CET ELECTRON

Newsletter of Department of Electronics and Communication, CET

In this issue:

CET ECGO, Nava Kerala Sadass Expo, Resonance, C2S, FDPs, Students Achievements, Placements, and Sem toppers

CET EC GO-1

8-November-2023: A science outreach programme was conducted by ECE department of College of Engineering. The first outreach visit was to the Govt. High School, Sreekariyam on 8 November 2023. The outreach was coordinated by Dr. Susan R J, EC UG Coordinator and Prof. Joaquim Ignatious Monteiro, ECE department. About 25 students had volunteered in the outreach, led by Saurabh A S (S7 AEI), , Sneha Saji (S7 AEI), and Dona Kurian (S7 EC). The outreach was indeed a learning experience for both the students and the volunteers. It included demonstration of interesting science experiments, mind blowing projects, Turtle Python demonstrations, familiarisation of Logic Gates, easy tricks of mathematics along with games, music and fun.

RESONANCE

15-21-November 2023: A 5-day technical workshop series, Resonance, was conducted by the EC Association from November 15th to November 21, 2023, at the ECE Seminar Hall. The workshops conducted included 'Introduction to Microcontrollers and Microprocessors', 'Proteus Workshop', and 'Introduction to Machine Learning: Image Classification using Tensorflow', which were conducted in collaboration with various clubs of the college. The workshops were open to all departments, and over 100 students participated in them, which helped the students to enhance their practical skills and gain valuable experience. The series also featured a five-hour interactive project creation workshop called "Build from Scratch", where teams were helped to create a project from scratch by a group of student mentors. Resonance was concluded by a cultural night organized at the gazebo, where many showcased their talents by engaging in music and dance.

VERILOG WORKSHOP: DEEP INTO ELECTRONICS

23 November 2023: AEI association, as a new initiative, organised a workshop on basics of Verilog. It was an initiative taken to increase the depth of knowledge in students. The speakers for the event were R Mukund (S7 AEI) and Sidharth P (S7 AEI). It was conducted on 23rd of November 2023 at ECE Seminar hall. About 61 students participated. The workshop focused on the basics of HDL language Verilog, using simple digital circuits. It also included some simulation using EDA tool which was very helpful in understanding the practical applications of Verilog, and how to identify a circuit from waveforms.

PROJECT EXPO

16 June 2023: On June 16, 2023, the Department of ECE organized a project expo at the ECE seminar hall. A total of around 20 final-year batches from the ECE and AEI programs presented their projects. The projects on display were diverse, ranging from a reinforced learning-based car navigation system to an artificial intelligence-based drone and even an implementation of the CAN protocol in a RISC-V processor. The exhibition attracted numerous visitors, including Dr. Savier J S, the principal, Jisha V R, the UG dean, various faculty members, and students from junior batches. The event sparked thought-provoking discussions and facilitated the transfer of ideas to the junior batches. Dr. Rajeev T, Dr. Jayakumar, and Dr. Roy Kumar formed the evaluation committee responsible for assessing all the projects. Ultimately, the "Ethernet IP with AVB protocol and UVM" from the AEI branch and the ATE hardware design from the ECE branch project received the prestigious Best Project Award.

NAVA KERALA EXPO

7 - 23 December 2023: The Nava Kerala Sadhas was an outreach program conducted by the Government of Kerala, where the Chief Minister as well as other ministers travelled the state and addressed the grievances of the public. As part of this program, an exhibition was held at the Greenfield Stadium in Trivandrum from 17th to 23rd December 2023, where the Electronics and Communication Department of CET organized a stall. Around 20 student volunteers took turns manning the stall, showcasing different electronic components as well as visually explaining the working of the basic logic gates. Several projects made by the students of the department were also presented and explained. The exhibition gave the volunteers great exposure in interacting with the public, and allowed them to provide insight and answer queries regarding the electronics field.

CET EC GO-2

16 November 2023: CetEcGo is a science outreach program conducted by Department of Electronics and Communication, College of Engineering Trivandrum. The outreach program had two school visits and the second visit was on held on November 16, 2023 at the Government Higher Secondary School, Kulathoor. The second school visit was coordinated by Prof. Joaquim Ignatious Monteiro, Dr. Susan R J and Dr. Helen Mary M C. 32 volunteers from all batches of the ECE Department took part in the second school visit, led by Saurabh A S (S7 AEI), Sneha Saji (S7 AEI), and Dona Kurian (S7 EC). The outreach had began with an entertaining interactive session followed by demonstration of some basic science experiments, logic gates familiarization, fun mathematics tricks, Turtle python demonstrations and introduction of some engineering level projects.

EC GARDEN RENOVATION

03 November 2023: The formal inauguration of the renovated garden (sponsored by AEI and ECE 1992-1996 Batch) at Electronics Department was conducted on Friday, 03 November 2023 at 2:45 PM. The renovated garden was inaugurated by CET Principal, Dr. Savier J S at the department premises. Bringing back the greenery to the department gave a fresh outlook for the faculty and students alike. The EC garden is now enjoyed by all, as a short breather from consistent classes.

SCTIMST OPEN DAY

23 February 2024: Students of M-Tech and faculty attended the Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) Open Day 2024 on 23rd February at the Biomedical Technology Wing Campus, Poojapura, Trivandrum. It provided an opportunity to explore and experience the world of medical device development, healthcare and public health-related activities.

C2S-A SHAKTI CPU BASED SMART VISION SYSTEM ON CHIP

The recently announced semiconductor "Chips to Startup (C2S)" program by Ministry of Electronics and Information Technology (MeitY), Govt. of India, aims to develop specialized manpower in VLSI/Embedded System Design domain.

A joint proposal by Department of Electronics and Communication Engineering, College of Engineering Trivandrum (CET) and Netrasemi Private Limited has been selected for the program with central funding under Category-1 (INR 4.7 Crore) for developing an indigenous RISC-V AI/ML chip.

Hearty congratulations to the CET team consisting of Dr. Sreelatha G, the chief investigator of the project (1996, AEI) and Prof. Adersh V R, the co- investigator, Dr. Anitha Edison former CI. From Netrasemi Private Limited team, Mr. Jyothis Indirabhai S. (CEO), (1995 ECE), the chief investigator and Mr. Sreejith Varma C. K. (CTO), (1995 ECE), the co-investigator.

VFS PROGRAM ON TECHNOLOGY TRENDS & OPPORTUNITIES – ARE WE READY?

The program was conducted on 23 August 2023, Wednesday from 03.00 PM - 04.30 AM for S5, S7 ECE & AEI students. The resource person was Mr. Shebu Varghese Kuriakose (Director, Technology Management, ARM, UK). Irene Saira Mathew and Dave Paul Joseph students of S5 ECE hosted the session. Dr. Joseph Zacharias (HoD, ECE Department) addressed the students.

During the session, students were introduced to the revolutionary impact of semiconductors on modern technology. The discussion covered semiconductors' role in enabling IoT and embedded systems, advancements in industrial automation driven by semiconductors, challenges related to latency in data processing and communication, machine learning algorithms, security issues, and solutions, the historical significance of Moore's Law, and the concept of software-defined vehicles (SDVs) and their influence on the automotive industry.

The presentation emphasized the transformative influence of semiconductors in various technological domains. The importance of continuous innovation and collaboration to tackle emerging challenges was highlighted. The session concluded with optimistic remarks about the boundless possibilities offered by semiconductor-led innovation in shaping our interconnected future.

FACULTY DEVELOPMENT PROGRAMS

FDP ON PYTHON, MATLAB, ML, AND ChatGPT

22 - 25 January 2024: The four-day program from January 22 to January 25, 2024, focused on enhancing technical and soft skills for researchers, covering MATLAB, Python, machine learning, LaTeX, and ChatGPT. The final day included sessions on personal development, stress management, and teaching methods. Sponsored by the Department of Technical Education, DTE, the program concluded with feedback and certificate distribution, providing a comprehensive learning opportunity. This sessions was coordinated by Dr Jerrin Thomas and Dr. Anusha S P. Students of M.Tech participated in this session.

FDP ON RESEARCH TRENDS IN ML BASED SIGNAL PROCESSING

29 January - 2 February 2024: The course provided insights into Machine Learning algorithms for image, speech, music, and neural signal processing. Academic researchers and industry experts shared their experiences in applying these techniques. Sessions on stress management were also included. Feedback was positive, highlighting the course's relevance and practical value. The session was sponsored by DTE and coordinated by Dr. Reshmi S Bhooshan and Prof. Joaquim Ignatious Monteiro. Students of M-Tech participated in this session.

FDP ON VLSI SYSTEM DESIGN: EXPLORATION OF EDA TOOLS FOR SoC DESIGN

5 - 9 February 2024: The Faculty Development program from February 5 to 9, 2024, focused on chip making, covering System on Chip, (SoC) architecture, RISC-V, physical design, FPGA, and verification. Lab sessions used Cadence, Synopsis EDA, and Xilinx Vivado. Facilitators included experts from RISE Lab at IIT Madras, faculty, and industry experts. Feedback praised the comprehensive content and hands-on learning. The session was sponsored by DTE and coordinated by Prof. Adersh V R and Prof. Sudhi S. Students of M-Tech participated in this session.

FDP ON RECENT ADVANCEMENTS IN LIGHTWARE TECHNOLOGY

19 - 23 february 2024: The faculty development program focused on Lightwave Systems for broadband applications, covering Fiber Optic systems, wireless communication, and recent trends like RoF, VLC, and Li-Fi. Hands-on training in optical simulation software was provided, emphasizing current technologies and enabling research and development. Certification and ideas for further R&D were given upon completion. The session was sponsored by DTE and coordinated by Dr. Pradeep R and Dr. Asha Prasad. Students of M-Tech participated in this session.

FDP ON EMERGING TRENDS IN NANOTECHNOLOGY AND ITS FUTURE SCOPE

8 - 12 January 2024: The FDP on "Emerging Trends in Nanotechnology and It's Future Scope," held from January 8 to January 12, 2024, offered a comprehensive exploration of nanotechnology.

Participants engaged with various concepts and applications, including nanomaterials, nanomedicine, and nanorobotics. Feedback was positive, highlighting the program's enriching content and its contribution to participants' understanding and skills in nanotechnology. The session was sponsored by DTE and coordinated by Prof. Titto Anujan and Prof. Rencymol M V. Students of M-Tech participated in this session.

ACHIEVEMENTS

ANAGHA UMESH (S3 EC)
First prize in Freedom Fest Ideathon - KERALA IN 2035, Conducted by Govt. of Kerala and KDISC. She also secured Second Prize in EMANATE MANAGERIAL CONQUEST conducted by IEEE

DURGA MADHUSUDANAN (S3 EC)
First prize in Freedom Fest Ideathon - KERALA IN 2035, Conducted by Govt. of Kerala and KDISC

SARANG S (S3 EC)
First prize in Maze Solver competition in IIST CONCENTIA

S VARUN (S5 AE)
Secured Silver in VLSI Design course conducted by NPTEL

GAUTAM LAKSHMAN ARUN (S5 AE)
Won 4 Events and cash prize of 25,000 in Tarang NITC Management Fest

SURYAGAYATRI THANGALAZHI (S5 EC)
Organised Frostcode Hackathon by GDSC CET in South India Level

DAVE PAUL JOSEPH (S5 EC)
Was technical mentor for South India in Frostcode Hackathon by GDSC CET

ATHUL KRISHNA A B (S5 EC)
Secured Gold in Analog Circuits Examination conducted by NPTEL

FASNA S (S5 EC)
Chosen as one of the three students for the She Loves Tech Conference conducted in Singapore

ISHA LEKSHMI I S (S5 AE)
Nominated for Inter State exposure visit programme for women students organising by National Commission for Women

IEEE EMANATE MANAGERIAL CONQUEST

Students of the ECE department bagged the first and second positions at the IEEE Emanate Managerial Conquest. The first prize was secured by Rita Maria Thomas, Sreelakshmi Ajit, Govind S and Kesav Balakrishnan (Team Wanagers). The second prize was secured by Anagha Umesh, Vasanthi BNS, Krishna Deepak and Arjun Pratap (Team Tech4Biz)
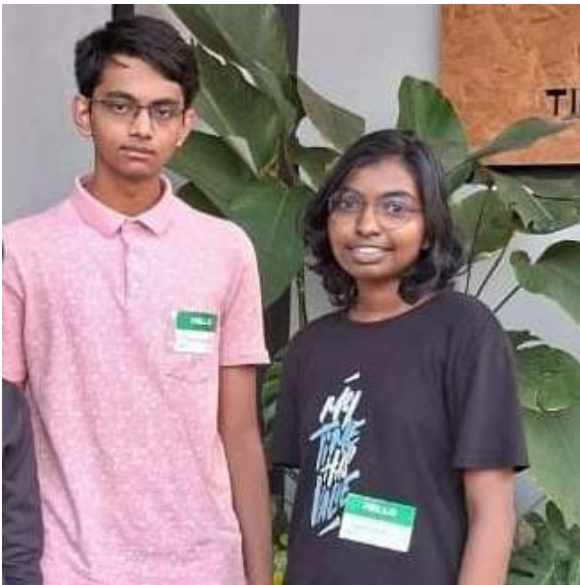
NANDITHA D (S1 AE), JNANESH NAICK G (S1 AE)

Best project award in Tinkerhub Saturday hacknight. Won third prize for social code hackathon conducted by IEEE


NAYAN KRISHNA P R (S1 AE), SAMUEL BINU VARGHESE (S1 AE), DIYA ELDO (S3 AE), ARDRA PRAKASH (S3 AE), HIMA CICILY (S3 AE), AMRUTHA S (S3 AE), ALTHAF MANSOOR (S5 EC), BEWIN GEORGE (S5 AE), AMRITHA S S (S7 AEI), DIYA DILIP K (S7 EC)

Won first prize at Srishti conducted by St. Thomas school, Thrissur, third prize in Step Up conducted at Kollam and second prize at IIM, Kozhikode

MARIYA CHERIAN (S7 EC)

Honourable mention in GLCT MUN'23 conducted in Govt. Law College Trivandrum
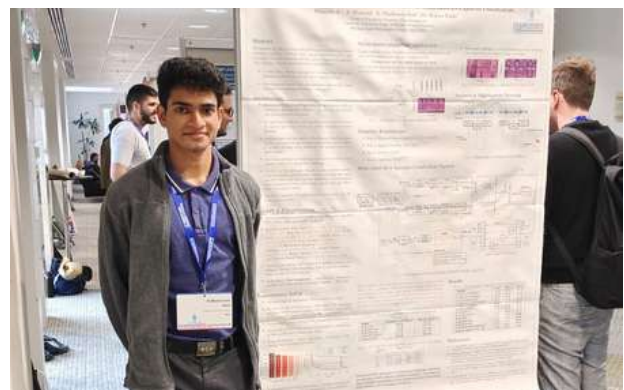
N MADHAVAN NAIR (S7 AE)

Took part in the 31st European signal processing conference, EUSIPCO 2023, held at Helsinki, Finland

SIDHARTH P (S7 AE), THEJAS RAJ (S7 AE)

Secured Best Endurance first prize in the SAEINDIA SOUTHERN SECTION Dr.G PADMANABHAM MEMORIAL ELECTRIC TWO WHEELER DESIGN COMPETITION - 2023 at Rajalakshmi Engineering College, Chennai on 22 and 23 July 2023

M V MAHADEVAN (S5 EC)
Winner of KTU Inter zlZone badminton championship (Men's interzone)

ANANYA A SATHISH (S5 AE)
Winner of KTU Inter Collegiate athletic meet 2023 - 2024

MOHAMMED NIMSHAD (S5 AE), ASHIQ M (S5 AE) , ABU BINOY MATHEW (S5 AE), ABU JOHN SHIJIN (S5 AE), MRITHUL MARTIN (S1 AE), GOKUL DAS (S1 AE), HANAN JASIM (S3 AE)
Winners of KTU A Zone Men's Footbal Tournament

RITHU SAGAR (S7 AE)
First prize in Hammer throw in 6th KTU Inter Colleigate athletic meet 2023 - 2024

KRIPA SOPHY DAVID (S1 AE)
Runner up in KTU A Zone Women's Basketball Tournament. Most promising player award in KTU A Zone Women's Basketball Tournament. Runner up in 4x400 relay in 6th KTU Inter Colleigate athletic meet 2023 - 2024

AKASH B (S1 AE)
Runner's up of KTU A Zone Basketball Tournament. Won 2nd Prize in Trivandrum Diatrict Cross Country Run. Secured third prize in 4x400 relay in 6th KTU Inter Colleigate athletic meet 2023 - 2024

SHAFNA FATHIMA K (S1 AE), SAMEENA K S (S1 AE), AVANTHIKA V (S1 AE)
2nd Runner up of KTU Women's Volleyball Tournament

D KASHYAP (S1 AE)
Runners-up of KTU A Zone Men's Handball Tournament

SUYAGAYATRI THANGALAZHI (S5 EC)
First in KTU Interzone Tennis Championship

SONA STEEPHEN (S1 AE)
Champion in KTU A ZONE Women's Kho Kho Tournament. Won 1st prize in ball badminton junior district championship. Got selected to represent Kerala state in Badminton Junior National Level Championship

BHARATH J (S1 AE), DEVADUTT (S7 AE)

First Place in KTU Interzone Shuttle Badminton. Championship 2023 - 24 (Men). First Place in KTU A Zone Shuttle Badminton Championship 2023 - 24 (Men)

AKASH MATHEW (S7 AE)

Secured first Prize in the University inter Colleigate (A zone) Shuttle Badminton held at CET Trivandrum on 27 and 28 October 2022

ARDRA S SHARMA (S1 AE), NEESHMA (S7 AE)

Secured First prize in University Inter Colleigate (A zone) Chess Championship (Men and Women) held at Mar Baselios College of Engineering and Technology on 17 and 18 November 2023. Secured second prize in KTU Interzone Chess Championship (Men and Women) held at Rajagiri School of Engineering and Technology on 22 and 23 November 2023
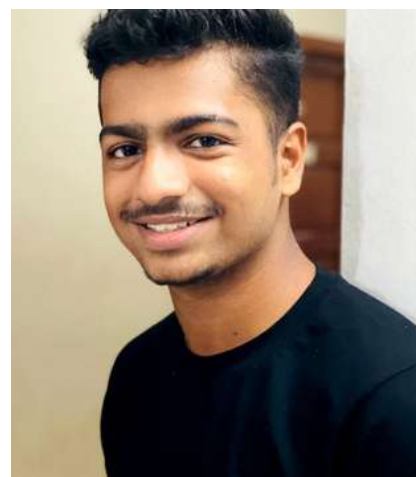
VISWAJITH P (S1 AE)

Won 2nd prize in NITC Thathva online chess tournament

EC DEPARTMENT PLACEMENTS B.TECH 2024 BATCH

(as of 04-03-2024)

AEI

STUDENT	PLACED AT
AAVANY S	IBS
ABHIJITH KRISHNA G	TISMO
ABHIJITH S	SCHNEIDER
ABHISHEK R S	L&T
ADITHI SABHU	L&T
ADITHYA SABU	L&T
AKASH S ZAIBIN	BOSCH
AMRITHA S S	IBS
ARJUN RAJESH	IBS
ARUNDATHI G M	IBS
ASWIN S	L&T
CAREN LAURETTE R	BOSCH
CHANDANA MOHAN	IBS
DHIYA SUDHEER	IBS
GAYATHRI R RAJ	ANORA
JUDY TERESA ZACHARIA	SCHNEIDER
JYOTHIKA P	IBS
MAHI SANKAR A G	IBS
MALAVIKA V	DELOITTE
MANSI MANOJ	DELOITTE
MOHAMMED BIN SALEEM	TISMO
NIVEDITHA NAVIN	TATA ELXSI
PRANAV P R	IBS
ROOPA C K	ACCENTURE
S NANDAGOPAL	IBS
SAFA SALAMATH P A	L&T
SAHAL MUNEER	IBS
SANDRA DAVIS	IBS
SAURABH A S	IBS
SETHUMADHAV V S	L&T
SHILPA S	DELOITTE
SNEHA SAJI	IBS
TIJIL T	IBS
UJWAL K	JSW
VANDANA A S	DELOITTE

ECE

STUDENT	PLACED AT
AABEL JEEVAN JOSE	IGNITARIUM
ABHIMANUE M	DELOITTE
AKSHAY K B	TEXAS INSTRUMENTS
ALAN PONNACHAN	BOSCH
AMAL K AYYAN	BOSCH
ARJUN A P	QBURST
ARUN V THAMPI	IGNITARIUM
ASHOK R	MICROCHIP
ASWIN K K	MICROCHIP
DHANUSH JOY	TEJAS NETWORKS
DHANUSH RAJ R J	AIR INDIA
DINET JOSE	IBS
DONA KURIAN	TEXAS INSTRUMENTS
EBINNADH T K	DAIMLER TRUCKS
ELSA ELDHOSE	TEJAS NETWORKS
GAUTAM MENON	IBS
GAYATHRI NAIR D	BOSCH
GODSON ANTONY	TEXAS NETWORKS
K SATHVIK KAMATH	DELOITTE
KARTHIK B	DELOITTE
KIRAN S	O9 SOLUTIONS
M LEKSHMI NAIR	DELOITTE
M MOHAMMED NAFEEZ	QBURST
MARIYA CHERIAN	TISMO
MEENAKSHI V	BOSCH
MIDHUN K K	BOSCH
MUHAMMED SALMAN PM	QBURST
NARAYANAN U N	IBS
P N PARAMESWARAN	SCHNEIDER
RAHUL SONI	IBS
ROHITH S KACHAPPILLY	BOSCH
SANGEETH P	TEXAS INSTRUMENTS
SIVASANKAR B P	VISTEON
THEJASWITHA T K	DAIMLER TRUCKS
VIJAY J V	IBS
VISHNU KIRAN P	DELOITTE
VISHNU S	CYNLR

EC DEPARTMENT PLACEMENTS M.TECH

(as of 04-03-2024)

NAME	PLACED AT	SPECIALISATION
ASISH NAIR	TATA ELXSI	APPLIED ELECTRONICS AND INSTRUMENTATION
ARJUN K	TATA ELXSI	ROBOTICS AND AUTOMATION
ARCHANA M	TATA ELXSI	SIGNAL PROCESSING
KRISHNA RAJEEV	TATA ELXSI	SIGNAL PROCESSING
JINCY M S	TATA ELXSI	SIGNAL PROCESSING
UTHRAJ M	TATA ELXSI	ROBOTICS AND AUTOMATION
R KEERTHI PREM	NOKIA	APPLIED ELECTRONICS AND INSTRUMENTATION
SUJITTA R V	TATA ELXSI	ROBOTICS AND AUTOMATION
ADITHYAN V	TATA ELXSI	ROBOTICS AND AUTOMATION
GOPIKA A K	BOSCH	SIGNAL PROCESSING
AKHIL B S	RENAULT NISSAN	SIGNAL PROCESSING

TOPPERS IN PREVIOUS SEMESTER EXAMS (UG)

(Based on SGPA Scored)

S4 ECE

S2 TOPPERS

ANAGHA UMESH	10	ABRAHAM GEORGE	9.79
ARJUN PRATAP	10	GOWRI NANDANA B	9.79
JENNIFER	10	RITA MARIA THOMAS	9.67
KESHAV BALAKRISHNAN	10	LINTO JOMON	9.67
VASANTHI BNS	10	NEHA RAJ P	9.67
SUSAN	10	KRISHNA	9.67
DURGA M	10	KESHAV NAIR	9.67
GOVIND S	9.95	VYKASI SIDHANA	9.62
AKHILA NAIR	9.86	ADITHYA MADHAV J	9.62
SAFDAR NAZIM	9.81	NIRUPAMA SANKAR B	9.60
DIYA ROSE THOMAS	9.81	SUPARNA R	9.57
JEBISHA DAPHNE G	9.81	KRISHNAPRABHA M S	9.52
SREELAKSHMI	9.79		

S4 AEI

S2 TOPPERS

M K S RASHMIKA	10	ALBERT C P	9.21
ASHILY BINU	10	ANAMIKA H	9.19
S.SUVEDHA	9.71	ANN GIPSON	9.17
GOWRI KRISHNAN M	9.67	A GOPIKA NAIR	9.14
SAPNA HARILAL	9.62	YOGITHA SETHU	9.14
MARIA GIPSON	9.50	NANDHANA	9.07
NAVMI SREERAJ	9.45	SHARIKA MD	9.05
MEGHA ELIZABETH	9.38	MOHAMMED SUHAIL	9.05
NEERAJA A	9.33	PRANATHI AJAYAN	9.05
SHREDDHA K L	9.29	AMALKRISHNAN P	9.00

S6 ECE

S4 TOPPERS

DEENA MARIYA DAVID	9.86	BHADRA ASHOK	9.18
ASWATHY N	9.73	DAVE PAUL JOSEPH	9.18
RAMEESA JAHAN	9.68	SURYAGAYATHRI	9.14
THEEETHA DEVAN	9.64	ATUL KRISHNA AB	9.14
GOUTHAM S KUMAR	9.55	AKSHAY K SUBASH	9.14
GOVIND V	9.55	HARINANDH M M	9.09
PRIYANKA THOMAS	9.32	SAFVAN CK	9.05
ARJUN ANIL	9.32	PAUL THOMAS	9.05
BRISTO C J	9.32	V JANAKI	9.05
SIDHARTH SHIBU	9.23	ARJUN P	9.05
PRANNAV KAMATH R	9.23	YADHUKRISHNAN T P	9.00

S6 AEI

S4 TOPPERS

KRISHNA S NAIR	9.86	S VARUN	9.41
ALWIN BABU	9.59	HAJAR BINT SEYD	9.23
VAISHNAVI G J	9.59	AKASH KRISHNA	9.14
ARCHA C S	9.45	HIMA P ANIL	9.00
GOURI M N	9.45		

S8 ECE

S6 TOPPERS

P N PARAMESWARAN	9.80	ROHITH S KACHAPPILLY	9.28
K SATHVIK KAMATH	9.74	GAYATHRI NAIR D	9.26
GODSON ANTONY	9.70	DHEERAJ SURESH	9.24
DONA KURIAN	9.50	MEENAKSHI V	9.11
S JANARDAN	9.50	MARIYA CHERIAN	9.09
AKSHAY K B	9.46	M LEKSHMI NAIR	9.04

S8 AEI

S6 TOPPERS

MALAVIKA V	9.43
MANSI MANOJ	9.11

NEWSLETTER PANEL

CO-ORDINATOR
Prof. Rencymol M V

CONTENT TEAM
Dona Kurian
Sneha Saji
Sreehari R
Anagha Umesh
Gourilakshmi
Vaishnav Krishna
Sana Sithara
Sidharth Shibu

DESIGN TEAM
Jeevan Krishna S
Saurabh A S
Mariya Cherian
Parvathi M
Priyanka Thomas
Ardra S Sharma
Shilpa S

SPECIAL THANKS TO:
Dr.Joseph Zacharias (HOD)
Dr.Susan R J
Dr.Sreelatha G