

Faculty Development Program

Simulation of Electronics Circuits using Multisim & LabVIEW Programming and

Design & Analysis using VLSI Cadence Tool Organized by

Department of ECE In association with IETE, ISTE and IE(I)





Date: 26th Sep 2022-30th Sep 2022

Timings: 9.00 am - 4.30 pm

Venue: VLSI Lab, DSP Lab, Old Building, KSIT

Conveners:

Dr. P. N. Sudha

Dr. Chanda V Reddy

FDP on "Simulation of Electronics Circuits using Multisim & LabVIEW Programming and Design & Analysis using VLSI Cadence Tool" was organized by the Dept. of ECE, K.S. INSTITUTE OF TECHNOLOGY, Bengaluru in association with IETE, ISTE and IE (I) from 26th Sep 2022 to 30th Sep 2022.

OBJECTIVES:

- To help faculty enhance their technical skills.
- To familiarize faculty with the Multisim electrical circuit simulation package to create simple schematics and perform basic simulations.
- · To help faculty improve their modern tools usage skills.
- To help faculty explore the others work in their interested domains and help them evolve critical thinking.
- To help students faculty and exchange ideas.

PROFILES OF RESOURCE PERSONS

Day 1:Monday



Mr. Navneet Krishna, Field Application Engineer, Entuple Technologies Pvt. Ltd. Completed his M.E in the year 2011 from KSR College of Technology, Thiruchengode, Tamilnadu. He has completed his B.E in the year 2007 from Jayaram College of Engineering and Technology, Thuraiyur, Tamilnadu. Later, Mr Navneet completed his VLSI Design Certification course from Pune University in the year 2008 and worked as a VLSI Trainer at Accel Technologies from 2008 – 2009. Has 10+ years of Teaching experience and has published a research article titled "Low Power Encoder for Flash ADC Architecture" in 3rd International Conference on "Computing for Sustainable Global Development", which was conducted during 16th - 18th March, 2016 organized by Bharati Vidyapeeth Institute of Computer Applications and Management (BVICAM), New Delhi (INDIA)

Day 2: Tuesday



Mr. Shivaprasad B K, Senior Field Application Engineer, Entuple Technologies Pvt. Ltd. Completed M.Tech from B.V. Bhoomaraddi College of Engineering and Technology, Hubli, in 2014, with VLSI Design and Testing as his specialization. He completed Bachelor of Engineering from SJM Institute of Technology, Chitradurga, in 2012. He worked as an Intern at ISRO Bangalore in the year 2014. He has 08+ years of experience in VLSI field. He is the Lifetime member of Indian Society for Technical Education (ISTE).

Day 3: Wednesday



Mr. Bhaskar B, Assistant Professor, SJB Institute of Technology, Bangalore, has more than 20 years of experience. He has completed M.Tech in RV College of Engineering, Bangalore in 2007. His research expertise is in signal and image processing. He has filed 2 patents, out of which one is published and the other is under process. He has more than 16 quality journal papers. He is a member of IETE, ISTE and affiliated to IEEE.

Day 4 & Day 5: Thursday & Friday



Dr.Ravikumar.A.V, is currently working as an Associate Professor and Chief coordinator LabVIEW Academy., SJBIT, Bagalore. He has 20 years of teaching experience and have received his PhD in "Real-TimeObject Tracking System By Using LabVIEW".HE is associated with many Professional Bodies like Indian Society For Technical Education (ISTE), Institute Of Engineers, International Association of Engineers (IAENG). He has published a book titled "Processing Digital Electronics and its Application with LabVI EW "He has filed one patent, received many research grants, and is actively involved in consultancy works. He has delivered more than 20 guest lectures at various faculty development programs and workshops. He has published 24 research articles in International Journals and has presented 15 papers in various International and national conferences.

EVENT:

The FDP is organized with an objective to provide insights as how to use modern tools for simulation of electronic circuits. The FDP was inaugurated on 26th Sep 2022 at 10.00am in Seminar Hall, Ground Floor, New Building, KSIT. Mrs. Sangeetha V, Assistant Professor, Dept.of ECE, KSIT, Bangalore started the event by welcoming the Participants. Dr.Dilip Kumar K, Principal, KSIT welcomed the Dignitaries. Dr. PN Sudha, HoD, ECE Department briefed the importance of organizing the FDP. Sri. R Rajgopal Naidu, President, Kammavari Sangham delivered presidential address. Sri Leela Shankar Rao, Secretary Kammavari Sangham delivered keynote address. Dr.KVA Balaji, CEO, Kammavari sangham congratulated all the enrolled participants. Mr. Santhosh Kumar BR, Associate Professor, Dept. of ECE, delivered vote of thanks.



Ms. Sangeetha, Assistant Professor, Dept. of ECE inviting the Guests and Participants

Post Break, the first session started at 11 am in VLSI Lab, 2nd Floor, Old Building, KSIT. Dr.Surekha Borra, Professor, Dept. of ECE introduced the Resource Person *Mr. Navneet Krishna, Field Application Engineer, Entuple Technologies Pvt. Ltd.*

Day 1: 26th September 2022

VLSI Lab using Cadence tool:

Topics Covered:

- 1. Design of UART and set the constraints to obtain optimum gate level netlist.
- 2. Physical Design for the synthesized netlist of a Digital Circuit.
- 3. Analysis of Two stage of OPAMP and its Layout verification.



Dr.Dllip Kumar K, Principal , KSIT welcoming the Gathering, Dr.Sangappa, Director Admissions welcoming Sri. R Leela Shankar Rao, Kammavari Sangham



Dr.Ram P Rutogi, HoD, Dept. of AI & MLwelcoming Sri Nirajakshuly Naidu, Treasurer, Kammavari Sangham



Dr.PN Sudha HoD, Dept. of ECE welcoming Dr.Dilip Kumar K, Principal, KSIT



Sri R Leela Shankar Rao, Secretery, Sri R Rajgpal Naidu, President, Sri Nirajakshuly Naidu, Treasurer, Kammavari Sangham and Dr.KVA Balaji, CEO, K.S.Group of Institutions lighting the lamp



Dr.PN Sudha HoD, Dept. of ECE briefing the importance of FDP and the sessions



Dr.Surekha Borra, Professor, Dept. of ECE introducing the Resource Person *Mr. Navneet Krishna, Field Application Engineer, Entuple Technologies Pvt. Ltd.*



Dr. PN Sudha, Professor& HoD, Dept. of ECE welcoming the Resource Person Mr. Navneet Krishna, Field Application Engineer, Entuple Technologies Pvt. Ltd.



Day 1: Group Photo with Mr. Navneet Krishna, Field Application Engineer, Entuple Technologies Pvt. Ltd.

Topics Covered:

Session 1: Analysis of Two stage of OPAMP

Session 2: Hands on Analysis of Two stage of OPAMP Session 3: Layout verification of two stage op-amp

Session 4: Hands on-: Layout verification of two stage op-amp



Dr.Surekha Borra, Professor, Dept. of ECE introducing the Resource Person Mr. Shivaprasad B K, Senior Field Application Engineer, Entuple Technologies Pvt. Ltd.



Dr.Surekha Borra, Professor, Dept. of ECE welcoming the Resource Person Mr. Shivaprasad B K, Senior Field Application Engineer, Entuple Technologies Pvt. Ltd.



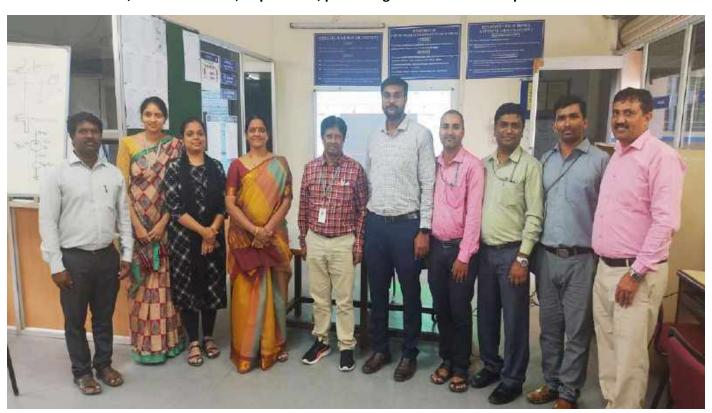
Mr. Shivaprasad B K, Senior Field Application Engineer, Entuple Technologies Pvt. Ltd.



Mr. Shivaprasad B K, Senior Field Application Engineer, Entuple Technologies Pvt. Ltd. Showing the demo



Dr.PN Sudha, Professor & HoD, Dept. of ECE, presenting a Memento to the speaker Mr. Shiva Prasad



Group Photo at the end of Day2

Day 3: 28th Sep 2022

Analog Electronic Circuits Lab using Multisim

Topics Covered:

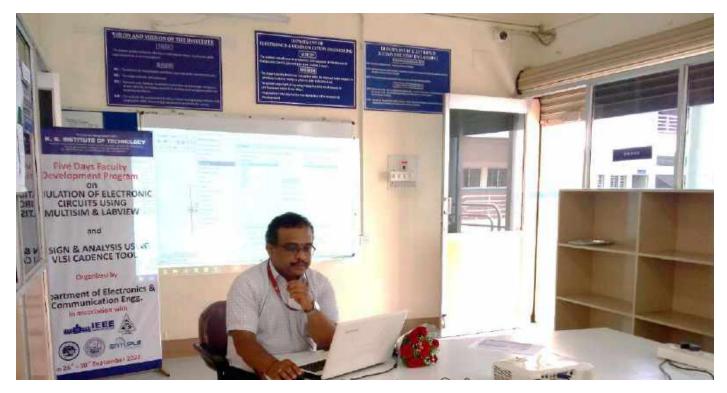
- 1. Understand the circuit schematic and its working.
- 2. Study the characteristics of different electronic devices.
- 3. Design and test electronic circuits as per the specifications using discrete electronic components.
- 4. Compute the parameters from the characteristics of active devices.
- 5. Familiarize with EDA software used for electronic circuit simulation.



Dr.Dilip J, Assistant Professor introducing the resource Person Mr. Bhaskar B



Mr.Santhosh Kumar BR, Associate Professor welcoming the resource Person Mr. Bhaskar B



Mr.Bharkar B, Assistant Professor explaining the basics of Multisim



Mr.Bharkar B, Assistant Professor demonstrating the sequence of steps in Multisim



Dr..PN Sudha, Professor & HoD, Dept. of ECE, presenting a Memento to the speaker Dr. Bhaskar B



Group Photo at the end of Day3

Day 4: 29th September 2022 LabVIEW Programming Basics

Topics Covered:

- 1. Use LabVIEW to create data acquisition, analysis, and display operations
- 2. Create user interfaces with charts, graph, and buttons
- 3. Introduction to the programming structures and data types that exist in LabVIEW
- 4. Introduction to various editing and debugging techniques



Mr.Santhosh Kumar BR, Associate Professor, Dept. of ECE welcoming Dr. Ravi Kumar A.V, Associate Professor, SJB Institute of Technology, Bangalore.



Mr.Saleem S Teveramani, Assistant Professor, Dept. of ECE introducing Dr. Ravi Kumar A.V, Associate Professor, SJB Institute of Technology, Bangalore.



Dr. Ravi Kumar A.V, Associate Professor, SJBIT explaining the concepts of LabVIEW



Group Photo at the end of Day4

Day 5: 30th September 2022 Design Lab using Multisim:

- 1. Demonstrate the truth table of various expressions and combinational circuits using logic gates.
- 2. Design various combinational circuits such as adders, subtractors, comparators, multiplexers and code converters.
- 3. Construct flips-flops, counters, and shift registers.
- 4. Design and implement synchronous counters.



Participants receiving certificates



Participants receiving certificates



Dr.PN Sudha, Professor & HoD, Dept. of ECE, presenting a Memento to the speaker Mr. Shiva Prasad



Group Photo at the end of Day5

The complete session was very informative which helped everyone imbibe the knowledge about CADENCE, Multisim, LABVIEW simulation tools. The participants were exposed to different analog and digital circuit design and analysis. Daily feedback was collected from all the participants via google form. A total of 37 participants attended the faculty development program. The event ended at 3.30 PM with valedictory in DSP Lab, and everyone left with positive feedback.

Outcomes of the event:

- Participants were trained to use CADENCE Tools for analog and digital design of circuits
 - · Latest Advancements in VLSI Industry
 - Full Custom Design Flow with Analog circuit as an example Schematic Entry,
 - · Spice Models, Simulation Analysis and Measurement of Operation Point
 - Analysis Transient and Power Analysis
 - · Layout entry Floor planning, Placement, Routing
 - · Post layout simulation
- Participants got awareness of using modern simulation tools.
- Provided practical exposure and equipped the faculty members in designing, building, and debugging analog and digital circuits using simulation tools.
- Provided a platform to the faculty members to upgrade their knowledge.
- Participants used Multisim simulation tool for the verification of electronic circuits.
- Participants used Lab VIEW graphical programming environment to develop the research, validation, and production.
- Participants designed and analyzed UART and two stage OPAMP with its post layout simulation.

Program Outcome

Participants got opportunity to learn using various simulation tools.

POs Mapping with Rank

FDP on	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12
Simulation of electronic circuit	3	3	3	2	3	-	-	-	1	-	-	2

PO1: Applied the knowledge of mathematics, engineering fundamentals, and engineering specialization to the solution of complex engineering problems

PO2: Participants identified and analyzed engineering problems to arrive at substantiated conclusions.

PO3: Participants designed solutions for complex engineering problems and designed system components, processes to meet the specifications.

PO4: Participants used research-based knowledge including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Participants were trained on modern tools.

PO9: Participants practiced the modern tools individually.

PO12: Learning modern tools and using them for design helps the participants in their future as well

Coordinators

The

Principal



K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING





Problem Solving with C

Date of Conduction: 27th October to 29th October

Venue: C Programming Laboratory

Time: 9.30 am to 3.30 pm

Duration: 3 days

Sponsoring Bodies / Associating Organization: IEI

Expert Details-Dr. VijayalaxmiMekali, Associate Professor, Dept. of CSE, KSIT, Mr. Kumar K, Assistant Professor, Dept. of CSE, KSIT, Mr. Kushal Kumar B N, Assistant Professor, Dept. of CSE, KSIT, Mr. Raghavendrachar S, Assistant Professor, Dept. of CSE, KSIT



Dr. Vijayalaxmi Mekali



Mr. Kushal Kumar B N,



Mr. Kumar K



Mr. Raghavendrachar S

Description of the Event: "Problem Solving with C", Faculty Development Program was conducted by Computer Science and Engineering staff for the Mechanical Engineering faculty. The program was for 3 days 27th October to 29th October 2022. 27th moring at 9.30 inauguration of the event was graced by Dr. Dilip Kumar K, Principal/Director, KSIT and Dr. K V A Balagi, CEO, KSGI.

Details of sessions

Date	Date Time Resource Person		Topic
27-10-2022	10.30 to 12.30	Mr.Kushal Kumar B N	Introduction to C Programming, Decision Making
	01.30 to 03.30	Mr. Kumar K	Looping
	09.30 to 11.30	Mr. Kumar K	Arrays
28-10-2022	11.30 to 12.30	Dr.VijayalaxmiMekali	Strings
	01.30 to 03.30	Dr.VijayalaxmiMekali	Functions
29-10-2022	09.30 to 12.30	Mr.Raghavendrachar S	Structures and Pointers
27-10-2022	01.30 to 03.00	All Staff	Hands-on lab programming

Objectives / Key Highlights:

- To provide detailed knowledge on the C programming language
- To provide Hand-on sessions

Participant details -10Mechanical Faculties

Photos







Outcomes / Benefits:

Mechanical faculties have learned all the basic concepts of C programming

Attachments:

- 1. Communication with the Resources person
- 2. Resources person Profile
- 3. Evaluation and Feedback
- 4. Budget and Expenditure Details/amount

CO/PO&PSO mapping

CO/PO&PSO	POI	PO2	PO3	PO4	PO5	PO6	PO7	POS	PO9	PO10	PO11	PO12	PSO 1	PSO 2
	2	2	2	2				1	2			1	2	2

Coordinator Sign

nop

Principal

Head of the Department STITUTE OF TECHNOLOGY

K.S. Institute of Technolog BENGALURU - 560 109.

Bengaluru -560 109



K. S INSTITUTE OF TECHNOLOGY

Affiliated to VTU, Belgari, Approved by AICTE, New Delhi, and Accredited by NAAC and NBA(Dept of CSE, ECE, ME 14, Kanakapura Rd, Raghuvanahalli, Bangalore City Municipal Corporation Layout. Bengaluru, Karnataka 560109 Tel: 284357227724 E-mail: principal@ksit.edu.in Web: www.ksit.edu.in

The Management, CEO, Principal & Staff Cordially invite you for the inaugural function of

3 DAYS FACULTY DEVELOPMENT PROGRAM ON Problem Solving with C

on Thursday 27th October 2022 at 9:30 am in C Programming Laboratory, KSIT

will grace the occasion

DR. K. V. A. Balaji

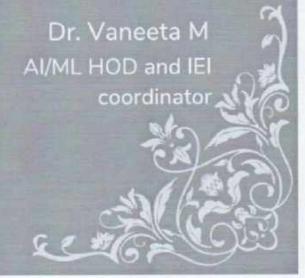
DR. Dilip Kumar K

Principal & Director, KSIT

Dr. Rekha B Venkatapur

Professor & Head, CSE Dept

Dr. Vijaylakshmi Mekali
Associate Prof. CSE



K S INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering 3 day's Faculty Development Program on Problem Solving with C Event Schedule

Date	Time	Resource Person	Topic
27-10-2022	10.30 to 12.30	Mr. Kushal Kumar B N	Introduction to C Programming, Decision Making
27-10-2022	01.30 to 03.30	Mr. Kumar K	Looping
	09.30 to 11.30	Mr. Kumar K	Arrays
28-10-2022	11.30 to 12.30	Dr. vijayalaxmi Mekali	Strings
	01.30 to 03.30	Dr. vijayalaxmi Mekali	Functions
29-10-2022	09.30 to 12.30	Mr. Raghavendrachar S	Structures and Pointers
29-10-2022	01.30 to 03.00	All Staff	Hands on lab programming



K S INSTITUTE OF TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

THREE DAY FACULTY DEVELOPMENT PROGRAM ON "PROBLEM SOLVING WITH C" 27th to 29th OCTOBER 2022

Venue:

Venu Sl.	Name of Faculty	Name of Department	Day 1 (27	//10/2022)
No			Session 1	Session 2
1	Mr.Nagabhushan M	ME	though	Mozert
2	Mr, Prasad K	ME	12 and	Ma an
3	Dr.Girish T R	ME	gour-	404
4	Dr. L. Nirmala	ME	OW.	m
5	Mr.Manjunath B R	ME	He	May
6	Mr. Ranganath N	ME	R	R
7	Mr. Anil Kumar A	ME	Ato	there
8	Mr. Harish U	ME		
9	Dr. Saleem Khan	ME	18	8
10	Dr. M. Umerhankel	ME	g than	Jun-
11	Parashwam . A.K	ME	1390	野牛
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K S INSTITUTE OF TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

THREE DAY FACULTY DEVELOPMENT PROGRAM ON "PROBLEM SOLVING WITH C" 27th to 29th OCTOBER 2022

Venue:

√enu Sl.	Name of Faculty	Name of Department	Day 2 (28	3/10/2022)
No			Session 3	Session 4
1	Mr.Nagabhushan M	ME	Mean-It	tenall
2	Mr. Prasad K	ME	Ban)	1a, -
3	Dr.Girish T R	ME	Lun	guy
4	Dr. L. Nirmala	ME	na-	20
5	Mr.Manjunath B R	ME	the	Ph
6	Mr. Ranganath N	ME	R	Ru
7	Mr. Anil Kumar A	ME	AP.	Att.
8	Mr. Harish U	ME		
9	Dr. Saleem Khan	ME	8	6/
10	Dr. Nagar Anead KS	ME	The	The
11	Parashurom A.K	ME	Por	BAK
12	Dr. M. Umerhanker	ME		Juan
13				
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K S INSTITUTE OF TECHNOLOGY DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

THREE DAY FACULTY DEVELOPMENT PROGRAM ON "PROBLEM SOLVING WITH C" 27th to 29th OCTOBER 2022

Venu Sl.	Name of Faculty	Name of Department	Day 3 (29	/10/2022)
No			Session 5	Session 6
1	Mr.Nagabhushan M	ME	fc. Narth	T(-Nogle
2	Mr. Prasad K	ME	12-1	12, -
3	Dr.Girish T R	ME	Lynn	guy
4	Dr. L. Nirmala	ME	W	SA
5	Mr.Manjunath B R	ME	they	Me
6	Mr. Ranganath N	ME	R	B
7	Mr. Anil Kumar A	ME	Attor	A
8	Mr. Harish U	ME	Tal 5 mil	1 2 2
9	Dr. Saleem Khan	ME	10/	10/
10	Parashuram.A.K	ME	PON	Bake
11	Parashuram.A.K Dr. Nagaprasad Ks	ME		THE
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K. S. INSTITUTE OF TECHNOLOGY, BENGALURU - 560109 DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Date: 29/9/2022

Event Permission with Budget

Academic Year: 2021-22

To The Director/Principal, KSIT, Bengaluru

Subject: Request for permission to organize three Days Faculty Development Program on "Problem Solving with C" in CSE Seminar Hall and CPL Laboratory consequently the budget.

Through: HoD (Department of Computer Science and Engineering)

Respected Sir.

In association with IEI, Faculty Development Program on "Problem Solving with C" has been scheduled on 27-10-2022 to 29-10-2022 for faculty of Mechanical Department of KSIT and the sessions will be conducted by CSE Department faculty

The topics to be covered are as follows

- Introduction to C programming, Tokens, Decision making
- Looping constructs
- Arrays and Strings
- Functions
- Structures and Pointers

Resource Persons from CSE Dept. - Dr. Vijayalaxmi Mekali, Mr. Kushai Kumar B N , Mr. Kumar K, Mr. Raghavendrachar S

Budget of the event:

RECEIPTS		EXPENDITURE	
Sponsorships from clubs and professional bodies	NIL	Stage Arrangements: Flower Arrangement	T
Contribution from the Management	800	Tea Biscuits for 3 Days for Participants and	200 600
Total	-	Organizers and	000
			800

Appronud -

May I request you to give the permission to organize this event. I further request you to sanction the budget.

Thanking You, Yours Faithfully,

Or mouraper

Departmental Event Coordinator: Dr. Vijayalaxmi Mekali Departmental IEI Coordinator: Dr. Vaneeta M

management was



K. S. INSTITUTE OF TECHNOLOGY, BENGALURU - 560109 DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Date: 31-10-2022

Event Expenditure

Academic Year: 2021-22

To The Director/Principal, KSIT, Bengaluru

Subject: Expenditure for the three Days Faculty Development Program on "Problem Solving with C" in CSE Seminar Hall and CPL Laboratory.

Through: HoD (Department of Computer Science and Engineering)

Respected Sir,

In association with IEI, Faculty Development Program on "Problem Solving with C" has been conducted on 27-10-2022 to 29-10-2022 for faculty of Mechanical Department of KSIT and the sessions were conducted by CSE Department faculty

Resource Persons from CSE Dept. - Dr. Vijayalaxmi Mekali, Mr. Kushal Kumar B N, Mr. Kumar K, Mr. Raghavendrachar S

	EXPENDITURE								
Stage Arrangements: Flower Arrangement	3 Stalk Roses, flower	210							
Tea for 3 Days for Participants and Organizers		350							
Total		560							

May I request you to sanction the Expenditure.

Thanking You, Yours Faithfully,

Departmental Event Coordinator: Dr. Vijayalaxmi Mekali

Departmental IEI Coordinator: Dr. Vaneeta M

Nuccurapm HOD-CSE

Head of the Department Dept. of Computer Science & Engg. K.S. Institute of Technology Bengaluru -560 109

Principal/Director



K.S. INSTITUTE OF TECHNOLOGY, BANGALORE – 560109

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING





GUEST LECTURE on "Addressing Challenges in Research Publications"

Date of Conduction: 26/11/2022

Venue: Seminar Hall (Ground Floor, New Building, KSIT)

Time: 10am-12pm

Duration: 2 Hours

Sponsoring Bodies / Associating Organization: Research Forum of KSIT & IETE Students Forum

Expert Details – with photo



Name: Dr. Nilanjan Dey

Designation: Associate Professor

Organization: Techno International New Town, Kolkata

Brief Profile about the Expert:

Nilanjan Dey is an Associate Professor in the Department of Computer Science and Engineering, Techno International New Town, Kolkata, India. He is a visiting fellow of the University of Reading, UK. He also holds a position of Adjunct Professor at Ton Duc Thang University, Ho Chi Minh City, Vietnam. Previously, he held an honorary position of Visiting Scientist at Global Biomedical Technologies Inc., CA, USA (2012–2015). He was awarded his PhD from Jadavpur University in 2015. He is the Editor-in-Chief of the International Journal of Ambient Computing and Intelligence (IGI Global). He is the Series Co-Editor of Springer Tracts in Nature-Inspired Computing (SpringerNature), Data-Intensive Research (SpringerNature), Advances in Ubiquitous Sensing Applications for Healthcare (Elsevier). He is having 110 books and over 300 publications around medical imaging, machine learning, computer aided diagnosis, data mining, etc. (over 16500 Citations, 63 h-index). Furthermore, he is the Indian Ambassador of the International Federation for Information Processing—Young ICT Group and Senior member of IEEE.

Description of the Event:

This Guest Lecture is organized with an objective to provide insights as how to start writing research paper. The Guest lecture was held on 16th Nov 2022 at 10.00am in Seminar Hall, Ground Floor, New Building, KSIT. *Dr. Surekha Borra, Professor, Dept. of ECE & Chief Research Coordinator, KSIT, Bangalore,* started the event by welcoming the Guest Speaker Dr. Nilanjan Dey, Dignitaries and faculty Participants and briefed the importance of organizing the Guest Talk on "Addressing challenges in Research Publications". Dr. PN Sudha, HoD, ECE Department welcomed the Guest speaker with a flower Bouquet. Dr. Surekha Borra introduced the speaker to the August gathering. Later, Dr. Nilanjan Dey in his session discussed the following topics in his lecture:

- Why writing research Paper is important?
- Structures of Papers
- Title, Abstract, Keywords
- Introduction
- Literature review
- Methodology
- Results and Discussions
- Conclusion
- Acknowledgements & Funding
- References, Google Scholar, Citations Styles
- ORCID, Journal Recommender systems,
- Accepting Rejections, Addressing Review comments, Plagiarism, Ethics

The complete session was very informative which helped everyone imbibe the knowledge about structure of research paper, plagiarism, and ethical issues relevant to the research and the risks associated with copy pasting the text while preparing research articles. Participants Students were exposed to the different structures of research articles and Google scholar, VoS Viewer, paraphrasing tools, Journal recommender systems, and citation styles. Finally, feedback was collected from all the participants via google form. A total of 45 (44 Faculty and 1 Research Scholar) attended the lecture. The technical talk has provided the students an exposure to Writing research articles, Literature review in particular, Risks of plagiarism and Ethics. The event ended at 12.00 PM., and everyone left with positive feedback.

Objectives / Key Highlights:

- To help enhance their research, presentation and writing skills.
- To help focus more and build their own opinions about the subject.
- To help explore the others work in their interested domains and help them evolve critical thinking.
- To provide insights of structuring the text in research articles
- To create and exchange ideas.
- To understand the ethics in publishing

Participant details - No. of Participants: 45

Students (internal/external): 1

Faculty: 44

Photos (Geo Tagged):



Dr.Surekha Borra. Professor & Chief Research Coordinator, KSIT Welcoming the Gathering



Dr.PN Sudha, HoD & Professor of ECE Dept., KSIT, Bangalore welcoming Dr.Nilanjan Dey, Guest Speaker



Dr.Dilip Kumar K, Principal, K..S.Institute of Technology, Bangalore explaining the importance of Publications



Dr.Dilip Kumar K, Principal, K..S.Institute of technology presenting token of Appreciation to Dr.Nilanjan Dey



Dr Nilanjan Dey, Guest Speaker explaining the structure of a Research Paper



Dr Nilanjan Dey, Guest Speaker addressing the queries of participants



Group Photo with Participants

Outcomes / Benefits:

- Faculty & Students got awareness of plagiarism tools, plagiarism, and ethical issues relevant to
 the research and the risks associated with copy pasting the text while preparing research
 articles.
- Faculty & Students were exposed to the different structures of research articles
- Faculty & Students were exposed to Google scholar, ORCID, Journal selector websites, VOS viewer, Cooccurrence matrix.
- Helped faculty & students to analyse their current writing skills and to write in a better way
- CO/PO&PSO mapping

CO/PO&PSO	POI	PO2	PO3	PO4	PO5	PO6	PO7	POS	P09	POID	PO11	PO12	PSO 1	PSO 2
		-	-	-	1	-	-	2	-	2		2	-	•

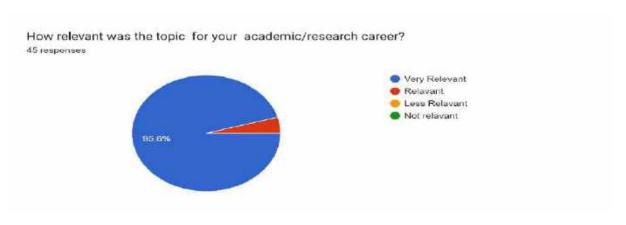
- PO5:Participants got to know the modern plagarism checking tools.
- PO8: Participants learnt the ethics in writing research articles
- PO10: Participants learnt independently the writing communication skills.
- PO12: Learning ethics and writing research articles helps the participants in their future as well

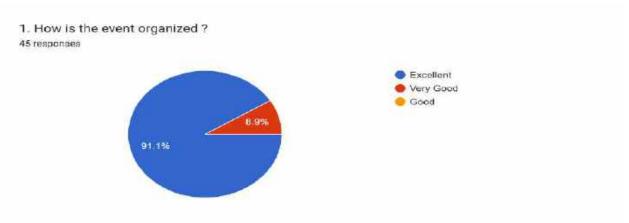
Coordinator Sign

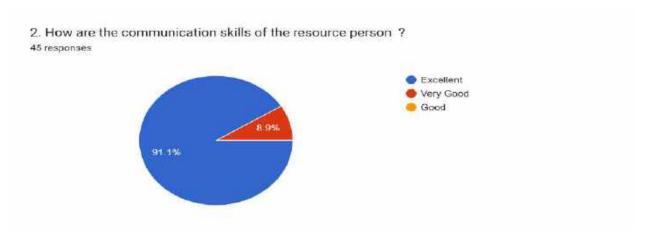
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Principal

Feedback Summary:



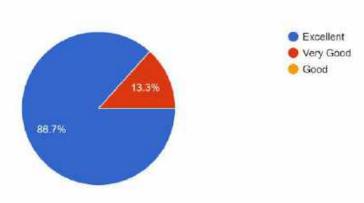




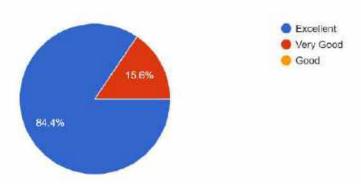
3. Is the information presented in an organized manner by the speaker? 45 responses



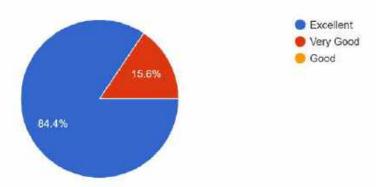
4. How is the Interaction with resource person ? 45 responses



5. How well you gained the knowledge about research paper writing? 45 responses



6. How well you gained the basic knowledge about challenges in publication? 45 responses





6 Days Faculty Development Program

on

"Python Programming and its Applications"

Organized by

Department of ECE

In association with

IETE, IEEE, ISTE and IE(I)



Date: 27th March to 1st April 2023 Timings: 9.00 am - 4.00 pm

Venue: CAD Lab, New Building, KSIT

6 days FDP on "Python Programming and its Applications" was organized by the Dept. of ECE, K.S. Institute of Technology, Bengaluru in association with IETE, ISTE and IE (I) from 27th March 2022 to 1st April 2023.

OBJECTIVES:

- To help faculty enhance their technical skills.
- To familiarize faculty with the Python language.
- To help faculty improve their modern tools usage skills.
- To help faculty explore the others work in their interested domains and help them evolve critical thinking.

PROFILES OF RESOURCE PERSONS

Mr. Suresh Maha Rajashekar, is a seasoned technocrat with 25+ years of progressive experience in Technical training/mentoring, System Architecture/Software Development/Project Management & Validation with reputed organizations in different domains. He has done BTech(C&S) from Mysore university, MTech(C&S) from Bits Pilani and currently pursuing PhD in BCI Technology from VTU. He has Started his career with C-DOT (Center for Development of Telematics) - A premier Telecom R&D Center, Govt of India and then worked in MNCs, Texas Instruments (TI), Infineon & Intel. He has travelled all over the world, on different project assignments. He has 15+ years progressive hands-on experience in python and used python extensively on varied projects. Mr. Suresh is Currently working as a freelancer- Technical Training, Project Mentoring & Management.

Mr. Karthik Subramanya, An expert in Object Oriented Programming. He has pursued BTech from PES and MTech from AITC. Currently he is working in a Start up as a specialist in project based on OOPs.

EVENT:

The FDP is organized with an objective to provide insights as how to use modern tools for simulation of electronic circuits. The FDP was inaugurated on 26th Sep 2022 at 10.00am in Seminar Hall, Ground Floor, New Building, KSIT. Mrs. Supritha Ganesh, Assistant Professor, Dept. of CSE, KSIT, Bangalore started the event by welcoming the Participants. Dr.Dilip Kumar K, Principal, KSIT welcomed the dignitaries. Dr. Chanda V Reddy, Professor of ECE & IQAC Coordinator briefed the importance of organizing the FDP. Dr. Rekha B Venkatapur introduced the chief guest Dr. C. P. Ravi Kumar, Director of Talent Development, Texas Instruments addressed the gathering. Sri. R Rajgopal Naidu, President, Kammavari Sangham delivered presidential address. Sri Leela Shankar Rao, Secretary Kammavari Sangham delivered keynote address. Sri Nirajakshulu Naidu, Treasurer, Kammavari Sangham addressed the gathering and highlighted the importance of continuous learning. Dr. KVA Balaji, CEO, Kammavari sangham congratulated all the enrolled participants. Dr. PN Sudha, Professor & HoD, Dept. of ECE, delivered vote of thanks.



Dr. Dilip Kumar K , Principal, KSIT, welcoming the dignitaries



Dignitaries lighting the lamp



Dr.Chanda V Reddy briefing the FDP Schedule



Dr.Rekha BVenkatapur introducing the Chief Guest





Inviting dignitaries on the Dias





Inviting dignitaries on the Dias



Chief Guest addressing the gathering



Participants listening to the Chief Guest



Sri Sri. R Rajgopal Naidu, President, Kammavari Sangham delivering presidential address.





Sri Leela Shankar Rao, Secretary and Sri Nirajakshulu Naidu, Treasurer, Kammavari Sangham highlighting the importance of continuous learning



Dignitaries felicitating the Chief Guest



Dr. KVA Balaji, CEO, Kammavari sangham congratulated all the enrolled participants.

Dr. PN Sudha, Professor & HoD, Dept. of ECE, delivered vote of thanks





Group Photo

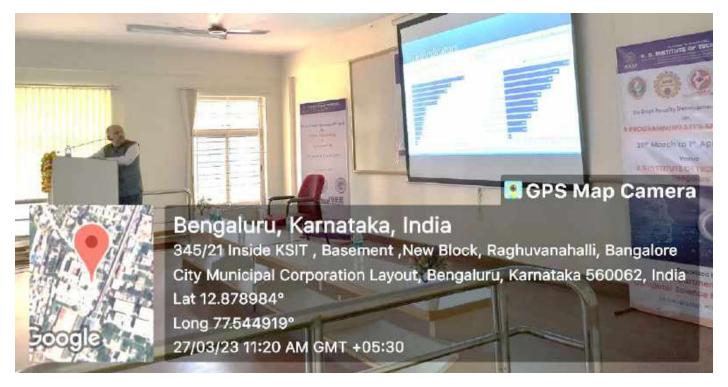
Day 1: 27th March 2023

Tea Break: 10.45 am -11am

Keynote Speech:

Post break, the keynote speech by Dr. C. P. Ravi Kumar, Director of Talent Development, Texas Instruments, India started at 11 am in Conference Hall, Ground Floor, New Building.

Topics Covered: Who should learn computer programming, essentials of programming, how is programming different today, constructs, significance of testing, File I/O, Libraries, challenges, grading.



Chief Guest delivering Key note speech

Session 1: 12 pm -1 pm

The first session started at 12 am in CAD Lab, 3rd Floor, New Building, KSIT. Dr.Surekha Borra, Professor, Dept. of ECE introduced the Resource Person *Mr. Suresh Maha Rajashekar, Freelancer- Technical Training, Project Mentoring & Management*.

The session started with briefing of FDP schedule, introduction of participants, followed by Installation of Python.



Dr.Surekha Borra, Professor, Dept. of ECE introducing the Resource Persons





Dr. Sudarshan B, Professor, Dept. of ECE welcoming Mr. Suresh Maha Rajashekar and Mr. Karthik Subramanya

Session 2: 1.30 pm-4.00pm

Topics Covered:

- Python Features
- Applications
- Frameworks and Libraries
- How to execute Python
- Key words
- Indentation
- User input handling
- Numeric Operations
- Python Variables



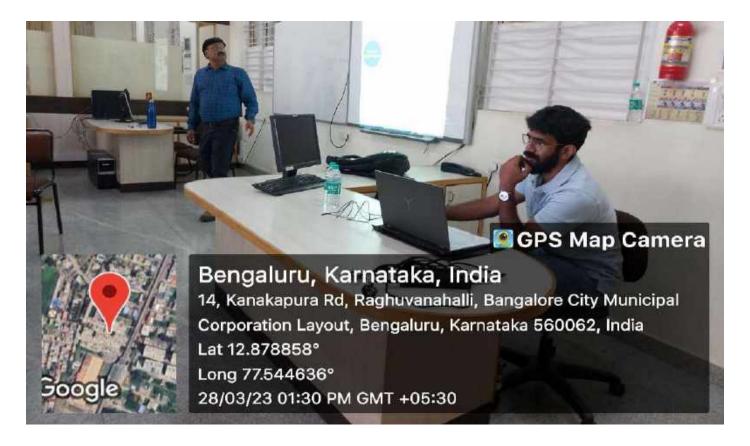
Day 2: 28th March 2023

Topics covered:

- Jupyter Notebook Installation
- Python Data Types: Int, float, complex numbers
- Conditional statements
- Loops
- Strings







Day 3: 29th March 2023

Topics covered:

- Lists
- Tuples
- Dictionaries
- Sets
- Functions





Day 4: 30th March 2023

Topics Covered:

- File handling
- Lambda Function
- Import and creating modules
- Handling Excel sheets





Day 5: 31st March 2023

Topics Covered:

- Regular expressions
- IoT
- Arduino set up
- Blinking LED project
- Light sensor project
- Temperature measurement project



Day 6: 1st April 2023 Topics Covered:

• Miniprojects

Team No.	Name	Title
1	Mr Nagabushan A Mr. Prasad K Mr. Saleem S Tevaramani Mr. Praveen A	Reading student details from the console and writing excel file
	Dr.Surekha B	
2	Dr Sudharshan Mrs. Srividya L Mr. Suresh Kumar A Mrs. Thriveni C Mrs. Bhargavi Anath	Traffic Light control using Python
3	Ramya T Rahul R P Vasanth kumar reddy Shreya H Shwetha	Digital thermometer with Arduino and LM335 temperature sensor
4	Abhishek J Ajay B G Akash M Chethan G G Bhavana Priyadarshini Gomitha R C Harshitha J Harini K	State Change Detector using Arduino Uno
5	Shakthi Anbazhagan M Darshan K S Arun Kumar B S Hemashree Hima Swetha S	Servomotor, Distance Measurement through Ultrasonics, Displaying Hello world through LCD Display





Group Photo





Participants receiving certificates

The complete session was very informative which helped everyone imbibe the knowledge about Python programming and applications. The participants were exposed to different libraries and python environments. Daily feedback was collected from all the participants via google form. A total of 29 participants attended the faculty development program. The event ended at 3.30 PM with valedictory in VLSI Lab, and everyone left with positive feedback.

Outcome of the event:

- Participants were exposed to use Python tools, different libraries, and Python environment.
- Participants were familiar with basics of python such as lists, tuples, dictionaries, sets and functions
- Participants got awareness on Python based Industries.
- Provided practical exposure in building different algorithm for various applications.
- Participants used Python tool for Server application.
- Participants used Python program environment to develop projects and research.
- All the project groups exhibited their Projects.

POs Mapping with Rank

FDP on	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12
Python												
Programming and its applications	3	3	3	2	3	-	-	-	3	-	-	2

PO1: Applied the knowledge of mathematics, engineering fundamentals, and engineering specialization to the solution of complex engineering problems.

PO2: Participants identified and analysed engineering problems to arrive at substantiated conclusions.

PO3: Participants designed solutions for complex engineering problems and designed system components, processes to meet the specifications.

PO4: Participants used research-based knowledge including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Participants were trained on modern tools.

PO9: Participants practiced the modern tools individually.

PO12: Learning modern tools and using them for design helps the participants in their future as well.

Coordinators

HODE



K. S. INSTITUTE OF TECHNOLOGY

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

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING









REPORT ON

6 Day Faculty Development Program on R PROGRAMMING AND ITS APPLICATIONS



Organizing Chair

Dr. Rekha B Venkatapur Professor & Head, Department of CS&E KSIT BANGALORE

Conveners

Dr. H S Prasantha, Professor, Department of CSE KSIT BANGALORE Mr. Kushal Kumar B N Assistant Professor, Department of CSE KSIT BANGALORE

CONTENTS

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3	Program schedule	5
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5	Participants list	7
6	Speaker details	8-13
7	Session-wise details	14-38
8	Feedback Questionnaire	39-40
9	Assessment questions	41-44

FDP Brochure

CHIEF PATRONS

Sri R. Rajagopal Naidu President, Kammavari Sangham

Sri R. Leela Shankar Rao

Hon. Secretary, Kammavari Sangham

Sri T.Neerajakshulu Naidu

Treasurer, Kammavari Sangharn

PATRONS

Dr. K.V.A. Balaji CEO, KSGI

Dr. Dilip Kumar K

Principal / Director, KSIT

ORGANISING CHAIR

Dr. Rekha B Venkatapur

Professor & Head of the Department Computer Science & Engineering, KSIT

CONVENERS

Dr. Prashantha HS

Professor, Department of Computer Science & Engineering, KSIT

Mr. Kushal Kumar B N

Asst. Professor, Department of Computer Science & Engineering, year

ORGANISING COMMITTEE

Mr. Harshavardhan J R

Assoc. Professor, CSE, KSIT

Dr. Vijayalaxmi Mekali

Assoc. Professor, CSE, KSIT

Mr. Sanjoy Das

Assistant Professor, CSE, KSIT

Mr. Roopesh Kumar B N

Assistant Professor, CSE, KSIT

Mr. Kumar K

Assistant Professor, CSE, KSIT

Mr. Raghavendrachar S

Assistant Professor, CSE, KSIT

Mr. Krishna Gudi

Assistant Professor, CSE, KSIT

Mr. Prashanth H S

Assistant Professor, CSE, KSIT

Mrs. Beena K

Assistant Professor, CSE, KSIT

Mr. Mano Kumar S

Assistant Professor, CSE, KSIT

Mrs. Pallavi K N

Assistant Professor, CSE, KSIT

Mrs. Rashmi H

Assistant Professor, CSE, KSIT

Mrs. Kavya M S

Assistant Professor, CSE, KSIT

Mr. T Somasekhar

Assistant Professor, CSE, KSIT

Mrs. Supreetha Ganesh

Assistant Professor, CSE, KSIT

Mrs. Pallavi R

Assistant Professor, CSE, KSIT

Mr. Laxmikanth

Assistant Professor, CSE, KSIT

Ms. Namyapriya D

Assistant Professor, CSE, KSIT

Mrs. Ramanjinamma G Assistant Professor, CSE, KSIT

TOPICS TO BE COVERED IN FDP

- Introduction to data science & Hands-on session
- Mathematical Preliminaries, Data science and Big data & Hands-on session
- Data Science using R programming & Hands-on session
- Machine learning using R, Machine learning using R examples & Hands-on session
- . Image Processing using R, Image Processing using R examples
- Mini Project













Six Days Faculty Development program

on

R PROGRAMMING & IT'S APPLICATIONS

27th March to 1st April 2023

Venue

K S INSTITUTE OF TECHNOLOGY, Bengaluru



Organized by
Department of
Computer Science & Engineering



FDP Inauguration Brochure



The Management, CEO, Principal & Staff
Cordially invite you for the Inaugural Function of
6 Days Faculty Development Program
[27th March 2023 to 1st April 2023]

Organized by Department of CSE & ECE

on 27th March at 9.30 am in Conference Hall, KSIT

Chief Guest

Dr. C. P. Ravi Kumar

Director of Talent Development,
Texas Instruments, India
Presided By

Sri. R. Rajagopal Naidu

President, Kammavari Sangham

Will Grace the Occasion

Sri. R. Leela Shankar Rao

Hon. Secretary, Kammavari Sangham

Sri. T. Neerajakshulu Naidu

Treasurer, Kammavari Sangham

Dr. K. V. A. Balaji CEO, KSGI

Dr. Dilip Kumar K

Principal & Director

Dr. P. N. Sudha Prof & Head, ECE Department

Dr. Rekha B Venkatapur Prof & Head, CSE Department





K. S. INSTITUTE OF TECHNOLOGY

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

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

6 Day Faculty Development program on R PROGRAMMING AND ITS

APPLICATIONSPROGRAM SCHEDULE

DATE	SESSION 1	10.30-	SESSION 2	12.30	SESSION 3
	(9 AM -10.30AM)	11 AM	(11 AM – 12.30 PM)	PM - 1.30	(1.30 PM – 3.30PM)
28/3/2023	REGISTRATI ON &INAGURATI ON		KEYNOTE ADDRESS Dr. C. P. Ravi KumarDirector of Talent Development, Texas Instruments, India	PM	Hands-On Session 1 Dr. H S Prasantha, Professor KSIT Introduction, Numeric, Arithmetic, Assignment
28/3/2023	Dr. Rekha Padke, Associate Professor,NMIT Bangalore Time series analysis using R	TEA BREA K	Dr. Rekha Padke, Associate Professor, NMIT Bangalore Forecasting using R	LUNC H BREA	Hands-on session 2 Dr. H S Prasantha, Professor KSIT Vectors, Matrices and Arrays
29/3/2023	Dr.Gourish Goudar, Assistant Professor NMIT Bangalore Statistical Modelling, Distribution Fitting and Plotting the graphs using R/R-studio		Dr. Vijayakrishna, Senior Architect, Robert Bosch Mathematical Preliminaries	K	Hand-on Session -3 Mr.Kushal Kumar B N, KSIT Lists and data frames
30/3/2023	Dheeraj .D, Assistant Professor GAT Bangalore Machine learning/Alusing R		Dheeraj .D, AssistantProfessor GAT Bangalore Examples of Machine learning/AIusing R		Hand-on Session -4 Mr. Kushal Kumar B N,KSIT Functions
31/3/2023	Dattaramu. B A, Director- Data Science,Noodles.AI Use Cases and Landscape of AnalyticsProjects: An Industrial Perspective		Dr. H S Prasantha, Professor KSIT Image Processing using R		Hand-on Session-5 Mr. Kushal Kumar B N,KSIT Pointers
1/4/2023	Mr. Ravindranath, PhDscholar NIT Trichy Biomedical signal processing using R		Mr. Ravindranath, PhD scholar NIT Trichy Examples on Biomedical signal processing		Valedictory function

KSIT

K.S. INSTITUTE OF TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

R PROGRAMMING & It's APPLICATIONS

Department Level Committee Coordinators

1. Registrations Committee

Faculty Coordinator: Dr. VijayalaxmiMekali

Faculty Member:

Mr. Prashanth H S

Mrs. Supreetha Ganesh

Mr. Manoj Kumar S

Mrs. Pallavi R

Mr. Laxmikantha K

Mrs. Divya R G

Mrs. Geetha T

Ms. Preethi R

2. Stage Committee

Faculty Coordinator: Mrs. Beenak K

Faculty Members:

Mrs. Kavya M S

Mrs. Pallavi K N

Mrs.Rashmi H,

Mrs. VimalaKumari V

Mrs. KeerthanM N

Mrs. Mounika G

Mr. Babu G

3. Hospitality Committee

Faculty Coordinator: Mr. Harshavardhan J R

Faculty Members:

Mr. Sanjoy Das,

Mr. Roopesh Kumar B N

Mr. Raghavendrachar S

Mr. Somasekhar T

Mr. Om Prakash S

Mr. Krishna Gudi (Transportation facility for Chief Guest and Resource persons if required)

4. Lab in-charge During Hands on Session

- 1. Mr. Kumar K
- 2. Mrs. Namyapriya D
- 3. Mrs. Ramanjinamma G



K. S. INSTITUTE OF TECHNOLOGY

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

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

6 Day Faculty Development program on R PROGRAMMING AND ITS

APPLICATIONS Registration details

Sl. No.	Name	Organization
1	Ms. Anitha M C	SVIT
2	Mrs. Rekha Murthy	SVIT
3	Mrs. Supriya R K	DSATM
4	Mrs. Swathi Darla	RVITM
5	Mrs. Padma Sree N	RVITM
6	Mrs. Prabhavathi K	RVITM
7	Mrs. Harshitha B K	DSATM
8	Ms. Roopa K Murthy	KSIT
9	Ms. Kiranashree B K	TJIT
10	Ms. Shilpa Sannamani	TJIT
11	Mrs. Apoorva Busad	DSATM
12	Mrs. Nandini D	ЛТ
13	Ms. Rakshatha S	ЛТ
14	Ms. Divya Sharma	NHCE
15	Ms. Sarala D V	DSCE
16	Mrs. K K Kavitha	KSIT
17	Ms. Sushma A	KSIT
18	Ms. Surekha Byakod	KSIT
19	Ms. Lakshmi K K	KSIT
20	Dr. M Nirmala	NHCE
21	Ms. Namyapriya Dayananda	KSIT
22	Mr. Sampath Kumar S	KSIT
23	Ms. Sheela S	GAT
24	Dr. Shalini S	GAT
25	Dr. Nandeeswar S B	APSCE
26	Dr. Vijayalaxmi Mekali	KSIT
27	Mrs. Rajashree M Byalal	APSCE
28	Mrs. Ramanjinamma G	KSIT
29	Mrs. Bhagyashree R	APSCE
30	Ms. Jyothi S	GAT
31	Mrs. Rashnmi H	KSIT
32	Mrs. Ishani Mishra	NHCE
33	Mr.Somashekar	KSIT

SPEAKER DETAILS



K.S. INSTITUTE OF TECHNOLOGY, BANGALORE

Department of Computer Science and Engineering
Six Days Faculty Development on "R Programming and its Applications"

(27th March 2023 to 1st April 2023)

PROFILE DETAILS

Name: Dr. A Vijayakrishna

Designation: Senior Architect

Organization: Bosch Global Software Technologies

Phone: 98441 66478

Email: a.vijayakrishna@in.bosch.com



- Currently working as Senior Architect Bosch Global Software Technologies in the area of Internet of Things (IoT), Cyber security, Cryptography
- Served as Professor in the department of Electronics & Communication Engineering from 2008-2022 handling courses related to communication an Signal Processing, Guiding PhD students, Guiding Projects (UG & PG), framing syllabus, served as Member BOS, BOE DPAC committees, conducting coaching for Gate classes (for PES ECE students) mentoring Junior faculties, etc..
- Graduated from SJCE Mysore (E&CE) 1994-98, masters from Indian Institute of Science (IISC) 1999-2001 and PhD from Indian Institute of Science (IISC)2002-2006
- Served as an expert member for handling session on Mathematical preliminaries, Signal Processing and Communication related topics at various organizations and Institutes
- Served as member for research committee, doctoral committee under VTU and PES university
- Published papers in Journals and conferences of repute
- Served as Reviewer for various Journals and conferences



Department of Computer Science and Engineering
Six Days Faculty Development on "R Programming and its Applications"

(27th March 2023 to 1st April 2023)

PROFILE DETAILS

Name: B A Dattaram

Designation: Director for Data Science

Organization: Noodle.ai

Phone: 95919 82000

Email: badattaram2@gmail.com



- B.A. Dattaram is a highly experienced analytics professional with 18 years of industry experience.
- He graduated in Instrumentation and Electronics from SIT, Tumkur, and completed his specialization in Machine Learning from IIM, Bangalore in 2011.
- Dattaram was a part of IBM's AI Expert labs and currently serves as the Director for Data Science at Noodle.ai. His extensive experience ranges from AI product development to Data Science leadership roles and includes contributions to various domains, including Manufacturing and Supply Chain.
- Dattaram's work has been recognized with several key awards, including the 'Outstanding Technical Achievement Award' from IBM and the 'AI Game changing (2018)' award presented by NASSCOM.
- He has also been granted three patents
- He is a guest speaker at IIM, Bangalore on Hidden Markov Models for executive courses.
- Dattaram's contributions to the field of analytics extend beyond his professional work, as he has authored several publications and is a frequent speaker at conferences on thetopic.



Department of Computer Science and Engineering

Six Days Faculty Development on "R Programming and its Applications" (27th March 2023 to 1st April 2023)

PROFILE DETAILS

Name: Dr. Gourish Goudar

Designation: Assistant Professor

Organization: Nitte Meenakshi Inst of Technology

Phone: 77605 09192

Email: gourish.goudar@nmit.ac.in



- Dr. Gourish Goudar has completed his ME and PhD in the area of Mobile and Wireless Networks from BITSPilani.
- He has worked as SDE at AMAZON development center, Bengaluru.
- He has a total of 2 years industry experience, 2.5 years in academics and 5 years as senior researchfellow.
- He is the awardee of the prestigious UGC JRF and NET by MHRD, Govt.ofIndia.
- He has won the PhD forum best paper award at IEEE International conference on Advanced Networks and Telecommunication Systems (ANTS),2017.
- He has published research articles in highly reputed journals such as IEEE Transactions and IEEE COREconferences.
- His current areas of research include Future Networks, Intelligent Transportation Systems, Machine Learning and Mathematical Modelling.
- He is currently working as Assistant Professor in Dept. of Artificial Intelligence and Data Science, NMIT, Bengaluru.



Department of Computer Science and Engineering

Six Days Faculty Development on "R Programming and its Applications" (27th March 2023 to 1st April 2023)

PROFILE DETAILS

Name: Dr. Rekha Padke

Designation: Associate Professor

Organization: Nitte Meenakshi Inst of Technology

Phone: 99017 33233

Email: rekhaphadke@gmail.com



- Graduated as Electronics and Communication Engineer from JNNCE, Shimoga and Post-Graduation in Digital Communication and Networking from SJCIT, Chickaballapur in 2008.
- Awarded PhD for Developing Algorithms for Glucose Monitoring in a closed loop System from University of Mysore in2021
- Currently Pursuing PG certified Course of 13 months in Computation Data Science from Indian Institute of Science.
- 20+ years of working experience in teaching handling various courses. Handled most of the basic courses for ECE students and Programming oriented courses for ECE, and other branches.
- Handled various Program or algorithm-based courses for ECE, and other branchstudents
- Guided about 20 undergraduate Projects, 4 PG projects related to cutting edgetechnologies
- Published around 15 papers. One of my PhD work is published in Sadhana along with Dr.Abhijit Bhograj, a renowned Diabetician inBangalore.
- Framed syllabus and contents for ECE and Data science branches(Autonomous).
- Served and serving as BOS/BOE Member for NMIT and presented session for students helping them for placement relatedactivities.
- Served and serving as Domain head in the area of Data science and Machine learning for Project relatedactivities.



Department of Computer Science and Engineering

Six Days Faculty Development on "R Programming and its Applications" (27th March 2023 to 1st April 2023)

PROFILE DETAILS

Name: Mr. Ravindranath K

Designation: Research Scholar

Organization: NIT, Trichy

Phone: 97424 20155

Email: ravindranath321@gmail.com



- 10+ years of experience in the Research and academic profession, spearheading diverse teams and people worked at NMIT and DBITBangalore
- Bachelor of Engineering from Vivekananda Institute of Technology, Master of Technology from RNS Institute of Technology Bangalore and Pursuing Ph.D. (2019-Till date), National Institute of Technology Tiruchirappalli (Final stage ofcompletion)
- <u>Projects Completed</u>: 1) Novel classification algorithms were built to classify the Histopathological images 2) Novel automated algorithms were developed using the deep learning toolbox of MATLAB to classify skin cancer and brain tumordatasets.
- On Going projects: 1) developing Hybrid models by combining convolutional neural networks and long short-term memory to efficiently classify CT Lung images provided by Kangwon medical university and hospital, South Korea, and Chonbuk National University and Hospital, South Korea 2) Studies are being made to automatically diagnose MRI Breast Images from Kangwon medical university and hospital South Korea. 3) Segmentation of Mediastinal images from CT chest images from Kangwon medical university and hospital, South Korea. 4) Supported the University of Saskatchewan, Canada team for rib segmentation. 5) Hardware implementation of LiteHistoNet on Raspberry Pi for reducing the number of parameters used by neuralnetworks.
- Published research manuscripts in reputed science citation and Scopus-indexedjournals
- Visited the University of Saskatchewan, Canada, under the Scheme for Promotion and Research Collaboration, India, funded by the Ministry of Human Resource & Development.
- Cleared UGC NET exam conducted by UGC, DEC 2013, 2014,2015



Department of Computer Science and Engineering

Six Days Faculty Development on "R Programming and its Applications" (27th March 2023 to 1st April 2023)

PROFILE DETAILS

Name: Mr. Dheeraj . D

Designation: Assistant professor

Organization: GAT Bangalore

Phone: 9880166448

Email: dwarakanathdheeraj@gmail.com

- Mr. Dheeraj D, currently works as an Assistant Professor in Dept.of ISE, Global Academy
 of Technology. He has about 15 years of experience in teaching including 4 years of
 research expertise in the field of bio-medical engineering and augmentedreality.
- His research interests include data science, deep learning and optimization, hyperparameter tuning, parallel processing, augmented reality and data mining and visualization.
- 40+ publications in peer journals and conferences. He has received many best paper awards in the past. He has 23 citations and h-index of 3 and i-10 index of 1.
- He has 2 Indian patents published in his name.
- He is a reviewer for ASTES and JENRS Journal in the field of computational intelligence.
- He has reviewed and contributed book chapters for the book entitled Introduction to Computing and Programming in Python with pearson publishers
- He owns 3 student clubs at GAT for promoting open source technologies, competitive programming and interdisciplinary projects.
- He has guided and completed more than 40 projects under UG and PGlevel.
- He is a technical consultant at Infidata Technologies and Dhwajani Technologies till date.
- Served as a resource person in FDPs conducted at RVCE, SVCE, DSCE, SVIT, REVA
- He has also delivered talks on machine learning and deep learning in about 2 ATAL sponsored FDPs and chaired few sessions in national conferences aswell.
- He is a recipient of various awards in sports and also recipient of academic excellence awardtoo.
 - o He is a Sun Certified Java Programmer in Java 1.4.
 - o Infosys certified Python Programmingtrainer.
 - O Wipro certified Full Stack Developmenttrainer.
 - o Also, he has many certifications under coursera andswayam.
- He also has served as a JURY at various state and national level hackathons and most importantly as a JURY for smart India hackathon 2020 software and 2021-hardware version. He also is a recognized mentor and jury at BiTesXcellerator Project competition at the national level from 2018onwards.
- Conducted many technical events, coding competitions, state and nation levelhackathons.
- life member of professional bodies such as IAENG, IFERP, MISTE, ISTE and IACSIT.



Department of Computer Science and Engineering

Six Days Faculty Development on "R Programming and its Applications" (27th March 2023 to 1st April 2023)

PROFILE DETAILS

Name: Dr. H S Prasantha

Designation: Professor

Organization: K.S. Institute of Technology Bangalore

Phone: 9902058362

Email: drhsprashanth@gmail.com



- Currently serving as Professor CSE Department KSIT and previously served as Professor at NMIT, PESIT and EWIT (more than 21 years of experience)
- Graduated from ECE under BU, MTech from VTU and PhD from Anna university Chennai during2012
- Extensive experience in executing Teaching/Training courses related to the Signal Processing and Machine Learning for Under-Graduate (UG) and Post-Graduate (PG)
 Programs (Handled most of the courses, framed syllabus and contents in the domain)
- Guiding Under-Graduate and Post-Graduate Projects related to Signal Processing and Machine learning (Guided more than 100 UG projects, more than 25 PGProjects)
- Guiding Research students for PhD in the area of Signal Processing and Machine Learning, Publishing papers in the area of Signal Processing and Machine Learning (Guided 2 students for PhD and guiding 3 students for PhD program under VTU)
- Published more than 80 papers in Reputed Journals and conferences with more than 450 citation and h index 0f 10, research gate citations of 500
- Served and serving as Reviewer for many reputed Journals and conferences including IEEE transactions, Jon WILEY, etc.
- Served and serving as Session chair for manyconferences
- Served and serving as Editorial Board member for VariousJournals
- Filed onepatent
- Served and serving as Member BOS NMIT, PESIT, CMRUniversity
- Served and serving as Member BOE NMIT, PESIT, Reva University, UVCE
- Served and serving as Academic council member for PESCE Mandya,
 CMRuniversityServed and research council member at NMIT from 2014 to 2022
- Served as Member Research Committee VTU and RevaUniversity
- Served as Guest speaker for various Institutes and Organizations
- He is a member of professional bodies such as IEEE (Senior Member), IEEE Signal Processing Society, IEEE –Commuter Society, IET, ISSE, Felow-IETE, IAENG, IFERP, MISTE, etc.
- Served as Doctoral committee member for Research scholars under VTU, Reva University, JainUniversity

Department of Computer Science and Engineering

Six Days Faculty Development on "R Programming and its Applications" (27th March 2023 to 1st April 2023)

PROFILE DETAILS

Name: Mr. Kushal Kumar B N

Designation: Asst. Professor

Organization: K.S. Institute of Technology Bangalore

Phone: 9900533883

Email: kushalkumarbn@ksit.edu.in



- Currently serving as Asst.Professor CSE Department KSIT
- Graduated from ISE under VTU & M. Tech from VTU
- Secured 3rd rank for the Visvesvaraya Technological University in M. Tech
- Pursuing PhD in VTU
- GATE Computer Science Qualified with 92.8 percentile
- Mentored a Team from KSIT named Pacman Bytes has won the first place in Smart India Hackathon under the problem statement of Ministry of Civil Aviation.
- Delivered Guest lecture on Discrete Mathematical Structures at K S School of Engineering and Management
- NBA Department Coordinator
- Handled NBA (National Board of Accreditation) criteria 3
- Handled NAAC (National Assessment and Accreditation Council) criteria 2
- Result Analysis Coordinator
- Technical Seminar Coordinator
- Member of Academic Committee
- Member of Cultural Committee
- Member of VTU flying squad Team

SESSION – 1 DETAIL

TOPIC: Registration and Inauguration of the FDP program

SCHEDULE: 9.30 AM to 11AM

Brief details about the session

The FDP program was designed to address the contents of 4th semester syllabus along with research opportunities in various domain such as Image Processing, Biomedical Signal Processing, Data science, Machine Learning with hands-on demonstrations using R language.FDP also covered mathematical preliminaries required for faculty pursuing research or planning to pursue research in the related domain.

The FDP was inaugurated by the dignitaries such as Dr. C P Ravikumar - Director of Talent Development Texas Instruments India Sri. R. Rajagopal Naidu, - President K S Group of Institution, Sri. R. Leela Shankar Rao - Hon. Secretary K S Group of Institution, Sri. T. Neerajakshulu Naidu – Treasurer K S Group of Institution, Dr. K. V. A. Balaji - Chief Executive Officer K S Group of Institution, Dr. Dilipkumar K - Principal & Director, KSIT, Dr. Rekha B Venkatapur - Head Department of CS&E KSIT, Dr.Sudha P N – Head, Department of E&CE KSIT. The program was attended by Principal & Director KSSEM, Principal K S School of Architecture, Principal PU College, Heads of all the departments of KSIT and KSSEM, Faculties of KSIT (both teaching and Non-teaching), Participants from various Institutes across Bangalore.

The agenda of the Inaugural Session are as follows:

Inaugural Function Agenda

Invocation Song:	Mr. Sanjeev and Ms. Bhumika
Welcome Address:	Dr. Dilip Kumar K
Lighting the Lamp:	Chief Guest and Dignitaries
Introduction of Chief Guest:	Dr. Rekha B. Venkatapur
Address by Chief Guest:	Dr. C.P Ravi Kumar
Address by President:	Sri. R. Rajagopal Naidu
Address by Secretary:	Sri R. Leela Shankar Rao
Address by Treasurer:	Sri. T. Neerajakshulu Naidu
Address by CEO:	Dr. K.V.A. Balaji
Vote of Thanks:	Dr. P.N Sudha

Few Glimpse from the inaugural Session



















Registration snapshots

DAY 1: Session 2 Date: 27/03/2023

KEY NOTE ADDRESS

Keynote Speaker: Dr. C P Ravikumar Director of Talent Development Texas Instruments India

Topic: Perspectives in Programming Schedule: 11 AM to 12 PM

The keynote speaker introduces about the two programming languages such as PYTHON and R. The speaker explained the necessity of programming languages to improve the quality of learning and teaching.





DAY 1: Session 2 Date: 27/03/2023

FDP Flow

Speaker: Dr. H S Prasantha, Professor CS&E KSIT Bangalore

Topic: FDP Design flow **Schedule:** 12 PM to 1 PM

The speaker introduces about R programming language and briefed about 6 days session details and contents of each session to be covered by different speakers.





DAY 1: Session 3 Date: 27/03/2023

Speaker: Dr. H S Prasantha, Professor CS&E KSIT Bangalore

Topic: Hands on session covering Module 1 **Schedule:** 1.30 PM to 3.30 PM





DAY 2: Session 1 Date: 28/03/2023

Speaker: Dr. Rekha Phadke, Associate Professor NMIT Bangalore

Topic: Introduction to Time series analysis and Forecasting using R Schedule: 9 AM to 10.30 AM

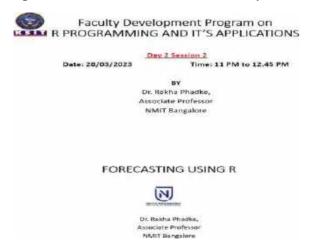




DAY 2: Session 2 Date: 28/03/2023

Speaker: Dr. Rekha Phadke, Associate Professor NMIT Bangalore

Topic: Introduction to Time series analysis and Forecasting using R **Schedule:** 11 AM to 12.45 PM





DAY 2: Session 3 Date: 28/03/2023

Speaker: Dr. H S Prasantha, Professor CS&E KSIT Bangalore

Topic: Hands on session covering Module 2 **Schedule:** 1.30 PM to 3.30 PM





DAY 3: Session 1 Date: 29/03/2023

Speaker: Dr.Gourish Goudar, Assistant Professor NMIT Bangalore Schedule: 9 AM to 10.30 AM

Topic: Statistical Modeling, Distribution and plotting the graphs using R/R-Studio



DAY 3: Session 2 Date: 29/03/2023

Speaker: Dr. A Vijayakrishna, Senior Architect, Bosch Global Software Technologies

Topic: Mathematical Preliminaries **Schedule:** 11 AM to 12.45 PM





DAY 3: Session 3 Date: 28/03/2023

Speaker: Mr.Kushal Kumar, Assistant Professor CS&E KSIT Bangalore

Topic: Hands on session covering Module 3 **Schedule:** 1.30 PM to 3.30 PM





DAY 4: Session 1 Date: 30/03/2023

Speaker: Mr. Dheeraj D, Assistant Professor GAT Bangalore Schedule: 9 AM to 10.30 AM

Topic: Machine Learning basics and Machine learning using R





DAY 4: Session 2 Date: 30/03/2023

Speaker: Mr. Dheeraj D, Assistant Professor GAT Bangalore

Topic: Machine Learning basics and Machine learning using R Hands-on Schedule: 11 AM to 12.45

PM





DAY 4: Session 3 Date: 30/03/2023

Speaker: Mr. Kushal Kumar, Assistant Professor CS&E KSIT Bangalore

Topic: Hands on session covering Module 4 **Schedule:** 1.30 PM to 3.30 PM





DAY 5: Session 1 Date: 31/03/2023

Speaker: Mr. Dattaram B A, Director Data Science, Noodle.AI **Schedule:** 9 AM to 10.30 AM **Topic:** Use cases and landscape of data science Projects – An industrial Perspective





DAY 5: Session 2 Date: 31/03/2023

Speaker: Mr. Dheeraj D, Assistant Professor GAT Bangalore **Topic:** Project Demonstration of classification using R





Schedule: 11 AM to 12.45 PM

DAY 5: Session 3 Date: 31/03/2023

Speaker: Mr. Kushal Kumar, Assistant Professor CS&E KSIT Bangalore

Topic: Hands on session covering Module 5 **Schedule:** 1.30 PM to 3.30 PM



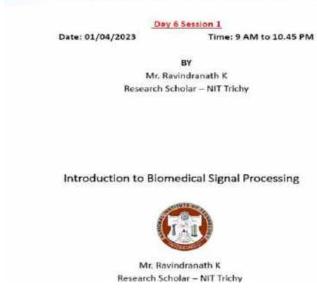


DAY 6: Session 1 Date: 01/04/2023

Speaker: Mr. Ravindranath K, Research scholar NIT Trichy **Schedule:** 9 AM to 10.30 AM

Topic: Introduction to Biomedical Signal Processing



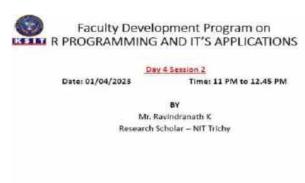




DAY 6: Session 2 Date: 01/04/2023

Speaker: Mr. Ravindranath K, Research scholar NIT Trichy

Topic: Biomedical Signal Processing using R, hands-on approach Schedule: 11 AM to 12.45 PM



Biomedical Signal Processing using R, Hands-on approach





DAY 6: Session 3
VALEDICTORY FUNCTION

Schedule: 1 PM



Day 6 Session 3

Date: 01/04/2023 Time: 1.30 PM to 3.30 PM

Valedictory function and Certificate distribution



Date: 01/04/2023

Feedback Questionnaire

Six Day FDP ON "R PROGRAMMING AND ITS APPLICATIONS"

01-04-2023 Day 6 Session 1 (9:00AM to 10:30AM):

Mr. Ravindranath, PhD scholar NIT Trichy Biomedical signal processing using R
hsprashantha@ksit.edu.in (not shared) Switch account
* Required
Participant Name*
Your answer
College Name *
Your answer
Email -ID
*
Your answer
Mobile Number *
Your answer
1. How would you rate the session? Was the topic relevant?
Strongly Agree

Agree Strongly Disagree Disagree

2. How would you rate the level and amount of information provided?

*

Too Much About Right Not Enough

3. The information and skills presented were relevant and useful.

*

Strongly Agree Agree Strongly Disagree Disagree

- 4. How would you rate the resource person? The resource person was knowledgeable, clear and professional:
- *

Strongly Agree Agree Strongly Disagree Disagree

5. How would you rate the activities?

*

Excellent Very Good Good Poor

Comments/Suggestions*



Submit

Clear form

Assessment questions

K. S. INSTITUTE OF TECHNOLOGY

Department of Computer Science & Engineering

hsprashantha@ksit.edu.in (not shared) Switch account

* Required	
Assessment form of FDP	
"R PROGRAMMING & IT'S APPLICATIONS"	
Name of the Faculty*	
Your answer	
College*	
Your answer	
Email id*	
Your answer	
1. Functions are defined using the	directive and are stored as R objects
a) functionb) funct	
c) functions	
d) fun	
*	
A B C D	
2. Point out the wrong statement?	
a) Functions in R are "second class objects"	
b) The writing of a function allows a developer to o	create an interface to the code, that is

explicitly specified with a set of parameters
c) Functions provides an abstraction of the code to potential users
d) Writing functions is a core activity of an R programmer*
A B C D
 3. Which of the following is used for reading tabular data? a) read.csv b) dget c) readLines d) writeline*
A B C D
 4. Which of the following will add the title "R language" to the graph? a) titleAdd("R language") b) title("R language") c) titleBar("R language") d) var(x, na.rm=TRUE)*
A B C D
5. Which are indexed by either row or column using a specific name or number?a) Datasetsb) Data framesc) Datad) Functions*
A B C D
6. What is the R function used to generate a matrix?*

Your answer
7. What is the function of rbind and cbind in R programming?*
Your answer
8. Consider the code
x<-9
seq(1,x,x/3)
what is the output?*
Your answer
9. Consider a situation where we need to find the sum of the first n squares using a loop. Write an R code to perform this using vector based programming *
Your answer
10 . What is the function of commands sapply and lapply?*
Your answer
11. Write a simple R code to find the roots of quadratic equation?*
Your answer
12. What is the function used to find what packages are available for loading?*
Your answer
13. What is the R function used to find the remainder from divison?*
Your answer

d the inverse of a matrix?*	
	in en son
Submit	
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HOD	Principal PRINCIPAL
	K.S. INSTITUTE OF TECHNOLO
	BENGALURU - 560 109.
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