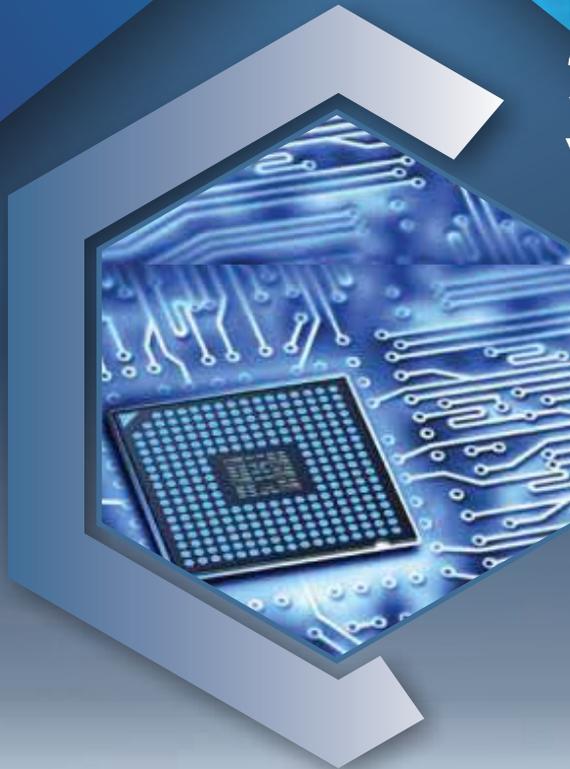# B.G.S.
INSTITUTE OF TECHNOLOGY

**Department of
Electronics & Communication
Engineering**
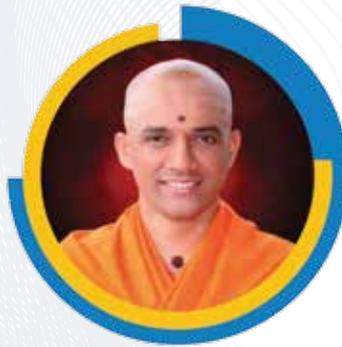
SAMVAHANA

News Letter
2019-2020
VOLUME 4 ISSUE 2

2019-2020 EVEN SEM
1st January 2020-31st August 2020

His Holiness Padmabhushana
Sri Sri Sri Dr. Balagangadharanatha Mahaswamiji

His Holiness
Sri Sri Sri Dr. Nirmalanandanatha Mahaswamiji
Present Pontiff
Sri Adichunchanagiri Mahasamsthana Math

VISION

BGSIT is committed to the cause of creating tomorrow's engineers by providing quality education and inculcating ethical values.

MISSION

1. Imparting quality technical education by nurturing a conducive learning environment.

2. Offering professional training to meet industry requirements.

3. Providing education with a moral - cultural base and spiritual touch.

Principal Message:

I am very happy to know that the department of E&C bringing out their Departmental magazine ,Many events take place in an engineering college during the semester that goes unnoticed by those not directly involved. This magazine lets everyone in college know about the Activities. This is an easy and accurate way of recording important events that have been conducted in college and this information can be used for the purpose of NAAC,NBA or other accreditation process. It is also a platform which helps as disseminating the information to all the Stakeholders i.e., Parents, students, Teachers, Industrialists & public at large.

The placement activities have been the highlight of BGSIT, with over 50+ reputed companies from different fields of engineering & Management visiting the campus & as many as 356+ offers being received by our students.

Thanks & Best Wishes to the Editorial committee for having brought out this Departmental magazine.

HOD'S Message

As head of the department, I would like to congratulate the coordinators for bringing this issue of the departmental magazine. The Electronics and Communications Engineering department strives for academic excellence through experienced and dedicated faculty. In this context, the department magazine becomes a platform to create an atmosphere that promotes creativity and innovation in all the areas of electronic and communication engineering Personally, I believe that this magazine is a platform for every member in the department both faculties and students in order to create, share, and use new knowledge. With this message I wish the coordinators all the best for their future projects. Let this be a platform to explore new trends and gain new ideas.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

VISION
To develop high quality engineers with technical knowledge, skills and ethics in the area of Electronics and Communication Engineering to meet industrial and societal needs.

MISSION
1. To provide high quality technical education with up-to-date infrastructure and trained human resources to deliver the curriculum effectively in order to impart technical knowledge and skills.

2. To train the students with entrepreneurship qualities, multidisciplinary knowledge and latest skill sets as required for industry, competitive examinations, higher studies and research activities.

3. To mould the students into professionally-ethical and socially-responsible engineers of high character, team spirit and leadership qualities.

Program Educational Objectives (PEO's)
After 3 to 5 years of graduation, the graduates of Electronics and Communication Engineering will –

1. Engage in industrial, teaching or any technical profession and pursue higher studies and research.
2. Apply the knowledge of Mathematics, Science as well as Electronics and Communication Engineering to solve social engineering problems.
3. Understand, Analyze, Design and Create novel products and solutions.
4. Display professional and leadership qualities, communication skills, team spirit, multidisciplinary traits and lifelong learning aptitude.

Program Specific Outcomes (PSO's)
1. To apply the knowledge of Electronics and Communication Engineering as well as automation tools to create electronic circuits, systems and solutions.
2. To collaborate effectively with Electronics and Information Technology industries through internship, induction, technical seminar, technical project, research, product design and development, industrial visit, staff training in order to provide the actual industrial exposure to students and faculties.

Toppers in Even semester 2019-20

8th Semester

BHANUPRIYA D
4BW16EC009
88%

BINDUSHREE M S
4BW16EC014
87.4%

ASIFA
4BW16EC007
86.3%

6th Semester

PRIYANKA M K
4BW17EC121
91.62%

VANITHA M R
4BW17EC111
91.37%

POOJA A C
4BW17EC065
89.97%

4th Semester

YASHWANTH GOWDA P
18ECE117
SGPA: 9.8

POORNIMA B N
18ECE070
SGPA: 9.5

ASHA H N
18ECE012
SGPA: 9.46

2nd Semester

RAKSHITHA CS
19ECE084
SGPA: 10

PREETHI L
19ECE080
SGPA: 9.83

VIDYASHREE B T
19ECE112
SGPA: 9.5

Events

ALUMNI MEET - ACU

Alumni meet 2020 was organized by Dept. ECE on 25th January 2020.

Newsletter was released by dignitaries on the stage. Chief Guest Dr. Mohan Alva, Chairman Alva's Education Foundation addressed the alumni. Our Dept. ECE alumni Jyothi J had successfully cleared KAS Exam and deputed as Tax officer.

BINDU A THOMAS –
Talk on – Significance of Professional association membership.

Dr. Bindu A Thomas, Prof & Head, Dept. ECE, VVIET, She spoke about the current requirements for professional bodies membership and its significant role in research work and entrepreneurship.

SOCIAL EVENTS

3-DAY VOTER'S ID REGISTRATION AND ELECTION AWARENESS CAMP

A 3 day election awareness camp and voter's id registration had been organized in the from 6th January 2020 to 8th January 2020 for the benefit of citizen and society.

REPUBLIC DAY

On 26th January 2020, 71st Republic Day celebration was held at BGSIT ground. Our beloved Principal Dr. B. K. Narendra hoisted the national flag and later gave a speech on national integrity and recent developments in technology and innovation.

WORLD ENVIRONMENT DAY

On 5th June 2020, World Environment Day was organized at BGSIT. Dept. of ECE Staffs planted saplings in the campus to mark World Environment Day.

SADBHAVANA DIVAS

On 20th August 2020, Sadbhavana Diwas was organized at BGSIT to mark the birth anniversary of Former Prime Minister Sri. Rajiv Gandhi, which is celebrated as Sadbhavna Diwas (Harmony Day).

DEPARTMENT ACTIVITIES

ONE DAY WORKSHOP ON ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

One Day Workshop On "Application Of Artificial Intelligence & Machine Learning" Organized By ACU(BGSIT) on 27th January 2020.

IPR

On 10th March 2020, One Day Workshop Entitled "Significance Of Intellectual Property Rights And Innovations" was held at BGSIT.

CAREERLABS IN PARTNERSHIP WITH **BYJU'S** The Learning App

BYJU'S-CareerLabs is hosting a **satellite (virtual) seminar** exclusively for the students of **BGSIT College**.

This Satellite Seminar is **highly recommended** for everyone to attend and since this is a **lock down period** you can best utilize the time by attending this.

The Satellite Seminar will cover topics related to **Profile Building for Higher Education & Placements**.

Colleges Closed due to Covid-19?
Worried about your future after Engineering?

DO YOU KNOW?

All it takes

ONE SECRET INGREDIENT

to crack the **top masters abroad with a 100% scholarship!**
Thinking whether or not to do your Masters during this time of crisis?

Get a chance to interact with

PN Santosh

(CEO & Founder - CareerLabs, BYJU'S Co-Founder, Ex- ISB, Ex McKinsey, GMAT 780 Scorer)

**Bonus- All attendees get access to the FREE starter pack of CareerLabs ProfileBoost Platform!
Get certified on completion of the free starter pack!**

CLICK HERE TO REGISTER NOW

2nd May Saturday | 4:00 PM - 6:00 PM
Attendance is highly recommended

✉ support@thecareerlabs.com   📞 +91 63-6600-4441

Topic: Satellite Communication

Speaker: Mr. P N Santosh, ByJUs

No. of Participants:190

Online Plat form: Go to Webinar

Date: 02nd May 2020

Mr. Santosh explained about complete details about satellite communications. Satellites have become essential for modern life. Among the important applications of satellite technology are video, voice, IP data, radio, Earth and space observation, global resource monitoring, military, positioning (GPS), micro-gravity science and many others. From direct-to-home TV to the Hubble telescope, satellites are one of the defining technologies of the modern age. Video is the most successful commercial application for satellites, and direct-to-home distribution is the most promising application for the technology at this time. "Spot" images of places on Earth, GPS, and Internet access—both for providers and direct-to-home or office—have been most successful, while cell phone systems based on fleets of low flying satellites have been a flop. Mobile phone-like connections (including at ISDN speeds) for marine and mobile services have been with us for some time, however. Satellite services have some big advantages, such as being available almost everywhere on Earth without wires, being mobile, being the perfect broadcast medium, and being protocol agnostic. The downside to satellite technology is that satellites have either a limited visibility over a spot on Earth, or a long round-trip time, and they broadcast data that can be received by anyone under them. Satellite transmissions are also affected by both terrestrial and space weather. They are subject to a higher error rate than fiber, and they are complex from both a physical and regulatory point of view. Satellites are launched from Earth by the shuttle, from high-flying airplanes, or from ground-based rockets. Once launched, payloads must reach proper elevation and escape velocity to be boosted into orbit. In order to maintain proper orbit, satellites are controlled from a ground station on Earth that sends commands and receives status and telemetry from the satellite.

This Satellite Seminar is Highly Important for everyone to attend and the lockdown period was utilised by students. The Satellite Seminar was covered topics related to Profile Building for Higher Education, Placements, Scholarships, Projects and Internship's.

Topic: Electronics for Renewable Energy Systems

Speaker: Mr. Chandra Mohan, CEO, Banashree Renewable Energy Systems PVT. Ltd., Bengaluru

No. of Participants:100

Online Plat form: ZOOM

Date: 12th May 2020

e-certificate is provided to all the participants.

Mr. Chandramohan was discussed about his company for 15 min and another 1 hour and 30 minutes he completely discussed about classification of Energy Sources, Renewable and non-renewable energy, Energy resources (Conventional and nonconventional), Energy needs of India, and energy consumption patterns. Worldwide Potentials of these sources. Energy efficiency and energy security. Energy and its environmental impacts, Distributed generation. Solar Energy: Solar thermal Systems: Types of collectors, Collection systems, efficiency calculations, applications. Energy storage, Battery – types, equivalent circuit, performance characteristics, battery design, charging and charge regulators. Battery management. Flywheel-energy relations, components, benefits over battery. Fuel Cell energy storage systems. Electronic and battery charged vehicle.

Topic: System Design using Xilinx Vivado for Zynq SoC

Speaker: Mr. Prakash, Lead Application Engineer. Coreel Technologies, Bengaluru

No. of Participants:140

Online Plat form: Webex

Date: 13th May 2020

e-certificate is provided to all the participants by coreel technologies

Mr. Prakash was discussed about his company for 5 min and another 1 hour and 30 minutes he completely discussed about Use Xilinx Design Constraints to communicate performance. Rapidly architect an embedded system targeting the ARM processor of Zynq located on ZedBoard using Vivado and IP Integrator. Extend the hardware system with Xilinx provided peripherals. Create a custom peripheral and add it to the system. Students are able to Use Xilinx Design Constraints to communicate performance, Rapidly architect an embedded system targeting the ARM processor of Zynq located on ZedBoard using Vivado and IP Integrator, Extend the hardware system with Xilinx provided peripherals, Create a custom peripheral and add it to the system, Debug a design using Vivado hardware analyzer and how to use Vivado HLS to generate an IP-XACT compliant hardware accelerator. Creating HDL Design and Xilinx design constraints.

Sl. No.	PROJECT REFERENCE NO.	PROJECT TITLE	BRANCH	DEGREE	PROJECT STREAM	NAME OF THE GUIDE(s)	NAME OF THE STUDENTS	SANCTIONED AMOUNT (in Rs.)

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science campus, Bengaluru – 560 012
Website: http://www.kscst.iisc.ernet.in/spp.html || Email: spp@kscst.iisc.ernet.in || Phone: 080-23600978

43rd Series of Student Project Programme: 2019-20
LIST OF STUDENT PROJECT PROPOSALS APPROVED FOR SPONSORSHIP

18) B.G.S. INSTITUTE OF TECHNOLOGY, MANDYA

Sl. No.	Project Ref No.	Project Title	Branch	Degree	Stream	Name of the Guide(s)	Name of the Students	Sanctioned Amount
98.	43S_BE_1712	FARMER FRIEND.IOT BASED SMART POLYHOUSE	ELECTRONICS AND COMMUNICATION ENGINEERING	B.E.	STREAM A	Dr. NAVEEN K B Mr. MANOJ KUMAR S B	Ms. PRIYANKA C Ms. PRATHIMA H G Mr. NISCHITH SHETTY Mr. OMPRAKASH T P	4000.00
99.	43S_BE_2157	AN EARLY DETECTION OF EXUDATES IN RETINAL FUNDUS IMAGES USING SVM ALGORITHM	ELECTRONICS AND COMMUNICATION ENGINEERING	B.E.	STREAM A	Mr. MANOJKUMAR S B Dr. ANANDARAJU M B	Mr. SUNIL RAJ D J Ms. SUCHARITHA B S Ms. SANDHYARANI S K Ms. RESHMA K A	3500.00

PUBLICATIONS

Sl. No.	Name of the Authors	Title of the Paper	ISBN/ISSN	Name of the Journal / Date of Publication
1	Dr. K N Muralidhara	Binary multiplier (n-bit size) design, implementation analysis and comparison of various logics	ISSN: 2005-4238 Volume 29, Issue 7, 2020.	International journal of advanced science and technology (IJAST).
2	Dr. K N Muralidhara	Incrementer and decrementer of an n-bit input, by a value 'M' circuit design and analysis for various parameters	ISSN: 2391-5125 Volume 7, Issue 5, 2020.	Journal of critical reviews.
3	Dr. K N Muralidhara	Design of scan chain using level sensitive flip flops for VLSI Testing	ISSN: 2005-4238 Volume 29, Issue 7, 2020.	International journal of advanced science and technology (IJAST).
4	Dr. K N Muralidhara	Design of low power hybrid model for scan-based VLSI Testing	ISSN: 0193-4120 Volume 81, Issue 7, Dec 2019.	The Mattingley Publishing Co. Inc TEST.
5	Dr Naveen K .B	Interpretation of One-Dimensional Hilbert Transform in terms of Fourier Transform and its Applications	ISSN: 2005-4238, Volume 29, Issue 3, April-2020	International Journal of Advanced Science and Technology
6	Dr Naveen K .B	Internet of Things: Internet Revolution, Impact, Technology Road Map and Features.	ISSN: 1857-8365, Volume 9, Issue 7, April-2020	Advances in Mathematics: Scientific Journal

7	Dr Naveen B	Analysis on CBIR system for ECG Reports	ISSN: 2249-8958, Volume-9, Issue-5, June-2020.	International Journal of Engineering and Advanced Technology (IJEAT).
8	Dr Naveen B	A Survey on QBIC system for ECG Reports	ISSN: 2581-4915, Vol-15, Issue-12, Dec-2019.	Industrial Engineering Journal.
9	Mrs. Ramya K	An unattended cluster based VANET oriented evolving graph model and ATED reliable routing them.	ISSN: 2278-0181, Vol-9, Issue-4, April-2020.	International journal of Engineering research and Technology (IJERT).
10	Mrs. Ramya K	Performance and analysis of synchronous voltage mods buck converter using 180nm	ISSN: 2395-0056, Vol-7, Issue-6, June-2020.	International research journal of Engineering and Technology (IRJET).

MOOC CERTIFICATIONS

Faculties are actively involved in continuous learning process and are enthusiastically participating in online certification courses.

Sl No	Faculty Name	Add on Course	Year	Course Name
1	Dr.Naveen K B	Udemy	2019-20	SOC Verification using system verilog
				System Verilog Verification1: start learning TB constructs
				8051 Microcontroller
				Welcome to Artificial Intelligence
				System Verilog Verification2: start learning TB constructs
2	Dr.Naveen B	NPTEL	2018-19	CMOS Digital VLSI Design
				Analog Circuits
			2019-20	Digital Image Processing

				AC DC Analysis of Diode-Electronics Engineering
3	Prabhavathi K	Udemy	2019-20	Digital Signal Processing with MATLAB Applications.
4	Shalini K J	NPTEL	2019-20	NBA Accreditation and Teaching-Learning in Engineering(NATE)
5	Kavitha B C	NPTEL	2018-19	Digital Electronic Circuits
		Udemy	2019-20	Artificial intelligence
				SWOT Analysis
				MATLAB with Image Processing
				Block chain
6	Manoj Kumar S B	NPTEL	2018-19	Microprocessors and Microcontrollers
		Udemy	2019-20	SOC Verification using system verilog
				Machine Learning:Making Computers think
				Block chain and Deep Learning: Future of AI
				Python AI and Machine learning for production and development
				Deep learning, Transfer learning, Turtles
7	Mohan Kumar K S	NPTEL	2018-19	Analog Circuits
8	Balaji B S	NPTEL	2018-19	Embedded System with ARM
				Digital Electronic Circuits
			2019-20	Microelectronics: Devices to Circuits
9	Goutham V	NPTEL	2018-19	CMOS Digital VLSI Design
			2019-20	Digital Image Processing
10	Jayanth Dwijesh H P	NPTEL	2018-19	Cryptography and Network Security
			2019-20	NBA Accreditation and Teaching-Learning in Engineering(NATE)

11	Nandini S	NPTEL	2018-19	Digital Electronic Circuits
12	Nishchitha S	NPTEL	2018-19	Microprocessors and Microcontrollers
			2019-20	Digital circuits
				Computer Networks and Internet Protocol
13	Srividya C N	NPTEL	2018-19	Digital Electronic circuits
14	Priyanka R	NPTEL	2018-19	Principles of Communication Systems-I
15	Prafulla S	NPTEL	2018-19	Principles of Communication Systems-I
16	Hamsashree M K	Udemy	2019-20	Specialization in Java
17	Lakshmi D L	Udemy	2019-20	Arduino Interfacing
				AC&DC Analysis of Diodes
				Practical IOT using Arduino UNO and ESP
				Microcontroller and C programming Language

QUIZ, HACKATHON, EXHIBITION

ISTE-BEST STUDENT AWARD 2019

BEST STUDENT AWARD 2019-ISTE KARNATAKA SECTION

Mr. Charrith Srinivaas ,VI Sem, Electronics and communication Engineering student of BGS Institute of technology B G Nagar has awarded with "Best student Award" in Karnataka section during ISTE State level student convention 2019. The principal Dr. B K Narendra have expressed his happiness for their student being honored with prestigious award.

We are proud to announce our 6th Sem BE (E&C) student "Mr. Charrith Srinivaas" has been awarded as "BEST STUDENT OF THE CHAPTER AWARD -2019" by ISTE, New Delhi & ISTE, Karnataka State Section for his overall performance and active involvement and participation in ISTE Chapter Activities
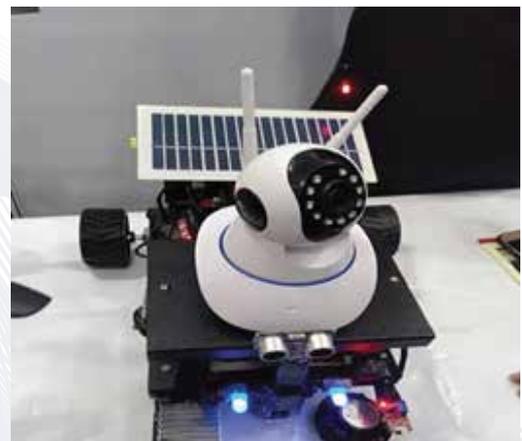
TCS TECH BYTES QUIZ 2020

Students of 6th Semester BE (ECE) have participated in "TCS Tech bytes Quiz 2020" organized by TCS on 27th February 2020 at SJCE, Mysuru.

JVTM 2020

Our final year BE students project "Bluetooth controlled smart surveillance robot" was selected for First prize in JVTM 2020.

HACKAMANIA 3.0

On 29th February 2020 to 01st March 2020, 8 students of 6th Semester BE (ECE) participated in Hackamania 3.0 project competition in the fields like Health care and Biomedical devices, Robotics and drones for human aid, Agriculture and rural development and Smart vehicles at PESCE, Mandya in association with and supported by Binghamton University of New York, USA.

PRAJWALANA 2019

Dept. of ECE Students have actively participated in annual College Festival – Prajwalana 2019 and show cased their talents on the stage.

Students received awards for their achievements in the field of art, culture and sports etc.

JVTM 2020

Our 6th semester BE (ECE) students actively participated in cultural festival as a part JVTM 2020 organized at Sri Kshetra Adichunchanagiri Mahasamasthana Math.

PLACEMENT AND TRAINING

TCS CSR IT EMPLOYABILITY PROGRAM – 2020-21

A unique program named – Corporate Social Responsibility of Tata Consultancy Services is being conducted in the campus for a selected batch of 42 students. The 80 hour employability training is being conducted by extremely competent trainers. A specialized course module has been designed to develop an individual's communication skill, numerical and analytical abilities and it enables one to face interviews confidently. Grooming and etiquette sessions familiarize a candidate with corporate environment. An overview of basic computer applications is also incorporated.

PLACED STUDENT LIST - 2020

SL NO	NAME	COMPANY
PLACEMENT DATA YEAR 2019-20		
SL NO	NAME	COMPANY
1	PRIYANKA C	COGNIZANT
2	PUNITH B S	COGNIZANT
3	SANDHYARANI S K	COGNIZANT
4	APOORVA M R	COGNIZANT
5	ASIFA	COGNIZANT
6	HARSHAVARDHAN R	COGNIZANT
7	HR CHARAN	COGNIZANT
8	NARASIMHA M R	COGNIZANT
9	PRAJWAL M R	COGNIZANT
10	SAHANA HK	COGNIZANT
11	SHALINI K J	COGNIZANT
12	SUNIL RAJ D J	COGNIZANT
13	CHAITHRA D K	COGNIZANT
14	MEENA R	COGNIZANT
15	SUCHARITHA B S	COGNIZANT
16	BINDHUSHREE M S	COGNIZANT
17	PRATHIMA H G	COGNIZANT
18	MONIKA JAIN D	COGNIZANT
19	KUBRA BANU	COGNIZANT
20	RACHANA B L	COGNIZANT
21	SUNIL RAJ D J	INFOSYS
22	NANDAN S	INFOSYS
23	VIDHYALAKSHMI M	INFOSYS
24	RAMYA C R	INFOSYS
25	ASHITHA H P	MINDTREE
26	LIKITH C	MPHASIS
27	H R CHARAN	MPHASIS
28	SHIVA PRASAD H S	MPHASIS
29	PRAJWAL M R	MPHASIS
30	HARSHAVARDHAN R	MPHASIS

31	LAKSHMIKANTHA B L	MPHASIS
32	PUNITHA D	MPHASIS
33	DARSHAN N G	MPHASIS
34	SHALINI K J	MPHASIS
35	PUNITH B S	NTT DATA
36	VINAY KUMAR O G	NTT DATA
37	PRATIMA H G	NTT DATA
38	RACHANA B L	NTT DATA
39	HARSHITH GOWDA T R	QUEST INFORMATICS
40	SAHANA BT	QUEST INFORMATICS
41	SINCHANA N S	QUEST INFORMATICS
42	HARSHITH M S	QUEST INFORMATICS
43	SOUNDARYA M S	QUEST INFORMATICS
44	NANDINI	QUEST INFORMATICS
45	MADAN	QUEST INFORMATICS
46	POOJA SN	QUEST INFORMATICS
47	ABHISHEK GOWDA C G	TCS
48	OMPRAKASH T P	TCS
49	GAGANA	TCS
50	HARSHITHA B	TCS
51	NISCHITH SHETTY	TCS
52	BHANUPRIYA D	TCS
53	BRUNDA K	TCS
54	HARSHITHA KS	TCS
55	PRIYANKA C	TCS
56	BHARATH K M	TCS
57	ASHITHA H P	TCS
58	LAVANYA S R	TCS
59	THEJASWINI G	TEST YANTRA SOLUTIONS
60	BHOOMIKA A	TEST YANTRA SOLUTIONS
61	RAKSHITHA H M	TEST YANTRA SOLUTIONS
62	SAHITHYA C	TEST YANTRA SOLUTIONS
63	NIKITHA M B	TEST YANTRA SOLUTIONS
64	SPOORTHI P	TEST YANTRA SOLUTIONS
65	SANDHYARANI S K	TEST YANTRA SOLUTIONS
66	SOUNDARYA M S	TEST YANTRA SOLUTIONS
67	SHIVA PRASAD H S	WIPRO

QSPIDERS

QSpiders visited the BGSIT campus on 26th February 2020 selected the students from Dept. ECE, CSE and ISE, BGSIT, B G Nagara.

QUEST INFORMATICS

Quest Informatics visited the BGSIT campus on 20th February 2020 selected the students from Dept. ECE, CSE and ISE, BGSIT, B G Nagara.

ADICHUNCHANAGIRI UNIVERSITY

(Formerly BGSIT)

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