activity Details for Control System Course

Date: 8th Aug 2022

Batch Number	Title of the project	USN of team members	Problem identification & Formulation [5]	Explanation Skills & Viva voce [5]	Team contribution & project Management [5]	Modern Tools usage & lifelong learning [5]		
1	TOUCH INDICATOR	78, 69, 74, 82, 115						
2	HEIGHT OR DEPTH SENSOR MEASURING	079, 083, 94, 97, 98						
3	Aurdino 4 in 1 Robot	84, 87, 109, 114						
4	Train accident Prevention using aurduino	80, 112, 401	5	4	5	5	(19)	Dr. Dinesh Kumar D.S
5	temperature sensor using aurduino	92, 93 95, 108						
6	IR motion sensor using [illegible]	103, 105, 106 73						Dr. Dinesh
7	Laser security Alarm system	61, 62, 65 71	4	4	5	5	(18)	Dr. Dinesh Kumar D.S
8	Rain detector	70, 72, 68, 60	4	4	5	5	(18)	Dr. Dinesh Kumar D.S
9	Aurdino fire alarm system	110, 102	5	4	5	5	(19)	Dr. Dinesh Kumar D.S
10								

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engg.

Activity Details for Control System Course

Date: 8th Aug 2022

Batch Number	Title of the project	USN of team members	Problem identification & Formulation [5]	Explanation Skills & Viva voce [5]	Team contribution & project Management [5]	Modern Tools usage & lifelong learning [5]	
1	TOUCH INDICATOR	78, 69, 74, 82, 115	4	4	5	5	18
2	HEIGHT OR DEPTH SENSOR MEASURING	079, 083, 94, 97, 98	4	4	4	4	16
3	Aurdino 4 in 1 Robot	84, 87, 109, 114	2	3	3	2	10
4	Train accident Prevention using aurduino	80, 112, 401					
5	temperature sensor using aurduino	92, 93 95, 108	3	3	4	4	14
6	Flame sensor	110 002					
7	Motion sensor using IC LM358	103, 105, 106 73	3	3	5	3	14
8	Automatic obstacle detection	111, 113, 117	3	3.5	4	4	14.5
9	Automatic Sensing Light	63, 64 67	4	3	4	3.5	14.5
10							

12

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engg.

Activity Details for Control System Course

Date:8th Aug 2022

Batch Number	Title of the project	USN of team members	Problem identification & Formulation [5]	Explanation Skills & Viva voce [5]	Team contribution & project Management [5]	Modern Tools usage & lifelong learning [5]
21	Signal jammer	1KS20EC009 1KS20EC021 1KS20EC004 1KS20EC006 1KS20EC024	4	2	4	2
22	Water level Indicator	1KS20EC016 1KS20EC013 1KS20EC027 1KS20EC031	2	2	2	2
23	Surveillance Car	1KS20EC43 1KS20EC51 1KS19EC34 1KS20EC49	4	3	3	2
24	Distance measurement using ultrasonic sensor	1KS20EC046 1KS20EC042 1KS20EC054 1KS19EC026	3	3	4	2
25	Smart dust bin	1KS20EC023 1KS20EC025 1KS20EC010	4	4	4	3
26	IOT BASED AUTOMATION FOR smart Home	1KS20EC036 1KS20EC035 1KS20EC034 1KS20EC008	4	4	3	2
27	wireless notice board using bluetooth	1KS20EC026 1KS20EC048 1KS20EC052 1KS20EC055 1KS20EC056	4	4	4	3
28	Wireless mobile charger	1KS20EC053 1KS20EC014 1KS20EC050 1KS20EC044	3	3	3	2
29	Obstacle avoiding robot	1KS20EC002 1KS20EC030 1KS20EC057	3	2	3	2
30	Automatic street light controller & mosquito repeller	003 011 012 020	4	3	4	2

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engg.

Activity Details for Control System Course

Date:8th Aug 2022

Batch Number	Title of the project	USN of team members	Problem identification & Formulation [5]	Explanation Skills & Viva voce [5]	Team contribution & project Management [5]	Modern Tools usage & lifelong learning [5]
31	Automatic Street light & mosquito repellent circuit.	1KS20EC003 1KS20EC011 1KS20EC012 1KS20EC020	3	2	4	2
32	soil moisture detector	1KS20EC029 1KS20EL037 1KS20EC089 1KS20EC091	2	3	3	2
33						
34						
35						
36						

Reproject

10

Judges:

Dr Chanda V. Reddy

Dr. Sudarshan I

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

DEARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

TEACHING AND LEARNING

CONTENT BEYOND SYLLABUS

Academic Year	2021-22 (Even)
Name of the Faculty	Mrs. Bhargavi Ananth
Course Name /Code	Engineering Statistics and Linear Algebra (18EC44)
Semester/Section	IV/A &B
Activity Name	Literature Survey
Topic Covered	Random Variables, Random Processes, Linear Algebra
Date	03/08/2022 – 03/09/2022
No. of Participants	60
Objectives/Goals	• To improve the self-learning skills of students • To improve the communication skills of students.
ICT Used	Mobile/Laptop, Microsoft PowerPoint
Appropriate Method/Instructional materials/Exam Questions • Initially delivered lecture on given topics. • Later students were given a survey paper which had to be understood by a group of 4-5 students and present their understanding	
Relevant PO's	4,6,9,10,12
Significance of Results/Outcomes	• Students tried to open up and develop self learning and communication skills. • 10 groups prepared PPTs and delivered their presentation.
Reflective Critique	• The activity improved the learning, and communication skills of students • The activity provided a platform for students to interact with peers, improve their communication skills and work as individuals.

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

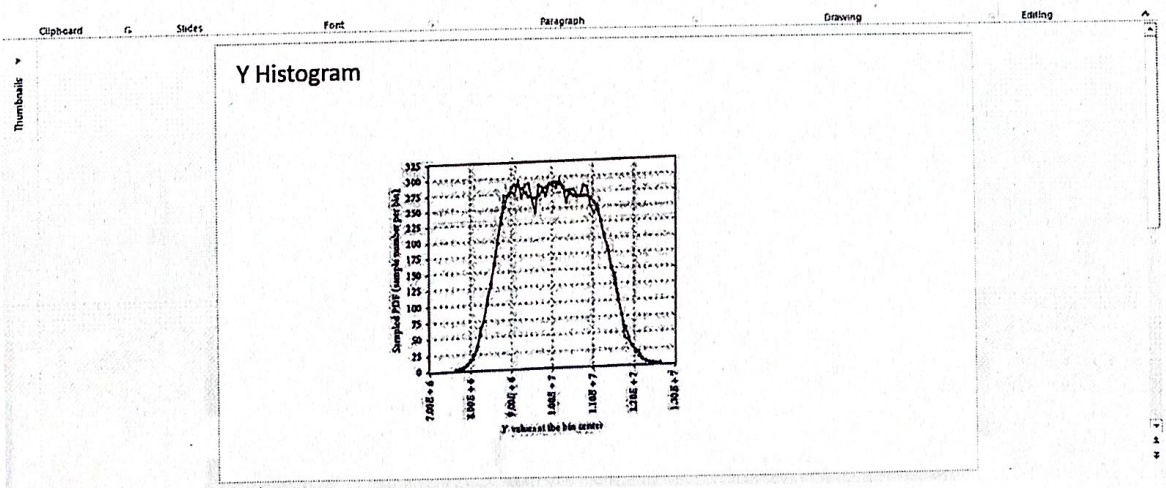
VISVESVARAYA TECHNOLOGICAL UNIVERSITY

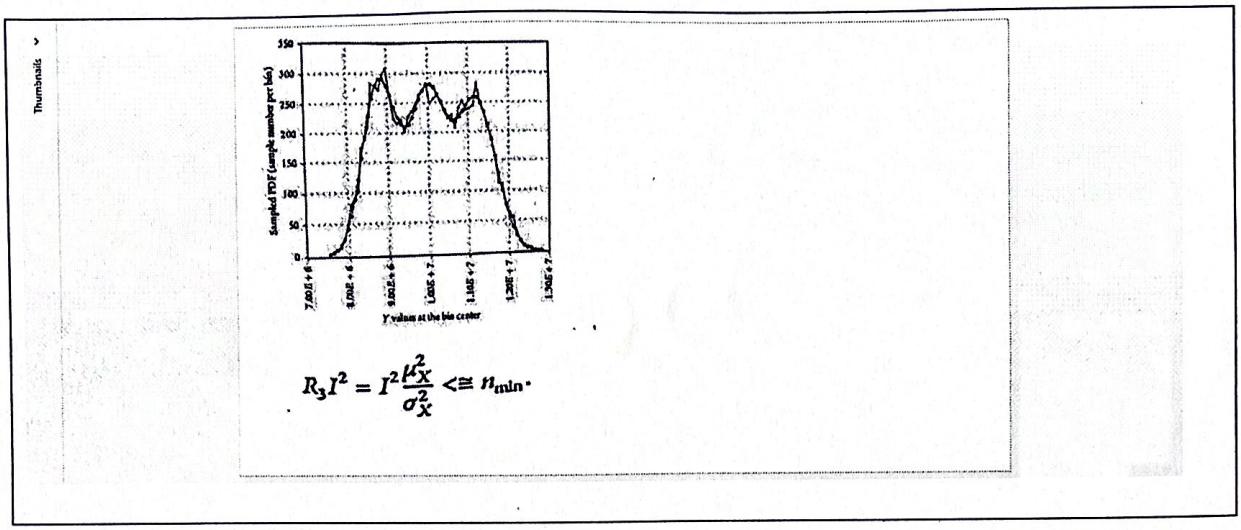
Jnana Sangama, Belgavi-590018

REPORT FOR ENGINEERING STATISTICS & LINEAR ALGEBRA
ON
An Estimate of the Probability Density Function of the Sum of a Random Number *N* of Independent Random Variables

Submitted by

NAME:	USN:
VAISHNAVI. V.H	1KS20EC111
VIJAYALAKSHMI.K	1KS20EC113
YASHILAA.S	1KS20EC117



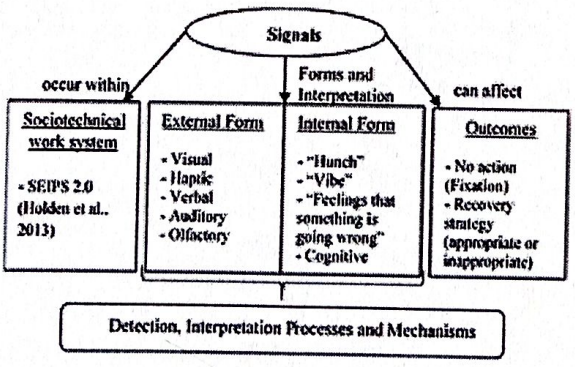


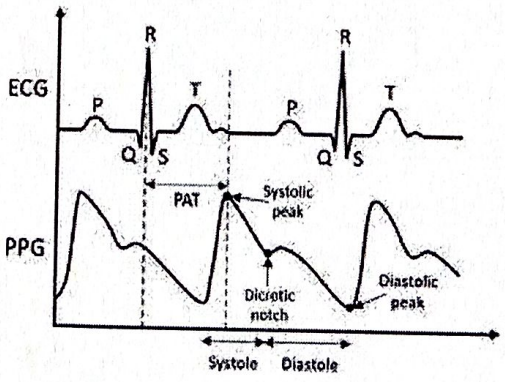
Signature of Course In charge
ECE

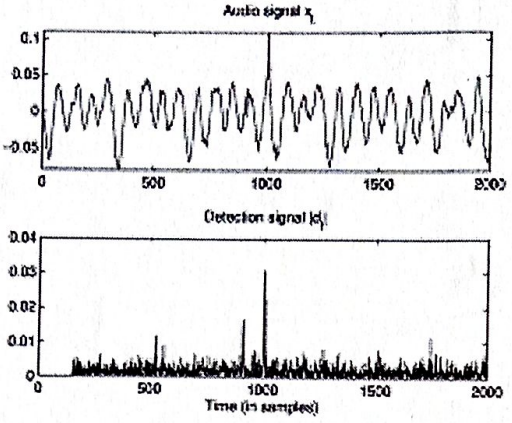
Signature of HOD

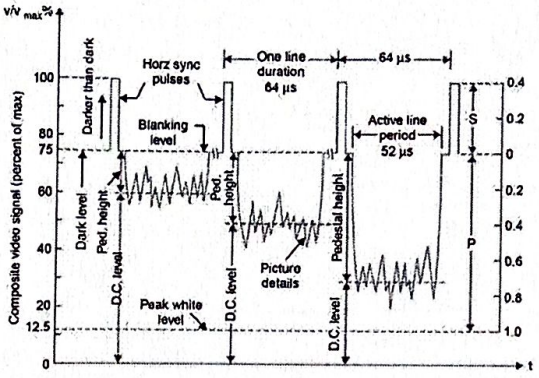
K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109
DEARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Content Beyond syllabus

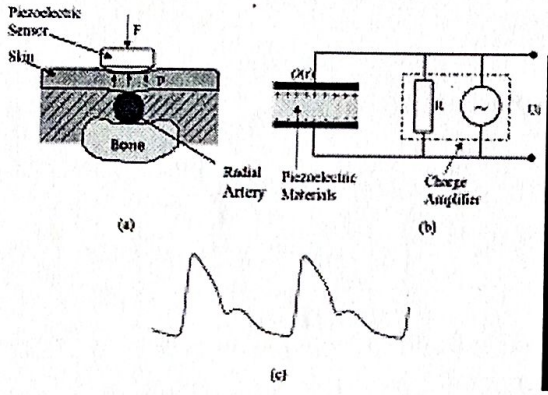
Academic Year	**2021-22 (Even)**
Name of the Faculty	**Jayasudha B S K**
Course Name /Code	**Signals and Systems(18EC45)**
Semester/Section	**IV A & B**
Activity Name	**E-Poster presentation-You can Visualize!**
Topic Covered	**Signals in different domains/applications**
Date	**20/6/2022**
No. of Participants	**116**
Objectives/Goals	• **To make students learn actively by creating e posters on signals in different domains/applications**
Materials Used	**mobile/Laptop, ppt**
Built the creativity skills of students by preparing and presenting E-posters.	
Relevant PO's **PO6, PO7, PO9 PO10,PO12**	
Significance of results/outcomes **Students presented E-posters on signals which helped them build knowledge on types of signals, signals in different domain (time, Frequency), and applications in health, audio, video, Environmental signals. Visualizations helped them understand better.**	
Reflective critique **Hands on skills creating posters, good understanding of concepts.**	
Relevant PO's **PO6, PO7, PO9 PO10,PO12**	

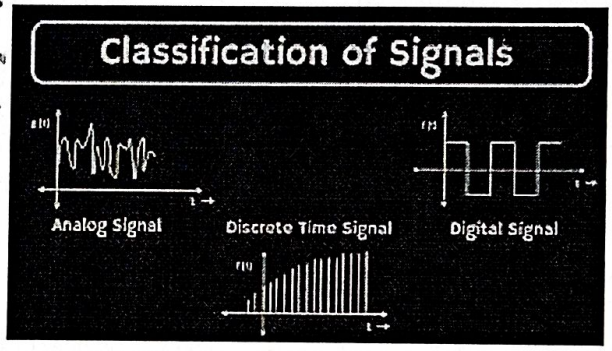




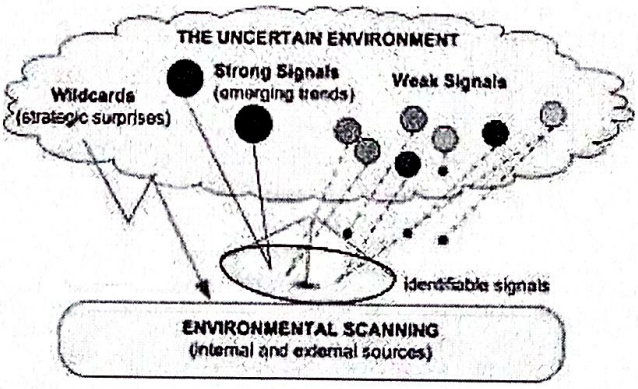








	Analog	Digital
Signal	Analog signal is a continuous signal which represents physical measurements.	Digital signals are discrete time signals generated by digital modulation.
Waves	Denoted by sine waves	Denoted by square waves
Representation	Uses continuous range of values to represent information	Uses discrete or discontinuous values to represent information
Example	Human voice in air, analog electronic devices.	Computers, CDs, DVDs, and other digital electronic devices.
Technology	Analog technology records waveforms as they are.	Samples analog waveforms into a limited set of numbers and records them.
Data transmission	Subjected to deterioration by noise during transmission and write/read cycle.	Can be noise-immune without deterioration during transmission and write/read cycle.
Response to Noise	More likely to get affected reducing accuracy	Less affected since small noise responses are analog in nature
Flexibility	Analog hardware is not flexible	Digital hardware is flexible in implementation
Uses	Can be used in analog devices only. Best suited for audio and video transmission.	Best suited for Computer and digital electronics
Applications	Thermometer	PCs, PDAs



Signature of Course In charge

Signature of HOD

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGG

Course:MC/18EC46	sem:3rd	sec:A

Content beyond the Syllabus - Presentation

Sl. No	USN	Name of the Student	Prepare PPT or Word file to Present these topics
1	1KS19EC026	ERAM FATHIMA	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status.(1 ALP Program) 3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
2	1KS19EC034	HIMA SWETHA S	1.Internal Memory organization 2.Addressing Modes 3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
3	1KS20EC001	ABHISHEK J	1.External Memory (ROM & RAM) interfacing (3 example) 2.Addressing Modes 3.Interfacing 8051 with LCD and Stepper motor
4	1KS20EC002	ADITI DUBEY	1.Branch instructions, Bit manipulation instructions 2.8051 Stack, Stack and Subroutine instructions. 3.Assembly language programming to generate a pulse using Mode-1(2 example)
5	1KS20EC003	AFEEFA SHARIEFF	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Assembly language program examples on subroutine and involving loops(2 example).3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
6	1KS20EC004	AJAY B G	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.3.Assembly language programming to generate a square wave using Mode- 2 on a port pin.(2 example).
7	1KS20EC006	AKASH M	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
8	1KS20EC008	B.S.HEMASHREE	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Addressing Modes 3.Assembly language programming to generate a pulse using Mode-1(2 example)
9	1KS20EC009	BHARATH M	1.8051 Architecture- Registers, Pin diagram 2.Internal Memory organization 3..External Memory (ROM & RAM) interfacing.(3 Example)
10	1KS20EC010	BHAVITHA B	1.Assembly language program examples on subroutine and involving loops(2 example). 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(2 example).3Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch

11	1KS20EC011	BHUVANESHWARI	1.8051 Timers and Counters – Operation and Assembly language programming to generate a pulse using Mode-1 2.8051 C programming to generate a square waveform on a port pin using a Timer interrupt(2 example).3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
12	1KS20EC012	CHAITANYA.K	1.1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.External Memory (ROM & RAM) interfacing.(3 Example) 3.Addressing Modes
13	1KS20EC013	CHAITHRA K	1.8051 Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.8051 Timers and Counters – Operation and Assembly language programming to generate a pulse using Mode-1 . 3.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status
14	1KS20EC014	CHALLAGUNDLA SAI SRUJITHA	1.External Memory (ROM & RAM) interfacing.(3 Example). 2 .Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.3.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status.
15	1KS20EC015	CHALLAGUNDLA UMADEVI	1.Branch instructions, Bit manipulation instructions. Simple Assembly language program examples (without loops) to use these instructions 2.Assembly language program examples on subroutine and involving loops. 3.Assembly language programming to generate a pulse using Mode-1 and a square wave using Mode- 2 on a port pin
16	1KS20EC016	CHAYA S	1.Internal Memory organization. External Memory (ROM & RAM) interfacing. 2.Addressing Modes 3.Simple Serial Port programming in Assembly and C
17	1KS20EC017	CHETHAN G	1.External Memory (ROM & RAM) interfacing (3 example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(2 example) 3.Interfacing 8051 with LCD and Stepper motor
18	1KS20EC018	CHETHAN KUMAR	1.8051 Architecture- Registers, Pin diagram 2.External Memory (ROM & RAM) interfacing 3.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(3 example).
19	1KS20EC019	CHETHAN KUMAR T	1.8051 Timers and Counters – Operation and Assembly language programming to generate a pulse using Mode-1. 2.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 3..External Memory (ROM & RAM) interfacing.(3 Example)
20	1KS20EC020	DARSHAN K	1.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 2.Branch instructions, Bit manipulation instructions. Simple Assembly language program examples (without loops) to use these instructions .3.Assembly language program examples on subroutine and involving loops
21	1KS20EC021	DARSHAN KUMAR S	1.8051 C programming to generate a square waveform on a port pin using a Timer interrupt 2.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially 3.Assembly language programming to generate a pulse using Mode-1 and a square wave using Mode- 2 on a port pin
22	1KS20EC023	DHAMINI J	1.Interfacing 8051 to ADC-0808 ,Stepper motor and their 8051 Assembly language interfacing programming 2.RS- 232 standard, 9 pin RS232 signals 3.Assembly language programming to generate a square wave using Mode- 2 on a port pin.
23	1KS20EC024	DHRUVA KUMAR S	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.8051 Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 3..8051 Timers and Counters – Operation and Assembly language programming to generate a pulse using Mode-1.

24	1KS20EC025	DIVYA N	1.Interfacing 8051 to ADC-0808 ,Stepper motor and their 8051 Assembly language interfacing programming 2.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 3.Assembly language programming to generate a square wave using Mode- 2 on a port pin.
25	1KS20EC026	ESHWAR BIRADAR	1.Branch instructions, Bit manipulation instructions 2.8051 Stack, Stack and Subroutine instructions. 3.Assembly language programming to generate a pulse using Mode-1(2 example)
26	1KS20EC027	G BHAVANA PRIYADARSHINI	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Assembly language program examples on subroutine and involving loops(2 example).3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
27	1KS20EC028	GAGAN H C	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.3.Assembly language programming to generate a square wave using Mode- 2 on a port pin.(2 example).
28	1KS20EC029	GAGANA B S	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
29	1KS20EC030	GANDHAMANI C M	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Addressing Modes 3.Assembly language programming to generate a pulse using Mode-1(2 example)
30	1KS20EC031	GOMITHA R C	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status.(1 ALP Program)
31	1KS20EC032	HARINI K	1.Internal Memory organization 2.Addressing Modes 3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
32	1KS20EC033	HARSHITH GOWDA A R	1.External Memory (ROM & RAM) interfacing (3 example) 2.Addressing Modes 3.Interfacing 8051 with LCD and Stepper motor
33	1KS20EC034	HARSHITHA.B.L	1.Branch instructions, Bit manipulation instructions 2.8051 Stack, Stack and Subroutine instructions. 3.Assembly language programming to generate a pulse using Mode-1(2 example)
34	1KS20EC035	HARSHITHA J	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Assembly language program examples on subroutine and involving loops(2 example).3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
35	1KS20EC036	HARSHITHA N	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
36	1KS20EC037	INCHARA.P	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Addressing Modes 3.Assembly language programming to generate a pulse using Mode-1(2 example)
37	1KS20EC038	JAMPULA CHAITHANYA KRISHNA	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status.(1 ALP Program)

38	1KS20EC039	JAMUNA S G	1.Internal Memory organization. External Memory (ROM & RAM) interfacing. 2.Addressing Modes 3.Simple Serial Port programming in Assembly and C
39	1KS20EC040	JANHAVI R	1.External Memory (ROM & RAM) interfacing (3 example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(2 example) 3.Interfacing 8051 with LCD and Stepper motor
40	1KS20EC041	JAYANTH H	1.8051 Architecture- Registers, Pin diagram 2.External Memory (ROM & RAM) interfacing 3.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(3 example).
41	1KS20EC042	K.JEEVITHA	1.8051 Timers and Counters – Operation and Assembly language programming to generate a pulse using Mode-1. 2.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 3..External Memory (ROM & RAM) interfacing.(3 Example)
42	1KS20EC043	K M AMSHUMANTH	1.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 2.Branch instructions, Bit manipulation instructions. Simple Assembly language program examples (without loops) to use these instructions .3.Assembly language program examples on subroutine and involving loops
43	1KS20EC045	KAVANA.G.S	1.Interfacing 8051 to ADC-0808 ,Stepper motor and their 8051 Assembly language interfacing programming 2.RS- 232 standard, 9 pin RS232 signals 3.Assembly language programming to generate a square wave using Mode- 2 on a port pin.
44	1KS20EC046	KAVYA S M	1.Branch instructions, Bit manipulation instructions 2.8051 Stack, Stack and Subroutine instructions. 3.Assembly language programming to generate a pulse using Mode-1(2 example)
45	1KS20EC047	KEERTHANA.B.S	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Assembly language program examples on subroutine and involving loops(2 example).3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
46	1KS20EC048	KIRAN DEV D	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.3.Assembly language programming to generate a square wave using Mode- 2 on a port pin.(2 example).
47	1KS20EC049	KIRAN V NARAYAN	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.
48	1KS20EC050	KODIDELA PRATHIMA	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Addressing Modes 3.Assembly language programming to generate a pulse using Mode-1(2 example)
49	1KS20EC051	KUMAR K G	1.Interfacing 8051 to ADC-0808 ,Stepper motor and their 8051 Assembly language interfacing programming 2.RS- 232 standard, 9 pin RS232 signals 3.Assembly language programming to generate a square wave using Mode- 2 on a port pin.
50	1KS20EC052	KUSUMA V R	1.Internal Memory organization. External Memory (ROM & RAM) interfacing. 2.Addressing Modes 3.Simple Serial Port programming in Assembly and C
51	1KS20EC053	M ARCHANA	1.External Memory (ROM & RAM) interfacing (3 example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(2 example) 3.Interfacing 8051 with LCD and Stepper motor

52	1KS20EC054	MADIHA	1.8051 Architecture- Registers, Pin diagram 2.External Memory (ROM & RAM) interfacing 3.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(3 example).
53	1KS20EC055	MAHESH BIRADAR	1.8051 Timers and Counters – Operation and Assembly language programming to generate a pulse using Mode-1. 2.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 3..External Memory (ROM & RAM) interfacing.(3 Example)
54	1KS20EC056	MANASWINI K M	1.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 2.Branch instructions, Bit manipulation instructions. Simple Assembly language program examples (without loops) to use these instructions .3.Assembly language program examples on subroutine and involving loops
55	1KS20EC057	MEGHA SHREE M	1.Branch instructions, Bit manipulation instructions 2.8051 Stack, Stack and Subroutine instructions. 3.Assembly language programming to generate a pulse using Mode-1(2 example)
56	1KS20EC058	MOHAN KRISHNA	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Assembly language program examples on subroutine and involving loops(2 example).3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially.

*The allotted Presentation address PO6,PO7,PO9,PO10,PO11&PO12

Staff In charge

HOD

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGG

Course:MC/18EC46	sem:3rd	sec:B

Content Beyond Syllabus – Presentation

Sl. No	USN	Name of the Student	Prepare PPT or Word file to Present these topics
1	1KS20EC073	Rahul Krishnan V	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status (1 ALP Program) 3.Simple Serial Port programming in Assembly and C to transmit a message and to
2	1KS20EC103	Sumukha S	1.Internal Memory organization 2.Addressing Modes 3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially
3	1KS20EC105	Tarun Prasanna	1.External Memory (ROM & RAM) interfacing (3 example) 2.Addressing Modes 3.Interfacing 8051 with LCD and Stepper motor
4	1KS20EC106	Tejas N Reddy	1.Branch instructions, Bit manipulation instructions 2.8051 Stack, Stack and Subroutine instructions. 3.Assembly language programming to generate a pulse using Mode-1(2 example)
5	1KS20EC060	N Gowthami	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Assembly language program examples on subroutine and involving loops(2 example) 3.Simple Serial Port programming in Assembly and C to transmit a message
6	1KS20EC068	Prema G	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially 3.Assembly language programming to generate a square wave using Mode- 2 on a port pin (2
7	1KS20EC070	Priyanka K	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 3.Simple Serial Port programming in Assembly and C to
8	1KS20EC072	Pushpa D T	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Addressing Modes 3.Assembly language programming to generate a pulse using Mode-1(2 example)
9	1KS20EC080	Ramya	1.8051 Architecture- Registers, Pin diagram 2.Internal Memory organization 3..External Memory (ROM & RAM) interfacing.(3 Example)
10	1KS20EC112	Varsha N	1.Assembly language program examples on subroutine and involving loops(2 example). 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(2 example) 3Interrupts. 8051 Assembly language programming to generate
11	1KS21EC401	Sudeep	1.8051 Timers and Counters– Operation and Assembly language programming to generate a pulse using Mode-1 2.8051 C programming to generate a square waveform on a port pin using a Timer interrupt(2 example) 3.Simple Serial Port programming in
12	1KS20EC092	Shakthi Anbazhagan M	1.1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.External Memory (ROM & RAM) interfacing (3 Example) 3.Addressing Modes
13	1KS20EC093	Sharath M	1.8051 Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.8051 Timers and Counters – Operation and Assembly language programming to generate a pulse using Mode-1 3.Interfacing simple switch and LED
14	1KS20EC095	Shiva Reddy B A	1.External Memory (ROM & RAM) interfacing.(3 Example). 2 .Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially 3.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to
15	1KS20EC108	Uday C H	1.Branch instructions, Bit manipulation instructions. Simple Assembly language program examples (without loops) to use these instructions 2.Assembly language program examples on subroutine and involving loops. 3.Assembly language programming to
16	1KS20EC061	Neha CR	1.Internal Memory organization. External Memory (ROM & RAM) interfacing. 2.Addressing Modes 3.Simple Serial Port programming in Assembly and C
17	1KS20EC062	Neha N	1.External Memory (ROM & RAM) interfacing (3 example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(2 example) 3.Interfacing 8051 with LCD and Stepper motor
18	1KS20EC065	Pavani TS	1.8051 Architecture- Registers, Pin diagram 2.External Memory (ROM & RAM) interfacing 3.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(3 example)
19	1KS20EC071	Priyanka M	1.8051 Timers and Counters– Operation and Assembly language programming to generate a pulse using Mode-1. 2.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 3. External Memory (ROM & RAM) interfacing (3
20	1KS20EC085	Sadhana Srinivas	1.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 2.Branch instructions, Bit manipulation instructions. Simple Assembly language program examples (without loops) to use these instructions. 3.Assembly
21	1KS20EC096	Shreya H	1.8051 C programming to generate a square waveform on a port pin using a Timer interrupt 2.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially 3.Assembly language programming to generate a pulse using Mode-

22	1KS20EC099	Shweta Deepak K	1.Interfacing 8051 to ADC-0808 ,Stepper motor and their 8051 Assembly language interfacing programming 2.RS- 232 standard, 9 pin RS232 signals 3.Assembly language programming to generate a square wave using Mode- 2 on a port pin
23	1KS20EC059	N.shreya	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.8051 Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 3. 8051 Timers and Counters – Operation and Assembly language programming to generate a
24	1KS20EC101	Sonika R	1.Interfacing 8051 to ADC-0808 ,Stepper motor and their 8051 Assembly language interfacing programming 2.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 3.Assembly language programming to generate a
25	1KS20EC104	Suraksha N	1.Branch instructions, Bit manipulation instructions 2.8051 Stack, Stack and Subroutine instructions. 3.Assembly language programming to generate a pulse using Mode-1(2 example)
26	1KS20EC113	Vijayalakshmi K	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Assembly language program examples on subroutine and involving loops(2 example) 3.Simple Serial Port programming in Assembly and C to transmit a message
27	1KS20EC117	Yashilaa S	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially 3.Assembly language programming to generate a square wave using Mode- 2 on a port pin (2
28	1KS20EC111	Vaishnavi VH	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 3.Simple Serial Port programming in Assembly and C to transmit
29	1KS20EC066	Pradyumna kashyap	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Addressing Modes 3.Assembly language programming to generate a pulse using Mode-1(2 example)
30	1KS20EC075	Rajath K Achar	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status (1 ALP Program)
31	1KS20EC116	Vineeth M S	1.Internal Memory organization 2.Addressing Modes 3.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially
32	1KS20EC118	Yashwanth Shetty	1.External Memory (ROM & RAM) interfacing (3 example) 2.Addressing Modes 3.Interfacing 8051 with LCD and Stepper motor
33	1KS20EC084	Sachin N M	1.Branch instructions, Bit manipulation instructions 2.8051 Stack, Stack and Subroutine instructions. 3.Assembly language programming to generate a pulse using Mode-1(2 example)
34	1KS20EC087	Sandeep Y H	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Assembly language program examples on subroutine and involving loops(2 example) 3.Simple Serial Port programming in Assembly and C to transmit a message
35	1KS20EC109	Ujjwal Naidu	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 3.Simple Serial Port programming in Assembly and C to transmit
36	1KS20EC114	VINAY S P	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Addressing Modes 3.Assembly language programming to generate a pulse using Mode-1(2 example)
37	1KS20EC063	P Vasanth kumar	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to
38	1KS20EC064	Pavan C	1.Internal Memory organization. External Memory (ROM & RAM) interfacing. 2.Addressing Modes 3.Simple Serial Port programming in Assembly and C
39	1KS20EC067	Praveen D B	1.External Memory (ROM & RAM) interfacing (3 example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(2 example) 3.Interfacing 8051 with LCD and Stepper motor
40	1KS20EC076	Rakshith N M	1.8051 Architecture- Registers, Pin diagram 2.External Memory (ROM & RAM) interfacing 3.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(3 example)
41	1KS20EC077	Rakshith R	1.8051 Timers and Counters– Operation and Assembly language programming to generate a pulse using Mode-1. 2.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 3. External Memory (ROM & RAM) interfacing (3
42	1KS20EC107	T Girish Chowdary	1.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 2.Branch instructions, Bit manipulation instructions. Simple Assembly language program examples (without loops) to use these instructions. 3.Assembly
43	1KS20EC089	Sanjana G	1.Interfacing 8051 to ADC-0808 ,Stepper motor and their 8051 Assembly language interfacing programming 2.RS- 232 standard, 9 pin RS232 signals 3.Assembly language programming to generate a square wave using Mode- 2 on a port pin
44	1KS20EC091	Sanjana T Gadikar	1.Branch instructions, Bit manipulation instructions 2.8051 Stack, Stack and Subroutine instructions. 3.Assembly language programming to generate a pulse using Mode-1(2 example)
45	1KS20EC102	Sumana N	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Assembly language program examples on subroutine and involving loops(2 example) 3.Simple Serial Port programming in Assembly and C to transmit a message
46	1KS20EC110	Vaishnavi A	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Simple Serial Port programming in Assembly and C to transmit a message and to receive data serially 3.Assembly language programming to generate a square wave using Mode- 2 on a port pin (2
47	1KS20EC069	Priyanka H C	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 3.Simple Serial Port programming in Assembly and C to transmit

48	1KS20EC074	Rahul R	1.External Memory (ROM & RAM) interfacing.(3 Example) 2.Addressing Modes 3.Assembly language programming to generate a pulse using Mode-1(2 example)
49	1KS20EC078	Rakshitha A	1.Interfacing 8051 to ADC-0808 ,Stepper motor and their 8051 Assembly language interfacing programming 2.RS- 232 standard, 9 pin RS232 signals 3.Assembly language programming to generate a square wave using Mode- 2 on a port pin
50	1KS20EC082	Rohith A K	1.Internal Memory organization. External Memory (ROM & RAM) interfacing. 2.Addressing Modes 3.Simple Serial Port programming in Assembly and C
51	1KS20EC115	Vinay Sagar V Alur	1.External Memory (ROM & RAM) interfacing (3 example) 2.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(2 example) 3.Interfacing 8051 with LCD and Stepper motor
52	1KS20EC079	Rameshwar	1.8051 Architecture- Registers, Pin diagram 2.External Memory (ROM & RAM) interfacing 3.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status(3 example)
53	1KS20EC083	S Arun Kumar	1.8051 Timers and Counters– Operation and Assembly language programming to generate a pulse using Mode-1. 2.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 3. External Memory (ROM & RAM) interfacing (3
54	1KS20EC094	Shashank S	1.Interfacing simple switch and LED to I/O ports to switch on/off LED with respect to switch status 2.Branch instructions, Bit manipulation instructions. Simple Assembly language program examples (without loops) to use these instructions 3.Assembly
55	1KS20EC097	Shreyas M S	1.Branch instructions, Bit manipulation instructions 2.8051 Stack, Stack and Subroutine instructions. 3.Assembly language programming to generate a pulse using Mode-1(2 example)
56	1KS20EC098	Shreyas P S Rao	1.Interrupts. 8051 Assembly language programming to generate an external interrupt using a switch 2.Assembly language program examples on subroutine and involving loops(2 example) 3.Simple Serial Port programming in Assembly and C to transmit a message

PO's Covered - 1,2,3,4,9,11 & 12

COURSE INCHARGE

HOD

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engg.

FORMAT & RUBRIC

2021-22

Course Name: Digital Communication **Course Code: 18EC61**

Content Beyond Syllabus

ASSIGNMENT TYPE: PRESENTATION

Objective: Title of the topic to be Presented [Oral or Poster presentation]
[Topic allotted must be from the course]

Instruction to be followed:

1. The topic allotted or assigned must be from the course
2. The work given must be from Apply level onwards
3. This will address **PO9, PO10, PO12**
4. Process to assign and evaluate the assignments steps.

- Divide the students into batches (Max five)
- Officially announce the batches & assignment topic for each batch. The topic selected must be from course.

Batch No.	Students in the batch		Assignment topic
	Roll No.	Name	
1			

Important dates:

Sl.No	Details	Date
1.	**Date of issue of topics for presentation**	16/5/2022
2.	**Last date for the submission of the presentation report OR If it is a poster presentation, the posters should be submitted in person by the batch of students.**	10/6/2022
3	**Presentation date [as per schedule shared]**	11/7/2022 to 16/7/22
4	**Dates for Appeal/challenge(on or before)**	20/5/2022
Note: Assignments marks will not be given if assignments submitted on later dates and failed to present a seminar.		

Rubrics: Oral Presentation

Note: Plagiarism (≤30%) is a mandatory criteria on to be met

Sl.No	Criteria
1.	Quality of the power point/poster
2.	Technical content
3.	Structuring of the speech
4.	Clarity of speech with respect to the topic
5.	Voice modulation
6.	Body language

Strategy to award marks for presentations based on the criteria

Sl. No.	Criteria	Marks for assignments
1.	Assignment not submitted in time or assignment submitted in time but not presented	No marks
2.	Assignment submitted in time, presented and any 04 or more criteria not met	1mark
3.	Assignment submitted in time, presented and any 03 or more criteria not met	2marks
4.	Assignment submitted in time, presented and any 02 or more criteria not met	3marks
5.	Assignment submitted in time, presented and any 01 or more criteria not met	4marks
6.	Assignment submitted in time, presented and all criteria are met	5marks

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Department of Electronics & Communication Engineering

2021-22

Course Name: Digital Communication **Course Code: 18EC61**

Semester/sec:VI A

Content Beyond Syllabus

ASSIGNMENT TYPE: PRESENTATION

Objective: Title of the topic to be Presented [Oral or Poster presentation]

Batch No.	Students in the batch		Assignment topic	ORAL/ POSTER
	USN	Name		
1	1KS19EC008	AMULYA. R	EVOLUTION OF COMMUNICATION SYSTEMS FROM 1G TO 5G	ORAL
	1KS19EC028	GAYATHRI. R. WARRIER		
	1KS19EC035	JAGRUTI PAI		
	1KS19EC002	ABHISHEK C		
	1KS19EC038	Karthik K		
2	1KS19EC012	ASHRITHA.R	EVOLUTION OF WIRELESS	ORAL
	1KS19EC023	DHANYA SUKANTH		
	1KS19EC025	DISHA SHIVANI		
	1KS19EC027	GAYATHRI.P.K		
	1KS19EC048	MOHITH KUMAR		
3	1KS19EC050	MONISHA B K	DIGITAL COMMUNICATION TIMELINE	POSTER
	1KS19EC051	N ANILA		
	1KS19EC052	NIDHI S		
	1KS19EC053	NISARGA K		
	1KS19EC017	CHANDANA L		
4	1KS19EC015	CHAITRA P	AUDIO PROCESSING	ORAL
	1KS19EC040	KRUPA A		
	1KS19EC043	LIKITHA H		
	1KS19EC049 1KS19EC036	MONIKA VARYA JAYANTH. MB		
5	1KS19EC062	PRAVEEN KUMAR N	MODULATION TECHNIQUES (ANALOG AND DIGITAL SIGNALS	ORAL
	1KS19EC063	PREETHAM G H		
	1KS19EC055	PAVAN KUMAR G R		
	1KS19EC054	NITHIN D		
	1KS19EC059	PRAKASH CHEGORE		
6	1KS19EC024	DHEEMANTH KN	INTER INTEGRATED CIRCUIT	ORAL
	1KS19EC007	AMRUTHA		
	1KS19EC030	GOWRI S NADIGER		
	1KS19EC021	DANESH RAJU V		
	1KS19EC019	CHIRANTHAN YOGANANDA		

7	1KS19EC066	RAJALAKSHMI S	GSM TECHNOLOGY	ORAL
	1KS19EC064	PRIYANKA K		
	1KS19EC056	POKURI MOUNIKA		
	1KS19EC061	PRASHANTH S K		
	1KS19EC065	RADHAKRISHNA L		
8	1KS19EC006 1KS19EC009	AKSHITHA ANITHA S	COMMUNICATION MEDIA AND EQUIPMENT	ORAL
	1KS19EC037	MANOGNA K M		
	1KS19EC044	LOKESHWARI M		
	1KS19EC045	MANU N KANDRA		
9	1KS19EC003	AISHWARYA B K	FUNDAMENTAL OF DIGITAL COMMUNICATION	ORAL
	1KS19EC010	ANJALI Y J		
	1KS19EC011	ARCHANA YADAV M		
	1KS19EC057	POOJA S P		
10	1KS19EC041	KRUTHIK S	OPTICAL COMMUNICATION	ORAL
	1KS19EC005	AKSHAY KUMAR D		
	1KS19EC039	KASHYAP P		
	1KS19EC016 1KS19EC020	CHANDHAN RAJ Y NAYAN D		
11	1KS19EC033	HEMANTH R PATIL	ERROR PROBIBILITY IN BPSK AND QPSK MODULATION	ORAL
	1KS19EC042	LAKSHMAN KUMARA		
	1KS19EC001	ABHILASH AS		
	1KS19EC047	MOHAMMAD RAKHEEB		
	1KS19EC058	PRADEEP GADED		
12	1KS19EC018	CHENNREDDY RAJASEKHAR	OPTICAL ETHERNET	ORAL
	1KS19EC022	DAVINO JOSEPH		
	1KS19EC042	SAI SIDDHARTH		
	1KS19EC031	HARSHA R		
13	1KS19EC004	AISHWARYA M G	LINE CODES	POSTER
	1KS19EC014	BHAVANA S		
	1KS19EC032	HARSHITHA BY		
	1KS19EC046	MEGHANA HP		

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Department of Electronics & Communication Engineering

2021-22

Course Name: Digital Communication **Course Code: 18EC61**

Semester/sec:VI B

Content Beyond Syllabus

ASSIGNMENT TYPE: PRESENTATION

Objective: Title of the topic to be Presented [Oral or Poster presentation]

Batch No.	Students in the batch		Assignment topic	ORAL/ POSTER
	USN	Name		
1	1KS19EC108	YASHASWINI N	SPACE COMMUNICATION	ORAL
	1KS19EC075	SAMIKSHA S		
	1KS19EC074	SAI PRIYA T S		
	1KS19EC097	TEJASHWINI P V		
2	1KS19EC103	VIGNESHMUTHAIAH R	SATELLITE COMMUNICATION	ORAL
	1KS19EC104	VIKAS K		
	1KS19EC105	VINUTH REDDY		
	1KS19EC106	VISHAL SANJAY RAJU		
3	1KS19EC093	SUSHMITHA S	Multiplexing and multiple access	ORAL
	1KS19EC098	THEERTHANA S R		
	1KS19EC086	SINCHANA MN		
	1KS19EC078	SHAMITHA BIJOOR		
4	1KS20EC400	MADALA VIVEK KUMAR	SMART CARD TECHNOLOGY IN SECURITY SYSTEM	POSTER
	1KS19EC102	VANDANA S		
	1KS19EC095	SWATHI U		
	1KS20EC401	RANJANA P		
	1KS20EC402	SINDHU J		

5	1KS19EC073 1KS19ET011	SAHANA.S SHWETHA.K	OPTICAL COMMUNICATION	ORAL
	1KS19ET002	CHAITRA.C		
	1KS19EC067	RAMYA SHREE		
	1KS19EC101	VANDANA.G		
6	1KS19EC079	SHASHANK KASHYAP	SATELLITE INTERNET COMMUNICATION USED IN STARLINK	ORAL
	1KS19EC081	SHREYAMS DK		
	1KS19EC083	SHREYAS GOWDA		
	1KS19EC092	SUMUKHA VASISHTA		
	1KS19EC069	ROHAN KR		
7	1KS19EC084	Shreyas V Bharadwaj	Wireless Fidelity (Wifi) communication	
	1KS19EC087	Srinivas S		
	1KS19EC088	Srinivasan M		
	1KS19EC089	Sriram		
	1KS19EC107	Vishnuraata Yadunandan		
8	1KS19EC070	S K Bharatesh	Bluetooth Technology	
	1KS19EC082	Shreyas B Aradhya		
	1KS19EC068	Rangaswamy u		
	1KS19EC094	Swagath Aithal		
	1KS19EC099	Tushar R Vasista		
9	1KS19EC071	SABARISH I J	SHORT DISTANCE WIRELESS COMMUNICATION	ORAL
	1KS19EC076	SANTOSH HEGDE		
	1KS19EC077	SATHVIK UM		
	1KS19EC096	TNL RUTHVIK		
	1KS19EC090	SUHAS M		
10	1KS19EC100 1KS18EC089	VAISNAVI K SNEHA N	GPS Vehicle Tracking & Theft Detection system	ORAL

11	1KS19ET009	ROHIT KUMAR	PROBABILITY ERROR FOR DETECTION OF DIGITAL PAM	ORAL
	1KS19ET010	SHREYAS C R		
	1KS19EC085	SHUBHAM KUMAR SINGH		
12	1KS19ET004	MAHADEV A C	CDMA BASED ON IS-95	ORAL
	1KS19ET006	NELBIN N		
	1KS19ET007	NIRANJAN S RAO		
	1KS19ET008	RISHI KUMAR		
13	1KS19ET003	Litchitha M Gowda	GSM Comminication	ORAL
	1KS19ET005	MRUTYUNJAYA		
	1KS19ETO12	Vaishnavi.S		
	1KS19TE005	Ankitha		

Course Incharge

HOD ECE

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engg.

FORMAT & RUBRICS DETAILS

2021-22

Course Name :Embedded Systems **Course Code : 18EC62**

Content Beyond Syllabus

ASSIGNMENT TYPE: MINI PROJECT ASSIGNMENT

Objective: **Title of the Miniproject**[Topic can be selected /allotted from the course]

Instruction to be followed:

1. The topic allotted or assigned must be from the course
2. The work given must be from Apply level onwards
3. This will address PO6,PO7(*DEPENDING ON THE TOPIC*)PO9, PO10, PO11&PO12
4. **Types ofminor projects**

Sl.No.	**Project type**	**Details**
1.	Mini project	Todemonstrateworkingprototype or a model learnt in the course for a specific application

5. Process to assign and evaluate the assignments steps.
   - Divide the students into batch of five. The topic selected must be from course.
   - Officially announce the batches, assignment topics Important Dates,
   - Guidelines and Evaluation strategy for each batch.

Important dates:.

Sl.No	**Details**	**Date**
1.	**Last Date of issue of topics for Mini Project**	15th May 2022
2.	**Dates for Appeal/challenge (on or before)**	20th May 2022
3.	**Lastdate for the submission of the Project report (OR) If it is a poster presentation, the posters should be submitted in person by the batch of students.**	7th July 2022

4.	**Demo Presentation date [as per schedule shared]**	7th July 2022
5.	**Date of announcement of evaluation details for demo/oral presentatioh/ poster presentation**	10th July 2022
Note: Assignmentsmarkswillnotbegivenifassignmentssubmittedonlaterdates and failedto presenta seminar/demo.		

Guidelines for Project Report "
Theprojectreportshouldcontain the following:

- Coverpage
- Certificate
- Contents
- Abstract
- Introduction
- Objectives
- Methodology/Details of Project
- Results
- Conclusion
- References

Rubrics/Evaluation Strategy

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

6. **Evaluate each Batch project report, Functional Demo and assign marks for each student**
7. **Document the Mini-project Reports, Photos of Functional Demos, and Split-up of Marks**
8. **Prepare a Pedagogy Report and submit to Department.**

K. S. INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Course Name Embedded Systems **Course Code : 18EC62**

Content Beyond Syllabus
Assignment-3 Marks
AY-2021-22

Sl No	USN	Name	Marks	Project Title	Team #
1	1KS19EC002	ABHISHEK.C	8	COFFEE-TEA VENDING MACHINE+E5:E72	A1-1
2	1KS19EC008	AMULYA.R	10		
3	1KS19EC011	ARCHANA.M.YADAV	9		
4	1KS19EC012	ASHRITHA.R	10		
5	1KS19EC017	CHANDANA.L	9		
6	1KS19EC005	AKSHAY KUMAR D	10	TEMPERATURE CONTROLLED DC MOTOR	A1-2
7	1KS19EC004	AISHWARYA MG	8		
8	1KS19EC014	BHAVANA S	8		
9	1KS19EC015	CHAITHRA P	8		
10	1KS19EC016	CHANDAN RAJ Y	5		
11	1KS19EC020	D NAYAN	10		
12	1KS19EC003	AISHWARYA BK	10	Buzzer System	A1-3
13	1KS19EC006	AKSHITHA	8		
14	1KS19EC007	AMRUTA	9		
15	1KS19EC009	ANITHA S	9		
16	1KS19EC010	ANJALI Y J	10		
17	1KS19EC019	CHIRANTHANA YOGAI	9	Interfacing LM35 with ARM Cortex M3 and displaying through LCD	A1-4
18	1KS19EC021	DANESH RAJU V	10		
19	1KS19EC018	CHENNREDDY RAJASE	8		
20	1KS19EC029	SAI SIDDHARTHA G	0		
21	1KS19EC021	DAVENO JOSEPH	0		
22	1KS19EC023	DHANYA SUKANTH	6	INTERFACING SERVO MOTOR WITH ARM CORTEX M3	A2-1
23	1KS19EC024	DHEEMANTH. K. N	10		
24	1KS19EC025	DISHA SHIVANI	10		
25	1KS19EC027	GAYATHRI. P.K	10		
26	1KS19EC028	GAYATHRI. R. WARRIE	10		
27	1KS19EC035	JAGRUTI PAI	10		
28	1KS19EC039	KASHYAP P	9	OBJECT DETECTIO USING ULTRASONIC SENSOR	A2-2
29	1KS19EC039	KARTHIK K	9		
30	1KS19EC041	KRUTHIK S	10		
31	1KS19EC033	HEMANTH PATIL'	8		
32	1KS19EC036	JAYANTH KUMAR MB	6		
33	1KS19EC042	LAKSMAN KUMAR	6		
34	1KS19EC030	GOWRI SN	10	temperature	A2-3
35	1KS19EC037	MANOGNA KM	10		

36	1KS19EC044	LOKESHWARI M	10	detection ,alerting and cooling	A2-3
37	1KS19EC045	MANU N KANDRA	10		
38	1KS19EC030	HARSHA R	6	DC MOTOR SPEED CONTROL	A2-4
39	1KS19EC032	HARSHITHA BY	6		
40	1KS19EC001	ABHILASH AS	10		
41	1KS19EC040	KRUPA A	10		
42	1KS19EC43	LIKITJHA H	10		
43	1KS19EC056	POKURI MOUNIKA K	9	Seat belt warning system	A3-1
44	1KS19EC061	PRASHANTH S	9		
45	1KS19EC064	PRIYANKA K	9		
46	1KS19EC065	RADHA KRISHNA L	10		
47	1KS19EC066	RAJALAKSHMI S	10		
48	1KS19EC051	N ANILA	10	TRAFFIC SIGNAL	A3-2
49	1KS19EC050	MONISHA BK	10		
50	1KS19EC052	NIDHI S	8		
51	1KS19EC053	NISARGA K	10		
52	1KS19EC048	MOHITH KUMAR G	6		
53	1KS19EC055	PAVAN KUMAR G R	10	ELEVATOR SYSTEM USING ARM CORTEX M3	A3-3
54	1KS19EC054	NITHIN D	10		
55	1KS19EC062	PRAVEEN KUMAR N	10		
56	1KS19EC063	PREETHAM G H	5		
57	1KS19EC059	PRAKASH CHEGORE	2		
58	1KS19EC47	MD. RAKEEB	4	Interfacing DAC and generating SINE Wave	A3-4
59	1KS19EC49	MONIKA V ARYA	8		
60	1KS19EC57	POOJA S P	10		
61	1KS19EC58	PRADEEP GADED	6		
62	1KS19EC46	MEGHANA H P	10		
63	1KS19EC071	SABARISH I J	10	erfacing RAIN sensor with ARM Cortex-l	**B1-1**
64	1KS19EC076	SANTOSH HEGDE	10		
65	1KS19EC077	SATHVIK U M	10		
66	1KS19EC079	SHASHANK KASHYAP.H.R	10		
67	1KS19EC081	SHREYAMS D K	10		
68	1KS19EC103	VIGNESH MUTHAIAH R	9	terfacing keyboard using 7 segment displ	**B3-1**
69	1KS19EC104	VIKAS S	8		
70	1KS19EC105	VINUTH S REDDY	8		
71	1KS19EC106	VISHAL SANJAY RAJU	10		
72	1KS19EC108	YASHASWINI N	6		
73	1KS19EC067	RAMYASREE R	8	Interfacing temperature sensor using rela y Temperature Controlled Relay)	**B1-2**
74	1KS19EC073	SAHANA S	10		
75	1KS19EC074	SAI PRIYA T S	9		
76	1KS19EC075	SAMIKSHA S	8		
77	1KS19EC078	SHAMITHA BIJOOR	8		
78	**1KS19EC086**	SINCHANA M N	**8**		
79	**1KS19EC093**	SUSHMITHA S	10		

80	**1KS19EC095**	SWATHI U	7	Obstacle detection using IR sensor	**B2-1**
81	**1KS19EC097**	TEJASHWINI P V	7		
82	**1KS19EC098**	THEERTHANA S R	9		
83	1KS19EC070	S K BHARATESH	10	REAL TIME CLOCK	**B1-3**
84	1KS19EC068	RANGASWAMY.U	5		
85	1KS19EC082	SHREYAS B ARADHYA	10		
86	1KS19EC069	ROHAN K R	5		
87	1KS19EC094	SWAGATH AITHAL P G	10	RFACING GAS SENSOR WITH ARM CORTE	**B2-3**
88	1KS19EC096	T N L RUTHVIK	7		
89	1KS19EC090	SUHAS.M	6		
90	1KS19EC092	SUMUKHA VASISHTA M R	9		
91	1KS19EC085	SHUBHAM KUMAR SINGH A	5	SMART PRINTER FOR COUNTING NUMBER OF PAGES (Printer page Counter)	**B2-2**
92	1KS19EC084	SHREYAS V BHARADWAJ	6		
93	1KS19EC087	SRINIVAS S	8		
94	1KS19EC088	SRINIVASAN M	9		
95	1KS19EC089	SRIRAM	9		
96	1KS19EC083	SHREYAS GOWDA	5		
97	1KS19EC099	TUSHAR R VASISHTA	5	terfacing Optocoupler with ARM Cortex M	**B3-1**
98	1KS19EC100	VAISHNAVI K	8		
99	1KS19EC101	VANDANA G	7		
100	1KS19EC107	VISHNU RAATA YADUNANDAN	10		
101	1ks19ec102	VANDANA S	9	Detection of objects using IR Sensor	**B3-2**
102	1ks18ec089	SNEHA N	8		
103	1ks20ec400	MADALA VIVEK KUMAR	8		
104	1ks20ec401	RANJANA P	8		
105	1ks20ec402	SINDHU J	8		

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

DEARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

TEACHING AND LEARNING

CONTENT BEYOND SYLLABUS

Academic Year	2021-22 (Even)
Name of the Faculty	Dr.Chanda V reddy
Course Name /Code	Microwave and Antenna/18EC63
Semester/Section	VI/A &B
Activity Name	Literature survey Paper
Topic Covered	Microwave and Antenna Syllabus
Date	9/5/2022 to 30/6/2022
No. of Participants	117
Objectives/Goals	• To improve the self-learning skills of students • To improve the communication skills of students. • To improve the writing skills of journal paper.
ICT Used	-
Appropriate Method/Instructional materials/Exam Questions • Journals / Conference papers referred	
Relevant PO's	9,10,12
Significance of Results/Outcomes	• This will teach & enhance working in team along with writing communication skills. • Students wrote individual paper and also a merged together paper after analyzing with other papers written by their group mates.
Reflective Critique	• The activity improved the learning and communication skills of students • The activity provided a platform for students to interact with peers, improve their communication skills and work as individuals. • The activity also helped them to write journal literature paper which will be required in future in research work.

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

- **Main Paper and Individual papers Attached**

Signature of Course Incharge

Signature of HOD ECE

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

PARABOLIC ANTENNA AND ITS TYPES

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Abstract- **One of the simplest and most common structures used for directing light in macroscale applications is the parabolic reflector. Parabolic reflectors are ubiquitous in many technologies, from satellite dishes to hand-held flashlights. Today, there is a growing interest in the use of ultracompact metallic structures for manipulating light on the wavelength scale. Significant progress has been made in scaling radiowave antennas to the nanoscale for operation in the visible range, but similar scaling of parabolic reflectors employing ray-optics concepts has not yet been accomplished because of the difficulty in fabricating nanoscale threedimensional surfaces. Here, we demonstrate that plasmon physics can be employed to realize a resonant elliptical cavity functioning as an essentially planar nanometallic structure that serves as a broadband unidirectional parabolic antenna at optical frequencies.**

KEYWORDS: ***Parabolic reflectors***

I. Introduction

Parabolic reflectors are well-known in geometrical optics; they couple the emission of a point source at the parabola's focus to a plane wave propagating parallel to parabola's axis, and vice versa. In a classical three-dimensional parabola the emitted light beam originates from the specular reflection of light over the entire parabola's surface. However, due to the special geometrical properties of a parabola, an array of individual scatterers placed in a parabolic arrangement will also generate a parallel beam of light in the far field. In fact, a point source coupled to any two-dimensional subsection of a paraboloidal surface will generate a wave preferentially propagating parallel to the paraboloid's axis. One special case of such a subsection is the elliptical intersection of a paraboloid with a planar surface, with the paraboloid and the planar ellipse sharing a common focus. In such a geometry, a beam of light can be generated by exciting SPPs near one of the two foci inside the planar ellipse followed by coherent scattering of the SPPs to free-space photons via the edges of the area in the form of a collimated beam. The direction of the beam is only determined by the position of the source inside the ellipse and the ellipse's eccentricity. Figure 1a shows this geometry. A detailed analytic description of this model is given in the Supporting Information. A series of concentric elliptical grooves has recently been used to realize a bull's eye type beam director with a controllable beam direction based on a similar concept.14 In contrast to this work, the elliptical bull's eye structure has a well-defined operation wavelength based on coherent scattering from multiple grooves, whereas here the broad optical resonances of the plasmonic cavity are utilized to achieve high directivities

II. LITERATURE SURVEY

An offset reflector antenna capable of scanning azimuth has been developed. This reflector illuminates different-but overlapping-surface portions, yielding high aperture efficiency. while minimizing blockage due to the feed system. The reflector is shaped differently from the usual paraboloid. It is designed by combining the attributes of a paraboloid, positioned to direct rays in an unscanned direction, and a second, symmetric pair of paraboloids positioned to direct rays 30 away from the unscanned direction.[1]

THE OFFSET-parabolic reflector has found applications as an -antenna for many years and was certainly receiving some attention during the 1940's. However, it is only in comparatively recent times that analytical and numerical models have been developed for this device which can provide reliable predictions of its electrical properties. Although the basic analytical techniques were available at the end of the World War 11.[2].

Abstract-Dual offset reflector antenna systems offer exciting possibilities for achieving both low scan losses and low cross polarization in geosynchronous communications satellite antennas providing narrow (100 5 D/h 5 400) and multiple beam frequency reuse coverages over an 18"

conical field of view. Novel geometrical configurations for the reflectors are characterized by simultaneously [3].

Circular polarization in the proposed feed horn is achieved by a polarizing structure inside the cylindrical waveguide.The inbuilt polarizing structure employs nine pairs of circular cavities in the cylindrical waveguide wall as shown. Before we get started, we assume the operating frequency of the system to be 9GHz and want the output gain of the entire system to be 15dB[4].

The 5G wireless systems would need high gain antenna solutions such as multiple beam using the reflector antenna system, dielectric lens and reflectarray antenna solutions.The physical dimension of the proposed horn antenna is 26 mm× 14 mm × 5.25 mm which corresponds to the electrical dimension of 7.2λ × 3.9λ × 1.4λ at 84 GHz with the horn aperture diameter of 3.26 mm. The diameter of the horn aperture is around the same size as the circular waveguide to obtain the desired 12 dB half edge beamwidth of 64° necessary for illuminating the offset reflector with f/D of 0.25 as discussed in section II[5].

In general, the circular cavities are not required till the mouth of the horn, as used in this application. The wave polarization does not change after the polarizer section and thus waveguide chokes, corrugations, and other waveguide techniques can beapplied to the proposed polarizer section to obtain higher gain without affecting circular polarization purity. The proposed feed horn and the offset parabolic reflector antenna is fabricated at the Custom Microwave Inc., facility, are the photographs of the fabricated feed horn and theoffset reflector integrated with the feed horn, respectively. The fabricated designs are measured at MVG spherical near-field chamber[6].

While designing the antenna we have considered varying the efficiency factor and then calculatingthe design parameters of the antenna. The solemn reason forvarying efficiency factor is to obtain different designs of the antenna so that we get different simulated results. Comparing and analyzing the obtained results for the corresponding efficiency factor gives us the advantage to choose the antenna with the desired output[7].

In this paper China has promulgated a national standard for digital terrestrial television (DTT) transmission systems in 2006.Digital terrestrial television broadcasting, as an important part of the radio and television system, is the main method for governments at all levels to provide radio and television public services, and an important channel for the general public to obtain news information and enjoy spiritual and cultural life. In order to save radio frequency resources effectively, the current DTT single frequency network (SFN) has been widely used . Considering the vastness of China and the differences in the broadcast programs of TV stations in different regions, the DTT coverage network must take into account the coverage requirements at national, provincial level, and the city, county level. This has brought challenges to the successful establishment of DTT SFN by local governments. This paper is organized as follow it introduces the DTT SFN and its requirements. Some new program transmission links of the DTT SFN is described provides the networking tests of different links[8].

The specifications of the transmitter and the receiver meet the ISDB-S3 standard. The transmission parameters of these experiments are shown the satellite simulator consists of the following analog components: a frequency up-converter, a 12 GHz band satellite transponder (IMUX filter – TWTA – OMUX filter), and a frequency down-converter. AM/AM and AM/PM characteristics of the TWTA that mainly induce the warping phenomenon of the I-Q centroid of theconstellation points. The I-Q constellation is also affectedby the TWTA operating point expressed by the input back- off (IBO) and the output back-off (OBO). In this study, IBO and OBO are defined as the logarithmic ratio between the power of unmodulated signal at the saturation point and the one of modulated signal at the operation point in the TWTA input and in the OMUX filter output, respectively .The amplitude and group delay characteristics of the IMUX and OMUX filters that mainly induce the clustering phenomenon of the I-Q signals through the inter-symbol interference (ISI). Since these phenomena have a negative impact on the transmission performance, the DPD techniques have been studied to compensate for the impact[9].

In this paper, a new Ku-band spiral antenna design is proposed achieving a wide impedance matching BW (11.7-12.7 GHz) with industrial standard (VSWR ≤ 1.5)and AR BW of (11.7-12.7 GHz). The design enjoys stable radiation patterns and high polarization purity (PP) with a low profile and a compact size. The design is amended to form a flat circular antenna array with a fixed upward electronically steered beam at 23°. This allows the array to achieve a LOS communication with the satellite while being mounted vertically on a wall. The paper is organized asfollows it discusses the antenna structure and the working principles and it illustrates the simulated results and at last presents the array structure. A circularly polarized circular antenna array has been designed with a fixed vertical electronically steered beam for the satellite TV signal reception. The array covers the frequency band from 11.7 GHz to12.7 GHz in terms of the impedance matching (with industrial standard VSWR ≤ 1.5) and AR [10].

In this paper Quasi-optical Design of the MMW Channel, Calculations and Alignment systems. In this paper the whole quasi optical design for the realization of MMW communication PTP link is shown in Figure 1. This unique design is composed of two standard TV satellite dishes, 100 GHz MMW source, 2 Arduino Uno microcontroller, GDD detector circuit shown in Figure 2 and an oscilloscope. The 100 GHz source (TX272 VDI) used here was manufactured by Virginia Diodes Inc (VDI). This MMW source in the W band is based on three GaAs frequencies and has a multiplication Factor of 8 to its local oscillator frequency range of 12.625–13.625 GHz [10].

The maximum output power of that source is 600 mW at 100 GHz. The encoded message bits were generated by the user and were transmitted from the Arduino microcontroller Tx pin to the TTL modulation input of the MMW source (0 to 5 V). The maximum TTL modulation rate of this MMW source is 100 MHz. A 3D CAD model of the satellite antenna is formedby the method of reverse engineering, which is made opposing air in the conditions of use of the technical system. The simulation model is based on the factor of the speed of the airflow and the data are valid for the area in which the device is used. The primary real model on which laboratory testing was carried out has been questioned by several factors[11].

Due to the amount of work in this study, it was not possible to include all the iterations that have been tested on a real model, and the simulation is performed only for some specific parameters. Antenna testing was conducted in a small wind tunnel diffuser to place their cross-section to flow around the antenna without major obstacles. The cross-section was 26.34m2, while the surface of the antenna was 7.07m2. A detailed description of the preparation apparatus in the laboratory space is not discussed in more detail in the paper, because this is not the main goal of the research, but we mention it to demonstrate the effectiveness of the established methods of developing technical systems. The details of the experiments can be found in and the documentation of VTI Belgrade [12].

III. PARABOLIC ANTENNAS ANALYSIS

To obtain maximum efficiency from the paraboloid antenna requires a close control of amplitude, phase, and polarization of the field incident to the reflector. This puts rather strict requirements on the primary source of radiation, This in itself is of no great significance, but ifwe measure the phase at all points in a field at a distance of several wavelengths from the source and connect points of equal phase we get a curve or surface representing the wave front from which we may draw certain conclusions. The direction of propagation of energy in the wave is perpendicular to the surfaces of constant phase. From one such surface we can project forward to find the destination of the wave. For a small phase deviation 4, the compensating correction to r of (2) is Ar= (5) 27r 1 + cos 6 If the phase front is not spherical, or is not corrected for, the radiation pattern will be distorted and the gain reduced.The amplitude of the radiation from the feed must be directed uniformly over a wide angle, to illuminate adequately the entire reflector area. Also, the field should be of such a nature that after reflectionthe waves will be properly polarized. A. Phase The phase of the field radiated from an antenna depends on the electrical distance the wave has traveled to arrive at the point under consideration.

or the parabola "feed." In the first place, the feed must be small and of such configuration that it gives a spherical phase front; that is, from a distance it must appear as though the energy were radiated from a point. The amplitude of the radiation from the feed must be directed uniformly over a wide angle, to illuminate adequately the entire reflector area. Also, the field should be of such a nature that after reflection the waves will be properly polarized. A. Phase The phase of the field radiated from an antenna depends on the electrical distance the wave has traveled to arrive at the point under consideration. This in itself is of no great significance, but if we measure the phase at all points in a field at a distance of several wavelengths from the source and connect points of equal phase we get a curve or surface representing the wave front from which we may draw certain conclusions. The direction of propagation of energy in the wave is perpendicular to the surfaces of constant phase. From one such surface we can project forward to find the destination of the wave, and we can project backward to locate the effective source and analyze its properties. On the basis of geometrical ray construction, we see that the deviation of such a surface from a sphere will cause a deviation of the wave front from a plane, after reflection from an ideal paraboloid. Similarly, we may find by projecting back that the apparent source is not a point, but is instead a line or some peculiar surface. Such an apparent source does not necessarily have a significant relation to the physical size and shape of the radiator, but it does give a basis for comparing various feeds, and often suggests methods of correction. If the phase front from a feed is not spherical, the phase in the aperture can be corrected by changing the shape of the reflector. For a small phase deviation 4, the compensating correction to r of (2) is Ar= (5) 27r 1 + cos 6 If the phase front is not spherical, or is not corrected for, the radiation pattern will be distorted and the gain reduced. The effect on the pattern depends upon a number of factors, so it is difficult to generalize. However, a widening of the main lobe at low levels, or a filling-in of the nulls between minor lobes, usually indicates deviations of phase.

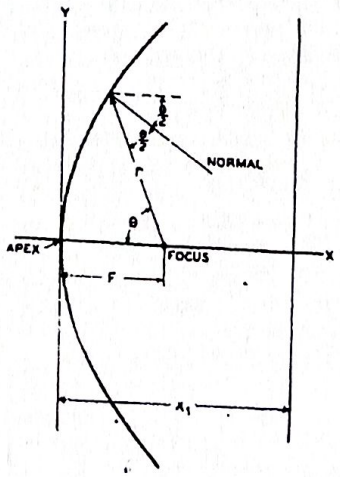

Fig. 1—The parabola.

IV OFFSET PARABOLIC ANTENNA

For applications involving complex primary-feed structures, the use of a Cassegrainian feed system has some obvious advantages. In particular, the Cassegrainian configuration allows the feed elements and the associated circuitry to be located close to the main reflector surface, possibly avoiding long RF transmission paths and the need for extended feed support structure, while the forward-pointing feed format can be a desirable attribute for applications requiring low-noise performance. Of the variety of offset Cassegrainian systems proposed in the literature, perhaps the best known is the open Cassegrain an antenna introduced in 1965 by the Bell System Laboratories [11 , [21 The antenna, which is illustrated in , comprises an offset section of a paraboloid and an offset hyperboloid subreflector, fed by a primary feed which protrudes from an aperture in the main reflector surface. With this configuration it is possible to design the antenna such that the subreflector does not block the aperture of the main reflector. However, as a direct consequence of the positions of the primary feed, some aperture blockage due to the feed system is unavoidable.

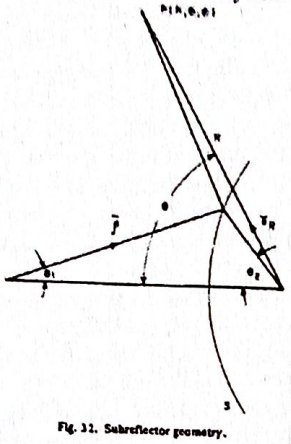

Fig. 32. Subreflector geometry.

Fig 2: Offset parabolic antenna design

the subreflector fields can be inserted into (14) or (18) to determine the tangential aperture fields of the main reflector, and, hence, via equations (22) or (24) to determine the far fields of the overall antenna. Thus the analysis essentially involves the evaluation of four two-dimensional diffraction integrals at each field point. Under certain circumstances, use can be made of the axes of symmetry afforded by the subreflector geometry to eliminate the azimuthal dependent integrals, thereby alleviating the computational problem. Ierley and Zucker [521 have also described a technique for reducing the double integrals associated with the main reflector into a more convenient one-dimensional form. The technique, which is based upon an application of the stationary-phase approximation in the azimuthal part of the integral, allows more economical predictions of both the near-in and the far-out sidelobe performance of the open Cassegrainian antenna. In general, the basic radiation characteristics of the open Cassegrainian antenna do not differ significantly from those of an equivalent single-offset-reflector antenna. To avoid aperture blockage the open Cassegrainian antenna must employ large offset angles and, when fed by conventional primary feeds, exhibits beam squinting and depolarizing characteristics which are similar to the single offset reflector. However, for applications where these particular performance parameters are not of major concern, the open Cassegrainian configuration offers excellent potential for realizing high overall efficiency and low wide-angle sidelobe radiation.

An alternative dual-offset-reflector configuration, which offers a number of attractive features, is the so-called double offset antenna shown in Fig. 3. This antenna, which was first implemented by Graham provides a convenient location for the primary-feed hardware by use of an offset section of a hyperboloidal subreflector in a Cassegrainian arrangement. Two variations of the double offset are illustrated in the figure. A Gregorian version, in which the subreflector comprises an offset portion of an ellipsoidal reflector, is also feasible and has been considered by Mizuguteh et al. [531. For either of the versions shown the overall antenna geometry can be designed to be completely free of aperture blockage. Analyses performed by several workers [121 , [131, [531, [54] has shown that the double-offset antenna can be designed such that, when fed by a conventional linearly polarized primary-feed, the depolarization arising from the two offset reflectors can be made to cancel, thus providing an overall low cross-polar characteristic. This performance is achieved by matching the scattered radiation fields from the subreflector to the main reflector. The principle is essentially similar to the matched-field approach previously described for single offset reflectors; and, in theory, the technique offers a greater potential for broad-band performance.

V. SATELLITE DISH

satellite dish is a telecommunications device used to send and receive microwave signals. It is a parabolic shaped antenna used for data transmission and broadcasting. The primary function of a satellite dish is to convert microwave signals into electric signals that can be used by a computer, television, and other devices. The low-frequency signals can be received by the larger dishes, whereas small dishes are used for higher frequency signals. Satellite dishes are used for all kinds of data communication. The signals can be sent anywhere without having miles of cables. A satellite may also be known as a parabolic antenna The working principles behind satellite dishes are as simple as a conventional cable connection. A satellite transmitter is used to send the signals through the air to bounce them off to a satellite. These signals can then be received anywhere in the world with the help of receivers attached to satellite dishes. There are three basic types of satellite dishes as shown in fig 3: Motor Driven Satellite dishes: Configured with a stepper motor. These can be controlled from the sky and moved to a suitable position according to a satellite position. Multi-Satellite dishes: Support multiple reflectors that enable them to receive signals from multiple locations simultaneously. The additional reflectors are placed vertically to capture all the signals that are originated from different locations. Very Small Aperture Terminal (VSAT) dishes: Employed for both consumer networks and private network operations. VSAT is most used satellite dish in the world.

Fig 3: Satellite antenna

VI. SATELLITE TELEVISION ANALYSIS

In a DTH (direct to home) or DBS (direct broadcasting) satellite system there are five major components. These are the programming source, the broadcast center, the satellite, the satellite dish and the receiver.

Programming source – this is where the channels that provide the programmes are based. This is where the satellite TV providers go to pay other companies (for example MTV or Nickelodeon) for the right to broadcast there programmes through their satellites.

Broadcast Center – The broadcast center is central part of the system. In the broadcast center the people who are providing the TV to the viewers at home receive signals from different programming sources and then beam a broadcast signal to satellites to geosynchronous orbit.

Satellites – The satellites in space receive the signal sent from the broadcast center and beam them back down to Earth.

Dish – The viewer then picks up this rebroadcasted signal and the satellite dish passes it onto the receiver in the house.

Receiver – All the receiver then has to is process the signal and pass it on to a standard TV.

This is a very good system to providing a good quality signal to a large area. It has very picture display and sound quality with hundreds of channels and the service is ready to use in rural and urban areas and provides a lot of access to digital and high-definition programming. However, satellite is not without its drawbacks. It can be quite expensive to buy all the equipment at the outset (satellite dish and receiver etc) and if you want to access satellite television in multiple rooms in your home be prepared for the extra cost. As well as this satellite television can be subject to extreme weather conditions. Conceptually, satellite TV is a lot like broadcast TV. It's a wireless system for delivering television programming directly to a viewer's house. Both broadcast television and satellite stations transmit programming via a radio signal. Broadcast stations use a powerful antenna to transmit radio waves to the surrounding area. Viewers can pick up the signal with a much smaller antenna. The main limitation of broadcast TV is range. The radio signals used to broadcast television shoot out from the broadcast antenna in a straight line. In order to receive these signals, you have to be in the direct line of sight of the antenna. Small obstacles like trees or small buildings aren't a problem; but a big obstacle, such as the Earth, will reflect these radio waves There are Five Main Components to a Satellite to Home TV transmission

- Programming sources are simply the channels that provide programming for broadcast. The provider doesn't create original programming itself; it pays other companies (HBO, for example, or ESPN) for the right to broadcast their content via satellite. In this way, the provider is kind of like a broker between you and the actual programming sources. (Cable TV companies work on the same principle.)

- The broadcast center is the central hub of the system. At the broadcast center, the TV provider receives signals from various programming sources and beams a broadcast signal to satellites in geosynchronous orbit.
- The satellites receive the signals from the broadcast station and rebroadcast them to Earth.
- The viewer's dish picks up the signal from the satellite (or multiple satellites in the same part of the sky) and passes it on to the receiver in the viewer's house.
- The receiver processes the signal and passes it on to a standard TV.

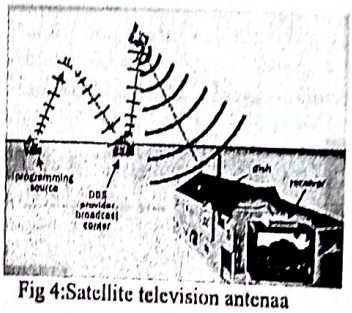

Fig 4:Satellite television antenaa

VI. FEED HORN ANTENNA ANALYSIS

The monopulse feed consists of a waveguide power divider, four multimode feed horns, and five waveguide loads. The waveguide power divider consists of a distribution network having a sum port, an azimuth difference port, and an elevation difference port interconnected to eight branch ports arranged as four pairs (A1 and B1, A2 and B2, A3 and B3, A4 and B4) in a common flange. Four feed horns of identical construction are connected to the branch ports of the power divider. To generate the sum beam, only the middle two horns are excited by branch ports A2, B2, A3, B3. The signals recombine through a transformer section and a mode transducer section and result in a combined TElo and TEN distribution at horn apertures. In the azimuth plane the intensity peaks in the center of the aperture and is

gradually tapered toward the edge. In the elevation plane cut the two excited horns have equal amplitude and phase, and therefore, the elevation sum distribution is constant. The elevation difference signal is obtained through a combination of signals captured by all four horns through the eight power divider ports A1-B8 with a 180° phase difference introduced between the upper four ports and the lower four ports. The azimuth difference signal is obtained from only the middle two horns through ports A2, B2, A3, B3. The power divider circuit for the azimuth difference signal provide the necessary 180° phase difference between the left half and the right half of the signal with a TE20 distribution at the horn aperture. The feed horn consists of a matching transformer section, a step multimode transducer, and a flare angle section (see In the following section, the design and analysis of the feed horn will be discussed. The design approaches that we used for the feed horn can be briefly summarized as follows. First, the step multimode transducer is theoretically analyzed to obtain design data for generating proper amounts of TEIo and TE30 modes. By selecting correct horn length l1 and l2 and flare angle Po the modes can be adjusted to be in phase at the aperture. Waveguide dimensions at the horn throat are then adjusted so that only desirable modes are propagating in each section and higher order modes will be attenuated as indicated. The phase error at the band edge is minimized by choosing the smallest horn length under the in-phase condition. The aperture quadratic-type phase error can be used together with the mode mixture to adjust the phase center and far-field pattern. The matching transformer section is required to match to the input hybrid-tee junction for both TEIo and TE2" mode propagation. A well-matched transformer section has been developed by an empirical procedure to modify an inverted H plane folded tee junction to allow for the propagation of both TEIo and TEZo modes. Each mode is tuned to the required bandwidth using small tuning buttons (not shown in the figure.) For example, an input VSWR of 1.3 has been achieved for both ports to propagate TEIo and TE2" modes over a ten-percent bandwidth. Fig. I(c) shows the geometry of the step multimode transducer. To obtain the mode conversion factor, the modalmatching technique is used at the junction. Assuming a TEIo mode incident from z < 0 region, the waveguide modes that exist on either side of the junction can be related by the normalized modal functions in a rectangular waveguide as defined by Marcuvitz [3]

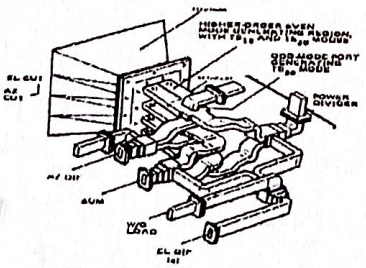

Fig 5: Feed horn antenna

VII. CONCLUSION

From the above papers we have studied and analysied The features of parabolic antennas and its types and they are offset, feedhorn,, satellite and satellite television reflector antennas.

The major applications of the offset reflectors are used in communication system, transmitting the data and receiving the data.

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Satellite TV Reception," *2018 15th European Radar Conference (EuRAD)*, 2018, pp. 505-508, doi: 10.23919/EuRAD.2018.8546512.

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[10] *Lidor Kahana 1,*, Daniel Rozban 1, Moshe Gilhar 1, Amir Abramovich 1,*, Yitzhak Yitzhaky 2 and Natan Kopeika 2,* 1 Department of Electrical and Electronic Engineering, Ariel University, Ariel 40700, Israel; rozbandaniel@gmail.com(D.R.);mosheg131@gmail.com (M.G.) 2 Department of Electro-Optical and Photonics Engineering, School of Electrical and Computer Engineering, Ben-Gurion University of the Negev, Beer Sheva 8410501, Israel; ytshak@bgu.ac.il *Correspondence: lidor8531@gmail.com (L.K.); amir007@ariel.ac.il (A.A.); kopeika@bgu.ac.il (N.K.)*

[11] *A 3d Analysis of Geometrical Factors and Their Influence on Air Flow Around a Satellite Dish. Zorana Jeli Associate Professor University of Belgrade Faculty of Mechanical Engineering Misa Stojicevic Teaching Assistant University of Belgrade Faculty of Mechanical Engineering Ivana Cvetkovic M.Sc. University of Belgrade Faculty of Mechanical Engineering Alina Duta Associate Professor University of Craiova Faculty of Mechanical Engineering Romania Dragos-Laurentiu Popa Associate Professor University of Craiova Faculty of Mechanical Engineering Romania*

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15/7/22

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engg.

Content Beyond syllabus

FORMAT & RUBRIC DETAILS

ASSIGNMENT TYPE: WRITTEN QUIZ

Objective: Title of the topics to be covered in the quiz

Instruction to be followed:

1. The quiz question paper must have 60% multiple choice questions
2. The quiz question paper must have 10% match the right answer
3. The quiz question paper must have 10%reasoning type questions
4. The quiz question paper must have 10% questions of arranging the in-write proper sequence
5. The quiz question paper must have 10% questions with multiple answers [more than one answer]
6. The work given must be from Apply level onwards
7. This will address **PO1, PO2, PO12**
8. Any online platform can be used for conducting quiz OR use the under mentioned template for conducting quiz offline.

K. S. Institute of Technology **Dept. of Electronics & Communication Engg.**	
Course code / Course:18EC641/Operating Systems	**Semester/ Section: 6 'A' &'B'**
Question No.	**Quiz questions**
1	Mention the goals of an OS
2	Name the computational structures
3	Mention the fundamental states of process
4	Mention the 3 methods of implementing threads
5	Name the part of the OS responsible for performing address translation
6	Name the field in the page table entry using which the MMU is able to raise a page fault
7	Name the fundamental file organizations
8	Name the three methods of allocation of disk space
9	Mention the advantages with respect to a mailbox
10	Mention the conditions for resource deadlock

Signature of Course In charge

Signature of HOD ECE

Questions Responses 29 Settings

Mention the goals of an OS

Short answer text

Name the computational structures

Short answer text

Mention the fundamental states of process

Short answer text

Mention the 3 methods of implementing threads

QUIZ-Operating System

18EC641

Student Name

Short answer

Short answer text

Required

Student USN *

Short answer text

Name the part of the OS responsible for performing address translation

Short answer text

Name the field in the page table entry using which the MMU is able to raise a page fault

Short answer text

Name the fundamental file organizations

Short answer text

Name the three methods of allocation of disk space

Short answer text

Questions Responses 29 Settings

Name the three methods of allocation of disk space

Short answer text

Mention the advantages with respect to a mailbox

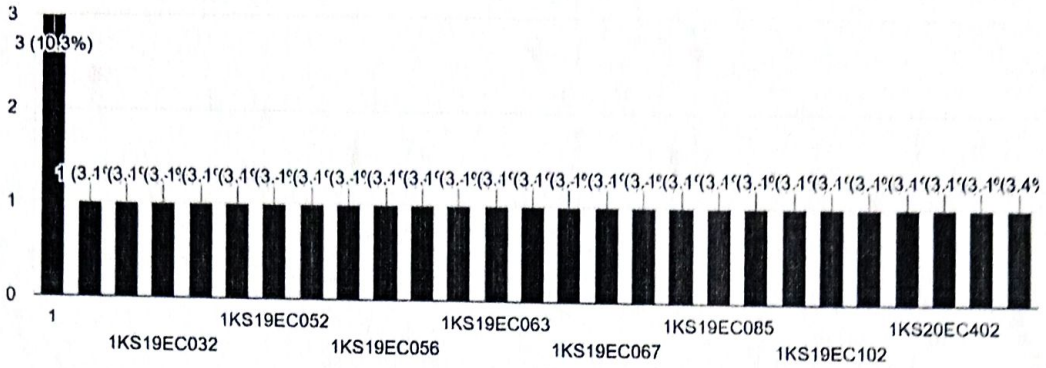
Short answer text

Mention the conditions for resource deadlock

Short answer text

Student USN

29 responses



1. Efficient use
   User convenience

2. Single program
   Sequence of single programs
   Co-executing programs

3. Ready
   Running
   Blocked
   Terminated

4. User-level threads
   Kernel-level threads
   Hybrid threads

5. MMU (Memory management unit)

6. Valid bit

7. Sequential file organization
   Direct access file organization
   Index sequential file organization.

8. Linked allocation
   File allocation Table (FAT)
   Indexed allocation

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Department of Electronics & Communication Engineering

CONTENT BEYOND SYLLABUS

Academic Year	2021-22 (Even)
Name of the Faculty	Dr. Surekha Borra
Course Name /Code	Python Application Programming/18EC646
Semester/Section	VI/A
Topic Covered	Applications of Python
Date	20/4/2022 to 15/7/22
No. of Participants	48
Objectives/Goals	• To improve the self-learning and programming skills of students • To improve the communication skills of students. • To improve the ICT usage skills of students
ICT Used	PPTs
Relevant PO's	1,2,5-11
Significance of Results/Outcomes	• 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. • Around 48 Students formed 13 teams, submitted reports, delivered their presentation, and gave demo of their apps.
Reflective Critique	• The activity improved the self-learning of students. • The activity provided a platform for students to interact with peers, improve their communication skills and work as individuals.

List of Topics Covered

Team		USN	Name	Title of Project
T-1	1	1KS19EC019	Chiranthana Yogananda.K	Object Detection
	2	1KS19EC021	Danesh Raju V	
	3	1KS19EC024	Dheemanth Kn	
T-2	1	1KS19EC007	Amrutha	Program to generate random quiz file
	2	1KS19EC014	Bhavana	
	3	1KS19EC030	Gowri	
T-3	1	1KS19EC008	Amulya.R	Image Processing using Python Libraries
	2	1KS19EC028	Gatathri.R.Warrier	
	3	1KS19EC035	Jagruti.Pai	
T-4	1	1ks19ec015	Chaitra P	DICE Rolling Simulator Game in Python
	2	1ks19ec040	Krupa A	
	3	1ks19ec043	Likitha H	
	4	1ks19ec049	Monika V Arya	
T-5	1	1KS19EC011	Archana Yadav M	Image compressor using python
	2	1KS19EC003	Aishwarya Basavaraja Kembavi	
	3	1KS19EC010	Anjali Y J	

	4	1KS19EC057	Pooja Sp	
T-6	1	1KS19EC012	Ashritha R	OTP Verification using Python
	2	1KS19EC023	Dhanya Sukanth B	
	3	1KS19EC025	Disha Shivani	
	4	1KS19EC027	Gayathri P K	
T-7	1	1KS19EC001	Abhilash As	Contact details management Using Python
	2	1KS19EC033	Hemanth R Patil	
	3	1KS19EC042	Lakshman Kumara B	
T-8	1	1KS19EC002	Abhishek C	Face recognition-based attendance system
	2	1KS19EC016	Chandan Raj Y	
	3	1KS19EC036	Jayanth Mb	
	4	1KS19EC038	Karthik Gg	
T-9	1	1KS19EC018	Chennreddy Rajashekhar	Guessing game
	2	1KS19EC022	Davino Joseph	
	3	1KS19EC031	Harsha	
	4	1KS19EC029	Sai Siddhartha	
T-10	1	1KS19EC054	Nithin D	Door unlock and Intruder Alert using face recognition
	2	1KS19EC061	Prashanth S K	
	3	1KS19EC062	Praveen Kumar A	
	4	1KS19EC065	Radhakrishna L	
T-11	1	1KS19EC048	Mohit Kumar G	Face Detection using Python
	2	1KS19EC050	Monisha B K	
	3	1KS19EC051	N Anila	
T-12	1	1KS19EC006	Akshitha	Digital Voting System using Python
	2	1KS19EC009	Anitha S	
	3	1KS19EC037	Manogna K M	
	4	1KS18EC044	Lokeshwari	
	5	1KS19EC045	Manu Kandra	

Signature of Course In charge

Signature of HOD

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGG.

CONTENT BEYOND SYLLABUS
FORMAT & RUBRIC 2021-22

Course Name: Python Application Programming **Course Code: 18EC646**
ASSIGNMENT TYPE: Mini Project

Objective: Programming on different applications using Python Language.

Instruction to be followed:

1. The topic allotted or assigned must be from the course
2. The work given must be from Apply level onwards
3. This will address **PO1, PO2, PO5-PO12**
4. Process to assign and evaluate the steps of the assignment.
    - Divide the students into batches(Max five)
    - Officially announce the batches & assignment topic for each batch. The topic selected must be from the course.

Batch No.	Studentsinthebatch		Topic
	Roll No.	Name	
1			

Important dates:

Sl. No	Details	Date
1.	Dateofissueoftopicsforpresentation	20/4/22
2.	DatesforAppeal/challenge(onorbefore)	25/4/22
3.	Lastdateforthesubmissionoftheprojectreport	10/6/22
4.	LastdateforDemoPresentation	20/6/22
5.	Dateofannouncementofevaluation	25/6/22
Note: Assignmentsmarkswillnotbegivenifsubmittedonlaterdatesorfailedtopresent aseminar/demo.		

GuidelinesforProjectReport:

Theprojectreportshouldcontainthefollowing:

- Coverpage
- Certificate
- Contents
- Abstract
- Introduction
- Objectives
- Methodology/DetailsofProject
- Results
- Conclusion
- References

Rubrics/EvaluationStrategy:

Sl.No	Criteria	Marks
1.	Results	10
2.	QualityofTeamDemo	5
3.	QualityofProjectReport	5
4.	Usefulnesstosociety/environment	5
5.	IndividualContributiontoProject	5
6.	IndividualContributiontoReport	5
7.	ToolLearning	5
	Total	**40(ScaletheMarksto10)**

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

KSIT

Content Beyond Syllabus
Mini Project Group list with topic

Course Name: Python Application Programming **Course Code: 18EC646**
Semester/sec:VI B

Batch No.	Students in the batch		Topic
	USN	Name	
1	1KS19EC073	Sahana S	Color Detection Using Python and Open CV
	1KS19EC075	Samiksha S	
	1KS19EC098	Theerthana S R	
	1KS19ET011	Shwetha K	
2	1KS19EC082	Shreyas B Aradhya	Automated Billing Machine using Python
	1KS19EC070	S K Bharatesh	
	1KS19EC010	Shreyas C R	
	1KS19ET009	Rohit Kumar	
3	1KS19EC069	Rohan K R	Text to Speech using Python
	1KS19EC076	Santhosh Hegde	
	1KS19EC094	SwagathAithal	
	1KS19EC077	Sathvik U M	
	1KS19EC096	Ruthvik T N L	
4	1KS19ET004	Mahadev A C	Car Parking Management Systemusing Python
	1KS19ET006	Nelbin N	
	1KS19ET007	Niranjan S Rao	
	1KS19ET008	Rishi Kumar S	
5	1KS19EC083	Shreyas Gowda	Facial Recognition using Open CV
	1KS19EC081	Shreyams DK	
6	1KS19EC087	Srinivas	Address Book using Python
	1KS19EC084	Shreyas V B	
	1KS19EC089	Sriram	
	1KS19EC107	Vishnuraatha	
7	1KS19EC088	Srinivasan	Volume Control using Hand Gesture
	1KS19EC100	Vaishnavi	
8	1KS19EC078	ShamithaBijoor	Quiz using Python
	1KS19EC093	Sushmitha S	
	1KS19EC086	Sinchana M N	

Course In Charge

HOD ECE

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109
DEPARTMENT OF COMPUTER SCIENCE& ENGINEERING
TEACHING AND LEARNING

content: Beyond syllabus

Academic Year	**2021-22**
Name of the Faculty	**Geetha.R**
Course Name /Code	**Introduction to Data Structures and Algorithm-18CS652**
Semester/Section	**VI A**
Activity Name	**Poster Presentation**
Topic Covered	**Trees, Graphs, Data structure concepts, Algorithms**
Date	**15-6-2022**
No. of Participants	**62**
Objectives/Goals	**To analyse the understanding of the students regarding to data structures and its algorithms**
ICT Used	**LCD**

Appropriate Method/Instructional materials/Exam Questions

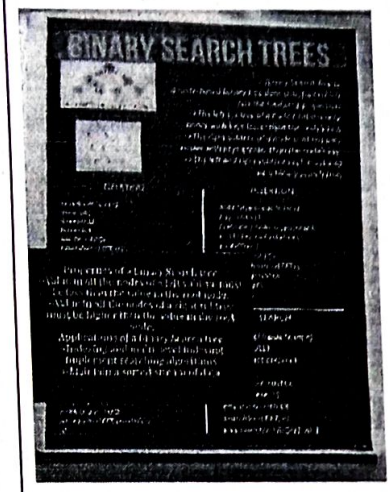
In class of 62 students 13 batches are formed with 4-5 students in a batch. Each batch choose the topic for presentation and prepared the poster for the same topic.

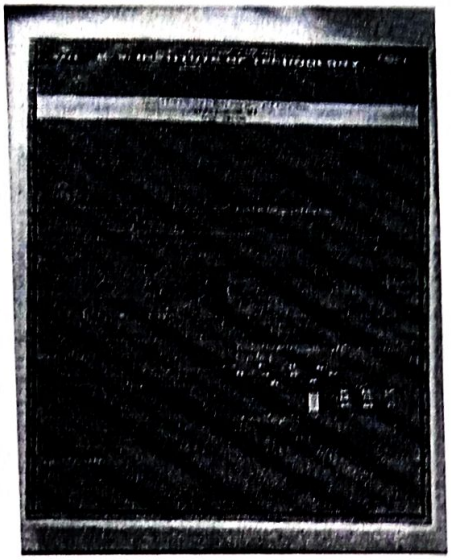
Key question to be examined are:

1.How well the students understood the topic taught in class?
2.Are they able to work effectively as an individual and team?
3.Are they able to present the work assigned-demonstration and answer the queries related to the program?

Relevant POs	**PO1, PO2, PO9 and PO10**
Significance of Results/Outcomes	**Students are able to know the importance of experiential learning and understanding the concepts of data structures and algorithm.**
Reflective Critique	**By conducting peer review we can measure how well the students are able to work in team and to explore the growth in knowledge, abilities, and/or skills**

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





Geetha.R

Faculty In-Charge

HOD

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engineering.

FORMAT & RUBRIC

ASSIGNMENT TYPE: PRESENTATION

Objective: POSTER PRESENTATION, INTRODUCTION TO DSA, 18CS652

Sl.No	Details	Date
1.	Date of issue of topics for presentation	Date: 15/6/2022
2.	Last date for the submission of posters Posters should be submitted in person by the batch of students.	Date: 30/6/2022
3	Presentation date [as per schedule shared]	Batch 1 to Batch 4: 09/07/2022 Batch 5 to Batch 10 : 15/7/2022 Batch 11 to Batch 13 : 16/7/2022
4	Dates for Appeal/challenge(on or before)	6/7/2022
Note: Assignments marks will not be given if assignments submitted on later dates and failed to present a seminar.		

Batch No.	Students in the batch		Assignment topic
	USN	Name	
1	1KS19EC012 1KS19EC023 1KS19EC025 1KS19EC027 1KS19EC048	ASHRITHA R DHANYA SUKANTH B K DISHA SHIVANI GAYATHRI.P. K MOHITH KUMAR G	Binary Search Tree.

Batch No.	Students in the batch		Assignment topic
	USN	Name	
2	1KS19EC019 1KS19EC021 1KS19EC024 1KS19EC064	CHIRANTHANA YOGANANDA.K DANESH RAJU V DHEEMANTH K N PRIYANKA K	Structures and Unions.

Batch No.	Students in the batch		Assignment topic
	USN	Name	
3	1KS19EC004 1KS19EC011 1KS19EC014 1KS19EC032 1KS19EC046	AISHWARYA M G ARCHANA YADAV M BHAVANA S HARSHITHA B Y MEGHANA H P	Introduction to data structures

Batch No.	Students in the batch		Assignment topic
	USN	Name	
4	1KS19EC054 1KS19EC055 1KS19EC062 1KS19EC063 1KS19EC058	NITHIN D Pavan Kumar G R PRAVEEN KUMAR N PREETHAM G H PRADEEP GADED	Single Linked list

Batch No.	Students in the batch		Assignment topic
	USN	Name	
5	1KS19EC005 1KS19EC016 1KS19EC039 1KS19EC038 1KS19EC041	AKSHAY KUMAR D Chandan Raj Y KASHYAP.P KARTHIK K KRUTHI K S	Stacks

Batch No.	Students in the batch		Assignment topic
	USN	Name	
6	1KS19EC008 1KS19EC028 1KS19EC035 1KS19EC002	AMULYA R GAYATHRI R WARRIER JAGRUTI PAI ABHISHEK CHANDRESH	Circular Queues

Batch No.	Students in the batch		Assignment topic
	USN	Name	
7	1KS19EC006 1KS19EC009 1KS19EC037 1KS19EC044 1KS19EC045	AKSHITHA ANITHA.S KAMMA MANUBOLU MANOGNA M LOKESHWARI MANU N KANDRA	Problem solving Technique

Batch No.	Students in the batch		Assignment topic
	USN	Name	
8	1KS19EC018 1KS19EC022 1KS19EC031 1KS19EC029	CHENNREDDY RAJASEKHAR DAVINO JOSEPH HARSHA R GONUGUNTLA SAI SIDDARTHA	Arrays

Batch No.	Students in the batch		Assignment topic
	USN	Name	
9	1KS19EC015 1KS19EC040 1KS19EC043 1KS19EC049 1KS19EC036	CHAITRA P KRUPA.A LIKITHA H MONIKA V ARYA JAYANTH M B	Asymptotic Notation

Batch No.	Students in the batch		Assignment topic
	USN	Name	
10	1KS19EC003 1KS19EC007 1KS19EC010 1KS19EC030 1KS19EC057	AISHWARYA BASAVARAJA KEMBAVI AMRUTA ANJALI Y J GOWRI S NADIGER POOJA SP	Queues

Batch No.	Students in the batch		Assignment topic
	USN	Name	
11	1KS19EC050 1KS19EC051 1KS19EC052 1KS19EC053 1KS19EC017	MONISHA B K N. ANILA NIDHI. S NISARGA K CHANDANA.L	Pointers

Batch No.	Students in the batch		Assignment topic
	USN	Name	
12	1KS19EC001 1KS19EC033 1KS19EC042 1KS19EC047 1KS19EC020	ABHILASH A S HEMANTH.R. PATIL LAKSHMAN KUMARA B MOHAMMAD RAKHEEB M R D NAYAN	Graphs

Batch No.	Students in the batch		Assignment topic
	USN	Name	
13	1KS19EC056 1KS19EC061 1KS19EC065 1KS19EC066	POKURI MOUNIKA PRASHANTH.S. K RADHA KRISHNA L RAJALAKSHMI S	1Dimensional Array

- Criteria for Evaluation & Instruction for students
  - Number of MS power point slides should not exceed more than 15 slides.
  - Student must design the poster as per the topic assigned.
  - Presentation time is only 15 minutes.

Batch No.	USN	Name	Individual Contribution	Marks
1	1KS19EC012	ASHRITHA R	INTRODUCTION	10
	1KS19EC023	DHANYA SUKANTH B K	PROPERTIES	10
	1KS19EC025	DISHA SHIVANI	OPERATION	10
	1KS19EC027	GAYATHRI.P. K	CODE SNIPPET	10
	1KS19EC048	MOHITH KUMAR G	OPERATION	10
2	1KS19EC019	CHIRANTHANA YOGANANDA.K	INTRODUCTION	9
	1KS19EC021	DANESH RAJU V	APPLICATION	10
	1KS19EC024	DHEEMANTH K N	USES AND CODE SNIPPET	10
	1KS19EC064	PRIYANKA K	SIMILARITIES AND DIFFERENCES	10
3	1KS19EC004	AISHWARYA M G	INTRODUCTION	10
	1KS19EC011	ARCHANA YADAV M	TYPES	10

	1KS19EC014	BHAVANA S	APPLICATIONS	9
	1KS19EC032	HARSHITHA B Y	USES	9
	1KS19EC046	MEGHANA H P	CODE SNIPPET	9
4	1KS19EC054	NITHIN D	INTRODUCTION	10
	1KS19EC055	PAVAN KUMAR G R	APPLICATIONS	10
	1KS19EC062	PRAVEEN KUMAR N	USES	9
	1KS19EC063	PREETHAM G H	CODE SNIPPET	9
	1KS19EC058	PRADEEP GADED	EXAMPLE	9
5	1KS19EC005	AKSHAY KUMAR D	INTRODUCTION	10
	1KS19EC016	Chandan Raj Y	APPLICATIONS	9
	1KS19EC039	KASHYAP.P	OPERATIONS	10
	1KS19EC038	KARTHIK K	CODE SNIPPET	9
	1KS19EC041	KRUTHI K S	WORKING OF STACKS	9
6	1KS19EC008	AMULYA R	INTRODUCTION	10
	1KS19EC028	GAYATHRI R WARRIER	OPERATIONS	10
	1KS19EC035	JAGRUTI PAI	APPLICATION	10
	1KS19EC002	ABHISHEK CHANDRESH	WORKING PRINCIPLE	10
7	1KS19EC006	AKSHITHA	STEPS, DIAGRAM	10
	1KS19EC009	ANITHA.S	ALGORITHM	9
	1KS19EC045	MANU N KANDRA	FLOWCHART	10
	1KS19EC037	KAMMA MANUBOLU MANOGNA	PSEUDOCODE	10
	1KS19EC044	M LOKESHWARI	APPLICATINS OF EACH	10
8	1KS19EC018	CHENNREDDY RAJASEKHAR	INTRODUCTION	8
	1KS19EC022	DAVINO JOSEPH	APPLICATION	8
	1KS19EC031	HARSHA R	USES	8
	1KS19EC029	GONUGUNTLA SAI SIDDARTHA	CODE SNIPPET	8
9	1KS19EC015	CHAITRA P	INTRODUCTION	10
	1KS19EC040	KRUPA.A	APPLICATION	10
	1KS19EC043	LIKITHA H	USES	10
	1KS19EC049	MONIKA V ARYA	TYPES	10
	1KS19EC036	JAYANTH M B	LIMITATION	10
10	1KS19EC003	AISHWARYA BASAVARAJA KEMBAVI	INTRODUCTION	8
	1KS19EC007	AMRUTA	APPLICATION	8
	1KS19EC010	ANJALI Y J	TYPES	8
	1KS19EC030	GOWRI S NADIGER	USES	8
	1KS19EC057	POOJA SP	LIMITATIONS	8
11	1KS19EC050	MONISHA B K	INTRODUCTION	10
	1KS19EC051	N. ANILA	APPLICATIONS	10
	1KS19EC052	NIDHI. S	USES	10
	1KS19EC053	NISARGA K	CODE SNIPPET	9
	1KS19EC017	CHANDANA.L	CODE SNIPPET	10
12	1KS19EC001	ABHILASH A S	INTRODUCTION	8
	1KS19EC033	HEMANTH.R. PATIL	APPLICATION	8
	1KS19EC042	LAKSHMAN KUMARA B	USES	8
	1KS19EC047	MOHAMMAD RAKHEEB M R	TYPES	8
	1KS19EC020	D NAYAN	REPRESENTATION	8
13	1KS19EC056	POKURI MOUNIKA	INTRODUCTION	10
	1KS19EC061	PRASHANTH.S. K	APPLICATIONS	9
	1KS19EC065	RADHA KRISHNA L	USES	9
	1KS19EC066	RAJALAKSHMI S	CODE SNIPPET	10

Rubrics: Oral Presentation

Sl.No	Criteria
1.	Quality of the power point/poster
2.	Technical content
3.	Structuring of the speech
4.	Clarity of speech with respect to the topic
5.	Voice modulation
6.	Body language

Strategy to award marks for presentations based on the criteria

Sl. No.	Criteria	Marks for assignments
1.	Assignment not submitted in time or assignment submitted in time but not presented	No marks
2.	Assignment submitted in time, presented and any 04 or more criteria not met	1-2mark
3.	Assignment submitted in time, presented and any 03 or more criteria not met	3-4marks
4.	Assignment submitted in time, presented and any 02 or more criteria not met	5-6marks
5.	Assignment submitted in time, presented and any 01 or more criteria not met	7-8marks
6.	Assignment submitted in time, presented and all criteria are met	9-10marks

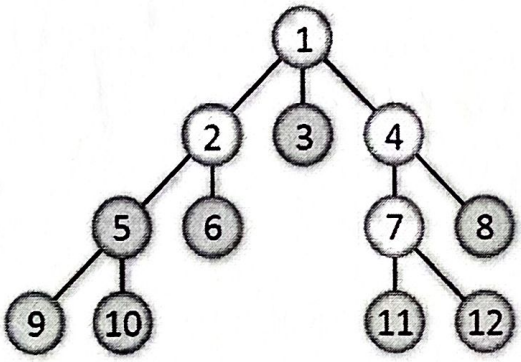
Geetha.R

Signature of Faculty-In charge

HOD

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
CONTENT BEYOND SYLLABUS2021-22 EVEN SEMESTERS

Batch	**2019 – 2023**		
Year/Semester/section	**3rd/6th/A&B**		
Course Code-Title	**18CS652-Introduction To Data Structures and Algorithm**		
Name of the Course in charge	**Harshavardhan.J.R** **Geetha R**	**Dept**	**ECE**

Sl.No	Questions	K Level	CO
1.	What is a queue? Apply the queue data structure for the following graph to perform BFS: 	K3 Applying	CO4
2.	Implement a C code to generate a binary numbers from 1 to n applying queue data structure.	K3 Applying	CO4
3.	Implement a C code to count the number of nodes in a binary tree.	K3 Applying	CO4
4.	Implement a C code to that displays all the leaf nodes of a binary tree.	K3 Applying	CO4
5.	Implement a C code for a 3-node directed graph using adjacency list.	K3 Applying	CO5
6.	Implement a C code that takes as input the path matrix ad applies the shortest path algorithm to generate the corresponding shortest path matrix.	K3 Applying	CO5
7.	Consider the following array of integers: 35, 1, 7, 12, 5, 23, 16, 3, 1	K3 Applying	CO5

	Apply bubble sort technique to create a snapshot of the above array at each pass.		
8.	Consider the following array of integers: 74, 39, 35, 32, 97, 84 Apply selection sort technique to create a snapshot of the above array at each pass.	K3 Applying	CO5
9.	Consider the following array of integers: 35, 54, 12, 1, 23, 15, 45, 38 Apply quick sort technique to create a snapshot of the above array at each pass.	K3 Applying	CO5
10.	Consider the following array of integers: 35, 1, 7, 12, 5, 23, 16, 3, 1 Implement a C program to sort the numbers using bubble sort technique and to search a key element using binary search technique.	K3 Applying	CO5

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

This will address PO1, PO2 & PO12.

Course In charge **Module coordinator** **HOD ECE**

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engg.

FORMAT & RUBRIC

CONTENT BEYOND SYLLABUS: Poster Presentation of Wireless and Cellular Communication -18EC81

Objective: To identify the application on Wireless and Cellular communication and give the **Poster Presentation.**

Instruction to be followed:

1. The topic allotted or assigned must be from the course
2. The work given must be from Apply level onwards
3. This will address **PO6,PO9, PO10,PO12**

Team &Poster presentation Details				
SL. No	**TEAM**	**USN**	**Name of the student**	**Topic of Poster presentation**
1	TEAM 1	1KS18EC094	SURAJ V GHORPADE	Comparison of 4G & 5G wireless Technology
		1KS18EC098	THANUSHREE D	
		1KS18EC099	VAISHNAVI G	
		1KS18EC111	VRINDHA SHAM BHATT	
2	TEAM 2	1KS18EC023	DHEERAJ M S	Role of wireless communication in Health care systems
		1KS18EC028	GANESH P	
		1KS18EC015	CHARAN G	
3	TEAM 3	1KS18EC073	RITHVIK P	Wireless in unmanned aerial vechicles
		1KS18EC082	SHIVA SHANKAR.B	
		1KS18EC012	C A SUSHMA	
		1KS18EC050	NAGA OMKAR N	
4	TEAM 4	1KS18EC085	SHREYAS D R	Evolution in Wireless communication
		1KS18EC057	P SAI GOVARDHAN	
		1KS18EC058	PARIKSHITH S	
		1KS18EC070	RAM BAHADUR MAHARA	
5	TEAM 5	1KS18EC092	SUJAY R	Wireless LAN
		1KS18EC090	SOMASHEKAR M	
6	TEAM 6	1KS18EC095	SUSHMA.A.V	Future wireless networks
		1KS18EC102	VARSHINI.B.M	
		1KS18EC108	VISHAL MADHUSUDAN	
		1KS18EC029	GOKUL G	
7	TEAM 7	1KS19EC401	KARTHIK B P	Wonders of Wireless
		1KS19EC402	KRISHNAPRASAD B	
		1KS19EC408	SINDHU G	
		1KS19EC400	HEMANTHA V	
8	TEAM 8	1KS18EC087	SIRI RAVINATH	Role of wireless communication in Health care systems
		1KS19EC406	RAGHOTHAM C G	
		1KS18EC007	AKHILA V	
		1KS18EC069	RAJATH S BHUSHAN	

9	TEAM 9	1KS18EC013	C M CHAITHANYA VARDHAN	Comparison of 4G & 5G wireless Technology
		1KS18EC014	CHANDAN Y C	
		1KS18EC018	DARSHAN V	
10	TEAM 10	1KS18EC110	VIVEKGOWDA J	5G Advantages & disadvantages
		1KS18EC104	VIJAY BABU K	
		1KS18EC106	VINAY S	
		1KS16EC005	AKASH C GURUVANNAVAR	
11	TEAM 11	1KS18EC030	HARSH SHARMA	Wireless in unmanned aerial vechicles
		1KS18EC027	G.J.NITHIN	
		1KS18EC025	DINESH KUMAR NAYAK	
		1KS18EC068	RAJ KRISHNA	
12	TEAM 12	1KS18EC078	SANJANA B	Cognitive Computing & wireless communication on the edge of Heath care
		1KS18EC088	SIRISHA.M	
		1KS19EC405	PRUTHVI DINESH	
13	TEAM 13	1KS18EC060	POOJA S	Evolution in Wireless communication
		1KS18EC061	PRAKRUTHI S H	
		1KS18EC081	SHEETAL N GOWDA	
		1KS18EC051	NAGASHREE A	
14	TEAM 14	1KS18EC002	ABHISHEK.V	Wireless LAN
		1KS18EC006	AKASH R	
		1KS18EC016	CHINNAPU CHARAN TEJA REDDY	
		1KS18EC043	MANOJ G S	
15	TEAM 15	1KS18EC001	A N BHOOMIKA CHOWDARY	Future wireless networks
		1KS18EC019	DARSHAN S	
		1KS18EC021	DEEPTHI ANDANI	
		1KS18EC040	LAVANYA M	
16	TEAM 16	1KS18EC041	M.NIHITHA YADAV	Wonders of Wireless
		1KS18EC035	JISHNU S	
		1KS18EC047	MOHAMMED FAIZAN SHAFI	
		1KS18EC026	DIVAKARBABU Y	
17	TEAM 18	1KS18EC076	S TUSHAR HARINATH	Wireless RF Technology for the IoT
		1KS18EC066	RAGHAVENDRA.K.P	
		1KS18EC064	PURUSHOTHAM V R	
		1KS18EC067	RAGHU B T	
18	TEAM 19	1KS18EC003	ADITHI.S	Wireless in unmanned aerial vechicles
		1KS18EC024	DHRITHIRHUTH RAJANNA	
		1KS18EC037	K RISHIKA RAVI	
		1KS18EC042	MAHANTH SAI M	
19	TEAM 20	1KS18EC049	N S V JASHWANTH	Wireless charging vs.Wired charging of Electronic Devices
		1KS18EC071	RASETTY SANDEEP	
		1KS18EC086	SHRIKANTH C K	
		1KS18EC097	THANUSH R S	
20	TEAM 21	1KS18EC008	ANAGHA S	Wireless RF

	21	1KS18EC010	ASHRITHA S C	the IoT
		1KS18EC009	ANANYA ANANTH	
		1KS18EC044	MEGHA R	
21	TEAM 22	1KS18EC020	DEEKSHA S N	Hereogenous wireless communication world
		1KS18EC036	JYOTSNA B UPADHYE	
		1KS18EC038	KARISHMA M	
		1KS18EC039	KOMALA K V	
22	TEAM 23	1KS18EC005	AISHWARYA R	Comparison of 4G & 5G wireless Technology
		1KS18EC096	SUSHMITHA R	
		1KS18EC093	SUPRIYA S	
		1KS18EC101	VANDANA K	
23	TEAM 25	1KS18EC053	NAVYA M S	Wireless in unmanned aerial vechicles
		1KS18EC052	NAMITH R	
		1KS18EC084	SHREYAS C	
		1KS18EC046	MEGHANA GOWDA V	
24	TEAM 26	1KS18EC004	AISHWARYA BANDIGANI	Evolution in Wireless communication
		1KS18EC055	NIROSHA G J	
		1KS18EC056	NISHANTH J RAO	
		1KS18EC059	PAVAN KUMAR P	
25	TEAM 27	1KS18EC017	CHITHRITHA G R	Future wireless networks
		1KS18EC022	DHANUSHREE C	
		1KS18EC031	HARSHITHA S	
		1KS18EC045	MEGHANA B S	
26	TEAM 28	1KS18EC011	AYEESHA RUMAN	Wonders of Wireless
		1KS18EC034	JHANAVI V	
		1KS18EC032	JAHNAVI A P	
27	TEAM 29	1KS18EC105	VINAY K	Hereogenous wireless communication world
		1KS18EC063	PUNEETH M	
		1KS18EC103	VASANTH PAI.M	
		1KS18EC109	VISHWAS P	
28	TEAM 30	1KS18EC091	SUDHEER B	Role of wireless communication in Health care systems
		1KS18EC074	S MANOJ	
		1KS18EC075	S RAHUL	
29	TEAM 31	1KS19EC403	NAVEEN G	Wireless in unmanned aerial vechicles
		1KS19EC409	VARSHA M S	
		1KS19EC407	SADANA M	
		1KS18EC100	VAKKALA GADDA ANIL	
30	TEAM 32	1KS18EC033	JANHAVI K P	Role of wireless communication in Health care systems
		1KS18EC048	MONISHA B R	
		1KS18EC054	NIHARIKA S A	
		1KS18EC083	SHREYA V DEV	
31	TEAM 33	1KS18EC077	SAGAR T C	Wireless RF Technology for the IoT
		1KS18EC079	SANKET B PASCHAPURI	
		1KS18EC080	SHASHANK H K	

Signature of Course In-charge

Signature of HOD-ECE

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Dept. of Electronics & Communication Engg.

FORMAT & RUBRIC

2021-22

Course Name: Radar Engineering **Course Code: 18EC823**

Content Beyond Syllabus

ASSIGNMENT TYPE: PRESENTATION

Objective: Title of the topic to be Presented [Oral or Poster presentation]
[Topic allotted must be from the course]

Instruction to be followed:

1. The topic allotted or assigned must be from the course
2. The work given must be from Apply level onwards
3. This will address **PO9, PO10, PO12**
4. Process to assign and evaluate the steps of the assignment.

- Divide the students into batches (Max five)
- Officially announce the batches & assignment topic for each batch. The topic selected must be from the course.

Batch No.	Students in the batch		Assignment topic
	Roll No.	Name	
1			

Important dates:

Sl.No	Details	Date
1.	**Date of issue of topics for presentation**	16/5/2022
2.	**Last date for the submission of the presentation report OR If it is a poster presentation, the posters should be submitted in person by the batch of students.**	10/6/2022
3	**Presentation date [as per schedule shared]**	20/6/2022 to 22/6/22
4	**Dates for Appeal/challenge (on or before)**	20/5/2022
Note: Assignments marks will not be given if assignments are submitted on later dates and failed to present a seminar.		

Rubrics: Oral Presentation

Note: Plagiarism (≤30%) is a mandatory criteria to be met

Sl.No	Criteria
1.	Quality of the power point/poster
2.	Technical content
3.	Structuring of the speech
4.	Clarity of speech with respect to the topic
5.	Voice modulation
6.	Body language

Strategy to award marks for presentations based on the criteria

Sl. No.	Criteria	Marks for assignments
1.	Assignment not submitted in time or assignment submitted in time but not presented	No marks
2.	Assignment submitted in time presented and any 04 or more criteria not met	1mark
3.	Assignment submitted in time presented and any 03 or more criteria not met	2marks
4.	Assignment submitted in time presented and any 02 or more criteria not met	3marks
5.	Assignment submitted in time presented and any 01 or more criteria not met	4marks
6.	Assignment submitted in time, presented and all criteria are met	5marks

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Department of Electronics & Communication Engineering

2021-22

Course Name: Radar Engineering **Course Code: 18EC823**
Semester/sec:VIII A

Content Beyond Syllabus

ASSIGNMENT TYPE: PRESENTATION

Objective: Title of the topic to be Presented [Oral or Poster presentation]Marks: 5

Batch No.	Students in the batch		Assignment topic	ORAL/ POSTER
	USN	Name		
1	1KS18EC001	A N BHOOMIKA CHOWDARY	Introduction to Radar System, Maximum Unambiguous Range	ORAL
	1KS18EC002	ABHISHEK.V		
	1KS18EC003	ADITHI.S		
	1KS18EC004	AISHWARYA BANDIGANI		
	1KS18EC005	AISHWARYA R		
2	1KS18EC006	AKASH R	PRF, PRI, Duty Cycle, Peak Transmitter Power	ORAL
	1KS18EC007	AKHILA V		
	1KS18EC008	ANAGHA S		
	1KS18EC009	ANANYA ANANTH		
	1KS18EC010	ASHRITHA S C		
3	1KS18EC011	AYEESHA RUMAN	The simple form of the Radar Equation	ORAL
	1KS18EC012	C A SUSHMA		
	1KS18EC013	C M CHAITHANYA VARDHAN		
	1KS18EC014	CHANDAN Y C		
	1KS18EC015	CHARAN G		
4	1KS18EC016	CHINNAPU CHARAN TEJA REDDY	Prediction of Range Performance	ORAL
	1KS18EC017	CHITHRITHA G R		
	1KS18EC018	DARSHAN V		
	1KS18EC019	DARSHAN S		
	1KS18EC020	DEEKSHA S N		
5	1KS18EC021	DEEPTHI ANDANI	Modified Radar Range Equation	ORAL
	1KS18EC022	DHANUSHREE C		
	1KS18EC023	DHEERAJ M S		
	1KS18EC024	DHRITHIRHUTH RAJANNA		
	1KS18EC025	DINESH KUMAR NAYAK		
6	1KS18EC026	DIVAKARBABU Y	Radar Cross Section of Targets: simple targets	ORAL
	1KS18EC027	G.J. NITHIN		
	1KS18EC028	GANESH P		
	1KS18EC029	GOKUL G		

	1KS18EC030	HARSH SHARMA		
7	1KS18EC031	HARSHITHA S	MTI and Pulse Doppler Radar	ORAL
	1KS18EC032	JAHNAVI A P		
	1KS18EC033	JANHAVI K P		
	1KS18EC034	JHANAVI V		
	1KS18EC035	JISHNU S		
8	1KS18EC036	JYOTSNA B UPADHYE	MTI Radar with – Power Amplifier Transmitter	ORAL
	1KS18EC037	K RISHIKA RAVI		
	1KS18EC038	KARISHMA M		
	1KS18EC039	KOMALA K.V		
	1KS18EC040	LAVANYA M		
9	1KS18EC041	M.NIHITHA YADAV	Delay- Line Canceller, Clutter Attenuation	ORAL
	1KS18EC042	MAHANTH SAI M		
	1KS18EC043	MANOJ G S		
	1KS18EC044	MEGHA R		
	1KS18EC045	MEGHANA B S		
10	1KS18EC046	MEGHANA GOWDA V	MTI Improvement Factor,Digital MTI Processing	ORAL
	1KS18EC047	MOHAMMED FAIZAN SHAFI		
	1KS18EC048	MONISHA B R		
	1KS18EC049	N S V JASHWANTH		
	1KS18EC050	NAGA OMKAR N		
11	1KS18EC051	NAGASHREE A	Tracking Radar	ORAL
	1KS18EC052	NAMITH R		
	1KS18EC053	NAVYA M S		
	1KS18EC054	NIHARIKA S A		
	1KS18EC055	NIROSHA G J		
12	1KS18EC056	NISHANTH J RAO	Radar Displays	ORAL
	1KS18EC057	P SAI GOVARDHAN		
	1KS18EC058	PARIKSHITH S		
	1KS18EC059	PAVAN KUMAR P		

Course In-charge

HOD

K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

Department of Electronics & Communication Engineering

2021-22

Course Name: Radar Engineering **Course Code: 18EC823**
Semester/sec: VIII B

Content Beyond Syllabus

ASSIGNMENT TYPE: PRESENTATION

Objective: Title of the topic to be Presented [Oral or Poster presentation]

Batch No.	Studentsinthebatch		Assignment topic	ORAL/ POSTER
	USN	Name		
1	1KS16EC005	AKASH CHANDRAPPA GURUVANNAVAR	Introduction to Radar System, Maximum Unambiguous Range	ORAL
	1KS18EC060	POOJA S		
	1KS18EC061	PRAKRUTHI S H		
	1KS18EC063	PUNEETH M		
	1KS18EC064	PURUSHOTHAM V R		
2	1KS18EC067	RAGHU B T	PRF, PRI, Duty Cycle, Peak Transmitter Power	ORAL
	1KS18EC068	RAJ KRISHNA		
	1KS18EC069	RAJATH S BHUSHAN		
	1KS18EC070	RAM BAHADUR MAHARA		
	1KS18EC071	RASETTY SANDEEP		
3	1KS18EC073	RITHVIK P	The simple form of the Radar Equation	ORAL
	1KS18EC074	S MANOJ		
	1KS18EC075	S RAHUL		
	1KS18EC076	S TUSHAR HARINATH		
	1KS18EC077	SAGAR T C		
4	1KS18EC078	SANJANA B	Predictionof Range Performance	ORAL
	1KS18EC079	SANKET B PASCHAPURI		
	1KS18EC080	SHASHANK H K		
	1KS18EC081	SHEETAL N GOWDA		
	1KS18EC082	SHIVA SHANKAR.B		
5	1KS18EC083	SHREYA V DEV	Modified Radar Range Equation	ORAL
	1KS18EC084	SHREYAS C		
	1KS18EC085	SHREYAS D R		
	1KS18EC086	SHRIKANTH C K		

	1KS18EC087	SIRI RAVINATH		
6	1KS18EC088	SIRISHA.M	Radar Cross Section of Targets: simple targets	ORAL
	1KS18EC090	SOMASHEKAR M		
	1KS18EC091	SUDHEER B		
	1KS18EC092	SUJAY R		
	1KS18EC093	SUPRIYA S		
7	1KS18EC094	SURAJ V GHORPADE	MTI and Pulse Doppler Radar	ORAL
	1KS18EC095	SUSHMA.A. V		
	1KS18EC096	SUSHMITHA R		
	1KS18EC097	THANUSH R S		
	1KS18EC098	THANUSHREE D		
8	1KS18EC099	VAISHNAVI G	MTI Radar with – Power Amplifier Transmitter	ORAL
	1KS18EC100	VAKKALA GADDA ANIL		
	1KS18EC101	VANDANA K		
	1KS18EC102	VARSHINI.B.M		
	1KS18EC103	VASANTH PAI.M		
9	1KS18EC104	VIJAY BABU K	Delay- Line Canceller, Clutter Attenuation	ORAL
	1KS18EC105	VINAY K		
	1KS18EC106	VINAY S		
	1KS18EC108	VISHAL MADHUSUDAN		
	1KS18EC109	VISHWAS P		
10	1KS18EC110	VIVEKGOWDA J	MTI Improvement Factor, Digital MTI Processing	ORAL
	1KS18EC111	VRINDHA SHAM BHATT		
	1KS19EC400	HEMANTHA V		
	1KS19EC401	KARTHIK B P		
11	1KS19EC402	KRISHNAPRASAD B	Tracking Radar	ORAL
	1KS19EC403	NAVEEN G		
	1KS19EC405	PRUTHVI DINESH		
	1KS19EC406	RAGHOTHAM C G		
12	1KS19EC407	SADANA M	Radar Displays	ORAL
	1KS19EC408	SINDHU G		
	1KS19EC409	VARSHA M S		

SSJ.
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