



Vivekanand Education Society's Institute of Technology

(Affiliated to University of Mumbai, Approved by AICTE & Recognized by Govt. of Maharashtra)

Key Indicator 6.3

Metric No. 6.3.3

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the last five years

DVV Clarification

" Provide Event Brochures and reports of AICTE Sponsored STTP on Green IoT--Phase I, organized by Department of Electronics & Telecommunication in association with AICTE AICTE Sponsored STTP on Green IoT--Phase II, coordinated by Department of Computer Engineering, Department of Information Technology and Department of Master of Computer Applications AICTE Sponsored STTP on Green IoT--Phase III, organized by Department of Electronics & Telecommunication Engineering in Collaboration with Department of Electronics Engineering And Department of Instrumentation Engineering One week Short Term Training program on Aarohan Faculty Development Program One week Faculty Development Program (FDP) on EPNCVII One week Short Term Training program on Aarohan Faculty Development Program One week Faculty Development Program (FDP) on EPNCVII for 2016-17, 2017-18, 2018-19, 2019-20, 2020-21 with Photographs with date and caption."

[Link to the Event Brochure and Report with Photographs for the respective Professional Development Programs](#)

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**Vivekanand Education Society's
Institute of Technology,
Chembur, Mumbai**

AICTE SPONSORED ONLINE STTP



**Department of
Electronics & Telecommunication**
(In Association with VESIT IQAC & IIC)

Organizes

One Week AICTE Sponsored

**Online STTP
on**

Green Internet of Things

(10th to 15th August, 2020)

**V. E. S. Institute of Technology,
Hashu Advani Memorial Complex,
R. C. Marg, Collector's Colony,
Chembur, Mumbai – 400 074.**

Phone: 022 – 61 532 532/500
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About VESIT

Vivekanand Education Society's Institute of Technology (VESIT) established in 1984, is one of the premier engineering colleges affiliated with the University of Mumbai. VESIT offers Bachelors programs in engineering under the following streams: Electronics, Electronics & Telecommunication, Information Technology Computer and Instrumentation.

In addition, VESIT offers Master of Engineering in Instrumentation and Control, Information Technology and Electronics & Telecommunication streams and Master of Computer Application. VESIT is a recognised Ph.D. Center for Engineering and Technology of University of Mumbai, and also a Lifelong Learning Center.

About Green Internet of Things

Internet of things (IoT) applications forecast to have 50 billion connected devices by the end of 2020. IoT promises to connect all industrial and consumer appliances to cloud service providers. IoT is impacting every aspect of our lives from wearable devices such as fitness bands and smart watches to personal health care monitors. IoT devices are making us connected. Homes and white goods appliances are also increasingly becoming IoT edge node candidates. The Smart Home concept where energy consumption is carefully monitored by smart gateways at home and appliances can be remotely controlled.

This Short Term Training Program (STTP) on Green Internet of Things is being organized by Department of Electronics and Telecommunication Engineering, Vivekanand Education Society's Institute of Technology for enhancing skills of

faculties and scholars of engineering colleges in the domain of IoT and its initiatives towards green technology.

This program focuses on development of various industrial and societal applications using the Internet of Things. The eminent speakers and practitioners from academia and industries will conduct the sessions to motivate the participants to undertake interesting and innovative ideas. The program will further explore research avenues in the domain of IoT and Green IoT through the effective discussion during the training.

Course Objective

The objective of this STTP is acquainting academicians and industry personnel with the IoT technology, recent trends and green initiatives, providing exposure to technologies supporting Green IoT, hardware and software development tools and demonstrations, predictive analytics using IoT, security in IoT.



Resource Person:

The speakers would be eminent personalities from academia and industries.

Registration Fee:

STTP Course is **Free**

Who can attend?

- ❖ Faculty from AICTE approved Engineering Institutes (Degree/ Diploma) & MCA institutes
- ❖ Industry Representative

Registration Form Link:

<https://forms.gle/MyRk2NPpa5BN26ct6>

Telegram Channel Link:

<https://t.me/joinchat/ShlH3xth3D7rrGrCiKdgtw>

For enquiries contact:

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Patrons:

Shri B. L. Boolani, President, VES Trust
Dr. (Mrs.) J. M. Nair, Principal, VESIT
Dr. (Mrs.) M. Vijayalakshmi, Vice Principal, VESIT
Mrs. Shoba Krishnan, Head EXTC
Dr. Ramesh Kulkarni, Deputy Head, EXTC

Program Evaluation Committee for the STTP:

Dr. (Mrs.) J. M. Nair, Principal (Chairperson)
Dr. Nadir Charniya, STTP Coordinator (Member Secretary)
Mrs. Shoba Krishnan, Head EXTC (Member)
Mrs. Kavita Tewari, Head ETRX (Member)
Dr. Ramesh Kulkarni, Deputy Head EXTC (Member)

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Organizing Committee:

Mr. A. Naganada, Associate Professor, EXTC
Mr. Shobhit Khandare, Assistant Professor, EXTC
Mrs. Pallavi Gangurde, Assistant Professor, EXTC
Mrs. Nusrat Ansari, Assistant Professor, EXTC
Mr. Sanjay Mirchandani, Assistant Professor, EXTC
Mr. Chintan Jethva, Assistant Professor, EXTC
Mrs. Arti Sawant, Assistant Professor, EXTC
Mr. Gaurav Tawde, Assistant Professor, EXTC
Mr. Ajinkya Valanjoo, Assistant Professor, EXTC

Instructions to Participants:

The person willing to join this program need to have the following basic requirements:

- ❖ Laptop/Desktop with good internet connection and Gmail account.
- ❖ Telegram App should be installed on mobile. Google App, Google Meet, Zoom App, MS Teams should be installed on a Laptop/Desktop.
- ❖ Every participant must register by filling up the online form and join telegram channel thereafter.
- ❖ All communications will be on Telegram channel.
- ❖ Fill the Google registration form carefully and check your name, university/ institution/ college name and e-mail ID before submission.
- ❖ No correction in the certificate will be done due to incorrect information provided in the registration form.
- ❖ Last Date to fill the registration form is 05th August, 2020.
- ❖ Confirmation of registration will be communicated to the registered e-mail ID by 08th August, 2020.
- ❖ Participants need to attend daily online sessions at the scheduled time.
- ❖ It is mandatory to fill up the feedback forms.
- ❖ Online Test, based on all the topics discussed during the program will be conducted. Minimum 40% score is necessary for certification.
- ❖ AICTE certificates will be provided on participants' e-mail ID.



Proceedings of

One Week AICTE Sponsored Online STTP

On

GREEN INTERNET OF THINGS

(PHASE-I)

From 10th August to 15th August, 2020

Organized by:

Department of Electronics & Telecommunication

Vivekanand Education Society's Institute of Technology

(In Association with IQAC and IIC)

**Hashu Advani Memorial Complex, Collectors Colony
Chembur (East), Mumbai – 400 074**

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FOREWORD



I am very much delighted to know that our Electronics and Telecommunications Department is arranging an AICTE sponsored Faculty Development Program on “Green Internet Of Things”. As all of you know, IOT has the potential to revolutionize the world, similar to what internet did earlier. It can be considered as a facilitator of ‘smart world’ which connects devices with unique addresses to interact with each other and with outside world. i.e. It enables physical objects to see, hear, think and perform jobs by having them talk to each other, to share information and co-ordinate decisions. The applications are of mainly three kinds, IOT for Consumers, IOT for Enterprises and IOT for process industries (IIOT). Alexa, Wearable device used by miners, and Smart grid falls under these categories respectively. Green IOT targets ‘sustainable smart world’ by reducing energy consumption of the IOT devices and processes. It envisages the practice of designing, manufacturing, using, and disposing of computers, servers, and associated sub systems, and networking and communications systems efficiently and effectively with minimal or no impact on the environment.

I am very happy to note that the technical experts from industries such as Accenture, Capgemini, TCS are sharing their expertise in this workshop. Hope that the participants of this workshop will make full use of this golden opportunity, and initiate, IOT related projects in their respective educational institutions leading to tangible research in this interdisciplinary, emerging area.

Dr. (Mrs) J. M. Nair

PRINCIPAL, VESIT

PREFACE



The AICTE Sponsored training program on *Green Internet of Things* has been organized by Department of Electronics and Telecommunication Engineering, Vivekanand Education Society's Institute of Technology for enhancing skills of faculties and scholars of engineering colleges in the domain of IoT and its initiatives towards green technology. The objectives of the training program were acquainting participants with the technology of Internet of things (IoT) and exposure to recent trends in IoT, introducing and exploring the technologies supporting Green IoT, exposure to security and privacy in IoT and Green initiative, demonstrating hardware and software platforms and tools for IoT, providing exposure and demonstration on IoT applications and Artificial Intelligence (AI) based predictive analytics with IoT, The program also focused on developments of various industrial and societal applications using the Internet of Things. The eminent speakers and practitioners from academia and industries conducted the sessions and demonstrations to motivate the participants to undertake interesting and innovative ideas. The program helps to explore research avenues in the domain of IoT and Green IoT through the effective discussion during the training.

On behalf of Department of Electronics & Telecommunication of Vivekanand Education society institute of technology, Mumbai we would hereby express profound sense of gratitude towards AICTE for Sponsoring Training Program on Green Internet of Things and also giving the opportunity to conduct it online due to COVID crisis.

We are thankful to Shree B L Boolani, President, Vivekanand Education Society, Dr. Faruk Kazi, Chairman, BoS EXTC University of Mumbai, Col. B. Venkat, Director, Faculty Development Cell AICTE, New Delhi, Dignitaries from AICTE, Special invitee Ms. Kalapana from Accenture, Dr. J. M. Nair, Principal, VESIT, Dr. M. Vijayalakshmi, Vice Principal, VESIT, Prof. Shoba Krishnan, Head, Electronics and Telecom Dept., Dr. Ramesh Kulkarni, Dr. Saylee Gharge, Prof. A. Nagananda, PEC members, the STTP team and the participants from all over the country.

Short Term Training Program on 'Green Internet of Things'

Special thanks are due to all the speakers from Accenture, Capgemini, TCS, L and T and academia of repute, who despite of their busy schedule and workload were able to find some time for us and imparted the knowledge that paved a way for better understanding of the fundamentals of the subject and their applications.

I duly acknowledge the help, direct or indirect of the whole department and VESIT. I am confident that the knowledge gained herein and the practical experiences will be an invaluable in the long run.

Dr Nadir Charniya

Course Coordinator

Professor. Electronics and Telecom Dept., VESIT

PROGRAM COMMITTEE

Patrons:

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Mrs. Kavita Tewari, Head, Electronics (Member)

Dr. Ramesh Kulkarni, Deputy Head, Electronics and Telecom (Member)

Course Coordinator:

Dr. Nadir Charniya, Professor, Electronics and Telecom.

Course Co-coordinator:

Dr. Saylee Gharge, Associate Professor, Electronics and Telecom.

Advisory Committee

Prof. D. N. Malkhede. Adviser, RIFD, AICTE, New Delhi

Col. B. Venkat. Director (FDC), AICTE, New Delhi

Organizing Committee:

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Mr. Sanjay Mirchandani, Assistant Professor, Electronics and Telecom.

Mr. Chintan Jethva, Assistant Professor, Electronics and Telecom.

Mrs. Arti Sawant, Assistant Professor, Electronics and Telecom.

Mr. Gaurav Tawde, Assistant Professor, Electronics and Telecom.

Mr. Ajinkya Valanjoo, Assistant Professor, Electronics and Telecom.

GREEN IoT

Course Objectives:

1. Acquainting participants with the technology of Internet of things (IoT) and exposure to recent trends in IoT.
2. Introducing and exploring the technologies supporting Green IoT
3. Exposure to security and privacy in IoT and Green initiative.
4. Demonstrating Hardware and Software platforms and tools for IoT.
5. Providing exposure and demonstration on IoT applications and Artificial Intelligence (AI) based predictive analytics using IoT.

Course Outcomes:

On completion of the course participants will be expected to:

1. Have good understanding of IoT Technology, emerging trends in IoT and various concept and features of Green IoT technology.
2. Comprehend and apply different hardware and software tools used for implementation of IoT.
3. Have good understanding of cloud platform for IoT, security and privacy in IoT, and Green initiatives towards IoT.
4. Apply predictive data analytics with the fusion of AI and IoT using Cloud and programming in python.
5. Develop IoT applications with the aid of IoT tools and AI tools.

SPEAKERS AND THEIR PROFILE

Ms. Kalpana Banka (*Application Design Architect, Accenture*)



Ms Kalpana Banka has about 11 years of experience in IT industry. She has primarily worked into .NET Technologies and earned several Microsoft certifications in this domain.

She has been working with Accenture since 2018 into Full Stack Web Application & Development which includes JavaScript Frameworks like Angular, ReactJS, NodeJS databases like MongoDB, Cassandra. She also has a passion in learning things about Adobe Analytics and creating a CMS using Adobe Skills.

Mr. Shailesh Agaskar (*Senior Enterprise Solution Architect, Capgemini Mumbai*)



Mr. Shailesh Agaskar is a Senior Enterprise Solutions Architect with Capgemini Cloud & Digital Practice with over 2 decades of rich and diverse experience in Information Technology, Business, Consulting and Leadership.

Expertise in Architecting Large Complex Software Systems, Software Products, Solution Conceptualization, Digital Transformation Assessments, and End to End

Solution Delivery to conform adherence to Business Outcome. Driving Modern disruptive technologies adoption especially from Edge to End Customer providing a seamless customer experience.

Drive Thought leadership, Innovation, Architecture Governance Boards, Evaluate Emerging Technologies, Technology & Tool Standardization, Design Strategies, Promote Industrialization and Lead Architecture Community for UK Geography to Mentor Aspiring Architects. TOGAF 9 Certified and Capgemini Certified Lead Architect. Member of industry forums like The Open Group, IEEE.

Specialization in :

- IoT, IIoT & Edge Computing
- Cloud Specialization (Azure , AWS) – PaaS, IaaS , iPaaS (Integration Platform As A Service), Security Architecture.
- Artificial Intelligence using Machine Learning, NLP , Enterprise Data Lake

Dr. Amol Madane (*Technical Architect, TCS Pune*)



Dr. Amol Madane is currently working as Technical Architect with Innovation and Digital Operation Centre (IDOC), EIS ERUG, Tata Consultancy Services Ltd., Pune, India. He has 13+ years of corporate onsite and offshore experience while working with various clients such as Jaguar Land Rover, Newcrest Mining Ltd., Tata Steel Europe, Rio Tinto, Apple Inc., Cardinal Health Care.

Honored with New India Award in “Shaping of New India” Category by Honorable chief minister of Maharashtra Shri. Devendra Fadnavis and India’s Minister of Human Resource Development (HRD) Shri. Satya Pal Singh on 11 Feb 2018. He received “Innovation Pride Award” at TCS level on 16 Jun 2020. This is solved Mining customer’s problem with Innovative solution.

Published 7 research papers in international journals, 13 in international conferences, and 13 in national conferences in area of Digital Signal Processing, Video Processing, Image Processing.

Guided PhD, PG, UG research scholars of various national and international universities when I was working with TCS innovation labs.

Implemented "Client Project Simulation Workshop" at TCS Initial Learning Program Centre, Trivandrum with innovation ideas in Mar 2011 and got the "Best Trainer" award for the same.

Initiated collaboration with Indian Institute of Technology, Bombay (IIT-B), Indian School of Mines, Dhanbad (Formally, known as Indian Institute of

Working as Editorial Board Member, Reviewer of various international and national journals, conferences. Working as member of PhD, PG, UG projects evaluation committee in IITB, and various international and national universities.

Mr. Bhupendra Bhate (Retd. Chief Innovation Officer, L&T Technology Services Ltd, Mumbai)



Bhupendra Bhate is a business leader with a very good blend of business acumen and in-depth understanding of cutting-edge technologies. He has over 35+ years of international exposure and experience in Engineering, Product Development and software space within Industrial Products, Medical, Aerospace, Automotive, Consumer Electronics etc. He has expertise in formulating strategies and translating it into actionable goals for top line and bottom line growth.

His last job at L&T Technology Services Ltd (LTTS) was Chief Innovation Officer. In this role, he was keenly involved in harnessing new technologies and commercially exploiting the same to provide innovative and intellectual property-based solutions to its customers and thereby creating values for his organization.

Prior to this, Bhupendra was Chief Operating Officer and Whole Time Board Member of L&T Technology Services. In this role, Bhupendra managed various business units with P&L responsibilities, providing strategic guidance, facilitating aggressive growth, ensuring operational excellence & high-quality deliverables, and incubating new businesses.

Other positions held by Bhupendra includes Chief Digital Officer, Chief Delivery Officer and Chief of Operations. Starting his career with Godrej & Boyce, Bhupendra worked as General Manager with Atos Origin and moved on to Head a Startup company - SoftDEL Systems Ltd. as President & COO. From December 2003, he has been with L&T.

Mr. Amit Mishra (Corporate Trainer, EDUX LABS)



Mr. Amit Mishra holds Bachelors of Technology & Master of Technology in Electronics & communication. Expertise in the field of Internet of Things (IoT), Embedded Systems, Network Programming, Cloud Computing with Amazon Web Services, Artificial Intelligence & Machine Learning, Data Science using R Programming, AWS Cloud IoT, Oracle IoT Cloud, IBM Bluemix, Python programming of 6+ Years.

Networking – Sockets, IPV4/IPV6, TCP/IP Socket Programming, Netmiko – network device interaction, Network Automation, Splunk, Python Pexpect, Paramiko, Juniper Networks, Python API - Arista, Ansible Networking Modules, Git, TCP echo client / server Application, Internet interaction with HTTP, AWS Cloud.

IOT & Embedded System: Expertise in AVR, ARM Cortex-M, AVR 8051, PIC, ARM Processor, Raspberry PI, NodeMCU, Arduino, Esp8266-01. Implemented IoT Application Layers & Network Layer protocols like HTTP, Mqtt, CoAP, LoRA, LORAWAN, Gateways, Wireless Sensor Network, WebSocket, XMPP, UPnP Protocol. Cloud & Tools like: Amazon AWS IoT Core, IBM Watson, Microsoft Azure, NodeMCU.

IOT Security – Network security, cryptography, database encryption and decryption, IoT cloud services, TCP/IP security, HTTP, MQTT, CoAP security. Industry protocols for IOT (IIoT) – ModBus,

OPC UA, RabbitMQ, AMQP,

Experience of delivering 400+ Corporate Trainings, Faculty Development Program (FDP), Workshops and Seminars on various modules at International & Pan India Level including organization and reputed Technical University (IITs, NIT). Hitachi Ventara Certified Trained for Data Science & Capgemini Trainer for AI & ML with 90% Trainer Test score.

Dr Faruk Kazi (*Professor & Dean-Research, Development and Consultancy, V.J.T.I Mumbai*)



Dr Faruk Kazi, received his PhD degree from IIT Bombay, in year of 2009. He is currently working as Professor, Head of Electrical engineering dept. and Dean R&D at VJTI, Mumbai. His research interest includes critical infrastructure protection and cyber-physical systems.

He is a senior member of IEEE and working as chair of WG-3 of India smart grid forum, PPP initiative of ministry of power, government of India. He also works as a consultant with Tata consulting Engineers for smart grid projects. As well, He is the chairman of Board of Studies for Electronics & Telecommunication department at Mumbai University.

He has worked as visiting research scholar at swiss federal institute of technology, EPFL, Switzerland and tufts university, Boston. He has published more than 90 research papers in various international journals & conferences.

Dr. Y. S. Rao (Vice Principal, Sardar Patel Institute of Technology, Mumbai)



Dr. Y. S. Rao has 30 years of vast experience in Engineering, Research and Consultancy. He is working as Professor, Head of Dept. and Vice Principal at SPIT Andheri, Mumbai. He has done Master's in Electronics Engineering in 1997 and Ph.D. (ES) from IIT Bombay in 2010. He has completed various funded as well as consultancy projects in India and abroad and guiding 7 candidates for their Ph.D. research work.

He has carried responsibilities in the capacity of Board of Studies, Local Managing Committee, and member of MPSC and member of LIC committee of Univ. Of Mumbai and also has been awarded and recognized by IEEE Computer Society. He has patents to his credit along with more than 80 research publications.

Dr. Manesh B Kokare (Professor, SGGS College of Engineering and Technology, Nanded)



Dr. Manesh Kokare is Professor and Head of the Department of Electronics and Telecommunication Engineering, SGGS COET, Nanded.

He received his Diploma in Industrial Electronics Engineering from Board of Technical Examination, Maharashtra, India, in 1990, and B.E. and M. E. Degree in Electronics from Shri Guru Gobind Singhji Institute of Engineering and Technology Nanded, Maharashtra, India, in 1993 and 1999 respectively, and Ph.D. from the Department of Electronics and Electrical Communication Engineering, Indian

Institute of Technology, Kharagpur, India, in 2005. He completed Post-Doctoral research work in 2011-12 from University of California Santa Barbara USA.

He was also Dean Research and Development of institute from 2016 to 2018 at SGGGS Nanded. He has published about 85 papers in international and national journals and conferences with research citation about 2000+, i-10 index: 32, and h-index: 20.

He received the prestigious Career Award for Young Teachers (CAYT) for the year 2005 from All India Council for Technical Education (AICTE), New Delhi, India. The award carries a research grant of Rs. 10.5 lakhs spread over three years. In December 2009, he honored with "Best Achiever of SGGGS Alumni". He also received BOYSCAST Fellowship of US \$ 38000 from Government of India to Carryout Post-Doctoral Research Work and University of California USA in 2011-12. Recently Dr. Kokare has been honored with "Best Teacher Award" by Swami Ramanand Teerth Marthwada University Nanded in September 2013. Under his supervision ten research scholars completed PhD in Electronics and Computer Engineering and presently six research scholars are working towards their PhD. He is a life member of System Society of India, Indian Society for Technical Education (ISTE), and The Institution of Electronics and Telecommunication Engineers (IETE) and Member of IEEE, Member of IEEE Signal Processing Society, Member of IEEE Computer Society.

Dr. Mahesh Bundele (*Principal and Director, Poornima College of Engineering, Jaipur*)



He has worked on various Wi-Fi/ Wi-Max based system designs and implementations for college and Pusa city villages. He has guided many research projects at UG and PG level on various applications in Electrical, Electronics & Computer Sciences. He has designed and executed various LT & HT electrical installations.

He was also appointed as Principal of Babsaheb Naik College of Engineering, Pusad from March 2011. He has worked in various capacities such as, member Board of Studies, Chief-Valuation officer etc. at University level.

He has also worked for getting ISI to Krishak Motor pumps at Amravati. He has visited US, UK, China and Malaysia for research presentations.

He has worked as Dean R&D at Poornima University, Jaipur during 2011- 2018. From 1st September 2018, he is working as Principal and Director of Poornima College of Engineering, Jaipur.

At Poornima College of Engineering he has established unique teaching-learning processes and implemented Outcome Based Education system in the Institute.

He has delivered many invited talks and has been on advisory committees of IEEE International Conferences. He has published more than 50 research papers in National and International conferences and journals. He is senior member of IEEE, Life member of ISTE and IEI and the member of ACM.

He has worked as Secretary in IEEE Rajasthan Subsection and also as Membership Development Chair in IEEE Rajasthan Subsection. He is member standing committee member for Technical and Professional activities at IEEE Delhi Section and also a member of execom IEEE Delhi Section. Currently he is Vice Chair in Jaipur ACM Professional Chapter and playing active role in ACM activities. He is having total 33 years of teaching including 7 years of research.

Dr. Saurabh N. Mehta (*Chief Academic Officer and Professor, VIT Mumbai*)



Dr. Saurabh N. Mehta has more than 18 years of professional, research, and teaching experience in wireless system development altogether. He is currently working as a chief academic officer and professor at Vidyalankar Institute of Technology, Mumbai.

Short Term Training Program on 'Green Internet of Things'

He is responsible for integrating academia and industry collaboration, bringing innovation and intrapreneurship in academia, research program, designing curricula, implementing academic planning and policies, human resource development, and educational training for Vidyalankar Institute of Technology,

Mumbai. He earned his B.E., M.S., and PhD. degrees in Electronics Engineering from Mumbai University, Mumbai, India, Ajou University, South Korea, and Inha University, South Korea,

Currently, he is also serving as Technical and Professional Activity Chair (TPAC) at IEEE Bombay Section. His research interests are in the area of Wireless Networks, Game Theory, and Educational Technology. He is also running his own "Sun Wireless Technologies", a consultancy firm in the area of embedded System, wireless technology, education, and technical market research.

INAUGURATION

The inauguration of STTP on 'Green IoT' was scheduled on 10th August 2020. The program was organized in association with VESIT- Internal Quality Assurance Cell and Institution's Innovation Council. The function began in presence of dignitaries and guests with lighting of digital lamp in front of Maa Saraswathi.

Guest list for inauguration function included Shri B. L. Boolani, President of Vivekanand Education Society Trust., special Invitee Shri Vijay Talreja, Chief Guest, Dr. Faruk Kazi , Keynote speaker, Mrs. Kalpana Banka, Principal Dr. (Mrs.) J. M. Nair, Vice Principal Dr. (Mrs) M. Vijayalakshmi, Prof. Shoba Krishnan (Head, Electronics and Telecom Dept., VESIT), Dr. Ramesh Kulkarni (Dy. Head Electronics and Telecom Dept., VESIT), Prof. A. Nagananda (TPO, VESIT), Dr. Nadir Charniya (STTP Coordinator), Dr. Saylee Gharge (STTP Co-coordinator), PEC members and the participant. The session moderator Mr. Shobhit Khandare welcomed the dignitaries, guests & participants, and expressed gratitude towards AICTE for sponsoring the Short-Term Training Program.

Course Coordinator, Dr.Nadir Charniya, Professor from Department of Electronics & Telecommunication gave course overview. He mentioned that about 200 PAN India participants from Tamilnadu, Andhra Pradesh, Telangana, Karnataka, W. Bengal, Gujarat, Goa, UP, Tripura etc. registered online, 82 were shortlisted based on AICTE approval of Institute and stream of participants, 61 gave confirmation. After the course overview Dr. (Mrs.) J. M. Nair, Principal, VESIT addressed the gathering with her words of guidance; mentioning the significance of IoT in every field of engineering and research. She gave best wishes to the proceedings and learnings from of the STTP

Shri B.L Boolani President of Vivekanand education society addressed everyone with his words of wisdom. Further, the audience were addressed by Chief Guest, Dr. Faruk Kazi advising the participants to take the benefit of learnings in the STTP. He also motivated the participants to take innovative projects in the domain of IoT. The function reached to successful end with vote of thanks by Dr. Saylee Gharge (STTP Co-coordinator).

SESSION-WISE SUMMARY (Day 1 to Day 6)

Day 1, 10th August 2020

Ms. Kalpana Banka, Keynote Speaker from Accenture started the first session on 'IoT and Green Initiatives' with quick introduction on Internet of Things (IoT). IoT refers to Internet enabled devices that establish communication between them in the network. The Internet of Things extends the internet beyond computers and smartphones to a whole range of other things, processes and environments. Overview of the history of the Internet of Things was then given by the speaker.

IoT is an important piece of technology that is set to improve greatly over time. The need of IoT was discussed as more data means better decisions, ability to track and monitor things, lighten the workload with automation, Increases efficiency by saving money and resources and better quality of life. In a nutshell IoT wants to connect all potential objects to interact each other on the internet to provide secure, comfort life for human. The ideas to protect digital life by securing IoT-connected devices was brought into focus by Ms. Kalpana Banka. Also the future trends such as Artificial Intelligence, Big Data, Blockchain for IoT Security, Smart Home Devices, Edge Computing will take Prominence over Cloud Computing etc was discuss at length.

Followed by the Keynote address next session was delivered by Dr. Faruk Kazi, VJTI Mumbai. He talked on Security and Privacy in IoT with introduction of internet of things which is broadly classified as consumer IoT, enterprise IoT, industrial IoT. From IoT perspective Top 10 application area in 2020 was discussed at length.

Evolution of IoT such as 1). Pre Internet 2). Internet of content 3). Internet of services web 2.0, e-productivity, e-commerce were described at length. The fundamental characteristics of the IoT are: Interconnectivity: With regard to the IoT, anything can be interconnected with the global information and communication infrastructure. Things-related services: The IoT is capable of providing thing-related services within the constraints of things, such as privacy protection and semantic consistency between physical things and their associated virtual things. In order to provide thing-related services within the constraints of things, both the technologies in physical world and information world will change. Heterogeneity: The devices in the IoT are heterogeneous as based on different hardware platforms and networks. They can interact with other devices or service platforms through different

networks. Dynamic changes: The state of devices changes dynamically, e.g., sleeping and waking up, connected and/or disconnected as well as the context of devices including location and speed. Moreover, the number of devices can change dynamically. Enormous scale: The number of devices that need to be managed and that communicate with each other will be at least an order of magnitude.

Further need of IoT, digital business, green initiatives were explained. IoT process flow: i) Connected Devices, ii) Network Devices, iii) Data Acquisition was also discussed.

Post lunch second session of Dr. Y S Rao from SPIT Mumbai on Smart (Hardware/Software) technologies for Power optimization started with introduction of three aspects of IoT in communication. The different types of energy sources were discussed. Application of solar energy such as solar water heating, solar electric power generation, solar distillation etc. India's available solar energy is more than the energy consumption and how energy is converted into different form was elaborated in detail.

The last session of the day was addressed by Mr Shailesh Agaskar from Capgemini on IoT applications and Research Avenues. Internet of Things provides solutions based on the integration of information technology, which refers to hardware and software used to store, retrieve, and process data and communications technology which includes electronic systems used for communication between individuals or groups. The rapid convergence of information and communications technology is taking place at three layers of technology innovation: the cloud, data and communication pipes/networks and device.

The Strategic Research and Innovation Agenda is the result of a discussion involving the projects and stakeholders involved in activities addressing IoT technology priorities that are crucial for the competitiveness

Many other technologies are converging to support and enable IoT applications. IoT architecture was summarised with identification, communication, networks technology, network discovery, software and algorithms, Hardware technology,

Day 2, 11th August 2020

The morning session by Dr. Amol Madane from TCS, was focused on Application of Image Analytics in Real World using IoT. The session started with introduction to Computer Vision System block schematic. Typical image processing module consists of four main parts, image acquisition, image

segmentation, image understanding, and application specific feature extraction. Computer vision is an interdisciplinary scientific field that deals with how computers can gain high-level understanding from digital images or videos. From the perspective of engineering, it seeks to understand and automate tasks that the human visual system can do. Dr. Madane explained that Computer vision tasks include methods for acquiring, processing, analyzing and understanding digital images, and extraction of high-dimensional data from the real world in order to produce numerical or symbolic information.

Further, he explained the concept of Advance Driver Assistant Systems (ADAS). Advanced driver-assistance systems (ADAS) are electronic systems that assist drivers in driving and parking functions. Through a safe human-machine interface, ADAS increase car and road safety. ADAS systems use automated technology, such as sensors and cameras, to detect nearby obstacles or driver errors, and respond accordingly. He further addressed that most road accidents occur due to human error. Advanced driver-assistance systems are systems developed to automate, adapt, and enhance vehicle systems for safety and better driving. ADAS's automated systems are proven to reduce road fatalities by minimizing human error. Safety features are designed to avoid accidents and collisions by offering technologies that alert the driver to problems, implementing safeguards, and taking control of the vehicle if necessary. Adaptive features may automate lighting, provide adaptive cruise control, assist in avoiding collisions, incorporate satnav/traffic warnings, alert drivers to possible obstacles, assist in lane departure and lane centering, provide navigational assistance through smartphones, and provide many more features. He also mentioned about Mobil-Eye capabilities that has developed a family of algorithms for mono-camera driver assistance system for safety applications such as pedestrian collision warning, lane departure warning, forward collision warning, headway monitoring and intelligent high beam control.

Next session was conducted by Mr. Amit Mishra, Corp Trainer, New Delhi. He started the discussion with the definition of Internet of Things. He explained the architecture of IoT with respect to sensor connectivity, Gateway & Network, Management service and Applications. He also elaborated the point for the boom of IoT. It enables real time data access to mobile; it allows to receive control remotely; it enables to automate the system. He added the technologies that enable IoT namely Big Data, cheap bandwidth, free Wi-Fi, cheap sensors, smartphones, etc. He gave the overview of Smart Waste Management System, Smart Cities, and Smart Healthcare System. Smart Gardening System that are based on IoT applications.

Post lunch the discussion continued with four V's of data analytics i.e. Volume, Velocity, Veracity and Variety. He explained about IoT Big Data analytics life cycle and core components like cloud computing, IIoT, machine learning, augmented reality and advance robotics. He also focused on various aspects of industry 4.0 trends.

In the last part of the session, Mr. Amit gave elaborated view of the hardware components like Arduino, Raspberry Pi, ESP8266 node MCU and software components required like python and JavaScript. It was very informative and fruitful session and very well received by active participation of the attendees.

Day 3, 12th August 2020

Day 3 started with morning session on 'Machine learning on IoT data' by Dr. Manesh Kokare from SGGS Nanded. He discussed the fundamentals of Deep learning, Machine learning and Artificial intelligence followed by different approaches towards machine learning. He then continued with correlation of machine learning and Internet of things. He further concluded the session with different applications of machine learning and artificial intelligence in relevance to IoT.

Second session of Day 3 started at around 11:15 am by Mr. Amit Mishra. He discussed various hardware and software required for the implementation of IoT. He demonstrated the interfacing of sensors with Arduino board and given live demo using simple program to import input from sensor and export it to output LED.

In post lunch session Mr. Amit Mishra gave overview of IoT networks and it's implementation requirements. Then he interfaced DH11 (temperature and humidity sensor) at his end and uploaded the program on cloud so that participants can access and observe the readings recorded by sensor using Internet of things. Participants has been asked to create account on thingspeak.com and they could observe various reading of sensor DH11 on their screen. During demo session, speaker had attended doubts and clarifications regarding thing speak demo on person to person level. Some participants had shared their screen to share their observations using thingspeak.com. Further he had given overview of MQTT and its application. Speaker concluded the session with discussion of topics for the next day and participants were asked to install Anaconda-3 or any other python programming platform for further sessions.

Day 4, 13th August 2020

The first session on 'Promoting Green initiative through IOT' was conducted by Mr. Bhupendra Bhate from L and T. He discussed about the term "Internet of Things" and described number of technologies and research disciplines that enable global connectivity over the world-wide physical objects.

Objects in IoT can sense the environment, transfer the data, and communicate with each other. They become powerful tools to understand physical world and to respond to emergent events and irregularities promptly. Thus, the IoT is seen by many as the ultimate solution for getting insights about real world.

Different types of green enabling technologies were discussed as green cloud computing, green wireless sensor network, green data centre. Smart building makes use of sensors, actuators, and microchips to manage everything. The utilization of sophisticated hardware facilities improvement in asset reliability, performance and in turn reduces energy utilization. The following points highlight the benefits of smart buildings:

1. Predictive Maintenance: Sensors can detect all sorts of technical performance of the building and can automatically activate the maintenance procedures in case of any sort.

Smart building makes use of sensors, actuators, and microchips to manage everything. The utilization of sophisticated hardware facilities improvement in asset reliability, performance and in turn reduces energy utilization. Mr. Bhate highlighted the following points on benefits of smart buildings

1. Energy management
2. Utility management
3. Asset management
4. Smart facilities management

Smart building /campuses are like smart cities, or a places where devices and applications create new experiences or services and facilitate operational efficiency was discussed.

Second session started at 11:15am. The speaker for the session was Mr. Amit Mishra, Corp Trainer, New Delhi. He started the discussion with Python programming for IoT and Data Analytics. It was very informative and practical session on how python can be used for programming different IoT application.

Post lunch the discussion continued with python programming and then he introduces Node Red. Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways. It provides a browser-based editor that makes it easy to wire together flows using the wide range of nodes in the palette that can be deployed to its runtime in a single-click.

In the last part of the session, Mr. Amit introduced Cloud Platforms and controlling devices from cloud platform. The cloud platform services can not only process big data from a wider set of IoT devices, but also provides a smart way to provision and manage each of them in an efficient manner. This also includes fine-grained control, configuration and management of IoT devices.

Smart building makes use of sensors, actuators, and microchips to manage everything. The utilization of sophisticated hardware facilities improvement in asset reliability, performance and in turn reduces energy utilization. He highlight the benefits of smart buildings and predictive maintenance where sensors can detect all sorts of technical performance of the building and can automatically activate the maintenance procedures in case of any sort

Day 5, 14th August 2020

The first session of the day on 'Green IoT: Opportunities and Challenges' started with presentation on the concept Green IoT. Green IoT represents the issue of reducing energy consumption of IoT devices which achieves a sustainable environment for IoT systems. Dr. Bundele from Poornima Institute Jaipur explained the life cycle of Green IoT that consists of Green Design, Production, Utilization and Disposal or Recycle. He elaborated his point with examples of Smart City, Home Grid, and Robots and applications of Green IoT.

He explained different types of IoT architecture like Three Layer, Middle ware based, SOA and Five Layer and the key technologies of IoT and Green IoT along with key technologies of IoT and Green IoT. He also talked about some upcoming trends like Internet of Underwater Things, Internet of Space Things and Internet of Nano Things. He continues his discussion with challenges in the field like scalability, reliable coverage, fog computing, processing and storage, energy harvesting, SDN/NFV based IoT. The overall session was very informative.

The second session started at 11:15 for the day was by Mr. Amit Mishra, Corp Trainer, New Delhi on the topic algorithms for regression and prediction. Regression analysis is a form of predictive modelling technique which investigates the relationship between a dependent (target) and independent variables. This technique is used for forecasting, time series modelling and finding the causal effect relationship between the variables. For example, relationship between rash driving and number of road accidents by a driver is best studied through regression. He explained the concept of supervised and unsupervised learning. He further led the discussion with hands on session with python programming.

Post Lunch the hands-on session on temperature reading and EDA using IoT devices and regression & predictive analysis using IoT devices was very interesting and very well received by the participants. The session was very interactive and full of practical knowledge of Python programming.

Day 6, 15th August 2020

Morning session of the day-6 was on 'Role of IoT in Power Sector' by Dr. Saurabh Mehta, VIT Mumbai. The speaker went through the journey of power industry since the beginning of industry revolution to the current scenario. He then discussed about importance of power sector and facts & figures of it. Further he continued with different application and opportunities in power sector with relevance to Internet of Things. The applications explained were very realistic, executable and evolutionary.

Second session started around 11:15 am and conducted by Mr. Amit Mishra. The last day was reserved for the trending technology i.e. cloud services. Participants created account on AWS for last day sessions. The session was about how cloud services can be used to implement Internet of things. Demo and hands on session conducted on how to create a thing on cloud, how certificates and policies can be attached to the thing followed by how to write program using Python for AWS IoT subscriber and publisher so that data can be published remotely.

Post lunch the whole sessions conducted were demo and hands on with doubt solving sessions in parallel. The session concluded with Node Red which is most easy, flexible and user-friendly technology tool. It is programming tool and browser-based editor which allows the user to implement any scenario using simply drag and drop method. Installation process for Node Red has been explained step by step.

VALEDICTORY

Valedictory function of the one week AICTE sponsored online short term training programme on 'Green Internet of Things (Phase III)' was organized by Department of Electronics and Telecommunication Engineering on 15th August 2020. The program was organized in association with VESIT- Internal Quality Assurance Cell and Institution's Innovation Council. The function began in presence of dignitaries and guests including Dr. (Mrs.) J. M. Nair, Principal (VESIT), Dr. (Mrs) M. Vijayalakshmi, Vice Principal (VESIT), Prof. Shoba Krishnan (Head, Electronics and Telecom Dept., VESIT), Dr. Ramesh Kulkarni (Dy. HoD EXTC Dept., VESIT), Prof. A. Nagananda (TPO, VESIT), Dr. Nadir Charniya (STTP Coordinator), Dr. Saylee Gharge (STTP Co-coordinator), Mr. Amit Mishra (one of the speaker of the during the STTP), PEC members, and the participants.

Participants shared their overwhelming words of excellent feedback about the STTP. The participants who shared their feedback with extraordinary learning experience were Dr. Vasif Ahmed from Pusad (MS), Dr. Shanta Shondur, from VESIT, Mumbai, Dr Pillutla Harikrishna from Rajiv Gandhi Memorial College of Engineering Aandra Pradesh and Mrs. Chintamaneni Mydhilli from C R Reddy College Aandhra Pradesh.

The sessions conducted during the six days STTP were summarized and concluded by session moderator. The guest for the function Mr. Amit Mishra addressed the participants and advised to practice further the learnings of the STTP and implement some innovative ideas. Dr. M. Vijayalakshmi, Vice-Principal, VESIT motivated the participants with her speech in the line with Atma Nirbhar Bharat.

Valedictory function was signed-off with the Vote of Thanks by Prof. Shoba Krishnan (Head of Department, Electronics & Telecommunication, VESIT). Overall online feedback and final quiz related to the course of the STTP were also conducted. The regular attendance of the participants and passing in the quiz was compulsory to become eligible for AICTE STTP certification.

Immense efforts were made by the technical committee and various teams of the STTP to make it a success. All the sessions were conducted at the scheduled time seamlessly without any unnecessary delay in the sessions. Experts from industry and academia have contributed immensely to the STTP with the course contents aligned with the objectives.

ANNEXURE-I

List of Qualified Participants

Name	Designation	Department	Institute/Industry name	City & State
Mr. Abhishek Chaudhari	Assistant Professor	Electronics Engineering	VES Institute of Technology	Mumbai, Maharashtra
Dr. Vasif Ahmed	Professor	Electronics and Telecommunication	Babasaheb Naik College of Engineering Pusad	Pusad District-Yavatmal Maharashtra
Mr.Ajinkya Anandgopal Valanjoo	Assistant Professor	Electronics and Telecommunication	Vivekanand Education Society Institute of Technology	Mumbai, Maharashtra
Mr.Amol Shashikant Sankpal	Assistant Professor	Electronics and Telecommunication	M.H.Saboo Siddik College of Engineering Mumbai-08	Mumbai, Maharashtra
Mrs. Anuradha Jadiya	Assistant Professor	Electronics and Telecommunication	VES Institute of Technology, Mumbai	Mumbai, Maharashtra
Mrs. Arti Sawant	Assistant Professor	Electronics and Telecommunication	Vivekanand Education Society Institute of Technology	Mumbai, Maharashtra
Mr.M.Ashok Kumar	Assistant Professor	ECE	SCAD College of Engineering and Technology	Cheranmahadevi, Chennai
Shreya Kurne	Assistant professor	ETC	Don Bosco college of engineering	Fatorda, Goa
Er.Manoj S. Kavedia	Assistant Professor	Electronics and Telecommunication	Thadomal shahani Engineering College , Bandra	Mumbai, Maharashtra
Mr. Gaurav Yashwant Tawde	Assistant Professor	Electronics & Telecommunication	V.E.S. Institute of Technology, Chembur	Mumbai, Maharashtra
Gayathri.R	Assistant Professor	ECE	Sri Ramakrishna Institute of Technology	Perur Chettipalayam, Chennai
Dr. Bhavin Shah	Assistant Professor	Electronics Engineering	Atharva College of Engineering, Mumbai	Mumbai, Maharashtra
JAYADEVAN N M	ASSISTANT PROFESSOR	ELECTRONICS AND COMMUNICATION ENGINEERING	KARPAGAM COLLEGE OF ENGINEERING	Coimbatore, Tamilnadu
Ms.K.HEMAVANI	ADHOC ASSISTANT PROFESSOR	ECE	JNTU COLLEGE OF ENGINEERING KALIKIRI	KALIKIRI , ANDHRA PRADSESH
Ms. Joyoti Kashyap	Associate professor	Electronics and Telecommunication	Thadomal Shahani Engineering College	Mumbai, Maharashtra
Mrs. Mayuri Kundu	Assistant Professor	CSE	Vishnu Institute of Technology	Bhimavaram, Andhra Pradesh

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Dr. K. Mahesh Kumar	Associate Professor	Computer Science & Engineering	Sree Vidyanikethan Engineering College	Tirupati, Andhra Pradesh
Dr. Mansi Subhedar	Associate Professor	EXTC	Pillai HOC College of Engineering and Technology, Rasayani	Raigad, Maharashtra
Dr. MILENDRAKUMAR MANILAL SOLANKI	Assistant Professor	Electronics Engineering	B.V.M.Engineering College, V.V.Nagar, Gujarat	Anand, Gujrat
Mrs.Monali Nitin Chaudhari	assistant professor	EXTC	V.E.S. Institute of Technology, Chembur	Mumbai, Maharashtra
MUNISANKAR NAGUGARI	ASSOCIATE PROFESSOR	COMPUTER SCIENCE AND ENGINEERING	SRI VENKATESA PERUMAL COLLEGE OF ENGINEERING AND TECHNOLOGY	Tirupati, Andhra Pradesh
Mrs. CH MYDHILI	ASSISTANT PROFESSOR	ELECTRONICS	SIR C R REDDY COLLEGE, ELURU	Eluru, Andhra Pradesh
Dr.S.K.Mydhili	Professor	ECE	KGISL Institute of Technology	Coimbatore, Tamilnadu
Nilesh Kulkarni	Assistant Professor	Electronics and Telecommunication	Smt Kashibai Navale College of Engg	Pune, Maharashtra
Mrs Nusrat Ansari	Assistant professor	Electronics and telecommunication	Vivekanand education society institute of technology	Mumbai, Maharashtra
Dr. PILLUTLA HARIKRISHNA	Assistant Professor	Computer Science and Engineering	Rajeev Gandhi Memorial College of Engineering and Technology	Nandyal, Andhra Pradesh
Dr. Pravin Ghate	Professor	E&TC	JSPM's Rajarshi Shahu College of Engineering	Pune, Maharashtra
Mr. Pratik S. Patel	Assistant Professor	Institute of Forensic Science(Cyber Security)	Gujarat Forensic Sciences University	Gandhinagar, Gujrat
Mr. Rajib Dutta	Assistant Professor	Computer Science & Engineering	Global Institute of Management & Technology	Nadia, West Bengal
Mr. Ratan Rajan Srivastava	Assistant Professor	Computer Application	Shri Ramswaroop Memorial Group of Professional Colleges, Lucknow, Uttar Pradesh	Lucknow, Uttar Pradesh
Dr Sohel Bhura	Asst Professor	Computer Science & Engineering	Babasaheb Naik College of Engineering, Pusad	Pusad District- Yavatmal Maharashtra
Dr Sachin Agrawal	Assistant Professor	Computer Science and Engineering	College of Engineering and Technology, Akola	Akola, Maharashtra
Santoshi pote	Associate professor	ENC	SNDT UMIT	Mumbai, Maharashtra
Mrs.SARIKA ATUL PATIL	Assistant Professor	Electronics and Telecommunication	Dr. D.Y.Patil Institute of Technology, Pimpri, Pune	Pune, Maharashtra

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MR. SANDEEP CHUDARAMJI MUNGHATE	ASSISTANT PROFESSOR	ELECTRONICS AND TELECOMMUNICATION	GHARDA INSTITUTE OF TECHNOLOGY	Khed, Ratnagiri, Maharashtra
Dr. Shanta Shondur	Professor	Information Technology	V.E.S. Institute of Technology	Mumbai, Maharashtra
Mrs.SIVASAKTHI S	ASSISTANT PROFESSOR	DEPARTMENT OF COMPUTER SCIENCE	G. VENKATASWAMY NAIDU COLLEGE	KOVILPATTI, Koimbtur
Mrs.S.JAYAKODI	Assistant Professor	Computer Applications	S.T.E.T Women's College	Mannargudi, Thiruvarur. Tamilnadu
Mrs Sneha Pankaj Ingale	Assistant Professor	Electronics and Telecommunication	Shivajirao Jondhale College of Engineering	Dombivli, Mumbai, Maharashtra
Mrs.Snehal Lopes	Assistant Professor	EXTC	St.Francis Institute Of Technology	Mumbai, Maharashtra
Sowmya S	Assistant Professor	Computer Science and Engineering	ATME College of Engineering, Mysore	Melahalli Mysore, Karnataka
Mrs. CH.SREEDEVI	Assistant Professor	CSE	BV Raju Institute of Technology	NARSAPUR, Telangana
Rubina Shaikh	Assistant Professor	Electronics	Pillai College of Enginnerig	New Panvel, Maharashtra
Mr. SUJIT BISWAS	Assistant Professor	Computer Science & Engineering	Global Institute of Management & Technology	West Bengal, Nadia, Krishnagar
Tarannum Shaikh	Assistant Professor	Electronics Engineering	M. H. Saboo Siddik College of Engineering	Mumbai, Maharashtra
S.THIRUMALAI	LECTURER	COMPUTER ENGINEERING	MURUGAPPA POLYTECHNIC COLLEGE	Avadi, Chennai
Mr. Vaibhav Vikas Mainkar	Asst. Prof.	E&TC	S.S.P.M's College of Engineering, Kankavli	Kankavli, Maharashtra
Vaibhav Prakash	AGM	Operations and HR	Carnation Infotech	Lucknow, Uttar Pradesh
VISHNU KAMBLE	Asst Prof	IT	PES MODERN COLLEGE OF ENGINEERING	Shivajinagar, Pune, Maharashtra
Dr. Sanjoy Mitra	Assistant Professor	Computer Science and Engineering	Tripura Institute of Technology	Narsingarh, West Tripura, Agartala

Annexure – II

List of Experts, Affiliation, and their Topics

Sr. No.	Name of Speaker	Affiliation, Company/Institute	Topics
1	Ms. Kalpana Banka, Keynote Speaker	Application Design Architect Accenture Mumbai shreeji.verma@accenture.com	Keynote Speaker
2	Mr. Shailesh Agaskar	Senior Enterprise Solution Architect Capgemini, Mumbai shailesh.agaskar@capgemini.com	IoT applications and Research Avenues
3	Dr. Faruk Kazi (Chief Guest of Inaugural)	Dean R and D, and Head Electrical Engg. Dept, VJTI Mumbai fskazi@el.vjti.ac.in	Security and Privacy in IoT
4	Dr. Y. S. Rao	Vice Principal, Professor Elec and Telecom. SPIT Mumbai ysrao@spit.ac.in	Smart (Hardware/Software) technologies for Power optimization
5	Mr. Amol Madane	Technical Architect TCS Pune amol.madane@tcs.com	Application of Image Analytics in Real World using IoT
6	Dr. Manesh Kokare	Prof. and Head, Electronics and Telecom, Cood Centre for Excellence, SGGs Nanded mbkokare@sggs.ac.in	Machine Learning on IoT Data
7	Mr. Bhupendra Bhate	Retired from L and T Technology Services (chief innovation officer) Mumbai bhatebm@gmail.com	Promoting Green initiative through IOT
8	Dr. Mahesh Bundeale	Principal and Director, Poornima University, Jaipur maheshbundeale@gmail.com	Green IoT: Opportunities and Challenges
9	Mr. Saurabh Mehta	Prof. Elect and Telecom, Chief Acad Officer, VIT Mumbai saurabh.n.mehta@gmail.com	Role of IoT in Power Sector
10	Mr. Amit Mishra	Corporate Trainer, EDUXLABS, Gurugram mishraamit2408@gmail.com	1) IoT, M2M towards IoT-the global context, HW, SW 2) Scope of IoT Applications, Evolution of IIoT & Industry 4.0, IoT Adoption, AI, Automation 3) Sensor data analytics

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			<ul style="list-style-type: none">4) IoT, details of HW, SW and platforms5) Network layer and IoT protocols6) Getting started with MQTT7) Python programming for IoT and Data Analytics8) Node Red9) Cloud Platforms and controlling devices from cloud platform10) Algorithms for regression and prediction11) Regression and prediction using Python12) Temperature reading & EDA using IOT Devices, Regression & Predictive Analysis using IOT Devices13) Information and cyber security,14) Standards and open source initiatives15) Some project demonstrations
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ANNEXURE-III

STTP Schedule

Date	Session Schedule	Topic	Speakers
10 th Aug 2020 (Day 1)	9.30 am to 10.45 am	Inauguration	
	11 am to 12.00pm	Keynote on IoT and Green Initiatives	Ms. Kalpana Banka, Accenture, Mumbai
	12.00 pm to 1.00pm	Security and Privacy in IoT	Dr. Farukh Kazi, Chairman BOS (EXTC) University of Mumbai
	1.00 pm 1.40pm	Lunch	
	1.40 pm to 3.00 pm	Smart (Hardware/Software) technologies for Power optimization	Dr. Y S Rao, SPIT Mumbai
	3.05 pm to 5:30 pm	IoT applications and Research Avenues	Mr. Sailesh Agaskar, Program Manager, Capgemini India
11 th Aug 2020 (Day 2)	9.30 am to 11 am	Application of Image Analytics in Real World using IoT	Dr Amol Madane, TCS Pune,
	11.15-12.45 pm	IoT, M2M towards IoT-the global context, HW, SW	Mr. Amit Mishra, Corp Trainer New Delhi:
	12.45- 1.15pm	Lunch	
	1.15- 3.15 pm	Scope of IoT Applications, Evolution of IIoT & Industry 4.0, IoT Adoption, AI, Automation	Mr. Amit Mishra, Corp Trainer New Delhi:

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	3.30-5.30pm	Sensor data analytics	Mr. Amit Mishra, Corp Trainer New Delhi
12 th Aug 2020 (Day 3)	9.30 am to 11 am	Machine Learning on IoT Data	Dr. Manesh Kokare, SGGS COE Nanded,
	11.15-12.45 pm	IoT, details of HW, SW and platforms	Mr. Amit Mishra, Corp Trainer New Delhi:
	12.45- 1.15pm	Lunch	
	1.15- 3.15 pm	Network layer and IoT protocols	Mr. Amit Mishra, Corp Trainer New Delhi:
	3.30-5.30pm	Getting started with MQTT	Mr. Amit Mishra, Corp Trainer New Delhi:
13 th Aug 2020 (Day4)	9.30 am to 11 am	Promoting Green initiative through IOT	Mr. Bhupendra Bhate, L and T (Retd) Mumbai,
	11.15-12.45 pm	Python programming for IoT and Data Analytics	Mr. Amit Mishra, Corp Trainer New Delhi:
	12.45- 1.15pm	Lunch Break	
	1.15- 3.15 pm	Node Red	Mr. Amit Mishra
	3.30-5.30pm	Cloud Platforms and controlling devices from cloud platform	Mr. Amit Mishra, Corp Trainer New Delhi:
14 th Aug 2020 (Day5)	9.30 am to 11 am	Green IoT: Opportunities and Challenges	Dr. Mahesh Bundele, Principal and Director, Poornima University, Jaipur,
	11.15-12.45 pm	Algorithms for regression and prediction	Mr. Amit Mishra, Corp Trainer New Delhi:

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	12.45- 1.15pm	Lunch Break	
	1.15- 3.15 pm	Regression and prediction using Python	Mr. Amit Mishra, Corp Trainer New Delhi:
	3.30-5.30pm	Temperature reading & EDA using IOT Devices, Regression & Predictive Analysis using IOT Devices	Mr. Amit Mishra, Corp Trainer New Delhi:
15 th Aug 2020 (Day6)	9.30 am to 11 am	Role of IoT in Power Sector	Dr Saurabh Mehta VIT Mumbai,
	11.15-12.45 pm	Information and cyber security	Mr. Amit Mishra, Corp Trainer New Delhi:
	12.45- 1.15pm	Lunch Break	
	1.15- 3.15 pm	Standards and open source initiatives	Mr. Amit Mishra, Corp Trainer New Delhi:
	3.30-5.00pm	Some project demonstrations	Mr. Amit Mishra, Corp Trainer New Delhi:
	5.00-5.30pm	Valedictory Function	

ANNEXURE-IV

Final feedback with Score of Online Test and Test Questions

Q1: The STTP sessions delivered the information that I expected to receive.

Q2: The STTP was successful in its objectives.

Q3: How would you rate the effectiveness of the demonstrations shown during the sessions?

Q4: How would you rate the duration of the program?

Q5: How would you rate the online arrangements for the entire STTP?

Q6: Write any three takeaways or outcomes of the STTP.

Name	Q1	Q2	Q3	Q4	Q5	Q6	Quiz Score (30)
Abhishek Chaudhari	5	5	5	5	Excellent	Different platforms of IoT, the applications of IOT in Power Sector and how ML and IoT can use together	28
Dr. Vasif Ahmed	5	5	5	5	Good	Online IoT demo with min hardware, knowledge of software tools like COLAB, THINGSPEAK, AWS and Red Node, Applications case studies for energy optimization using IOT..	29
Mr.Ajinky a Anandgopal Valanjoo	5	5	5	5	Excellent	Understand detail of Green IOT	29
Mr.Amol Shashikant Sankpal	5	5	5	5	Excellent	good content good speaker	27
Mrs. Anuradha Jadiya	5	5	5	4	Excellent	Very nice & informative session.	29

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Mrs. Arti Sawant	5	5	5	5	Excellent	Broad knowledge of IoT, AWS services	30
Mr.M.Ashok Kumar	5	5	5	5	Excellent	Know the concepts of IOT	25
Shreya Kurne	5	5	5	4	Very Good	Basics of green internet of things Applications of IOT Future scope of IOT	26
Er.Manoj S. Kavedia	4	4	4	4	Very Good	Knowledge of IOT, AWS, Node Red	25
Mr. Gaurav Yashwant Tawde	5	5	5	5	Excellent	Insight and concepts of Green IoT, python basics, AWS	30
Gayathri.R	4	4	4	4	Very Good	Good	13
Dr. Bhavin Shah	5	5	5	5	Excellent	All the sessions were Technically Sound, Good Resource Persons & Very Knowledgeable & in depth Sessions on IoT	28
JAYADEVA N N M	4	4	4	4	Very Good	GAINED KNOWLEDGE OF IOT FUNDAMENTALS, IOT PROTOCOLS,CLOUDS,ARDUINO,NODE MCU etc	28
Ms.K.HEM AVANI	5	5	5	5	Excellent	Informative session	25
Ms.Jyoti Kashyap	5	5	5	5	Excellent	Motivation ,guidance ideas for projects	29
Mrs. Mayuri Kundu	4	4	4	4	Excellent	Knowledge New Technology Skills	25

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Dr. K. Mahesh Kumar	5	5	5	5	Very Good	lot application green lot significane automation	25
Dr. Mansi Subhedar	5	5	5	5	Excellent	Informative Sessions	28
Dr. MILENDRA KUMAR MANILAL SOLANKI	5	5	5	5	Excellent	Nicely organized FDP, Nice selection of expert speakers, All the sessions were started on mentioned time.	28
Mrs.Mona li Nitin Chaudhari	5	5	5	5	Excellent	IOT, architecture and applications, coding	27
MUNISAN KAR NAGUGAR I	5	5	5	5	Excellent	ALL THE TOPICS ARE KEY ASPECTS	28
Mrs. CH MYDHILI	5	5	5	5	Excellent	LEARNT THE USES	28
Dr.S.K.My dhili	5	5	5	5	Excellent	1. Insight into Programming 2. Perspective of concepts 3. Effective Team work	27
Nilesh Kulkarni	5	5	5	5	Excellent	Learned many news things in field of IOT. Very informtive sessions	29
Mrs Nusrat Ansari	5	5	5	5	Excellent	IOT , IIOT n Python	29
Dr. PILLUTLA HARIKRISH NA	5	5	5	5	Very Good	1)Learnt the basics and Handson of IoT, 2. Handson, 3. Security	30
Dr. Pravin Ghate	5	5	5	5	Excellent	Knowledge	21
Mr. Pratik S. Patel	5	5	5	5	Very Good	productive work.very good practical	27

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Mr. Rajib Dutta	5	5	5	5	Excellent	1. Knowledge about Green IoT, 2. How to Implement IoT Project, 3. Research topic on Green IoT.	29
Mr. Ratan Rajan Srivastava	5	5	5	5	Excellent	Excellent learning, new technological concepts	30
Dr Sohel Bhura	5	5	5	5	Excellent	great hands on experience	28
Dr Sachin Agrawal	5	5	5	5	Excellent	Knowledge	25
Santoshi pote	5	5	5	5	Excellent	Helpful for Research in IOT	24
Mrs.SARIK A ATUL PATIL	5	5	5	5	Excellent	python,AWS,things pick	27
MR. SANDEEP CHUDARA MJI MUNGHATE	5	5	5	4	Excellent	1. Know about Green IoT 2. About AWS 3. About thingspeak	29
Shanta Sondur	5	5	5	5	Excellent	wonderful hands-on session, worked on web platforms, nice learning	30
Mrs.SIVAS AKTHI S	5	5	5	5	Excellent	IoT Arduino More knowledge	20
Mrs.S.JAY AKODI	5	5	5	5	Excellent	informative	27
Mrs Sneha Pankaj Ingale	4	4	4	4	Very Good	Very informative	24
Mrs.Sneha I Lopes	5	5	5	5	Excellent	got to know about Green IOT and its opportunities,Node red,	27

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Sowmya S	4	5	5	4	Very Good	learnt on IOT, Applying thoughts on IOT	28
Mrs. CH.SREED EVI	4	4	4	4	Very Good	Sensor Data analytics, Machine Learning on IoT, Green IoT Opportunities and Challenges	26
Rubina Shaikh	4	4	4	4	Very Good	Aws,iot and javascript	29
Mr. SUJIT BISWAS	4	4	4	4	Very Good	Excellent	21
Tarannum Shaikh	5	5	5	5	Excellent	Pandas programming. Python. IOT. Green iot learning	28
S.THIRUM ALAI	5	5	4	5	Good	GREEN IOT TECHNOLOGIES	22
Mr. Vaibhav Vikas Mainkar	5	5	5	5	Excellent	Nicely organised	28
Vaibhav Prakash	4	4	4	4	Very Good	Analytics, AI, ML	28
VISHNU KAMBLE	5	5	5	5	Excellent	Good knowledge	12
Dr. Sanjoy Mitra	4	5	4	5	Very Good	Knowledge of IoT and practical tips to perform IoT based works	29

Final Test Questions

- 1) Can Green IoT concept be used to optimize the usage of Internet to save energy by judiciously using all the available resources?
 1. **True**
 2. False

- 2) Internet of Things can be broadly divided into
 1. Consumer IoT
 2. Enterprise IoT
 3. Industrial IoT
 4. **All of the above**

- 3) Industry 4.0 IoT or IIoT is used for:
 1. Mass Production
 2. Computer & Automation
 3. **Both of the above**
 4. None of the above

- 4) IoT is about machine to machine communication without human interventions?
 1. **True**
 2. False

- 4) Active & Passive safety systems include
 1. Scope
 2. System
 3. Situation
 4. **All of the above**

- 6) ADAS is
 1. **Advanced Driver Assistance Systems**
 2. Advanced Detection Assistance Systems
 3. Advanced Driver Associate Systems
 4. Advanced Driver Application Systems

- 7) ADAS applications include
 1. High Beam Control
 2. Cross Traffic Assist
 3. Front View Camera System
 4. **All of the above**

- 8) Hadoop provides storage and processing
 1. **True**
 2. False

- 9) Out of the following hardware devices which one is a low power device having a built-in Wi-Fi module?
1. Arduino
 2. Raspberry Pi
 - 3. ESP8266 node MCU**
 4. Intel Edison
- 10) Which Microcontroller is used in Arduino Uno?
1. Atmel 2051
 2. ARM7
 - 3. ATmega 328P**
 4. PIC1650
- 11) Raspberry Pi does not require Bootloader?
- 1. True**
 2. False
- 12) IoT has become important and popular because of ...
1. Provides real time access to mobile devices
 2. Receives controls remotely
 3. Automates the system
 - 4. All of the above**
- 13) Deep Learning is a subset of Machine Learning.
- 1. True**
 2. False
- 14) If the database is classified and the input-output is mapped then this type of learning is called as :
1. Reinforced Learning
 - 2. Supervised Learning**
 3. Unsupervised Learning
 4. Semi-Learning
- 15) TCP is preferred for secured cloud transmission over UDP.
- 1. True**
 2. False
- 16) Which of the following are required for the implementation of an IoT network?
1. SIM Module
 2. Access Network
 3. Ethernet
 - 4. All of the above**
- 17) DHT11 is a _____
- 1. Temperature & Humidity Sensor**
 2. PIR Sensor
 3. Fire Sensor
 4. Smoke Detector

- 18) In Aurdino, which in is used for hard resetting?
1. TTS Pin
 2. PPS Pin
 - 3. RTS Pin**
 4. None of the above
- 19) Green IoT represents the issue of reducing energy consumption of IoT devices.
- 1. True**
 2. False
- 20) MQTT stands for
- 1. Message Queuing Telemetry Transport**
 2. Message Queuing Telephone Tranport
 3. Message Question Telemetry Transport
 4. None of the above
- 21) The secure port in MQTT is
1. 1883
 - 2. 8883**
 3. 1888
 4. 1818
- 22) The word IoT stands for...
1. Internet of Technology
 - 2. Internet of Things**
 3. Internet on Things
 4. Internet over Things
- 23) Mention Four V's of Big Data
1. Volume, Velocity, Veracity, Variety
- 24) ____is the popular programming language for IoT mentioned in the session.
- 1. Javascript**
 2. Python
 3. Assembly language
 4. C language
- 25) What is the proportion to select the data set for training and testing?
- 1. 80% & 20%**
 2. 20% & 80%
 3. 40% & 60%
 4. 30% & 70%
- 26) isnull can be used instead of isna
- 1. True**
 2. False

- 27) matplotlib is a plotting library for ____
1. Matlab programming
 2. C programming
 - 3. Python programming**
 4. None of the above
- 28) Visualization using Matplotlib generally consists of
1. Bars
 2. Pies
 3. lines
 4. scatter plots
 - 5. All the above**
- 29) Which of these is an Open Source Software?
1. Java Script
 2. Python
 3. Arduino
 - 4. All of These**
- 30) Write the function to print value in serial monitor.
- 1. Serial.print()**
 2. serial.Print()
 3. serial.print()
 4. Serial.Print()

ANNEXURE – II

Session wise Attendance and Feedback

Q1: Can you recollect a few application that were covered in the session? Mention few.

Q2: Was the delivery of the sessions as per expectation.

Q3: How would you rate the topics covered in this session?

List of participants attended Day 1, Session 1 with feedback

Resource Person: Ms. Kalpana Banka

Name	Q1	Q2.	Q3	Any other comments
Mayuri Kundu	-	4	4	No
Dr S K MYDHILI	Yes	5	5	Informative Session
RAJIB DUTTA	Village development application	5	5	
Mrs. Anuradha Jadiya	Home automation, clean-energy wind & solar project, lot in mines	1	5	nice session
Dr. Bhavin Shah	Green approaches in AWS, Azure IoT	4	4	
Mr. Gaurav Yashwant Tawde	Amazon, Alexa, Home Automation	5	5	Excellent session!
JAYADEVAN N M	IoT effects in industry and other aspects	4	4	
Ajinkya Anandgopal Valanjoo	amazon alexa	5	5	
PRATIK S. PATEL	Yes	4	4	Nothing
SREEDEVI CH	Amazon Applications	4	4	Informative Sessions
JYOTI KASHYAP	Security of device,	5	5	Very good session

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Dr. Mansi Subhedar	M	5	4	No
Dr. Pillutla Harikrishna	Mam was from Accenture	5	4	NA
Abhishek Chaudhari	Data connecting on cloud	5	5	
CH MYDHILI	Arogya sri app	5	5	
Ratan Rajan Srivastava	Smart City, Smart Grid Systems	5	5	
MILENDRAKUMAR MANILAL SOLANKI	Yes	5	5	No
Munisankar Nagugari	lot	5	5	No
Nilesh Kulkarni	Yes, overall architecture of IOT, applications and challenges	5	5	Very informative session
Shanta Sondur	Agriculture, health, Industry home automation	5	5	Very Good session!
Arti Sawant	IOT with ML, Blockchain, big data	5	5	
Mrs Nusrat Ansari	more emphasis on digital business, sensors are becoming widely available	5	5	very well explanation of the question & answers and overall very informative session
SANDEEP MUNGHATE	Yes	5	5	
Sanjoy Mitra	AWS, Azure	4	4	Very informative session
MR. VAIBHAV VIKAS MAINKAR	Yes	4	5	
Amol Sankpal	Alexa	5	5	good session

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Snehal Lopes	IOT in medical field	5	5	
Er.Manoj S. Kavedia	Smart City (germany and Singapore) , Application, Fitbit, Where to used IOT etc	4	4	All good
Shreya Kurne	Basics of green internet of things	4	4	-
Tarannum Shaikh	lot and its uses	5	5	
Ashok Kumar M	Yes. I can	5	5	Excellent
Jayakodi.S	Yes	5	5	Nothing
Dr Sachin Agrawal	No	5	5	
SUJIT BISWAS	YES	4	4	
SIVASAKTHI S	Yes	5	5	Nice
Rubina Shaikh	lot definition	4	4	
monali nitin chaudhary	amazon, alexa etc	5	5	NA
VISHNU KAMBLE	No	5	5	
Mrs Sneha Pankaj Ingale	Yes	4	5	
Dr Sohel	lot	4	5	
Vasif Ahmed	Yes	5	4	
Mrs.SARIKA ATUL PATIL	Top security concerns, Security best practices	5	5	Informative session
Sowmya S	Yes	4	4	
SANDEEP MUNGHATE	Yes	5	4	
Pravin Ghate	IOT for all	5	5	No
Dr. S.K.Mydhili	Healthcare, Industry, Agriculture	5	5	Good.
Vaibhav Prakash	IOT Platforms	4	4	

List of participants attended Day 1, Session 2 with feedback

Resource Person: Dr. Faruk Kazi

Name	Q1	Q2.	Q3	Any other comments
Mr. Gaurav Yashwant Tawde	3 / 3	5	5	Excellent Session!
SREEDEVI CH	3 / 3	5	5	Informative Session
Dr S K MYDHILI	2 / 3	5	5	Informative Session
HEMAVANI	3 / 3	4	4	Please share the ppt
Dr. Pillutla Harikrishna	3 / 3	5	5	NA
Ajinkya Anandgopal Valanjoo	3 / 3	5	5	
Mayuri Kundu	3 / 3	4	4	Excellent delivery of lecture.
Ratan Rajan Srivastava	3 / 3	5	5	
Arti Sawant	3 / 3	5	5	
Santoshi pote	2 / 3	5	5	Nil
Dr. Bhavin Shah	3 / 3	5	5	
Nilesh N Kulkarni	3 / 3	5	5	
Jyoti Kashyap	3 / 3	5	5	Very good session
RAJIB DUTTA	3 / 3	5	5	
Dr. Mansi Subhedar	3 / 3	5	4	Good session
Sanjoy Mitra	3 / 3	4	4	Very informative session
CH MYDHILI	2 / 3	5	5	
Shanta Sondur	3 / 3	5	5	Nice Session
Er.Manoj S. Kavedia	3 / 3	4	4	All good
monali Nitin Chaudhari	3 / 3	5	5	NA
Snehal Lopes	3 / 3	5	5	
Amol Sankpal	3 / 3	5	5	good
Jayakodi.S	3 / 3	5	5	nothing
MUNISANKAR NAGUGARI	3 / 3	5	5	NO
PRATIK S. PATEL	1 / 3	4	4	NOTHING
Abhishek Chaudhari	2 / 3	5	5	
Rubina Shaikh	3 / 3	4	4	
MILENDRAKUMAR MANILAL SOLANKI	3 / 3	5	5	No
VISHNU KAMBLE	1 / 3	5	5	
Tarannum Shaikh	3 / 3	5	5	

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Mrs Sneha Pankaj Ingale	2 / 3	4	4	
Mrs. Anuradha Jadiya	3 / 3	5	5	very good session
Dr Sohel	3 / 3	5	4	
Vasif Ahmed	3 / 3	5	5	
Mrs.SARIKA ATUL PATIL	3 / 3	5	5	No
Sowmya S	2 / 3	4	4	
Dr. K. Mahesh Kumar	3 / 3	5	5	
MR. VAIBHAV VIKAS MAINKAR	3 / 3	5	5	
K HEMAVANI	3 / 3	5	5	
Mrs Nusrat Ansari	3 / 3	5	5	very informative session
Shreya Kurne	3 / 3	4	4	
SUJIT BISWAS	2 / 3	4	4	
Vaibhav Prakash	2 / 3	4	4	

List of Participants attended Day 1, Session 3 with feedback

Resource Person : Dr. Y.S.Rao

Name	Q1	Q2.	Q3	Any other comments
JAYADEVAN N M	3 / 3	4	4	
Dr. Mansi Subhedar	3 / 3	4	4	Good session
Nilesh N Kulkarni	3 / 3	5	5	
Snehal Lopes	3 / 3	5	5	
CH MYDHILI	1 / 3	5	5	
Ratan Rajan Srivastava	2 / 3	5	5	
Dr. Bhavin Shah	3 / 3	5	5	
S.THIRUMALAI	3 / 3	5	5	GOOD
Dr.S.K.Mydhili	3 / 3	5	5	GOOD
SREEDEVI CH	2 / 3	4	4	Informative Session
Mr. Gaurav Yashwant Tawde	3 / 3	5	5	Good session.
Dr. K. Mahesh Kumar	3 / 3	5	5	

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Mrs. Anuradha Jadiya	3 / 3	5	5	very informative session
Dr. Pillutla Harikrishna	3 / 3	5	5	NA
Shanta Sondur	3 / 3	5	5	Nice session
Sanjoy Mitra	2 / 3	4	4	Very informative session
Mayuri Kundu	2 / 3	4	4	
Er. Manoj S. Kavedia	2 / 3	4	4	All good
Rubina Shaikh	2 / 3	4	4	
Abhishek Chaudhari	3 / 3	5	5	
RAJIB DUTTA	3 / 3	5	5	
Ajinkya Anandgopal Valanjoo	2 / 3	5	5	
Pratik S. Patel	2 / 3	4	4	nothing
MILENDRAKUMAR MANILAL SOLANKI	3 / 3	5	5	No
Arti Sawant	3 / 3	5	5	
Pravin Ghate	3 / 3	5	5	Nil
Dr Sohel Bhura	2 / 3	5	4	
Amol Sankpal	3 / 3	5	5	good session
Mrs. SARIKA ATUL PATIL	3 / 3	5	5	no
MR. VAIBHAV VIKAS MAINKAR	3 / 3	5	5	
SIVASAKTHI S	3 / 3	5	5	Nice Session
JYOTI Kashyap	3 / 3	5	5	Very good
Tarannum Shaikh	2 / 3	5	5	
Jayakodi.S	2 / 3	5	5	nothing
K HEMAVANI	3 / 3	5	5	
Mrs Sneha Pankaj Ingale	3 / 3	4	5	
Dr Sachin Agrawal	3 / 3	5	5	
Monali Nitin Chaudhari	3 / 3	5	5	VERY INFORMATIVE SESSION
Munisankar Nagugari	2 / 3	5	5	No
Vasif Ahmed	3 / 3	4	4	
Mrs Nusrat	3 / 3	5	5	
Shreya Kurne	3 / 3	5	4	
VISHNU KAMBLE	2 / 3	5	5	

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SUJIT BISWAS	1 / 3	4	4	
SANDEEP CHUDARAMJI MUNGHATE	3 / 3	5	5	

List of Participants attended Day 1, Session 4 with feedback

Resource Person : Mr. Shailesh Agaskar

Name	Q1	Q2.	Q3	Any other comments
SIVASAKTHI S	3 / 3	5	5	Nice Session
JAYADEVAN N M	3 / 3	4	4	
SREEDEVI CH	3 / 3	5	4	Informative Session
Dr.S.K.Mydhili	3 / 3	5	5	GOOD. Pls share the ppts
JYOTI Kashyap	3 / 3	5	5	Good session
Abhishek Chaudhari	3 / 3	5	5	
RAJIB DUTTA	3 / 3	5	5	
Nilesh Kulkarni	3 / 3	5	5	Awesome session
Dr. Bhavin Shah	3 / 3	5	5	
Amol Sankpal	3 / 3	5	5	good session
Shanta Sondur	3 / 3	5	5	Good session
Mrs. Anuradha Jadiya	3 / 3	5	5	nice session
Arti Sawant	3 / 3	5	5	
MR. VAIBHAV VIKAS MAINKAR	3 / 3	5	5	
Pratik S. Patel	2 / 3	4	4	nothing
Dr. Pillutla Harikrishna	3 / 3	5	5	NA
S.THIRUMALAI	3 / 3	5	5	good
Sanjoy Mitra	2 / 3	4	4	Very informative session
CH MYDHILI	3 / 3	5	5	
Mayuri Kundu	3 / 3	4	4	
K HEMAVANI	3 / 3	5	5	
Tarannum Shaikh	2 / 3	5	5	
Jayakodi.S	3 / 3	5	5	nothing
Dr. Mansi Subhedar	3 / 3	4	4	Good

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Mrs Sneha Pankaj Ingale	3 / 3	4	5	
Dr Sachin Agrawal	3 / 3	5	5	
Ashok Kumar M	3 / 3	5	5	Excellent
Dr Sohel Bhura	3 / 3	5	5	
Monali Nitin Chaudhari	3 / 3	5	5	GOOD SESSION
Munisankar nagugari	3 / 3	5	5	No
Vasif Ahmed	3 / 3	5	4	
Rubina Shaikh	3 / 3	5	5	
Mrs.SARIKA ATUL PATIL	3 / 3	5	5	No
VISHNU Kamble	3 / 3	5	5	
Mr. Gaurav Yashwant Tawde	3 / 3	5	5	Nice session.
Dr. K. Mahesh Kumar	3 / 3	5	5	
Shreya Kurne	3 / 3	5	4	
Snehal Lopes	3 / 3	5	5	
Ratan Rajan Srivastava	3 / 3	5	5	
SUJIT BISWAS	2 / 3	4	4	
Er. Manoj S. Kavedia	3 / 3	4	4	All good
SANDEEP CHUDARAMJI MUNGHATE	2 / 3	5	5	
Vaibhav Prakash	3 / 3	4	4	

List of Participants attended Day 2, Pre-lunch session with feedback

Resource Person : Dr. Amol Madane

Name	Q1	Q2.	Q3	Any other comments
Abhishek Chaudhari	3 / 3	5	5	
Vasif Ahmed	3 / 3	4	4	
Ajinkya Anandgopal Valanjoo	3 / 3	5	5	
Amol Sankpal	3 / 3	5	5	good
Mrs. Anuradha Jadiya	3 / 3	5	5	Very informative session
Arti Sawant	2 / 3	5	5	
Ashok Kumar M	3 / 3	5	5	Excellent
Shreya Kurne	3 / 3	5	5	
Er.Manoj S, kavedia	3 / 3	4	4	All good
Mr. Gaurav Yashwant Tawde	3 / 3	5	5	Good session
Gayathri.R	1 / 3	5	5	Nil
Dr. Bhavin Shah	3 / 3	4	4	
JAYADEVAN N M	3 / 3	4	4	
K HEMAVANI	2 / 3	5	5	
Jyoti Kashyap	3 / 3	5	5	5/5
Mayuri Kundu	3 / 3	3	3	
Dr. K. Mahesh Kumar	2 / 3	5	4	
Dr. Mansi Subhedar	3 / 3	5	5	Good session
MILENDRAKUMAR MANILAL SOLANKI	3 / 3	5	5	No
Monali Nitin Chaudhari	3 / 3	5	5	GOOD SESSION
Munisankar Nagugari	2 / 3	5	5	No
CH MYDHILI	3 / 3	5	5	
Dr S K MYDHILI	3 / 3	5	5	informative session
Nilesh Kulkarni	3 / 3	5	5	
Mrs Nusrat Ansari	3 / 3	5	5	
Dr. Pillutla Harikrishna	3 / 3	5	5	NA
Pravin Ghate	1 / 3	5	5	No
PRATIK S. PATEL	3 / 3	4	3	
RAJIB DUTTA	3 / 3	5	5	

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Ratan Rajan Srivastava	3 / 3	5	5	
Dr Sohel Bhura	3 / 3	5	5	
Dr Sachin Agrawal	1 / 3	5	5	
Santoshi pote	3 / 3	5	5	Nil
Mrs.SARIKA ATUL PATIL	3 / 3	5	5	No
SANDEEP CHUDARAMJI MUNGHATE	3 / 3	4	4	
Shanta Sondur	2 / 3	5	5	Good session
SIVASAKTHI S	2 / 3	5	5	Nice
Jayakodi.S	3 / 3	5	5	nothing
Mrs Sneha Pankaj Ingale	3 / 3	4	5	
Snehal Lopes	3 / 3	5	5	
Sowmya S	3 / 3	4	4	
SREEDEVI CH	3 / 3	5	5	Informative Session
Rubina Shaikh	3 / 3	4	4	
SUJIT BISWAS	1 / 3	4	4	
Tarannum Shaikh	2 / 3	5	5	
S.THIRUMALAI	2 / 3	5	5	good
MR. VAIBHAV VIKAS MAINKAR	2 / 3	5	5	
Vaibhav Prakash	3 / 3	4	4	
vishnu kamble	2 / 3	5	5	
Sanjoy Mitra	3 / 3	4	5	Very Informative Session

List of Participants attended Day 2, sessions with feedback

Resource Person : Mr. Amit Mishra

Name	Q1	Q2.	Q3	Any other comments
Abhishek Chaudhari	4 / 5	5	5	
Vasif Ahmed	4 / 5	4	5	
Ajinkya Valanjoo	5 / 5	5	5	
Amol Sankpal	3 / 5	5	5	good
Mrs. Anuradha Jadiya	4 / 5	5	5	Nice session with good examples
Arti Sawant	5 / 5	5	5	
Ashok Kumar M	4 / 5	5	5	Excellent
Shreya Kurne	3 / 5	5	5	
Mr. Gaurav Yashwant Tawde	5 / 5	5	5	Excellent session.
Gayathri R	2 / 5	5	5	Nil
Dr. Bhavin Shah	5 / 5	4	4	
JAYADEVAN N M	4 / 5	3	3	
K HEMAVANI	4 / 5	5	5	
Jyoti Kashyap	4 / 5	5	5	Very good
Mayuri Kundu	2 / 5	4	4	
Dr. K. Mahesh Kumar	3 / 5	5	5	
Dr. Mansi Subhedar	3 / 5	5	5	Good
MILENDRAKUMAR MANILAL SOLANKI	3 / 5	5	5	No
Monali NitinChaudhari	4 / 5	5	5	NA
Munisankar Nagugari	2 / 5	5	5	No
CH MYDHILI	5 / 5	5	5	
Dr S K MYDHILI	4 / 5	5	5	Informative session
Nilesh Kulkarni	3 / 5	5	5	
Mrs Nusrat Ansari	5 / 5	5	5	
Dr. Pillutla Harikrishna	5 / 5	5	5	NA
Pravin Ghate	3 / 5	5	5	No
PRATIK S. PATEL	3 / 5	5	5	nothing
RAJIB DUTTA	3 / 5	5	5	
Ratan Rajan Srivastava	3 / 5	5	5	
Dr Sohel Bhura	3 / 5	5	5	
Dr Sachin Agrawal	4 / 5	5	5	

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Mrs.SARIKA ATUL PATIL	4 / 5	5	5	No
SANDEEP CHUDARAMJI MUNGHATE	5 / 5	5	5	
Shanta Sondur	5 / 5	5	5	Good session for the beginner
SIVASAKTHI S	3 / 5	5	5	Nice Session
JAYAKODI.S	5 / 5	5	5	nothing
Mrs Sneha Pankaj Ingale	3 / 5	4	5	
Snehal Lopes	4 / 5	5	5	
Sowmya S	4 / 5	4	4	
SREEDEVI CH	3 / 5	4	4	Informative Session
Rubina Shaikh	5 / 5	4	4	
SUJIT BISWAS	2 / 5	4	4	
Tarannum Shaikh	4 / 5	5	5	
S. THIRUMALAI	5 / 5	5	5	Good
MR. VAIBHAV VIKAS MAINKAR	4 / 5	5	5	
Vaibhav Prakash	3 / 5	4	4	
VISHNU KAMBLE	2 / 5	5	5	
Sanjoy Mitra	4 / 5	4	4	Informative sessions

List of Participants attended Day 3, Pre-lunch session with feedback

Resource Person : Dr. Manesh Kokare

Name	Q1	Q2.	Q3	Any other comments
Abhishek Chaudhari	1 / 3	5	5	
Vasif Ahmed	2 / 3	5	4	
Ajinkya Valanjoo	2 / 3	5	5	
Amol Sankpal	2 / 3	5	5	nice session
Mrs. Anuradha Jadiya	1 / 3	5	5	Very nice session.
Arti Sawant	3 / 3	5	5	
Ashok Kumar M	1 / 3	5	5	Excellent
Shreya Kurne	2 / 3	5	5	
Er.Manoj S. Kavedia	2 / 3	4	4	All good
Mr. Gaurav Yashwant Tawde	3 / 3	5	5	Excellent session
Dr. Bhavin Shah	2 / 3	5	5	

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JAYADEVAN N M	2 / 3	4	4	
K HEMAVANI	1 / 3	5	5	
Jyoti Kashyap	1 / 3	5	5	V good
Mayuri Kundu	2 / 3	4	3	
Dr. K. Mahesh Kumar	2 / 3	5	5	
Dr. Mansi Subhedar	2 / 3	4	5	Good
MILENDRAKUMAR MANILAL SOLANKI	2 / 3	5	5	No
monali nitin chaudhari	2 / 3	5	5	NA
CH MYDHILI	2 / 3	5	5	
Dr.S.K.Mydhili	2 / 3	5	5	NIL
Nilesh Kulkarni	2 / 3	5	5	
Mrs Nusrat Ansari	3 / 3	5	5	
Dr. Pillutla Harikrishna	2 / 3	5	5	NA
Pratik S. Patel	2 / 3	4	4	nothing
Rajib Dutta	2 / 3	5	5	
Ratan Rajan Srivastava	2 / 3	5	5	Very Informative session
Dr Sohel Bhura	2 / 3	5	5	
Dr Sachin Agrawal	2 / 3	5	5	
Santoshi pote	2 / 3	5	5	Nil
Mrs.SARIKA ATUL PATIL	2 / 3	5	5	no
SANDEEP CHUDARAMJI MUNGHATE	2 / 3	5	5	
Shanta Sondur	3 / 3	5	5	Good session
SIVASAKTHI S	2 / 3	5	5	NICE SESSION
JAYAKODI.S	2 / 3	5	5	nothing
Snehal Lopes	2 / 3	5	5	
Sowmya S	2 / 3	4	4	
SREEDEVI CH	2 / 3	4	4	Informative Session
Rubina Shaikh	3 / 3	4	4	
SUJIT BISWAS	1 / 3	4	4	
Tarannum Shaikh	2 / 3	5	5	
S.THIRUMALAI	2 / 3	5	5	GOOD
MR. VAIBHAV VIKAS MAINIKAR	2 / 3	5	5	
Vaibhav Prakash	2 / 3	4	4	
Vishnu kamble	2 / 3	5	5	
Sanjoy Mitra	2 / 3	5	5	Very informative session

List of Participants attended Day 3, sessions with feedback

Resource Person : Mr. Amit Mishra

Name	Q1	Q2.	Q3	Any other comments
Abhishek Chaudhari	1 / 5	5	5	
Vasif Ahmed	3 / 5	5	4	
Ajinkya Valanjoo	4 / 5	5	5	
Amol Sankpal	5 / 5	5	5	good
Mrs. Anuradha Jadiya	5 / 5	5	5	very nice session
Arti Sawant	4 / 5	5	5	
Ashok Kumar M	5 / 5	5	5	Excellent
Shreya Kurne	4 / 5	4	4	
Er.Manoj S. kavedia	4 / 5	4	4	
Mr. Gaurav Yashwant Tawde	5 / 5	5	5	Excellent session
Gayathri.R	2 / 5	4	4	Nil
Dr. Bhavin Shah	3 / 5	4	4	
JAYADEVAN N M	4 / 5	4	4	
Jyoti Kashyap	5 / 5	5	5	Good
Mayuri Kundu	4 / 5	4	3	
Dr. Mansi Subhedar	4 / 5	5	5	Good
MILENDRAKUMAR MANILAL SOLANKI	5 / 5	5	5	No
monali nitin chaudhari	5 / 5	5	5	NA
Munisankar Nagugari	5 / 5	5	5	No
CH MYDHILI	4 / 5	5	5	
Dr.S.K,Mydhili	5 / 5	5	5	GOOD
Nilesh Kulkarni	5 / 5	5	5	
Dr Pillutla Harikrishna	5 / 5	5	5	Na
PRATIK S. PATEL	3 / 5	5	5	nothing
RAJIB DUTTA	4 / 5	5	5	
Ratan Rajan Srivastava	4 / 5	5	5	
Dr Sohel Bhura	5 / 5	5	5	

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Dr Sachin Agrawal	4 / 5	5	5	
Santoshi pote	5 / 5	5	5	Nil
Mrs.SARIKA ATUL PATIL	5 / 5	5	5	Informative session
SANDEEP CHUDARAMJI MUNGHATE	3 / 5	5	5	
Shanta Sondur	5 / 5	5	5	Well conducted
SIVASAKTHI S	5 / 5	5	5	Nice Session
JAYAKODI.S	5 / 5	5	5	nothing
Mrs Sneha Pankaj Ingale	5 / 5	4	4	
Snehal Lopes	4 / 5	5	5	
Sowmya S	5 / 5	4	4	
SREEDEVI CH	5 / 5	4	4	Informative Session
Rubina Shaikh	5 / 5	4	4	
SUJIT BISWAS	2 / 5	4	4	
Tarannum Shaikh	5 / 5	5	5	
MR. VAIBHAV VIKAS MAINKAR	5 / 5	5	5	
Vaibhav Prakash	5 / 5	4	4	
Sanjoy Mitra	3 / 5	4	4	Very Informative

List of Participants attended Day 4, Pre-lunch session with feedback

Resource Person: Mr. Bhlupendra Bhate

Name	Q1	Q2.	Q3	Any other comments
Abhishek Chaudhari	2 / 3	5	5	
Vasif Ahmed	3 / 3	4	4	
Ajinkya Valanjoo	3 / 3	5	5	
Amol Sankpal	3 / 3	5	5	good
Mrs. Anuradha Jadiya	3 / 3	5	5	very nice session
Ashok Kumar M	3 / 3	5	5	Excellent
Shreya Kurne	3 / 3	5	5	
Er.Manoj S. Kavedia	3 / 3	4	4	All good

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Mr. Gaurav Yashwant Tawde	3 / 3	5	5	Good Session.
Gayathri.R	3 / 3	4	4	Nil
Dr. Bhavin Shah	3 / 3	5	5	
JAYADEVAN N M	3 / 3	4	4	
K HEMAVANI	3 / 3	5	5	
Jyoti Kashyap	3 / 3	5	5	V good
Mayuri Kundu	2 / 3	3	3	
Dr. K. Mahesh Kumar	3 / 3	5	5	
Dr. Mansi Subhedar	3 / 3	5	5	
MILENDRAKUMAR MANILAL SOLANKI	3 / 3	5	5	No
monali Nitin Chaudhari	3 / 3	5	5	NA
MUNISANKAR NAGUGARI	3 / 3	5	5	NO
CH MYDHILI	3 / 3	5	5	
Dr.S.K.Mydhili	2 / 3	5	5	Good
Nilesh Kulkarni	3 / 3	5	5	
Mrs Nusrat Ansari	3 / 3	5	5	
Dr.Pillutla Harikrishna	3 / 3	5	5	NA
Pravin Ghate	3 / 3	5	5	No
PRATIK S. PATEL	3 / 3	4	4	nothing
RAJIB DUTTA	2 / 3	5	5	
Ratan Rajan Srivastava	3 / 3	5	5	
Dr Sohel	3 / 3	5	5	
Dr Sachin Agrawal	3 / 3	5	5	
Santoshi pote	2 / 3	5	5	Nil
Mrs.SARIKA ATUL PATIL	3 / 3	5	5	No
SANDEEP CHUDARAMJI MUNGHATE	2 / 3	5	4	
SIVASAKTHI S	2 / 3	5	5	Nice Session
JAYAKODI.S	3 / 3	5	5	nothing
Snehal Lopes	3 / 3	5	5	
Sowmya S	3 / 3	4	4	

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SREEDEVI CH	3 / 3	4	4	Informative Session
Rubina Shaikh	3 / 3	4	4	
SUJIT BISWAS	0 / 3	4	4	
Tarannum Shaikh	2 / 3	5	5	
S. THIRUMALAI	3 / 3	5	5	Good
MR. VAIBHAV VIKAS MAINKAR	3 / 3	5	5	
Vaibhav Prakash	2 / 3	4	4	
VISHNU KAMBLE	1 / 3	5	5	
Sanjoy Mitra	3 / 3	5	5	Very informative

List of participants attended Day 4, sessions with feedback

Resource Person : Mr. Amit Mishra

Name	Q1	Q2.	Q3	Any other comments
Abhishek Chaudhari	3 / 5	5	5	
Vasif Ahmed	5 / 5	5	4	
Amol Sankpal	4 / 5	5	5	good
Anuradha Jadiya	5 / 5	5	5	Good Session
Arti Sawant	4 / 5	5	5	
Ashok Kumar M	4 / 5	5	5	Excellent
Shreya Kurne	5 / 5	5	5	
Er.Manoj S. Kavedia	5 / 5	4	4	All good
Mr. Gaurav Yashwant Tawde	5 / 5	5	5	Excellent Session!
Gayathri.R	3 / 5	4	4	Nil
Dr. Bhavin Shah	4 / 5	4	4	
JAYADEVAN N M	4 / 5	4	4	
K HEMAVANI	3 / 5	5	5	
Jyoti Kashyap	5 / 5	5	5	5/5
Mayuri Kundu	4 / 5	4	4	
Dr. K. Mahesh Kumar	4 / 5	5	5	
Dr. Mansi Subhedar	2 / 5	4	5	

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MILENDRAKUMAR MANILAL SOLANKI	5 / 5	5	5	No
Monali Nitin Chaudhari	5 / 5	5	5	
Munisankar Nagugari	3 / 5	5	5	No
CH MYDHILI	5 / 5	5	5	
Dr.S.K.Mydhili	4 / 5	5	5	Nice session.Thank You. Gained lot of information in new perspective.
Nilesh Kulkarni	3 / 5	5	5	
Mrs Nusrat Ansari	5 / 5	5	5	
Dr. Pillutla Harikrishna	5 / 5	5	5	Na
Pravin Ghate	3 / 5	5	5	N
PRATIK S. PATEL	3 / 5	5	5	nothing
RAJIB DUTTA	4 / 5	5	5	
Ratan Rajan Srivastava	4 / 5	5	5	
Dr Sohel	3 / 5	5	5	
Dr Sachin Agrawal	2 / 5	5	5	
Mrs.SARIKA ATUL PATIL	5 / 5	5	5	Informative session
SANDEEP CHUDARAMJI MUNGHATE	5 / 5	5	5	
Shanta Sondur	5 / 5	5	5	Very good session
SIVASAKTHI S	4 / 5	5	5	Nice Session
JAYAKODI.S	5 / 5	5	5	nothing
Mrs Sneha Pankaj Ingale	4 / 5	4	4	
Snehal Lopes	4 / 5	5	5	Can we get amit mishra sirs recording? because I missed few lectures because of network issue
Sowmya S	4 / 5	4	4	
SREEDEVI CH	4 / 5	4	4	Informative Session
Rubina Shaikh	5 / 5	4	4	

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SUJIT BISWAS	3 / 5	4	4	
Tarannum Shaikh	4 / 5	5	5	
S. THIRUMALAI	4 / 5	5	5	Good
MR. VAIBHAV VIKAS MAINKAR	4 / 5	5	5	
Vaibhav Prakash	3 / 5	4	4	
VISHNU KAMBLE	2 / 5	5	5	
Sanjoy Mitra	4 / 5	5	4	Very Informative

List of participants attended Day 5, pre-lunch session with feedback

Resource Person : Dr. Mahesh Bundele

Name	Q1	Q2.	Q3	Any other comments
Abhishek Chaudhari	3 / 3	5	5	
Vasif Ahmed	3 / 3	4	4	
Ajinkya Valanjoo	3 / 3	5	5	
Amol Sankpal	3 / 3	5	5	Excellent
Mrs. Anuradha Jadiya	3 / 3	5	5	Nice session.
Arti Sawant	3 / 3	5	5	
Ashok Kumar M	3 / 3	5	5	
Shreya Kurne	2 / 3	5	4	
Er.manoj S. Kavedia	2 / 3	4	4	All good
Mr. Gaurav Yashwant Tawde	3 / 3	5	5	Good session!
Gayathri.R	2 / 3	4	4	Nil
Dr. Bhavin Shah	3 / 3	4	4	
JAYADEVAN N M	2 / 3	4	4	
K HEMAVANI	2 / 3	5	5	
Jyoti Kashyap	2 / 3	4	4	4/5
Mayuri Kundu	2 / 3	4	4	
Dr. K. Mahesh Kumar	3 / 3	5	5	
Dr. Mansi Subhedar	2 / 3	5	5	
MILENDRAKUMAR MANILAL SOLANKI	3 / 3	5	5	No
Monali Nitin Chaudhari	2 / 3	5	5	NA
Munisankar Nagugari	2 / 3	5	5	No
CH MYDHILI	2 / 3	5	5	
Nilesh Kulkarni	2 / 3	5	5	
Mrs Nusrat Ansari	3 / 3	5	5	

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Dr. Pillutla Harikrishna	3 / 3	5	5	NA
Pravin Ghate	1 / 3	5	5	N
PRATIK S. PATEL	2 / 3	4	4	Nothing
RAJIB DUTTA	2 / 3	5	5	
Ratan Rajan Srivastava	3 / 3	5	5	
Dr Sohel Bhura	2 / 3	5	5	
Dr Sachin Agrawal	1 / 3	5	5	
Santoshi pote	2 / 3	5	5	Nil
Mrs.SARIKA ATUL PATIL	2 / 3	5	5	No
SANDEEP CHUDARAMJI MUNGHATE	2 / 3	5	5	
SIVASAKTHI S	2 / 3	5	5	Nice Session
JAYAKODI.S	2 / 3	5	5	nothing
Sowmya S	2 / 3	4	4	
SREEDEVI CH	3 / 3	4	4	Informative Session
Rubina Shaikh	2 / 3	5	4	
SUJIT BISWAS	1 / 3	4	4	
Tarannum Shaikh	2 / 3	5	5	
S.THIRUMALAI	2 / 3	5	5	GOOD
MR. VAIBHAV VIKAS MAINKAR	2 / 3	5	5	
Vaibhav Prakash	3 / 3	4	4	
VISHNU KAMBLE	1 / 3	5	5	
Sanjoy Mitra	2 / 3	3	4	Good

List of participants attended Day 5, sessions with feedback

Resource Person : Mr. Amit Mishra

Name	Q1	Q2.	Q3	Any other comments
Abhishek Chaudhari	5 / 5	5	5	
Vasif Ahmed	4 / 5	5	4	
Amol Sankpal	5 / 5	5	5	nice
Mrs. Anuradha Jadiya	5 / 5	5	5	nice session
Ashok Kumar M	4 / 5	5	5	
Shreya Kurne	4 / 5	5	5	
Er.Manoj S. Kavedia	5 / 5	4	4	All good
Mr. Gaurav Yashwant Tawde	5 / 5	5	5	Excellent session!
Gayathri.R	3 / 5	4	4	Nil
Dr. Bhavin Shah	5 / 5	4	4	
JAYADEVAN N M	4 / 5	4	4	
K HEMAVANI	5 / 5	5	5	
Jyoti Kashyap	5 / 5	5	5	Good
Mayuri Kundu	5 / 5	4	4	
Dr. K. Mahesh Kumar	5 / 5	5	5	
Dr. Mansi Subhedar	5 / 5	5	5	
MILENDRAKUMAR MANILAL SOLANKI	4 / 5	5	5	No
Monali Nitin Chaudhari	5 / 5	5	5	
Munisankar Nagugari	5 / 5	5	5	No
CH MYDHILI	5 / 5	5	5	
Dr.S.K.Mydhili	4 / 5	5	5	NIL
Nilesh Kulkarni	5 / 5	5	5	
Dr. Pillutla Harikrishna	5 / 5	5	5	Na
Pravin Ghate	3 / 5	5	5	No
PRATIK S. PATEL	5 / 5	5	5	
RAJIB DUTTA	5 / 5	5	5	
Ratan Rajan Srivastava	5 / 5	5	5	
Dr Sohel Bhura	4 / 5	5	5	
Dr Sachin Agrawal	4 / 5	5	5	
Santoshi pote	4 / 5	5	5	Nil
Mrs.SARIKA ATUL PATIL	5 / 5	5	5	Informative session

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SANDEEP CHUDARAMJI MUNGHATE	5 / 5	5	5	
Shanta Sondur	5 / 5	5	5	Nice Hands-On session
SIVASAKTHI S	3 / 5	5	5	Nice Session
JAYAKODI.S	4 / 5	5	5	nothing
Mrs Sneha Pankaj Ingale	5 / 5	4	4	
Snehal Lopes	5 / 5	5	5	
Sowmya S	5 / 5	4	4	
SREEDEVI CH	4 / 5	4	4	Informative Session
Rubina Shaikh	5 / 5	4	4	
SUJIT BISWAS	2 / 5	4	4	
Tarannum Shaikh	4 / 5	5	5	
MR. VAIBHAV VIKAS MAINKAR	5 / 5	5	5	
Vaibhav Prakash	4 / 5	4	4	
VISHNU KAMBLE	2 / 5	5	5	
Sanjoy Mitra	4 / 5	5	4	Very practical and informative session

List of participants attended Day 6, ssessions with feedback

Resource Person : Dr. Saurabh Mehta

Name	Q1	Q2.	Q3	Any other comments
Abhishek Chaudhari	3 / 3	5	5	
Vasif Ahmed	3 / 3	5	4	
Amol Sankpal	3 / 3	5	5	Good
Mrs. Anuradha Jadiya	3 / 3	5	5	nice session
Ashok Kumar M	2 / 3	5	5	
Shreya Kurne	3 / 3	4	5	
Er.Manoj S. Kavedia	3 / 3	4	4	I have attended session with laptop and i forget change name , i session my son name is

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				there Rishabh Kavedia, because laptop login with his name
Mr. Gaurav Yashwant Tawde	3 / 3	5	5	Good session
Gayathri.R	2 / 3	4	4	Nil
Dr. Bhavin Shah	3 / 3	4	4	
JAYADEVAN N M	3 / 3	4	4	
K HEMAVANI	3 / 3	5	5	
Jyoti Kashyap	3 / 3	5	4	5/5
Mayuri Kundu	3 / 3	4	4	
Dr. K. Mahesh Kumar	3 / 3	5	5	
Dr. Mansi Subhedar	3 / 3	4	4	
MILENDRAKUMAR MANILAL SOLANKI	3 / 3	5	5	No
Monali Nitin Chaudhari	3 / 3	5	5	NA
Munisankar Nagugari	2 / 3	5	5	No
CH MYDHILI	3 / 3	5	5	
Dr S K MYDHILI	2 / 3	5	5	informative session
Nilesh Kulkarni	3 / 3	5	5	
Mrs Nusrat Ansari	3 / 3	5	5	
Dr. Pillutla Harikrishna	3 / 3	5	5	NA
Pravin Ghate	2 / 3	5	5	Need ppt
PRATIK S. PATEL	3 / 3	5	5	nothing
RAJIB DUTTA	3 / 3	5	5	
Ratan Rajan Srivastava	2 / 3	5	5	
Dr Sohel Bhura	3 / 3	5	5	
Dr Sachin Agrawal	1 / 3	5	5	
Santoshi pote	3 / 3	5	5	Nil
Mrsa.SARIKA ATUL PATIL	3 / 3	5	5	No
SANDEEP CHUDARAMJI MUNGHATE	3 / 3	5	4	
Shanta Sondur	2 / 3	5	5	Very good session
SIVASAKTHI S	2 / 3	5	5	Nice Session
JAYAKODI.S	3 / 3	5	5	nothing

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Mrs Sneha Pankaj Ingale	3 / 3	4	4	
Snehal Lopes	3 / 3	5	5	
Sowmya S	3 / 3	4	4	
SREEDEVI CH	3 / 3	4	4	Informative Session
Rubina Shaikh	2 / 3	5	4	
SUJIT BISWAS	2 / 3	4	4	
Tarannum Shaikh	3 / 3	5	5	
S.THIRUMALAI	3 / 3	5	5	GOOD
MR. VAIBHAV VIKAS MAINKAR	3 / 3	5	5	
Vaibhav Prakash	3 / 3	4	4	
Vishnu kamble	0 / 3	5	5	
Sanjoy Mitra	3 / 3	4	4	Good Session

List of participants attended Day 6, sessions with feedback

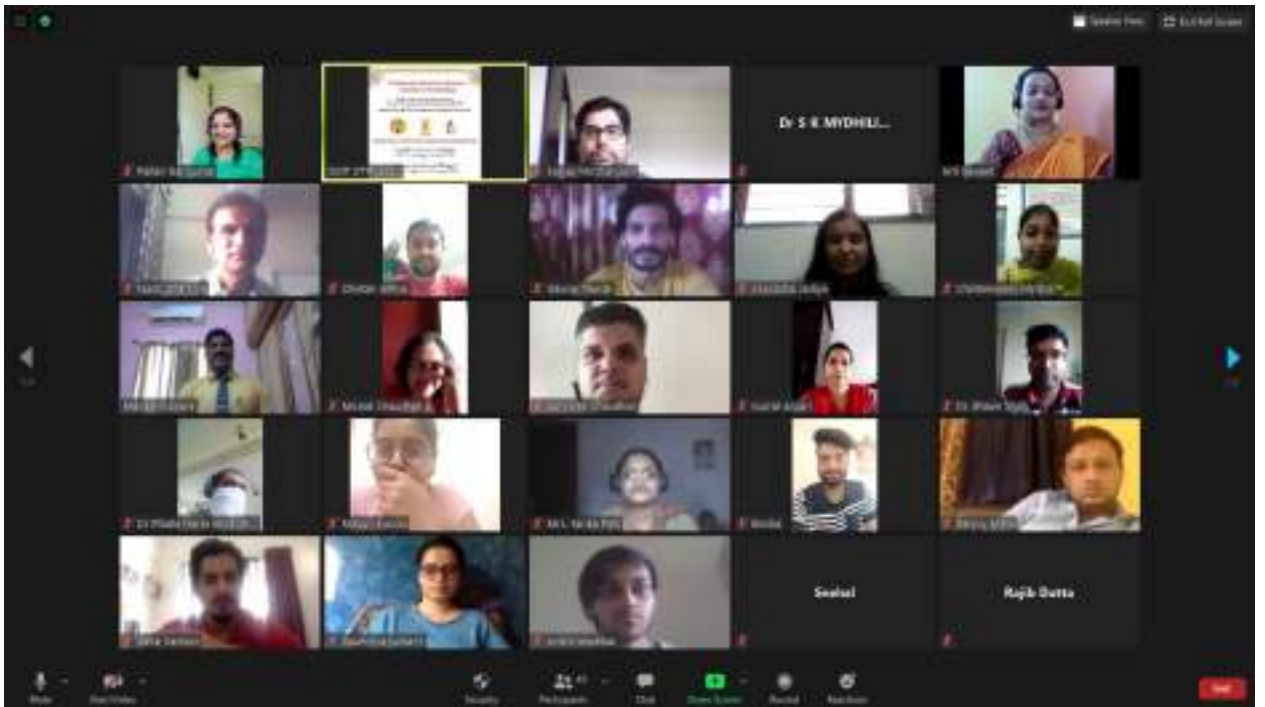
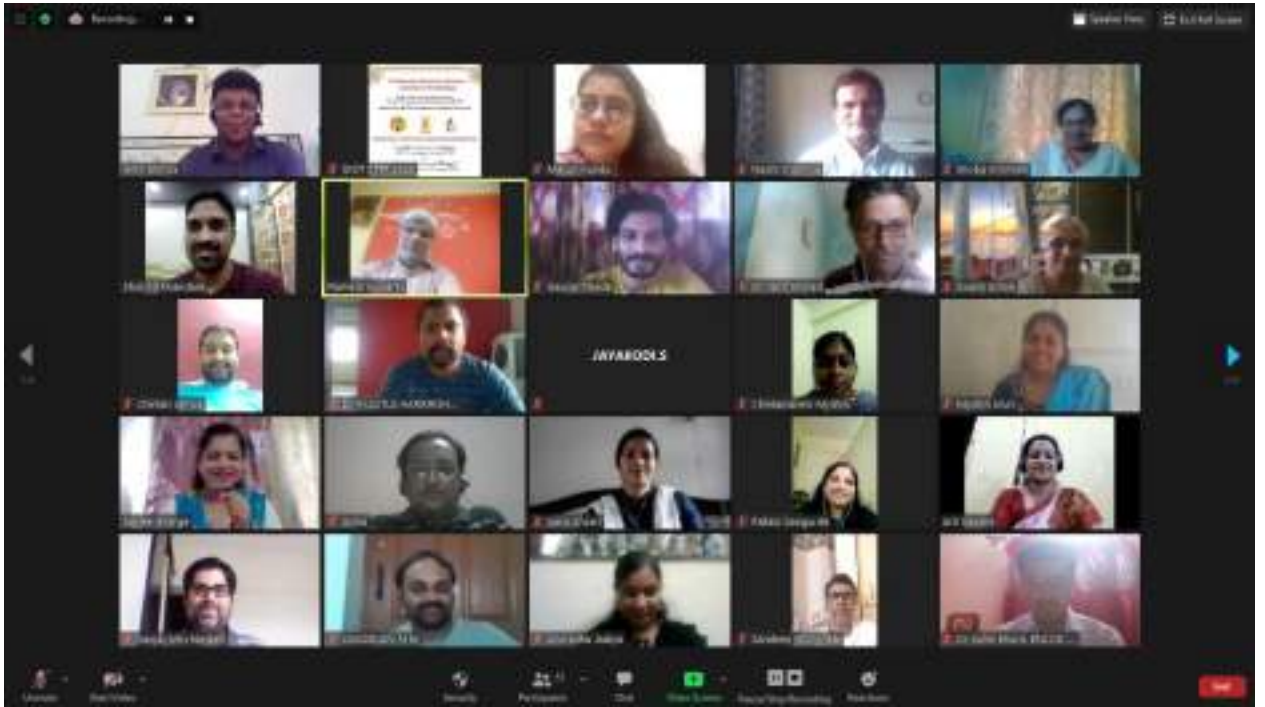
Resource Person : Mr. Amit Mishra

Name	Q1	Q2.	Q3	Any other comments
Abhishek Chaudhari	4/ 5	5	5	
Vasif Ahmed	5 / 5	5	4	
Amol Sankpal	4 / 5	5	5	good
Anuradha Jadiya	5 / 5	5	5	Good
Arti Sawant	4 / 5	5	5	
Ashok Kumar M	4 / 5	5	5	Excellent
Shreya Kurne	5 / 5	5	5	
Er.Manoj S. Kavedia	5 / 5	4	4	All good
Mr. Gaurav Yashwant Tawde	5 / 5	5	5	Excellent
Gayathri.R	3 / 5	4	4	Nil
Dr. Bhavin Shah	4 / 5	4	4	
JAYADEVAN N M	4 / 5	4	4	
K HEMAVANI	3 / 5	5	5	
Jyoti Kashyap	5 / 5	5	5	5/5
Mayuri Kundu	4 / 5	4	4	
Dr. K. Mahesh Kumar	4 / 5	5	5	
Dr. Mansi Subhedar	2 / 5	4	5	
MILENDRAKUMAR MANILAL SOLANKI	5 / 5	5	5	No

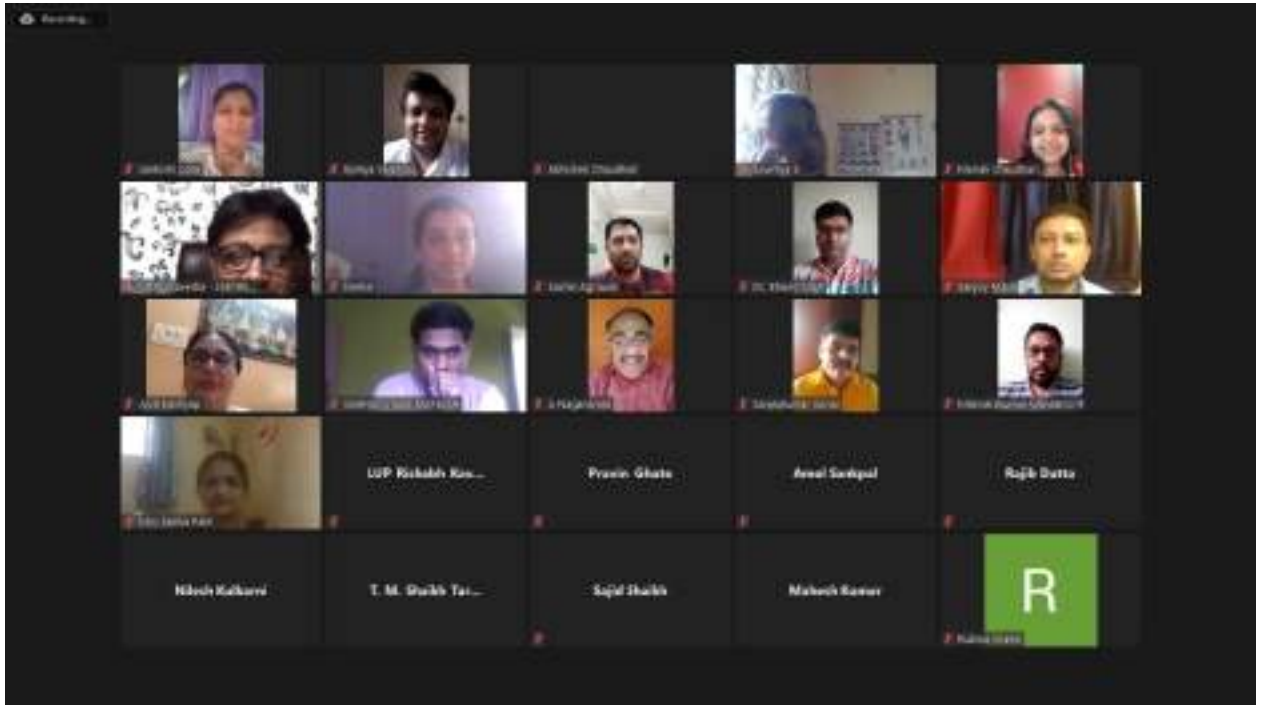
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Monali Nitin Chaudhari	5 / 5	5	5	
Munisankar Nagugari	3 / 5	5	5	No
CH MYDHILI	5 / 5	5	5	
Dr.S.K.Mydhili	4 / 5	5	5	Nice session
Nilesh Kulkarni	3 / 5	5	5	
Mrs Nusrat Ansari	5 / 5	5	5	
Dr. Pillutla Harikrishna	5 / 5	5	5	
Pravin Ghate	3 / 5	5	5	
PRATIK S. PATEL	3 / 5	5	5	nil
RAJIB DUTTA	4 / 5	5	5	
Ratan Rajan Srivastava	4 / 5	5	5	
Dr Sohel	3 / 5	5	5	
Dr Sachin Agrawal	2 / 5	5	5	
Mrs.SARIKA ATUL PATIL	5 / 5	5	5	Informative session
SANDEEP CHUDARAMJI MUNGHATE	5 / 5	5	5	
Shanta Sondur	5 / 5	5	5	Very good session
SIVASAKTHI S	4 / 5	5	5	Nice Session
JAYAKODI.S	5 / 5	5	5	nothing
Mrs Sneha Pankaj Ingale	4 / 5	4	4	
Snehal Lopes	4 / 5	5	5	-
Sowmya S	4 / 5	4	4	
SREEDEVI CH	4 / 5	4	4	Informative Session
Rubina Shaikh	5 / 5	4	4	
SUJIT BISWAS	3 / 5	4	4	
Tarannum Shaikh	4 / 5	5	5	
S. THIRUMALAI	4 / 5	5	5	Good
MR. VAIBHAV VIKAS MAINKAR	4 / 5	5	5	
Vaibhav Prakash	3 / 5	4	4	
VISHNU KAMBLE	2 / 5	5	5	
Sanjoy Mitra	4 / 5	5	4	Very Informative

ANNEXURE-VI Grid Photographs



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Annexure – VII

Sample Copy of Certificate



ANNEXURE-VIII

STTP Brochure

**Vivekanand Education Society's
Institute of Technology,
Chembur, Mumbai**

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**Department of
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on

Green Internet of Things
(10th to 15th August, 2020)

**V. E. S. Institute of Technology,
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Chembur, Mumbai – 400 074.**

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Email: vesit@ves.ac.in

About VESIT

Vivekanand Education Society's Institute of Technology (VESIT) established in 1984, is one of the premier engineering colleges affiliated with the University of Mumbai. VESIT offers Bachelors programs in engineering under the following streams: Electronics, Electronics & Telecommunication, Information Technology Computer and Instrumentation.

In addition, VESIT offers Master of Engineering in Instrumentation and Control, Information Technology and Electronics & Telecommunication streams and Master of Computer Application. VESIT is a recognized Ph.D. Centre for Engineering and Technology of University of Mumbai, and also a Lifelong Learning Centre.

About Green Internet of Things

Internet of things (IoT) applications forecast to have 50 billion connected devices by the end of 2020. IoT promises to connect all industrial and consumer appliances to cloud service providers. IoT is impacting every aspect of our lives from wearable devices such as fitness bands and smart watches to personal health care monitors. IoT devices are making us connected. Homes and white goods appliances are also increasingly becoming IoT edge node candidates. The Smart Home concept where energy consumption is carefully monitored by smart gateways at home and appliances can be remotely controlled.

This Short Term Training Program (STTP) on Green Internet of Things is being organized by Department of Electronics and Telecommunication Engineering, Vivekanand Education Society's Institute of Technology for enhancing skills of

facilities and scholars of engineering colleges in the domain of IoT and its initiatives towards green technology.

This program focuses on development of various industrial and societal applications using the Internet of Things. The eminent speakers and practitioners from academia and industries will conduct the sessions to motivate the participants to undertake interesting and innovative ideas. The program will further explore research avenues in the domain of IoT and Green IoT through the effective discussion during the training.

Course Objective:

The objective of this STTP is equipping academicians and industry personnel with the IoT technology, recent trends and green initiatives, providing exposure to technologies supporting Green IoT, hardware and software development tools and demonstrations, predictive analytics using IoT, security in IoT.



Resource Person:-

The speakers would be eminent personalities from academia and industries.

Registration Fee:-

STTP Course is **Free**

Who can attend?

- ◆ Faculty from AICTE approved Engineering Institutes (Degree/Diploma) & MCA institutes
- ◆ Industry Representative

Registration Form Link:-

<https://forms.gle/B4yRkz2NPFs5BN286ct6>

Telegram Channel Link

<https://t.me/joinchat/SbAH3xth3d7rerGrC3Kdgtw>

For enquiries contact:-

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Mob: +919764996706
Email: nadir.charniya@ves.ac.in

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Mrs. Shoba Krishnan, Head EXTC
Dr. Ramesh Kulkarni, Deputy Head, EXTC

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Dr. Nadir Charniya, STTP Coordinator (Member Secretary)
Mrs. Shoba Krishnan, Head EXTC (Member)
Mrs. Kavita Tewari, Head EXTC (Member)
Dr. Ramesh Kulkarni, Deputy Head EXTC (Member)

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Mrs. Arti Sawant, Assistant Professor, EXTC
Mr. Gaurav Tawde, Assistant Professor, EXTC
Mr. Ajinkya Valanjool, Assistant Professor, EXTC

Instructions to Participants:-

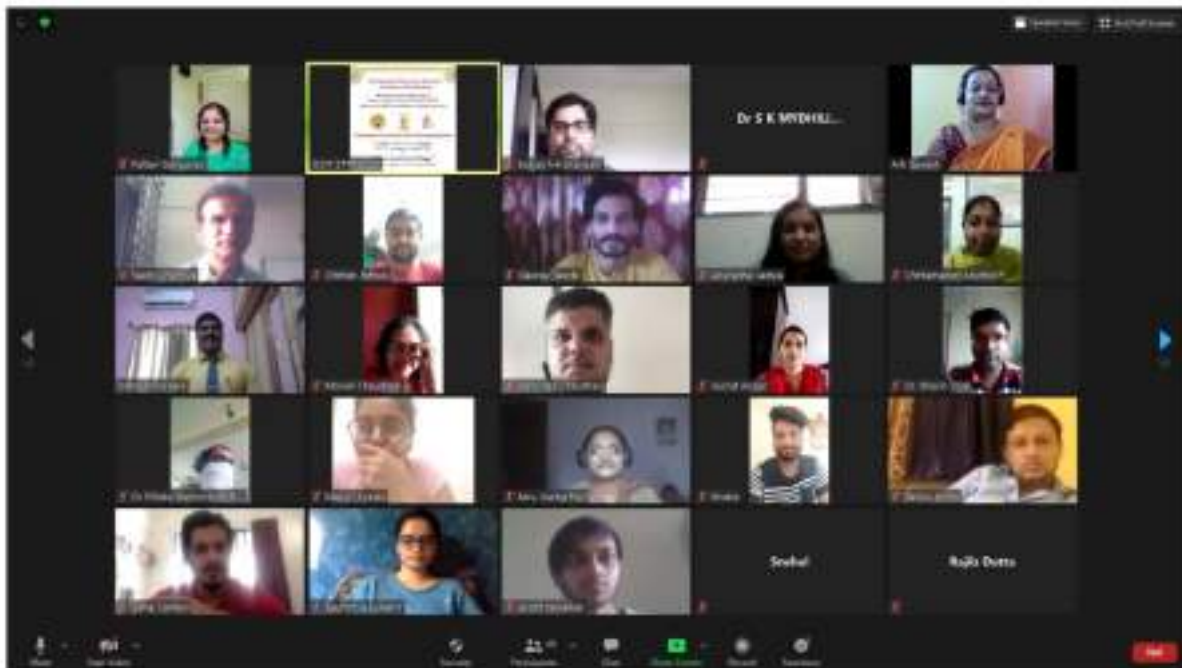
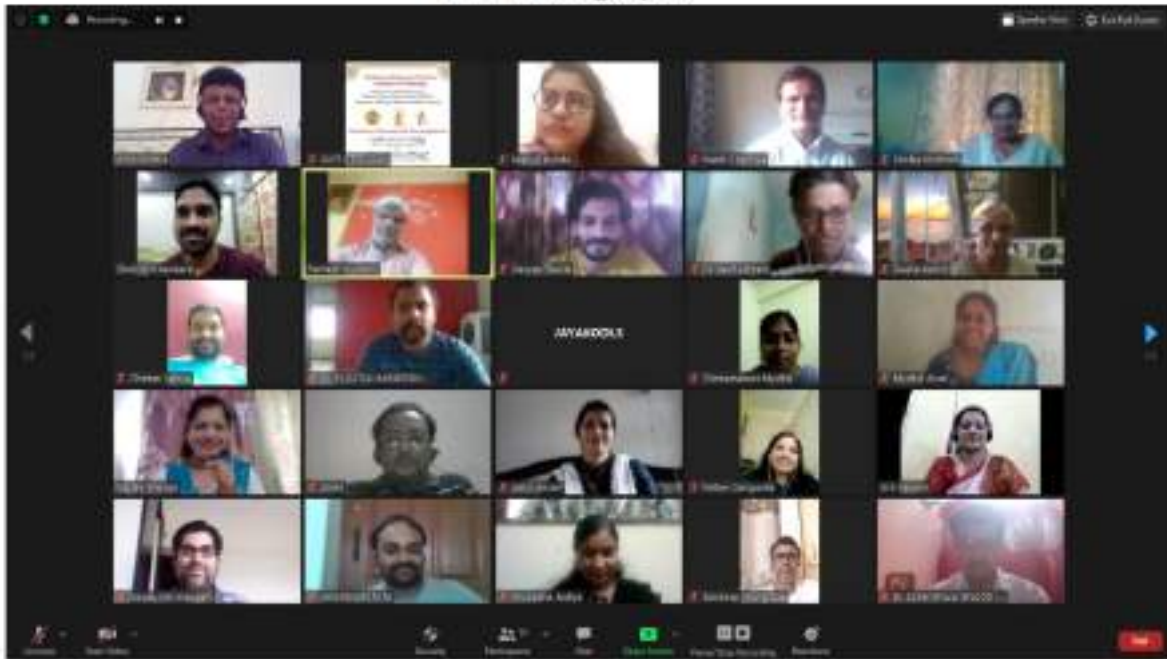
The person willing to join this program need to have the following basic requirements:-

- ◆ Laptop/Desktop with good internet connection and Gmail account
- ◆ Telegram App should be installed on mobile. Google App, Google Meet, Zoom App, MS Teams should be installed on a Laptop/Desktop.
- ◆ Every participant must register by filling up the online form and join telegram channel thereafter.
- ◆ All communications will be on Telegram channel.
- ◆ Fill the Google registration form carefully and check your name, university/ institution/ college name and e-mail ID before submission.
- ◆ No correction in the certificate will be done due to incorrect information provided in the registration form.
- ◆ Last Date to fill the registration form is 05th August, 2020.
- ◆ Confirmation of registration will be communicated to the registered e-mail ID by 08th August, 2020.
- ◆ Participants need to attend daily online sessions at the scheduled time.
- ◆ It is mandatory to fill up the feedback forms.
- ◆ Online Test, based on all the topics discussed during the program will be conducted. Minimum 40% score is necessary for certification.
- ◆ AICTE certificates will be provided on participants' e-mail ID.

Course material provided by the experts and recording of sessions enclosed herewith in CD/DVD.

STTP on Green IoT--Phase I Photographs

Grid Photographs





**Vivekanand Education Society's Institute of
Technology, Chembur, Mumbai 400074**



**Department of Electronics and
Telecommunication
Organizing**

One Week AICTE Sponsored Online STTP on

GREEN INTERNET OF THINGS

(November 23rd to November 28th 2020)

Coordinated by

- **Department of Computer Engineering**
- **Department of Information Technology**
- **Department of Master of Computer Applications**

(In Association with VESIT IQAC & IIC)

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Resource Persons:

Resource persons will be eminent personalities from academia and industries.

Registration Fee:

The course is **FREE**

Who can attend?

- Faculty from AICTE approved Engineering Institutes (Degree/ Diploma) & MCA institutes
- Industry Representative

Registration Link: <https://forms.gle/9on8tjs7jbXHqK1QA>

Telegram Channel Link: https://t.me/sttp_green_IOT

For enquiries contact:

E-Mail: giot.phaseii@ves.ac.in

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Dr. (Mrs.) M. Vijayalakshmi,
Vice Principal, VESIT
Mrs. Shoba Krishnan,
Head of Department, EXTC
Dr.(Mrs.) Nupur Giri
Head of Department, Computer Engineering.
Dr. (Mrs.) Shalu Chopra
Head of Department, Information Technology
Dr. Shiv Kumar Goyal
Head of Department
Master of Computer Applications.

Program Evaluation Committee

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(Chairperson)
Dr. (Mrs) M. Vijayalakshmi, Vice Principal
(Member)
Dr. Nadir Charniya, Prof. EXTC,
STTP Coordinator (Member Secretary)
Mrs. Shoba Krishnan, Head EXTC
(Member)
Dr. P. P. Vaidya, Dean, R and D
(Member)
Mrs. Kavita Tewari, Head ETRX
(Member)
Dr. Ramesh Kulkarni, Deputy Head EXTC
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Prof. D. N. Malkhede.
Adviser, RIFD, AICTE, New Delhi

Organising Committee

Mrs Abha Tewari, Computer Engg
Mrs. Vinita Mishra Info. Technology
Ms. Sukanya Roychowdhury, Info Tech.
Mrs Meenakshi Garg, Dept of MCA
Mr Sunny Nahar, Dept of MCA
Mrs Vaishali Gatty, Dept of MCA
Mr. Prashant Kanade, Computer Engg

Instructions to Participants:

The faculty members who are willing to join this program need to have the following basic requirements:

1. Laptop/Desktop with good internet connection and Gmail account.
2. Every participant must register by filling up the online form and join telegram channel thereafter.
3. All communications will be on Telegram channel.
4. Fill the Google registration form carefully and check your name, university/ institution/ college name and e-mail ID before submission.
5. Last Date to fill the registration form is 19th November, 2020.
6. Confirmation of registration will be communicated to the registered e-mail ID by 20th November 2020.
7. Participants need to attend daily online sessions at the scheduled time.
8. It is mandatory to fill up the feedback forms.
9. Online Test, based on all the topics discussed during the program will be conducted. Minimum 40% score is necessary for certification.
10. AICTE certificates will be provided on participants' e-mail ID.





Proceedings of

One Week AICTE Sponsored Online STTP

On

GREEN INTERNET OF THINGS

(PHASE-II)

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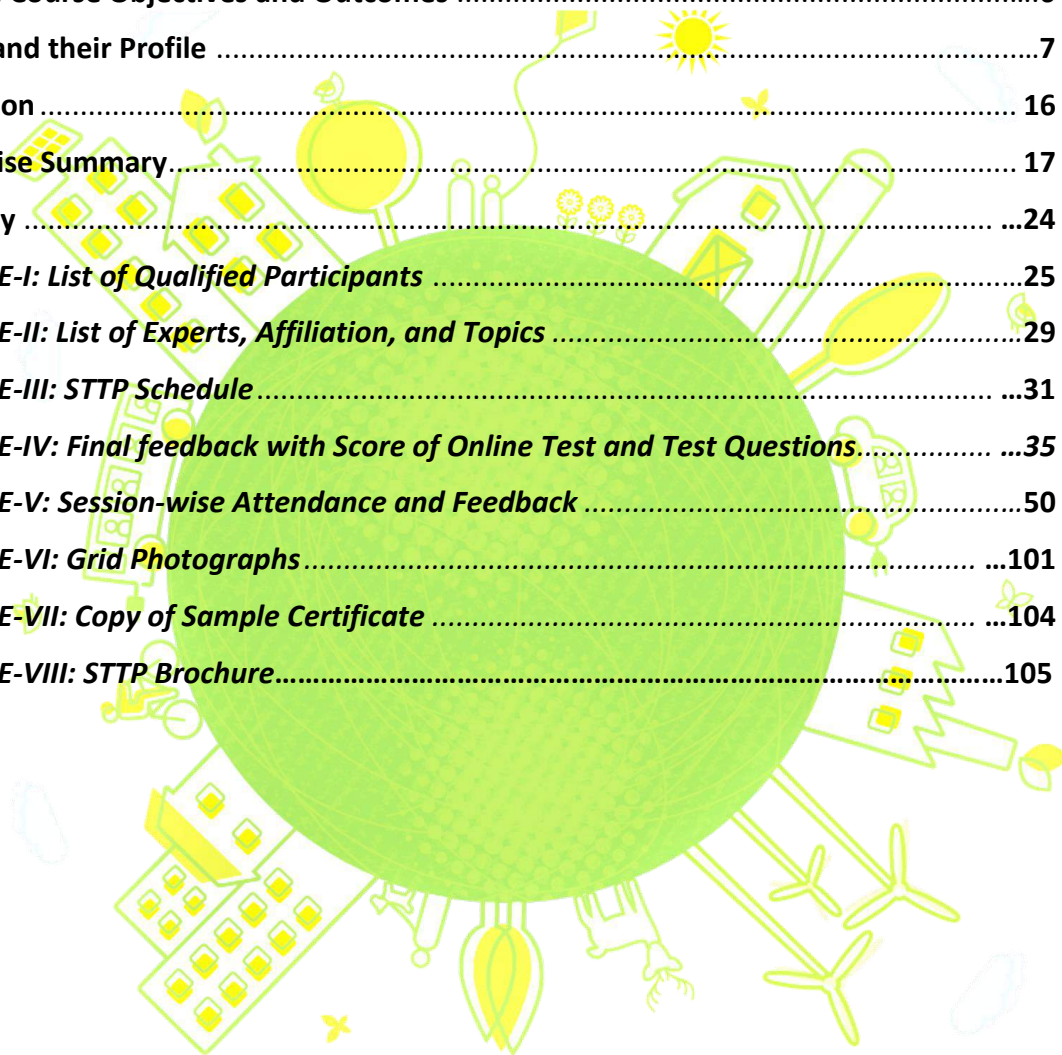
Vivekanand Education Society's Institute of Technology

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FOREWORD



I am very much delighted to know that our departments of Computers, Information Technology and Master of Computer Applications in association with Electronics and Telecommunications Department are arranging an AICTE sponsored Faculty Development Program on “Green Internet of Things”. As all of you know, IOT has the potential to revolutionize the world, similar to what internet did earlier. It can be considered as a facilitator of ‘smart world’ which connects devices with unique addresses to interact with each other and with outside world. i.e. It enables physical objects to see, hear, think and perform jobs by having them talk to each other, to share information and co-ordinate decisions. The applications are of mainly three kinds, IOT for Consumers, IOT for Enterprises and IOT for process industries (IIOT). Alexa, Wearable device used by miners, and Smart grid falls under these categories respectively. Green IOT targets ‘sustainable smart world’ by reducing energy consumption of the IOT devices and processes. It envisages the practice of designing, manufacturing, using, and disposing of computers, servers, and associated sub systems, and networking and communications systems efficiently and effectively with minimal or no impact on the environment.

I am very happy to note that the technical experts from companies, such as, Siemens, Meta Cube, Tetcos and researchers from academia are sharing their expertise in this workshop. Hope that the participants of this workshop will make full use of this golden opportunity, and initiate IOT related projects in their respective educational institutions leading to tangible research in this interdisciplinary, emerging area.

Dr. (Mrs) J. M. Nair

PRINCIPAL, VESIT

PREFACE



The second phase of the AICTE sponsored online training program on *Green Internet of Things* has been organized by Department of Electronics and Telecommunication Engineering, in collaboration with departments of Computer Engineering, Information Technology, and Master Of Computer Applications, in association with IQAC and IIC, Vivekanand Education Society's Institute of Technology for enhancing skills of faculties and scholars of engineering colleges in the domain of IoT and its initiatives towards green technology.

The buzzwords Internet of Things (IoT) is a system of interconnected devices or sensors over internet that is growing exponentially due to demand of smart consumer appliances, wearable devices, smart home, industrial devices, cloud services and many. This has opened up new challenges and research majorly in managing the energy resources for IoT, and energy efficiency by various means.

'*Green IoT*' is the initiative and concept motivated by achieving a low power consumption IoT. Green IoT is possible by using Ultra low power consumption hardware, Software algorithms and protocols to minimize power consumption, Using unconventional energy resources, Smart grids, Designing IoT itself for minimizing power consumption and many.

The STTP would provide various concepts, theory, and practical demonstrations on IoT, and Green initiatives to IoT.

The eminent speakers and practitioners from academia and industries are conducting the sessions and demonstrations to motivate the participants to undertake interesting and innovative ideas. The program helps to explore research avenues in the domain of IoT and Green IoT through the effective discussion during the training.

Short Term Training Program on 'Green Internet of Things'

We express profound sense of gratitude towards AICTE for Sponsoring Training Program on Green Internet of Things and also giving the opportunity to conduct it online due to COVID crisis.

We are grateful to AICTE, New Delhi and dignitaries from AICTE for the funding the STTP and guidance received. Special thanks to the experts invited for the sessions, Dr. J. M. Nair Principal, VESIT, Dr. M. Vijayalakshmi, Vice Principal VESIT, Prof. Shoba Krishnan Head Elect and Telecom Dept, Dr. Nupur Giri, Head, Computer Engineering Dept, Dr. Shalu Chopda, Head, Information Technology Dept, Dr. Shivkumar Goyal, Program Evaluation Committee members, the STTP team and participants from all over the country.

I am confident that the knowledge gained herein and the practical experiences learnt will be invaluable in the life long learning.

Dr Nadir Charniya

Course Coordinator

Prof. Electronics and Telecom, VESIT

PROGRAM COMMITTEE

Patrons:

Shri B. L. Boolani, President, VES Trust

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Prof. Shoba Krishnan, Head, Electronics and Telecom Dept

Dr. Nupur Giri, Head, Computer Engineering Dept

Dr. Shalu Chopra, Head, Information Technology Dept

Dr. Shivkumar Goel, Head, Master of Computer Application Dept

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Dr. Nadir Charniya, STTP Coordinator (Member Secretary)

Prof. Shoba Krishnan, Head Electronics and Telecom Dept (Member)

Dr. P. P. Vaidya, Dean R & D and Head, Instrumentation Engineering Dept (Member)

Prof. Kavita Tewari, Head, Electronics Dept (Member)

Dr. Ramesh Kulkarni, Deputy Head Electronics and Telecom Dept (Member)

Course Coordinator:

Dr. Nadir Charniya, Professor, Electronics and Telecom Dept

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Ms. Sukanya Roychowdhury, Information. Technology Dept

Mrs Meenakshi Garg, Dept of Master of Computer Applications

Mr Sunny Nahar, Dept of Master of Computer Applications

Mrs Vaishali Gatty, Dept of Master of Computer Applications

Mr. Prashant Kanade, Computer Engineering Dept

GREEN IoT

Course Objectives:

1. Acquainting participants with the technology of Internet of things (IoT) and exposure to recent trends in IoT.
2. Introducing and exploring the technologies supporting Green IoT
3. Exposure to security and privacy in IoT and Green initiative.
4. Demonstrating Hardware and Software platforms and tools for IoT.
5. Providing exposure and demonstration on IoT applications and Artificial Intelligence (AI) based predictive analytics using IoT.

Course Outcomes:

On completion of the course participants will be expected to:

1. Have good understanding of IoT Technology, emerging trends in IoT and various concept and features of Green IoT technology.
2. Comprehend and apply different hardware and software tools used for implementation of IoT.
3. Have good understanding of cloud platform for IoT, security and privacy in IoT, and Green initiatives towards IoT.
4. Apply predictive data analytics with the fusion of AI and IoT using Cloud and programming in python.
5. Develop IoT applications with the aid of IoT tools and AI tools.

SPEAKERS AND THEIR PROFILE

Mr. Vipin Jain (Sr. Delivery Manager, Metacube Softwares, Jaipur, India)



Mr Vipin Jain, Sr. Delivery Manager for Metacube Softwares, Jaipur India, has proven experience in refining processes for smoother deliveries across the globe. Internet of Things is his major area of interest. He loves to provide the solutions to the challenges associated in real life problems and has published 4 papers research papers. He has presented 4 papers in Spain, Vienna Austria and Prague Czech Republic on various IoT related topics. He is engaged in delivering talks on IoT since Year 2012 and has delivered a talks across Europe. He participated in key conferences namely Testing United 2020 and 2019, QA & Test, Bilbao Spain in 2020, 2018, 2016 and 2012, ExpoQA Madrid 2015, TestingCup Poland 2017, Belgrade Testing Conference 2018, Poznan Meetups like PTaQ and WrotQA in 2017 and 2018.

Dr. Anubha Jain (Associate Professor and Head, Department of Computer Science & IT, IIS (deemed to be University), Jaipur, India)



Dr. Anubha Jain, is serving as an Associate Professor and Head, Department of Computer Science & IT, IIS (deemed to be University), located in Jaipur, India. As an academician for the last 20 years, she has actively contributed in teaching, industry and R&D. Knowing that

teaching is the best form of giving knowledge back to society, she has been involved in teaching and mentoring several students in the field of Computer Science.

She was awarded her PhD in the field of 'Information Retrieval and Information Architecture'. Her research interests include Soft Computing, Computational Studies, and Software Engineering. She is the author of nine books, and has published a number of papers at national as well as international level. She is a reviewer for many journals and leading book houses. Also, she is associated with different academic bodies in diverse capacities including being the Convener of the Board of Studies, Member of Academic Council, Curriculum Committees, etc. She was invited as a speaker to present her paper on "Internet of Things – Testing the Experience" in QA & Test, Bilbao, Spain in 2015, and "Searching Lost QA in DevOps World" in QA & Test, Bilbao, Spain in 2018.

Dr. Anjali Yeole (Asst. Professor, V.E.S. Institute of Technology, Mumbai)



Dr. Anjali Yeole is currently serving as an Assistant Professor, in Vivekanand Education Society's Institute of Technology, Mumbai University, Mumbai, India. She has been awarded Ph.D in Technology from University of Mumbai, Mumbai in 2019. She has published various research papers in international journals and international conferences including IEEE, ACM , Springer and peer reviewed journals. She co-authored two books on "Information Management" and "Internet of Everything". She has reviewed many papers for conferences and journals. She has reviewed two books " Computer Organization and Architecture" and "Internet of Things" by Shriram K. Vasudevan, Abhishek S. Nagarajan, and R. M. D. Sundaram". She is a Staredu certified IoT trainer. She has completed Microsoft Certification for "Cryptography and System Security". Her areas of interest are IoT, Distributed Computing, Cloud Computing, System Security and Web Technology. She has also delivered talks and

conducted workshops, seminars on her areas of interest. She has patented innovative idea for her research work.

Dr. Sachin Patil (Asst. Professor, College of Engineering Pune)



Dr. Sachin D. Patil is serving as Assistant Professor, Department of Computer Engineering, College of Engineering Pune. He has received his Bachelor's degree in Information Technology from Government College of Engineering, Karad, and the Master's Degree in Computer Science and Engineering from VJTI, Mumbai. He is Ph.D from the Department of Computer Science and Engineering at National Institute of Technology Karnataka (NITK), Surathkal, India. His problem statement for PhD was "Mitigating the Bufferbloat problem to reduce the Internet transport latency". His areas of interest include Active Queue Management and Network Performance Analysis, and IoT.

He has total teaching experience of 4 years from the institutes WCE, Sangli, ADCET, Ashta, and COEP, Pune. He is a reviewer for IEEE Communication Letters, IET Electronics Letters and, several IEEE conferences. He has given several talks on ns-2, ns-3, IoT, and setting up a real-time testbed. Dr. Sachin is also a contributor to the Linux kernel and his codes are merged into the Linux kernel version 5.1 and 5.6. His research works are published in several renowned journals and conferences like Computer Communications journal of Elsevier, IET Networks, and IEEE conferences on LCN and ANTS.

Mr. Suraj Khandare (Asst. Professor, Fr. C. Rodrigues Institute of Technology, Navi Mumbai)



Mr Suraj Khandare is serving as Assistant Professor in Fr. C.Rodrigues Institute of Technology, Vashi for last 10 years. He holds M. Tech in Computer Engineering from VJTI Mumbai. He has taught subjects like Structured Programming Approach, Automata Theory, and Microcontrollers & Embedded systems. He has mentored many projects in the field of IoT. He is a volunteer with art of living and has been practising meditation from last 6 years.

Mr. Bhupendra Bhate (Retd. Chief Innovation Officer, L&T Technology Services Ltd, Mumbai)



Mr. Bhupendra Bhate is a business leader with a very good blend of business acumen and in-depth understanding of cutting-edge technologies. He has over 35+ years of international exposure and experience in Engineering, Product Development and software space within Industrial Products, Medical, Aerospace, Automotive, and Consumer Electronics etc. He has expertise in formulating strategies and translating it into actionable goals for top line and bottom line growth.

His last job at L&T Technology Services Ltd (LTTS) was Chief Innovation Officer. In this role, he was keenly involved in harnessing new technologies and commercially exploiting the same to provide innovative and intellectual property-based solutions to its customers and thereby creating values for his organization.

Prior to this, Mr. Bhupendra was Chief Operating Officer and Whole Time Board Member of L&T Technology Services. In this role, Mr. Bhupendra managed various business units with P&L responsibilities, providing strategic guidance, facilitating aggressive growth, ensuring operational excellence & high-quality deliverables, and incubating new businesses.

Other positions held by Mr. Bhupendra includes Chief Digital Officer, Chief Delivery Officer and Chief of Operations. Starting his career with Godrej & Boyce, Mr. Bhupendra worked as General Manager with Atos Origin and moved on to Head a Startup company - SoftDEL Systems Ltd. as President & COO. From December 2003, he has been with L&T.

Mr. Prashant Kanade (Asst. Professor, V.E.S Institute of Technology, Mumbai)



Mr. Prashant Kanade is serving as Asst. Professor, V.E.S Institute of Technology, Chembur, Mumbai (VESIT) for last 17 years. He is M.E. Computer Engineering, from University of Mumbai, MBA HRD, YCMOU, Nasik, B Tech Computer Engineering, Dr BATU, Lonere, and also holds diploma in Cyber Laws. He is involved in various student and staff activities at VESIT. He has participated actively in various Cultural activities in VESIT. He is influenced by various projects that have Technology for Societal Transformation. He has worked as an instructor for the VESIT Robotics Team. Mr. Prashant has published more than 20 Papers in Various National and International Conferences and Journals. His areas of interest are Human Machine Interface, Artificial Intelligence, Robotics and Web Engineering, and ICT in

Governance. Currently, he is pursuing Ph.D. in Computer Engineering, in the domain of Electronic Health Records.

Dr. Vishnu Murthy (Asst. Professor, Vellore Institute of Technology, Vellore)



Dr. Vishnu, is serving at Vellore Institute of Technology (VIT), Vellore campus as a Senior Assistant Professor in the School of Computer Science and Engineering since July, 2019. Prior to that, he worked at various reputed institutions like National Institute of Technology Karnataka (NITK), Surathkal, GITAM University, Anil Neerukonda Institute of Technology and Sciences, Gudlavalleru Engineering College. He has five years research experience in the institute of NITK. He finished his Ph.D. from NITK Surathkal under the guidance of Dr. Shashidhar G. Koolagudi, Associate Professor, NITK Surathkal.

He has published many papers during his professional career, and all are indexed by Scopus. Around 10 journals and 20 conference articles have been published since 2011 out of which, he has one ACM computing surveys article with an impact factor of 16 in Research gate and SCI indexed. ACM computing surveys is ranked A* among all the computer science journals based on Wikipedia surveys. In addition, he has one article in Elsevier Expert Systems with an impact factor of 4.59 (SCI indexed), and three springer journals with an average impact factor of 1.19. All the 20 conferences are Scopus indexed and some are 28th, 36th, 29th, 25th in series and IEEE flagship conferences.

He recently finished one project with Samsung in the field of voice translation and one is in progress. He has given around 15 guest lectures on Internet of Things, Speech Processing and its Applications, Machine Learning, Deep Learning, and Dimensionality Reduction Techniques. He received best teacher award for his excellence in teaching and chosen this profession with passion and working dedicatedly towards it.

Mr. Vishal Bhat (Application Engineer, TETCOS LLP, Bengaluru)



Mr. Vishal Bhat is presently working as an Application Engineer at TETCOS LLP, Bangalore and has more than four years of experience in the field of computer networks. He completed his B. Tech. in Computer Science at NMAMIT, NITTE Karnataka. At NMAMIT, he was amongst the top performers in his class and he won the prestigious best project award for his networking project. His area of expertise is Mobile Ad-hoc Networks, LTE Networks and the Internet of Things. He has worked on several modelling, simulation and programming projects in these domains using NetSim software.

Mr. Nithin Ravi (Application Engineer, TETCOS LLP, Bengaluru)



Mr. Nithin Ravi is an Application Engineer with around three years of experience in computer networks and wireless communication. He worked on protocol testing, network modelling, and performance analysis. He possess knowledge and experience in providing technical support to

customers in solving issues on and off the field. Also, he conducted more than 20 training programs for several universities in these domains across India and SE Asia.

Dr. Ajay Kumar Godara (Professor, NITTR Chandigarh, Member of NITI Aayog)



Dr. Ajay Kumar Godara is Professor at National Institute of Technical Teachers Training and Research (NITTR), Chandigarh. He is founder and director of Enovate Skill (a NITTR Chandigarh Startup Initiative). He is Innovator & Mentor of Change, NITI Ayog, Govt of India.

He has expertise in Area of Robotics, Internet of Things and AI. He has developed many innovative products & has patents in the renewable energy domain. He has delivered more than 100 expert talks in national and international Faculty Development Programmes. He has trained more than 20 thousand students. He has a lot of content live on the internet to motivate young innovators.

Mr. Sushil Bedre (Senior Architect and consultant, Siemens Softwares, Pvt. Ltd)



Mr. Sushil has completed his Masters in Computer Applications from Aurangabad in 2004 and has 16 Years of professional experience in software with multinationals in various domains like Shipping/Media/PLM/Industry Automation etc. Presently working as Senior Architect and

consultant with Siemens Industry Softwares Ind. Pvt. Ltd. And working in the domain of Industry Automation, ML/AI/Imaging/PLM technologies. He is pursuing his research in cognitive science with Dr. BAMU Aurangabad in Cognitive Science. He has 3 publications in national and international conferences and 5 Patents with Indian Patents.

Dr. Abhay Kshirsagar (Associate Professor, V.E.S. Institute of Technology, Mumbai)



Dr. Abhay Kshirsagar is serving as Associate Professor in Dept. of Electronics Engineering, V. E. S. Institute of Technology (VESIT), Chembur, Mumbai. He has more than 21 years of teaching and industry experience. He completed B.E Electronics, Nagpur University in 1996, M.E Electrical (Microprocessor System Design), M. S. University, Baroda. He is Ph.D in Electronics Engineering, Nagpur University. He has executed many projects in V.E.S Institute of Technology and is actively involved in Student and Faculty engagement programs. He was Chief Instructor of VESIT Robotics Team that represented India at Asia Pacific Level in Seoul South Korea in the year 2004. He was also a major adviser for Elecrama student project competitions in 2004, 2006, 2008. His interests are WSN, IOT, Embedded Systems, Robotics and recent trends in Electronics. Last but not the least he is an active sports person and he is an excellent cricket player.

INAUGURATION

The inauguration of Short-Term Training Program (STTP) on 'Green IoT' was scheduled on 23rd November 2020. Ms. Sukanya Roychawdhury Asst. Prof. Information Technology Dept. was the MOC of the function. The function has started in presence of dignitaries and participants with lighting the digital lamp in front of Maa Saraswathi.

Guest and dignitaries list for the inauguration function included keynote speaker Mr. Vipin Jain, Sr. Delivery Manager, Metacube Software, Jaipur, Rajasthan, Dr. (Mrs.) J. M. Nair, Principal (VESIT), Dr. (Mrs) M. Vijayalakshmi, Vice Principal (VESIT), Prof. Shoba Krishnan (Head, Electronics and Telecom Dept., VESIT), Dr. Nupur Giri (Head, Computer Engineering Dept), Dr. Shalu Chopra (Head, Information Technology Dept), Dr. Shivkumar Goel (Head, Master of Computer Applications Dept), PEC members, and the participant.

Dr. Nadir Charniya, Course Coordinator gave the course overview. He mentioned that the STTP was organized by Department of Electronics and Telecommunication Engineering, in collaboration with departments of Computer Engineering, Information Technology, and Master of Computer Applications for enhancing skills of faculties and scholars of engineering colleges in the domain of IoT and its initiatives towards green technology. The IQAC and IIC, VESIT was also associated with the STTP. Dr. Charniya expressed his gratitude towards AICTE for sponsoring the STTP and allowing to conduct it online due to COVID crisis. He greeted and thanked the dignitaries and participants for their gracious presence. He mentioned that about 85 PAN India participants from Tamilnadu, Andhra Pradesh, Telangana, Karnataka, Gujarat, Goa, UP, MP, Tripura etc. were shortlisted from over 150 registered participants.

Dr. (Mrs) M. Vijayalakshmi, Vice Principal (VESIT), addressed the gathering with her words of guidance mentioning the importance of IoT technology which is the technology of today and is going to remain as technology of tomorrow too. The function reached a successful end with a vote of thanks.

SESSION-WISE SUMMARY (Day 1 to Day 6)

Day-1, 23rd November 2020

Day-1 started with the keynote address by Mr.Vipin Jain, Sr. Delivery Manager for Metacube Softwares, Jaipur India. He gave an insight to the basics of IoT and how Industry and academics go hand in hand. He spoke how mobile technology has emerged from nowhere to everywhere. He spoke on topics namely, Future of IOT, Carbon footprint, Revolution in IOT, Green IOT movement.

Followed by the Keynote address, the next session was conducted by Dr.Anubha Jain. Dr. Anubha Jain, Associate Professor and Head (CS & IT), IIS (deemed to be University), Jaipur delivered her talk on IoT Basics and Green IoT. She started with the revolution the Internet that has brought drastic change in our lives since its development, ranging from dial up connections to mobile net to Internet of Things. Her talk covered the key concepts and terminologies of IoT, and its applications in day-to-day lives. She also threw light on how different industries are getting benefited by IoT, with the help of interesting examples. Then, the challenges and future of IoT due to energy consumption and Carbon emission of connected devices was discussed which have resulted in research domains in Green IoT. The solutions for Green IoT were also discussed. Another pre-lunch session was conducted by Dr.Sharvari Tamane, Professor and Head of Dept. of Information Technology, Jawaharlal Nehru Engineering College, MGM University, Aurangabad, delivered a webinar on 'IoT and its Applications'. She focused more on Enabling Technologies for IoT, Working on IoT, IoT Application Development, possible Applications of IoT in our everyday lives, Challenges, Barriers and Future of IoT. She explained how IoT is an essential platform where embedded devices are connected to the internet, to collect and exchange data with each other. She stressed on the fact that the IoT provides a platform that creates opportunities for people to connect these devices and support them with the advantages of Big Data technology. This will promote efficiency in performance, economic benefits and minimize the need for human involvement.

Post lunch sessions were conducted by Dr.Sachin Patil and Dr.Anjali Yeole. Dr.Sachin Patil began his talk with IoT fundamentals and standards. He threw light on how IoT systems and

applications are designed to provide security, Integrity, safety, trust, dependability and transparency. He spoke about IETF group, roll, LoWPAN, Header Compression, HLIM, NDP optimization, RFC (6550), RPL identifiers. He concluded his talk with MQTT. Dr. Anjali Yeole elaborated the security aspect of IoT in the first half of the talk. She discussed how IoT security has become the subject of scrutiny after a number of high-profile incidents where a common IoT device was used to penetrate and attack the larger network. Implementing security measures is critical to ensuring the safety of networks with IoT devices connected to them. The second half of the talk was on a Cooja simulator to implement and test proposed security protocols, algorithms etc followed by demo.

Day-2, 24th November 2020

Day-2 pre-lunch sessions were conducted by Dr. Anubha Jain and Prof. Suraj Khandare. Dr. Anubha Jain, Associate Professor and Head (CS & IT), IIS (deemed to be University), Jaipur delivered her talk on 'Testing of IoT across different industries'. She took a used case example to throw light on how the IoT model has created a dynamic user experience. She emphasized on the significance of thorough testing of IoT devices, covering the complexities involved due to real time tracking and the amount of data being generated. Further, she covered the common strategies involved in testing IoT devices, different ways in which testing should be done at various layers of IoT.

Prof. Suraj Khandare discussed that for solving real world problems there are many methodologies and many programming languages available. One such language which is not very popular is Lustre Programming. This language is used in safety critical applications like aeroplanes, nuclear reactors and many more. If safety is not taken into consideration it can cause disasters like Chernobyl. The concepts of Lustre Programming language were discussed.

Post lunch session was handled by Mr. Bhupendra Bhate and Mr. Prashant Kanade.

Mr. Bhupendra Bhate founding member and CEO of Saintiant Technologies – a company in the space of cutting-edge technology products in the area of medical, industrial and consumer appliances. Mr. Bhupendra focused on various aspects of IoT innovations in the Medical and Agricultural field. He threw light on how the IoT technology has realized smart wearables, connected devices, automated machines, and driverless cars. However, in agriculture, the IoT

has brought the greatest impact. Recent statistics reveal that the global population is about to reach 9.6 billion by 2050. To feed the massive population, the agriculture industry is bound to adopt the Internet of Things. Amongst the challenges like extreme weather conditions, climatic changes, environmental impact, IoT is eradicating these challenges and helping us to meet the demand for more food. After this an interactive session was conducted by Mr. Prashant Kanade, VESIT. In this session all the participants were involved by having a group discussion on emerging areas where IOT is effectively adopted. The session was really interactive and participants took an active part in discussion.

Day-3, 25th November 2020

The speaker for day-3 was Dr. Vishnu Murthy, Asst. Professor, Vellore Institute of Technology, Vellore. He started his session with the basics of IOT and its applications. He further explained Arduino and it's interfacing with sensors, Bluetooth device HC-05 for wireless communication and Bluetooth-enabled devices. He spoke about how Arduino helps in sensing the environment by receiving inputs from add-on devices such as sensors, and can control the world around it by adjusting lights, motors, and other actuators. He also threw light on how and when to use the different types of sensors and how to connect them to the Arduino. Since the external world uses continuous or analog signals and the hardware is digital, signal conversions back-and-forth using programming was discussed. He also gave insight to the use of Arduino-specific shields and the shields software libraries to interface with the real world. He also demonstrated ESP8266 WiFi Module Interfacing with Arduino UNO. It includes the following features:

- Processor: L106 32-bit RISC microprocessor
- Memory:
 - 32 KiB instruction RAM
 - 32 KiB instruction cache RAM
 - 80 KiB user-data RAM
 - 16 KiB ETS system-data RAM
- External QSPI flash: up to 16 MiB is supported (512 KiB to 4 MiB typically included)

He also took hands-on sessions on programming and interfacing of Ultrasonic Sensors, DTH11 Sensors and Motors etc.

Day-4, 26th November 2020

Day-4 speaker were Mr. Nithin Ravi and Mr. Mr. Vishal Bhat (Application Engineers, Tetcos LLP, Bengaluru). The pre-lunch session by Mr. Nithin was on NetSim tool which is an application based on IoT and other such protocols. Mr. Nithin Ravi started with IoT and its concepts and how it is concerned with greenhouse, for which most of the devices are moving towards Green IoT and its initiatives. He mentioned that world is now focused on Industry 4.0, Smart Cities and many more. He further introduced NetSim v12.2. The discussion gave insight to one of the modules in NetSim which is basically for IoT. He also discussed its relation with RPL, 6LoWPAN Gateway for Low power Wireless Personal Networks, which deals with sensors and their communication with the Internet. Demo was also given on RPL protocol for IoT. Various examples on network technology with simulation those are used for research areas in the recent trends were elaborated. NetSim and its configuration setup were discussed using modeling and simulation. Further, a tour was taken on IoT Simulation in with OSI reference model and LowPAN gateway working (IoT-WSN Model, RPL Model). Coding for one of the applications on 'Wireless body Area Network' with Visual Studio, Packet Capture using Wireshark demonstrated.

Post lunch session was conducted by Mr. Vishal Bhat (Application Engineer, Tetcos LLP, Bengaluru). In this session the participants learned about how LEACH can be used in WSN with static clustering. Implementations using NetSim to perform dynamic clustering with matlab extension of 3D graphs were demonstrated.

Different types of attacks like IDS and SINK HOLE were witnessed using NetSim based demos. This topic was totally relevant to GIOT as it relates greatly to energy saving techniques wherever wireless sensors are used in IoT with the aid static and dynamic clustering. Grid view and map view feature were shown during the simulations.

These were really beneficial session for researchers who are beginners and who are also interested in IoT as their research topic. Thus day-4 was more of demonstration and the entire day was conducted by the experts from Tetcos LLP.

Day-5, 27th November 2020

Dr. Ajay Godhara, Professor, NITTR, Chandigarh conducted both prelunch and postlunch session with more practical aspects of IoT, network simulation and smart applications using IoT. IoT programming basics as well as some real-time applications were also covered based on programming of Arduino and Raspberry-Pi. Applying IoT to monitor Covid-19 Patients was also discussed.

His talk initially was more focused on industrial revolutions that happened in the past. He gave insight into how sensors and actuators are integral part of our digital world. Sensors are often used to measure asset temperature, vibration, pressure or fluid levels. Industrial applications of actuators include operating dampers, valves, and couplings; there are many uses for both actuators and sensors in the industrial fields. They both help critical assets work more effectively and efficiently, helping to reduce downtime and improve productivity

He further explained Arduino - is an open-source hardware and software platform with project and user community that designs and manufactures single-board microcontrollers and microcontroller kits for building digital devices. Its hardware products are licensed under a CC-BY-SA license, while software is licensed under the GNU Lesser General Public License (LGPL) or the GNU General Public License (GPL), permitting the manufacture of Arduino boards and software distribution by anyone. Arduino boards are available commercially from the official website or through authorized distributors.

Dr. Ajay Godhara has a YouTube channel where he has several demos on Arduino, Sensors, Raspberry pi, and many other applications which are useful for implementing Green IoT to support Smart Cities and Smart Applications.

With the help of IDE he also explained single board microcontroller and several examples based on it. Here, python is used for programming and many other event driven programming which writes code and makes things easy with respect to programming. For Python he added that it is a wonderful and powerful programming language that's easy to use (easy to read and write) and, with Raspberry Pi, lets you connect your project to the real world.

The demonstration on COVID-19 patients was very well taken by the participants. He used the board and made all the connections and also added sensors to it with respect to concept of social distancing demo. Thus day-5 was more on real life applications and demonstrations of real world problems as well.

Day-6, 28th November 2020

Day-6 began with a session by Mr. Vipin Jain, Sr. Delivery Manager, Metacube Software, Jaipur who has expertise and papers published on Network Security; specifically in device based security.

Security is a major concern as IoT has changed the overview through which all devices communicate. He made a point where we need to secure our devices then only our data can be more secure. This security aspect is everywhere whether it's Data, Device, Protocol, Network or any stuff. Nowadays a smart house makes it more vulnerable as it can pose more risk to our family as well. He mentioned that failure in IoT project is more vulnerable as compared non-IoT. He gave examples of banking sectors and how data is at risk. As, nowadays more of the features are on smartphones and data is stored on various locations and could be in use, one must be more vigilant and make all aspects more secure. Also, IoT based infrastructure is made available by various companies and they have different ways to handle security, which makes IoT more deadly when it comes to security of data.

The subsequent session was conducted by Mr. Sushil Bedre, Senior Architect and Consultant, Siemens Industry Software India Pvt. Ltd wherein he discussed live case studies on energy conservation and energy management using IoT. He also discussed water treatment and distribution centre in the state of Maharashtra state. A case study on 'Automated Pumping Station Management System', where he made an entire system with IoT with sensors used for data collected. Insight was also given the decision making further. Different sensors were used, such as, flow, water level, pressure, temperature, Chlorine, pH, Turbidity, etc. After this, Dr. Abhay Kshirsagar, Associate Professor, VESIT gave talk on 'IoT levels and WSN research Application'. He explained Wireless Sensor Network (WSN), which will improve the reliability of wireless links in health monitoring systems, providing reconfigurable features to all

intermediate nodes. Reconfigurable devices permit remote and runtime software reconfiguration, which implies benefits in WSNs deployment and maintainability and, finally, cost reduction

VALEDICTORY

The Phase-2 of STTP on 'Green IoT' was concluded on 28th November 2020 with Valedictory function. The function started in the presence of dignitaries and participants.

Ms. Vaishali Gatty, Asst. Prof. Dept of Master of Computer Applications was MOC for the function. Ms. Vinita Mishra, Technical Coordinator for the STTP from Information Technology Dept. summarized the deliberations, sessions and learnings during the STTP. Gratitude was expressed towards the experts from industry and academia who contributed with their experiences, hands-on and demonstrations during the STTP with the contents aligned with the objectives of the STTP.

The STTP received excellent feedback from the participants during the valedictory function. The participants who have addressed the gathering with the positive feedback for STTP were Mr. Devanand K. Bathe, K.J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai, Dr. Ramesh Solanki from VESIT, Mumbai, Er. Manoj S. Kavedia Thadomal Shahani Engineering College, Bandra, Dr. Gnanajeyaraman Rajaram SBM College of Engineering and Technology, Tamilnadu and Mrs..Sandhya Deshpande from K.J. Somaiya Institute of Technology. Sion. Participants shared their extraordinary learning experience during the STTP.

Dr. Shiv Kumar Goel, Head, Master of Computer Applications Dept., VESIT addressed the participants with the importance of Green IoT. He motivated the participants and expressed his desire from the participants to train their students with this technology and contribute to the green practices.

Valedictory function was signed-off with the Vote of Thanks by Technical Coordinator, Mr. Prashant Kanade, Asst. Prof. Dept. of Computer Engineering, VESIT.

An overall online feedback was taken and final quiz based on the 6-day sessions of the STTP was also conducted. The regular attendance of the participants and passing in the quiz was compulsory to become eligible for AICTE STTP certification.

Immense efforts were made by the technical committee and various teams of the STTP. All the sessions were conducted at the scheduled time seamlessly without any unnecessary delay in the sessions.

ANNEXURE-I

List of Qualified Participants

S.no	Full Name	Designation	Department	Institute/Industry and place	State
1	Rasika G Patil	Assistant Professor	MCA	B.V. Institute of Technology, Navi Mumbai	Maharashtra
2	Nazahat Balur	Assistant Professor	Electronic and Tel engineering	Rajiv Gandhi Institute of Technology, Mumbai	Maharashtra
3	B Karthika	Asst. Professor	Information Technology	PSNA college of Engineering and technology, Dindigul	Tamilnadu
4	R.Saravanan	Assistant Professor	Electronics and Comm	PSNA College of Engineering and Technology, Dindigul	Tamilnadu
5	Gnanajeyaraman Rajaram	Professor	Computer Engineering	SBM College of Engineering and Technology, Dindigul	Tamilnadu
6	Monali V. Rajput	Assistant Professor	MCA	VESIT, Chembur, Mumbai	Maharashtra
7	Manju Ahuja	Assistant professor	MCA	Vivekanand education society's institute of technology, Mumbai	Maharashtra
8	Er. Manoj S. Kavedia	Assistant Professor	Electronics and Telecom	Thadomal Shahani Engineering College, Bandra	Maharashtra
9	Vaishali Gatty	Assistant professor	MCA	Vivekanand education society's institute of technology, Chembur	Maharashtra
10	E.Thangaselvi	Asso Prof.	Electronics	Hindustan College, Coimbatore	Tamilnadu
11	Rekha Chouhan	Assistant Professor	Master of Computer Applications	Pratibha Institute of Business Management, Pune	Maharashtra
12	Suthahar R P	Assistant Professor	Information Technology	Sri Sai Ram Institute of Techmilogy, Chennai	Tamil Nadu
13	P.Malathy	Assistant Professor	Electrical and Electronics Engineering	PSNA College of Engineering and Technology, Dindigu	Tamil Nadu
14	Sushma Jaiswal	Assistant Professor	CS and IT	Guru Ghasidas IT, Bilaspur	Chhatisgarh

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15	Tarun Jaiswal	Research Scholar	NIT Research Center	National Institutes of Technology, Raipur	Chhatisgarh
16	Rahul Tiwari	Assistant Professor	Electronics and Comm	Medi-Caps University, Indore	Madhya Pradesh
17	Harshali P. Patil	Assistant Professor	MCA	MITWPU School of Management, Pune	Maharashtra
18	Sandhya Deshpande	Asst. Professor.	Electronic and Tel engineering	KJSIE Inst of Tech, SION, MUMBAI	Maharashtra
19	Manish Bhelande	Asst. Professor	Information Technology	Shah and Anchor Engg and Tech, Mumbai	Maharashtra
20	Nithya Jayakumar	Professor	Information Technology	K.S.Rangasamy College of Technology	Tamilnadu
21	Meena Talele	Lecturer	Computer	VES Polytechnic, Mumbai	Maharashtra
22	Madhuri Ghuge	Assistant Professor	Computer Engineering	Bharati vidyapeeth college of engineering, Mumbai	Maharashtra
23	Sharon Christa I L	Assistant Professor	Computer Science and Engineering	R V Institute of Technology and Management, Bangaluru	Karnataka
24	Devanand K. Bathe	Assistant Professor	Electronics Engineering	K.J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai	Maharashtra
25	Torana Kamble	Assistant professor	Computer engineering	Bharati Vidyapeeth college of engineering, Navi Mumbai	Maharashtra
26	Dr.Ramesh k Solanki	Assistant professor	MCA	Vivekanand education society's institute of technology, Chembur	Maharashtra
27	Diptee S. Patil	Assistant Professor	Instrumentation Engineering	Ramrao Adik Institute of Technology, Navi Mumbai	Maharashtra
28	Vijesh Mundokalam	Assistant Professor	Computer Engineering	Gharda Institute of Technology, Ratnagiri	Maharashtra
29	Bhawana Sahebrao Dakhare	Assistant Professor	Information Technology	Bharati Vidyapeeth College of Engineering Navi Mumbai	Maharashtra
30	Prabhu R	Assistant Professor	Comp Sci Engg	Hindustan Inst of Tech Coimbatore	Tamilnadu
31	Raghvendra Singh	Assistant Professor	Computer Engineering	G.M.Vedak Inst of Tech Tala, Raigad	Maharashtra
32	Sathiyapriya T	Assistant Professor	Electronics and Communication Engineering	Dr.Mahalingam CoET Technology, Coimbatore	Tamilnadu

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33	Vishakha K Gaikwad	Assistant Professor	Electronics and Telecom	Ramrao Adik Institute of Technology, Navi Mumbai	Maharashtra
34	Sujata Bhairnallykar	Assistant professor	Computer Engineering	Saraswati College of Engineering, Mumbai	Maharashtra
35	Darshan B D	Assistant Professor	Electronics and Communication Engineering	SJB Inst of Tech, Bengaluru	Karnataka
36	Priya B Pandharbale	Assistant Professor	Information Technology	Bharati Vidyapeeth College of Engineering, Mumbai	Maharashtra
37	Shreya Kurne	Assistant Professor	Electronics and Telecom Engineering	Don Bosco Inst Goa	Goa
38	Kancha Ganesh Dhuri	Assistant Professor	Information Technology	Vidyalankar Inst of Technology, Mumbai	Maharashtra
39	Harsh N Bhor	Assistant Professor	Information Technology	KJSIE Inst of Tech, SION, MUMBAI	Maharashtra
40	ASIF RAJA M	Assistant Professor	Computer Science and Engineering	Jansons Institute Of Technology, Coimbatore	Tamilnadu
41	Geetabala S Lendhare	Asst. Professor	Department of management studies	Smt. Kashibai Navale. C.O Engineering, Pune	Maharashtra
42	Shilpa M. Satre	Asst. Professor	Information Technology	Bharati Vidyapeeth College of Engineering, Mumbai	Maharashtra
43	Ameya Parkar	Asst. Professor	MCA	VES institute of technology, Mumbai	Maharashtra
44	Sanjay kumar Vanjirao Sonar	Asst. Professor	Electronics and Telecommunications	Konkan Gyanpeeth college of Engineering ,Karjat	Maharashtra
45	Mona Deshmukh	Asst. Professor	MCA	Vivekanand education society's institute of technology, Chembur	M. aharashtra
46	Anita D. Mhatre	Asst. Professor	Information Technology	Datta Meghe College of Engineering, Mumbai	Maharashtra
47	Sarika Atul Patil	Asst. Professor	Electronics and Telecommunication	Dr.D.Y.Patil Institute of Technology, Pimpri, Pune	Maharashtra
48	Shyamala M	Asst. Professor	Information Technology	Rathinam Technical Campus, Coimbatote	Tamilnadu
49	Swati Jha	Professor	Electronics and Telecommunications Engineering	Bharati Vidyapeeth College of Engineering, Navi Mumbai	Maharashtra
50	H. M. Gaikwad	Sr. Lecturer	Computer Tech	K. K. Wagh Polytechnic, Nashik	Maharashtra

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51	Nahar Sunny Suresh	Asst. Professor	MCA	Vivekanand education society's institute of technology, Mumbai	Maharashtra
52	Meenakshi Garg	Asst. Professor	MCA	VES institute of technology, Chembur	Maharashtra
53	R S M Lakshmi Patibandla	Asst.Professor	Electronics and Comm Engg	Manakula Vinayagar Institute of Tech. Puducherry	Tamilnadu
54	Ramassamy Elangovan	Asst.Professor	Electronics and Comm Engg	Manakula Vinayagar Institute of Tech. Puducherry	Tamilnadu
55	Megha Wankhade	Asst.Professor	MCA	NCRD'S Sterling Institute of Management studie, Nerul	Maharashtra
56	Ratan Rajan Srivastava	Assistant Professor	Computer Application	Shri Ramswaroop Memorial Group of Professional Colleges	Uttar Pradesh
57	Sivaraj M	Assistant Professor	Electronics and Comm Engg	Manakula Vinayagar Institute of Technology	Puducherry
58	Dashrath Bhagwan Kale	Lecturer	Computer	VES Polytechnic Mumbai	Maharashtra

Annexure – II

List of Experts, Affiliation, and Topics

S.no	Speakers	Topic covered
1	Mr. Vipin Jain Sr.Delivery Manager / Metacube software, Jaipur, Rajasthan	IoT, Applications and security
2	Mrs. Anubha Jain Associate Professor and head Dpt of CS & IT / IIS (deemed to be University),Jaipur, Rajasthan	IoT basics and Green IoT
3	Dr. Sharvari Tamhane Professor and Head ,Dept. of IT, Jawaharlal Nehru Engineering College, MGM University, Aurangabad, Maharashtra	IoT and IoT Applications
4	Dr Sachin Patil Assistant Professor / College of Engineering Pune (COEP), Pune	IoT Applications
5	Dr Anjali Yeole Assistant Professor, Computer Dept. VESIT, Mumbai, Maharashtra	Security and Privacy in IoT
6	Prof Suraj Khandare Assistant Professor / Fr. C.Rodrigues Institute of Technology, Vashi, Maharashtra	Lustre Programming for IoT
7	Dr Abhay Kshirsagar Associate Professor, Electronics Dept. VESIT, Mumbai, Maharashtra	WSN, IoT levels and Applications
8	Dr. Vishnu Shrinivasa Murthy Assit. Prof. School of CSE (SCOPE), Vellore Institute of Technology (VIT), Vellore, Tamil Nadu	Hands-on on IoT using bluetooth and Wifi etc

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9	Mr. Vishal Bhatt Application Engineer / Tetcos LLP	IoT using NetSIM
10	Mr. Nithin Ravi Application Engineer / Tetcos LLP	IoT using NetSIM
11	Dr. Ajay Godhra Professor /NITTR ,Chandigarh	Hands-on ESP, Arduino, WSN, and case studies.
12	Mr.Sushil Bedre Senior Architect and consultant / Siemens Industry Softwares Ind. Pvt. Ltd.	IoT opportunities and future possibilities
13	Mr Bhupendra Bhate, L and T InfoTech Mumbai	Industry innovation using IoT and Green initiatives.
14	Prashant Kanade Assistant Professor, Computer Dept. VESIT,Mumbai, Maharashtra	Interactive session on case applications of IoT

ANNEXURE-III

STTP Schedule

Date	Session Timings	Speakers	Topic
23/11/2020 (Day 1) Monday	10:00 am to 11:00 am	Mr. Vipin Jain	Inauguration and Keynote Address
	11:00 am to 12:00 am	Dr. Anubha Jain	Session 1: Basics of IOT and Green IOT
	12:00 am to 1:00pm	Dr. Sharvari Tamhane	Session 2: IOT and its applications
	1:00 pm to 2:00 pm	Break	
	2:00 pm to 3:30 pm	Dr Sachin Patil	Session 3: IOT Algorithms
	3:30 pm to 5:00 pm	Dr Anjali Yeole	Session 4: IOT Security aspects
	10:00 am to 11:30 am	Dr. Anubha Jain	Session 1: Testing IoT for Different Industries
	11:30 am to 1:00pm	Prof Suraj Khandare	Session 2: Introduction to lustre programming language

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24/11/2020 (Day 2) Tuesday			and discussion on few projects
	1:00 pm to 2:00 pm	Break	
	2:00 pm to 4:30 pm	Mr. Bhupendra Bhate	Session 3: Real Life Examples of IOT and Industry Innovation in IOT
	4:30 pm to 5:00 pm	Mr. Prashant Kanade	Session 4: Interactive session on applications of IoT
25/11/2020 (Day 3) Wednesday	10:00 am to 11:30 am	Dr. Vishnu Shrinivasa Murthy	Session 1: Introduction to Arduino and Interfacing with Sensors
	11:30 am to 1:00pm		Session 2: HC-05 Bluetooth and ESP8266 Wi-Fi Interfacing
	1:00 pm to 2:00 pm	Break	
	2:00 pm to 3:30 pm	Dr. Vishnu Shrinivasa Murthy	Session 3: HANDS ON Ultrasonic, DTH11 sensors and Motors
3:30 pm to 5:00 pm	Session 4: HANDS ON Bluetooth Interfacing and Wi-Fi Module Demonstration		
	10 :00am to 11:30 am	Mr. Vishal Bhatt	Session1: IOT using NETSIM

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26/11/2020 (Day4) Thursday	11:30 am to 1:00 pm	Mr. Vishal Bhatt	Session2: IOT using NETSIM
	1:00 pm to 2:00 pm	Break	
	2:00 pm to 3:30 pm	Mr. Nithin Ravi	Session3: IOT using NETSIM
	3:30 pm to 5:00 pm	Mr. Nithin Ravi	Session4: IOT using NETSIM
27/11/2020 (Day5) Friday	10:00 am to 11:30 am	Dr.Ajay Godhra	Session 1: Deployment of condition monitoring of machines using IOT (hands on session).
	11:30 am to 1:00 pm	Dr.Ajay Godhra	Session 2: Arduino and raspberry pi programming for IoT using simulation (hands on)
	1:00 pm to 2:00 pm	Break	
	2:00 pm to 3:30 pm	Dr.Ajay Godhra	Session 3: Wireless less sensor network simulation for smart city Session
	3:30 pm to 5:00 pm	Dr.Ajay Godara	Session 4: Building IOT based smart applications to monitor covid patient's

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28/11/2020 (Day6) Saturday	10:00 am to 11:30 am	Mr.Vipin Jain	Session1: Securing your devices to secure your data in IOT
	11:30 am to 1:00 pm	Mr.Sushil Bedre	Session 2: Application Areas in public domains. Case study with live demo of live public sector IOT solution,Opportunities and future possibilities
	1:00 pm to 2:00 pm	Break	
	2:00 pm to 3.10 pm	Dr. Abhay Kshirsagar	Session 3: IOT levels and WSN Research Application of IOT
	3:15 pm to 4:30 pm	Dr. Abhay Kshirsagar	Session 4: IOT levels and WSN Research Application of IOT
	4:30 pm to 5:00 pm		Valedictory Function

ANNEXURE-IV

Final feedback with Score of Online Test and Test Questions

Q1: The STTP sessions delivered the information that I expected to receive.

Q2: The STTP was successful in its objectives.

Q3: How would you rate the effectiveness of the demonstrations shown during the sessions?

Q4: How would you rate the duration of the program?

Q5: How would you rate the online arrangements for the entire STTP?

Q6: Write any three takeaways / outcomes of the STTP.

Name	Quiz Score out of 40	Q1	Q2	Q3	Q4	Q5	Q6
Diptee S. Patil	32.00	5	5	5	5	Excellent	
Harsh N Bhor	32.00	5	4	4	5	Excellent	Role of IoT
Dashrath Bhagwan Kale	36.00	4	4	3	3	Very Good	Session were good
B KARTHIKA	24.00	5	4	4	5	Excellent	Interfacing with arduino ,good session, Very good hand on session
Dr Harshali Parag Patil	30.00	5	5	5	5	Very Good	Green IoT, Its applications and practical approach
MRS. ANITA DAYANAND MHATRE	28.00	5	5	5	5	Excellent	lot in detail and handon

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Bhawana Sahebrao Dakhare	33.00	5	5	5	5	Excellent	Knowledge from Hands on session and Security in IOT, no other sttp focus on it .
Dr GNANAJEYARAMAN RAJARAM	30.00	5	5	5	5	Excellent	IOT and it's applications
Dr. Sharon Christa I L	33.00	5	5	5	4	Excellent	The contents delivered gave insights on IoT. I got various project ideas. I understood how to guide my students when they come up with IoT related projects
Sanjaykumar Vanjirao Sonar	29.00	5	5	5	5	Excellent	1. Green IOT is a very useful concept in current scenario 2. Various software languages like python is useful. 3.Nice and smooth conduction of IOT
Dr. Sushma Jaiswal	33.00	5	5	5	5	Excellent	Gaining knowledge
PRABHU R	24.00	5	5	5	5	Excellent	More knowledge gained
Shreya y	22.00	5	5	4	5	Excellent	In-depth knowledge of IOT Applications of IOT Future of IOT
Tarun Jaiswal	32.00	5	5	5	5	Excellent	Very informative
SATHIYAPRIYA T	23.00	5	5	5	5	Excellent	Practical sessions are good

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Madhuri Ghuge	32.00	5	5	5	4	Excellent	The bright future of green IoT will change our tomorrow environment to become healthier and green, very high QoS, socially and environmentally sustainable and economically. We got to know green communication n networking, Application of GIOT, internet technology.
NITHYA JAYAKUMAR	35.00	5	5	5	4	Very Good	Different tools for IOT
Meena Talele	29.00	5	5	5	5	Excellent	Green iot, live demo of aurdino, raspberry pi
Prof. Geetabala Siddharth Lendhare	31.00	4	5	5	4	Excellent	Deep knowledge, better understanding, explore concepts in effective manner
Dr. Rekha Chouhan	31.00	5	5	5	4	Excellent	Applications of IoT, NETSIM, Wireless Sensor network.
RAMASSAMY ELANGO VAN	31.00	5	5	5	5	Very Good	1.Basic and Advancements in IoT 2.Implementation possibilities 3.Practical knowledge on Arduino
Manish Bhelande	24.00	5	5	5	5	Very Good	Well organize, prominent speaker, realtime application example
Mrs.Mona Deshmukh	34.00	5	5	5	5	Excellent	Informative sessions

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SUTHAHAR P	32.00	5	5	5	5	Excellent	Very Knowledgeable Session with Hands on
Mr.R.SARAVANAN	33.00	5	5	5	5	Very Good	Good information about Green IOT
VIJESH MUNDOKALAM	32.00	5	5	5	5	Excellent	Am able to implement the concepts in my Day-to-day academics.
Prof. Sujata Bhairnallykar	34.00	5	5	5	5	Excellent	Handson sessions and depth knowledge of green IoT
Ameya Parkar	34.00	4	4	4	4	Very Good	Good under standing of Green IOT
Torana Kamble	34.00	5	5	5	5	Excellent	Application of Giot, programming for simulator,Netsim
Nazahat Balur	16.00	4	4	4	4	Very Good	Gained knowledge
Manju Ahuja	38.00	5	5	4	5	Excellent	Got the deep knowledge on GIOT, how to do interfacing with sensors, NETSIm, programming knowledge. Scope of IOT in different areas in future.
Er. Manoj S. Kavedia	32.00	4	4	4	4	Very Good	Example of IOT , Protocols , Tinker cad Demo , Remote XY , Arduino Programming , Smart city etc
Sandhya. Sandeep. Deshpande	22.00	5	5	5	5	Excellent	IIoT. Real time project,cyber security
DARSHAN B D	23.00	5	5	5	5	Excellent	Knowledge of IoT, green IoT, and advantages

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Devanand K. Bathe	29.00	5	5	5	5	Excellent	Coverage of relevant topic, arduino hands on practice, suggestions on research topics
Mr. H. M. Gaikwad	30.00	5	4	5	4	Very Good	1. Real life project ideas 2. TikerCAD circuits 3. NetSim Simulator
Dr.E.THANGASELVI	31.00	5	5	5	5	Excellent	Gained knowledge
Vaishali Gatty	37.00	5	5	4	5	Excellent	Learnt the significance of green IOT,netsim, Arduino connection etc
SIVARAJ M	29.00	5	5	5	5	Excellent	Simulation pare is very good
RAHUL TIWARI	34.00	5	5	5	5	Excellent	1. Learn about the GIOT 2. Learn about the Simulator of GIOT 3. Learn about the application of GOT
Dr.Ramesh k Solanki	35.00	5	5	4	4	Excellent	Some basic concepts with connection details of circuit board
Dr.P.Malathy	33.00	5	5	5	5	Excellent	Everything
Nafees Ahmed M. Kazi	12.00	5	5	5	5	Excellent	Good sessions, Well organized STTP & , Effective Demonstrations
Prof.Megha Wankhade	25.00	4	4	4	4	Good	IoT tools
NAHAR SUNNY SURESH	40.00	5	5	5	5	Excellent	Superb

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Kanchan Ganesh Dhuri	32.00	5	5	5	4	Very Good	Need of securing IOT applications Different tools those can be used to implement IOT applications Future applications of iot and research area
R S M Lakshmi Patibandla	17.00	5	5	5	5	Excellent	Excellent
RAGHVENDRA OMPRAKASH SINGH	31.00	5	4	4	5	Very Good	Best
Rasika Gajendra Patil	22.00	4	5	5	5	Excellent	IoT Knowledge updated,use of green IOT to solve social problems, learning of open source tools for coding.
Prof. Shilpa M. Satre	26.00	5	5	5	5	Excellent	Very informative, Understandable and able to execute
Meenakshi Garg	40.00	4	4	4	4	Very Good	Netsim usage, water treatment using iot, security of devices
Monali V. Rajput	37.00	4	4	4	4	Very Good	Understood the concept of Arduino very well
Dr. Swati Jha	26.00	4	4	4	4	Very Good	Learned about the fundamentals of IOT, Detailed information regarding the IOT Simulators was imparted. Got to know about Lustre Programming

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ASIF RAJA M	33.00	4	4	4	3	Very Good	I learned about IoT. The information is wealth. Each feedback session you ask some MCQ about the session is very nice and it's useful for us to recollect what I learn.
Vishakha krantikumar Gaikwad	24.00	5	5	5	5	Excellent	Very good session
Mrs. SARIKA ATUL PATIL	28.00	5	5	5	5	Excellent	IoT
RATAN RAJAN SRIVASTAVA	30.00	5	5	5	5	Excellent	Arduino uno board practical knowledge, Netsim practical knowledge, Green IoT
SHYAMALA M	16.00	5	5	5	5	Excellent	Utilize the session
Ms. PRYA B. PANDHARBALE	33.00	5	5	5	5	Excellent	Knowledge, hands on session, good resource person
VISHAKHA KRANTIKUMAR GAIKWAD	24.00	5	5	5	5	Excellent	VERY INFORMATIVE SESSION

Questions from Final Test

1. Warren Buffet says that “Cyber security is the biggest threat facing mankind, even more dangerous than _____”

nuclear weapons

war

calamity

strick

Ans-nuclear weapons

2. Who invented the term internet of things?

Mc Donald

Kevin Ashton

Bill Gates

Steve Jobs

Ans Kevin Ashton

3.Can you specify where there is an error in this program?/*Turns on an LED on for one second, then off for one second, repeatedly. This example code is in the public domain.

```
1. int led = 13;
2. void setup() {
3. pinMode(led, INPUT);
4. }
5. void loop() {
6. digitalWrite(led, HIGH);
7. delay(1000);
8. digitalWrite(led, LOW);
9. delay(1000);
10. }
```

3

1

6

8

Ans- 3

4.Which technology is used in Rafael bomber ?

Esteral
SCADE
Signal
Verilog

Ans-Esteral

5.NetSim Protocol Source codes are written in which of the following Programming Languages?

C#
C
C++
Tcl/Tk

Ans C

6. Which characteristics involve the facility to respond in an intelligent way to a particular situation?

Intelligence
Connectivity
Dynamic Nature
Enormous Scale

Ans Intelligence

7.How many digital pins are there on the UNO board? *

14
16
12
20

Ans 12

8.Which action is the best step to protect Internet of Things (IoT) devices from becoming the entry point for security vulnerabilities into a network while still meeting business requirements?

Applying security updates promptly
Turning IoT devices off when not in use
Using encryption for communications
Removing IoT devices from the network

Ans Applying security updates promptly

9. Which protocol allows user at one site to establish connection to another site and pass keystroke from local to remote host:

- Telnet
- FTP
- IP
- HTTP

Ans Telnet

10. Which of the following is the future application of IoT?

- Role of green IoT system
- QoS in communication
- Secure communication
- Multimedia communication

Ans Role of green IoT system

11 In Cooja simulator programs are written in which programming language ? *

- cobol
- java
- python
- C

Ans C

12. NetSim IoT / WSN module is based on:

- IEEE 802.11p
- IEEE 1609
- IEEE 802.15.4
- IEEE 802.22

Ans IEEE 802.15.4

13 Warren Buffet says that "Cyber security is the biggest threat facing mankind, even more dangerous than _____"

- nuclear weapons
- war
- calamity
- Strick

Ans nuclear weapons

14. NetSim IoT module supports which of the following network layer protocols?

DSR & AODV
RPL & OLSR
AODV & RPL
ZRP & OLSR

Ans AODV & RPL

15 ITS stands for _____
Internet Travel Services
Internet Transportation Security
Intelligent Transportation Security
Intelligent Transportation Services

Ans Intelligent Transportation Services

16. IoT promotes the creation of IoT terminal industry _____
Devices
Network
Clusters
Things

Ans Clusters

17. A program written with the IDE for Arduino is called _____
Source Code
Sketch
Cryptography
IDE Source

Ans Sketch

18 When was lustre language invented ?
1960's
1970's
1980's
1990's

Ans 1980's

19. What allows digital devices to interconnect and transmit data?
a sensor
a global positioning sensor
a smart phone
a network

Ans a sensor

20. Which of the following is a simulator for IoT ?

contiki

tiny

cooja

Rtos

Ans cooja

21 Which is the top most challenge for adoption of the Internet of Things?

Security

Money

Implementation

Connectivity

Ans Security

22 NetSim Packet Trace and Event Trace log files are provided in which file format?

txt

xml

csv

Doc

Ans csv

23 What is IIoT?

Information Internet of Things

Industrial Internet of Things

Innovative Internet of Things

Instructive Internet of Things

Ans Industrial Internet of Things

24. From a security perspective, what should organizations expect will occur as they become more dependent upon the Internet of Things (IoT)?

Security risks will be eliminated.

Security risks will decrease.

Security risks will increase.

Security risks will stay the same.

Ans Security risks will increase.

25. Network scenario created in NetSim GUI is saved as
XML configuration file
flat text file
C file
HTML file

Ans XML configuration file

26. In which language is a significant portion of Airbus A340 and 385 code written ?
Esteral
SCADE
Signal
Verilog

Ans SCADE

27. Which one out of these is not a data link layer technology:
Bluetooth
UART
WiFi
HTTP

Ans HTTP

28. Resource management will elaborate the key aspects of _____
Energy management
Network management
both a and b
neither a nor b

Ans both a and b

29. What does IDE stand for?
IDE
Internal Deep Escape
Integrated Development Environment
In Deep Environment

Ans Integrated Development Environment

30. Arduino IDE consists of 2 functions. What are they?
Build() and loop()
Setup() and build()
Setup() and loop()

Loop() and build() and setup()

Ans Setup() and loop()

31. IPv4 is _____ and IPv6 is _____ bit address protocols

24, 32

64, 128

32, 128

32, 64

Ans 32, 128

32. Which language is preferred for IoT analytics?

C ++

Python

HTML

PHP

Ans Python

33. The temperature and humidity sensor values are printed in _____

OLED matrix

PIP

PYPI

SDK

Ans OLED matrix

34. The class declares the _____ method that receives the temperature.

public-observation

Public_observation

Public – observation

Public- Observation

Ans Public_observation

35. Which of the following are in LPWAN technologies

LoRa

GSM

LTE

CDMA

Ans LoRa

36. Arduino shields are also called as _____

- Extra peripherals
- Add on modules
- Connectivity modules
- Another Arduinos

Ans Add on modules

37. What is the microcontroller used in Arduino UNO?

- ATmega32114
- ATmega2560
- AT91SAM3x8E
- ATmega328p

Ans ATmega328p

38. What does GPIO stand for?

- General Purpose Input Output Processor
- General Purpose Inner Outer Propeller
- General Purpose Interested Old People
- General Purpose Input Output Pins

Ans General Purpose Input Output Pins

39 Which one is not an element of IoT?

- People
- Process
- Security
- Things

Ans Security

40 How many Analog pins are used in an Arduino UNO board?

- 6
- 14
- 12
- 16

Ans 6

ANNEXURE-V Session-wise Attendance and Feedback

Q1: The e-Session found relevant to the objectives

Q2: The e-Session objectives were clearly stated and met

Q3: The e-session has increased your knowledge and skill in the discussed topic.

Q4: Do you feel the sessions will be useful for your career?

Q5: Have you come across such sessions in the past?

Q6: Are you willing to join such sessions if an opportunity comes in future.

List of participants attended DAY1 session Morning with feedback

Resource Persons-Dr. Anubha Jain

Dr. Sharvari Tamhane

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
Dr.Ramesh Solanki	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Thank you
B KARTHIKA	Agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	GOOD SESSION
DARSHAN B D	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
RAGHVENDRA OMPRAKASH SINGH	Strongly agree	Strongly agree	Agree	Yes	No	Agree	Best
Rasika Gajendra Patil	Agree	Agree	Agree	Yes	No	Agree	Nil
PRABHU R	Agree	Agree	Agree	Yes	Yes	Agree	Nil
Dr.P.Malathy	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	very good
SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good
DASHRATH B KALE	Agree	Agree	Agree	Yes	Yes	Agree	No
SATHIYAPRIYA T	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No

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VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good.
Vaishali Gatty	Agree	Agree	Agree	Yes	Yes	Agree	Good session
Dr GNANAJEYARAM AN RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Diptee S. Patil	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	
Madhuri Ghuge	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Session was good
Torana N. Kamble	Agree	Agree	Strongly Agree	Yes	Yes	Agree	Session was good
Bhawana S. Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	The different applications of IOT and communication technologies are explained very properly. thanks
Mr.R.SARAVANA N	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session.
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Dr. Sharon Christa I L	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nil
ASIF RAJA M	Agree	Agree	Agree	Yes	No	Agree	Send a PPT after completing each session
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
H MANOJ T GADIYAR	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent

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Dr.E.THANGASEL VI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent program
Ramassamy Elangovan	Strongly agree	Strongly agree	Agree	Yes	No	Strongly Agree	-
Kanchan Ganesh Dhuri	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	session was good, will like to have handson part
Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
Mr.Gajanan Purushottam Khapre	Strongly agree	Agree	Neutral	Yes	No	Agree	Nice Session
Ms. Priya B. Pandharbale	Strongly agree	Strongly agree	Agree	Yes	No	Agree	Nil
RAHUL TIWARI	Strongly agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	NA
SHIRSHENDU MAITRA	Agree	Agree	Agree	Yes	Yes	Agree	Informative
Devanand K. Bathe	Agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	in-depth coverage of topic.
A.Benazir Begum	Strongly agree	Agree	Agree	Yes	Yes	Agree	Good
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good sessions
Mr. H. M. Gaikwad	Strongly agree	Strongly agree	Strongly Agree	May be	No	Strongly Agree	Good organization
ANITA DAYANAND MHATRE	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NO
Anna N Kurian	Agree	Agree	Agree	May be	No	Agree	Good
Mr.. Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session

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Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Prof. Geetabala Siddharth Lendhare	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative session
Dr Harshali Parag Patil	Agree	Agree	Agree	Yes	No	Agree	Please share recordings day wise
Sachin Govardhan Jagdale	Strongly agree	Agree	Agree	Yes	Yes	Strongly Agree	Thank you for the session
Dr. Swati Jha	Agree	Agree	Agree	Yes	Yes	Agree	No
Sandhya sandeep Deshpande	Agree	Agree	Agree	Yes	No	Agree	Good
Vijaya Ambadas Dhopte	Agree	Agree	Agree	Yes	Yes	Agree	Thank you
Shyamala M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	----
Er.Manoj S. Kavedia	Agree	Agree	Agree	Yes	No	Agree	All good , Provide PPT and Recording
Nahar Sunny Suresh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No thanks
Dr. Swati Jha	Agree	Agree	Agree	Yes	Yes	Agree	No
Meenakshi Garg	Agree	Agree	Agree	Yes	Yes	Strongly Agree	Nice session

List of participants attended DAY1 session Afternoon with feedback

Resource Persons: Dr. Sachin Patil

Dr. Anjali Yeole

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
Dr.P.MALATHY	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	very good
DASHRATH B KALE	Agree	Agree	Agree	Yes	Yes	Agree	No
ANITA DAYANAND MHATRE	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Ramassamy Elangovan	Agree	Strongly agree	Agree	Yes	Yes	Agree	-
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	---
VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good.
Mr.Gajanan Khapre	Strongly agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	Very Nice
A.Benazir Begum	Agree	Agree	Agree	Yes	Yes	Agree	Good
Anna N Kurian	Agree	Agree	Agree	May be	No	Agree	Good
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice
PRABHU R	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
B KARTHIKA	Agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	NICE
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session.
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative

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SATHIYAPRIYA T	Agree	Agree	Agree	Yes	Yes	Strongly Agree	Nil
Diptee S. Patil	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	
Dr.Ramesh Solanki	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Thank you
Dr GNANAJEYARAMA N RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	VERY INSIGHTFUL
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Devanand K. Bathe	Agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	excellent session
Prof. Geetabala Siddharth Lendhare	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative and insightful session
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
RAGHVENDRA OMPRAKASH SINGH	Strongly agree	Strongly agree	Agree	Yes	Yes	Agree	Best
Dr.E.THANGASELVI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent program
Dr. Harshali Parag Patil	Agree	Agree	Agree	Yes	No	Agree	Please share recordings day wise
Sandhya Deshpande	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very good session!!
Meena Talele	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	lot knowledge share was excellent
Rasika Gajendra Patil	Agree	Agree	Agree	Yes	No	Agree	Nil
Dr. Sharon Christal	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nil

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Prof. Megha Wankhade	Agree	Agree	Agree	Yes	Yes	Strongly Agree	No
Er. Manoj S. kavedia	Agree	Agree	Agree	Yes	Yes	Agree	All Good , Pprovide ppt AND rECORDINGS
ASIF RAJA M	Agree	Agree	Agree	Yes	Yes	Agree	No
Prof. Shilpa M. Satre	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very Informative sessions
Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	good
Kanchan Ganesh Dhuri	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	no
Ms. Priya B. Pandharbale	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Agree	Nil
Torana Kamble	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Session was good
Madhuri Ghuge	Agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Session was good
Bhawana S. Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	The protocols were well explained
Mr. H. M. Gaikwad	Strongly agree	Strongly agree	Strongly Agree	May be	No	Strongly Agree	Useful contents covered
Sunny Suresh Nahar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Thanks
S.S.Deshpande	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Agree	Good
Rahul Tiwari	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NA
Vaishali Gatty	Agree	Agree	Agree	Yes	Yes	Agree	Very good session
Meenakshi Garg	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nice Session

List of participants attended DAY2 session Morning with feedback

Resource Person- Dr. Anubha Jain

Prof Suraj Khandare

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
PRABHU R	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very
Mr.Gajanan Purushottam Khapre	Strongly agree	Strongly agree	Agree	Yes	No	Agree	Kindly Send PPT
SATHIYAPRIYA T	Agree	Agree	Agree	Yes	Yes	Agree	Nil
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good session
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Vijesh Mundokalam	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very good session.
Ramassamy Elangovan	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	-
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Dr.Ramesh Solanki	Strongly agree	Strongly agree	Agree	Yes	No	Agree	Thank you
Dr.P.Malathy	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Meenakshi Garg	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Nice session
Prof. Geetabala Siddharth Lendhare	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Wonderful and informative session
B KARTHIKA	Strongly agree	Strongly agree	Agree	Yes	Yes	Agree	GOOD PRESENTATION

Short Term Training Program on 'Green Internet of Things'

Anna N Kurian	Agree	Agree	Agree	Yes	Yes	Agree	Good
SHYAMALA M	Strongly agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Devanand K. Bathe	Agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	nice session
Meena Talele	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Testing iot nicely narrated also programming language is interesting
Dr GNANAJEYARA MAN RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	VERY INSIGHTFUL
Mr. H. M. Gaikwad	Agree	Agree	Agree	May be	No	Agree	Second session was moderate
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
Dashrath B Kale	Agree	Agree	Agree	Yes	No	Agree	No
Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Nahar Sunny Suresh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
ASIF RAJA M	Agree	Agree	Agree	Yes	Yes	Agree	No
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session.
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good
Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Rasika Gajendra Patil	Agree	Agree	Agree	Yes	No	Agree	Null
S.S.Deshpande	Strongly agree	Strongly agree	Strongly Agree	No	No	Strongly Agree	Good

Short Term Training Program on 'Green Internet of Things'

RAGHVENDRA OMPRAKASH SINGH	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Agree	Best
Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
PRIYA B. PANDHARBALE	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Agree	Nil
Torana Kamble	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Session was good
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	THANK YOU .AMIT NAIK SGSITS INDORE
Madhuri Ghuge	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Good session
Dr. Harshali Parag Patil	Agree	Agree	Agree	Yes	No	Agree	NA
Dr. Sharon Christa I L	Strongly agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	Nil
Bhawana S. Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Today we come to know new things ex. Lustre
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Session Was Good
Monali V. Rajput	Agree	Agree	Strongly Agree	Yes	Yes	Agree	Good recent topic discussed
Dr.E.THANGASE LVI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice program
Dr.E.THANGASE LVI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice program
Er.Manoj S. Kavedia	Agree	Agree	Agree	Yes	Yes	Agree	All good
Mr.Gajanan Purushottam Khapre	Strongly agree	Agree	Agree	May be	Yes	Strongly Agree	Kindly share PPT
VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very good.

Short Term Training Program on 'Green Internet of Things'

Dashrath B kale	Agree	Agree	Agree	Yes	No	Agree	Nil
Meena Talele	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice explanation of iot
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Dr.P.Malathy	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good session
Devanand K. Bathe	Agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	nice session and excellent discussion
ANITA DAYANAND MHATRE	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NO
Dr.Ramesh Solanki	Strongly agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	thanks
SsDeshpande	Agree	Agree	Agree	Yes	No	Agree	.
Vaishali Gatty	Agree	Agree	Agree	Yes	Yes	Agree	Very good session
Kanchan Ganesh Dhuri	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Prof. Shilpa M. Satre	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session

List of participants attended DAY2 session Afternoon with feedback

Resource Person- Mr. Bhupendra Bhate

Mr. Prashant Kanade

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
Meena Talele	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Real time demo of iot
SUTHAHAR P	Agree	Agree	Agree	Yes	No	Agree	Very Informative Session
Er.Manoj S. Kavedia	Agree	Agree	Agree	Yes	No	Agree	All good , Provide PPT and Recoding for Futur Reference
Mr. H. M. Gaikwad	Strongly agree	Strongly agree	Strongly Agree	May be	Yes	Strongly Agree	Very good sessdions
Monali V. Rajput	Agree	Agree	Agree	Yes	No	Agree	Good more detailed were much appreciated
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Dr. Sharon Christa I L	Agree	Strongly agree	Strongly Agree	May be	No	Strongly Agree	Nil
B KARTHIKA	Strongly agree	Agree	Strongly Agree	Yes	Yes	Agree	Good session
Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Anita Dayanand Mhatre	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Prof. Geetabala Siddharth Lendhare	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nice presentation and discussion

Short Term Training Program on 'Green Internet of Things'

Dr GNANAJEYARAM AN RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	VERY INSIGHTFUL
Dr.Ramesh Solanki	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Thanks
Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good session
Dr Harshali Parag Patil	Agree	Agree	Agree	Yes	No	Agree	-
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session.
Ramassamy Elangovan	Agree	Agree	Agree	Yes	No	Strongly Agree	-
Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good.
Dr.P.Malathy	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Mr.Gajanan Purushottam Khapre	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Kindly share PPT
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good Session
Rahul Tiwari	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NA
Madhuri Ghuge	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good session
Torana Kamble	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Session was good
Mr.R.SARAVANA N	Strongly agree	Agree	Agree	Yes	Yes	Agree	Good
Shreya Kurne	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very good session.. keep it up

Short Term Training Program on 'Green Internet of Things'

Harsh Namdev Bhor	Strongly agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	Good session
Prof. Megha Wankhade	Agree	Agree	Agree	Yes	No	Agree	No
Prof. Shilpa M. Satre	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Sessions are very informative
PRABHU R	Agree	Agree	Agree	Yes	Yes	Agree	Nil
Vaishali Gatty	Agree	Agree	Agree	Yes	Yes	Agree	Excellent session
SATHIYAPRIYA T	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Bhawana S Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	All session we're good n newly added interactive session was good
Devanand K. Bathe	Agree	Agree	Agree	May be	Yes	Strongly Agree	nice session followed by open discussion
Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice
ASIF RAJA M	Agree	Agree	Agree	Yes	No	Agree	No
PRIYA B. PANDHARBALE	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nil
Meenakshi Garg	Agree	Agree	Agree	Yes	Yes	Agree	Good
Dr K S Balamurugan	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good Experience
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative

Short Term Training Program on 'Green Internet of Things'

Dr.E.THANGASEL VI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent program
ASHOK KUMAR S	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	I will definitely join such sessions in the future.
Ratan Rajan Srivastava	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent Sessions
DARSHAN B D	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Kanchan Ganesh Dhuri	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NO
RAGHVENDRA OMPRAKASH SINGH	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Best
Dr. Mrs. Gresha S Bhatia	Agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Such sessions should be conducted frequently
Dr. Vaishali Prashant Jadhav	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Superb Topic
Dr. Swati Jha	Agree	Agree	Agree	Yes	Yes	Agree	No
Vijaya Ambadas Dhopte	Agree	Agree	Agree	Yes	Yes	Agree	Thank you
Nithya Jayakumar	Agree	Agree	Agree	Yes	Yes	Agree	No
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Thank you .amit naik
Nahar sunny suresh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Thank you
Amit naik	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Thank you.amit naik

Short Term Training Program on 'Green Internet of Things'

SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
DARSHAN B D	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Dr K S Balamurugan	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
SUTHAHAR P	Agree	Agree	Agree	Yes	No	Agree	Very Informative Session
Harsh N Bhor	Strongly agree	Agree	Agree	Yes	No	Agree	Good Session
Anna N Kurian	Agree	Agree	Agree	May be	Yes	Agree	Good
VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very good.
Nazahat Balur	Agree	Agree	Agree	Yes	Yes	Agree	No
Mr.Gajanan Purushottam Khapre	Strongly agree	Agree	Neutral	Yes	Yes	Agree	Nice
Mrs Mona Deshmukh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Dr GNANAJEYARAM AN RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very insightful
Diptee S. Patil	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	
Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Shreya Kurne	Agree	Agree	Strongly Agree	Yes	Yes	Agree	Well done.. it was a good session
Dr. Vaishali Prashant Jadhav	Strongly agree	Strongly agree	Strongly Agree	May be	No	Strongly Agree	Good topic selection

Short Term Training Program on 'Green Internet of Things'

Nafees Ahmed M. Kazi	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good Sessions
Kazi Nafees Ahmed M.	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent Sessions
Vaishali Satish Joshi	Agree	Agree	Agree	Yes	Yes	Strongly Agree	This session has increased our knowledge and skill.
Ratan Rajan Srivastava	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very Informative sessions
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	I will definitely join such sessions in the future.

List of participants attended DAY3 session Morning with feedback
Resource Person-Dr. Vishnu Shrinivasa Murthy

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
Dr. Harshali Parag Patil	Agree	Agree	Agree	Yes	No	Agree	-
Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Dr.P.Malathy	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good
Dr GNANAJEYARAMAN RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	VERY INSIGHTFUL
Dr. Sharon Christa I L	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Session is good and practical oriented
Mr.Gajanan Purushottam Khapre	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nice
Kanchan Ganesh Dhuri	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	session was good

Short Term Training Program on 'Green Internet of Things'

VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very good session.
Prof. Geetabala Siddharth Lendhare	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Superb session, thank you so much
Rasika Gajendra Patil	Agree	Agree	Agree	Yes	No	Agree	Nil
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Anna N Kurian	Agree	Agree	Agree	May be	Yes	Agree	Good
Ramassamy Elangovan	Strongly agree	Agree	Agree	Yes	Yes	Strongly Agree	-
Devanand K. Bathe	Agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	nice hands on session
Mrs Mona Deshmukh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Mrs Mona Deshmukh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
PRABHU R	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Dashrath B kale	Agree	Agree	Agree	Yes	Yes	Agree	No
Mrs Mona Deshmukh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Anita Dayanand Mhatre	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session.
Dr.Ramesh Solanki	Strongly agree	Agree	Agree	Yes	Yes	Strongly Agree	thanks
Dr.E.THANGASELVI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent program
SATHIYAPRIYA T	Agree	Agree	Agree	Yes	Yes	Agree	No

Short Term Training Program on 'Green Internet of Things'

Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Practical Session is very nice
ASIF RAJA M	Agree	Agree	Agree	Yes	No	Agree	NO
RAGHVENDRA OMPRAKASH SINGH	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Best
Monali Rajput	Agree	Agree	Strongly Agree	Yes	No	Agree	Good practically explained
Vaishali Gatty	Agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent session
Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Er.Manoj S. Kavedia	Agree	Agree	Agree	Yes	No	Agree	All good
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-
S.S.DESHPANDE	Agree	Agree	Agree	Yes	Yes	Agree	.
Prof. Shilpa M. Satre	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session
Nahar Sunny suresh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
Madhuri Ghuge	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Good session
Dr K S Balamurugan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent
Mr. H. M. Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	God Demonstrations
SUTHAHAR P	Agree	Agree	Agree	Yes	No	Agree	Good and Well Organized
MS. PRIYA B. PANDHARBALE	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Bhawana S. Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session

Short Term Training Program on 'Green Internet of Things'

Nazahat Balur	Agree	Agree	Agree	Yes	Yes	Neutral	No
Rahul Tiwari	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NA
B KARTHIKA	Strongly agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Thank you
Nithya Jayakumar	Agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	No
Manish Bhelande	Agree	Agree	Strongly Agree	Yes	No	Strongly Agree	Nope
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
Dr.M.DEIVAKANI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	NICE
Mr.R.SARAVANAN	Agree	Agree	Agree	Yes	Yes	Agree	Good
Dr. Swati Jha	Agree	Agree	Agree	Yes	Yes	Agree	No
SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Torana Kamble	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Session was good
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	—
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Shreya Kurne	Strongly agree	Strongly agree	Agree	Yes	Yes	Agree	Useful session

Short Term Training Program on 'Green Internet of Things'

Meenakshi Garg	Strongly agree	Agree	Agree	Yes	Yes	Agree	Good
Vijaya Ambadas Dhopte	Agree	Agree	Agree	Yes	Yes	Agree	Thank you
Dr. Vaishali Prashant Jadhav	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Informative session
Nafees Ahmed M Kazi	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	The Best sessions
Vaishali Satish Joshi	Agree	Agree	Agree	Yes	Yes	Strongly Agree	This session has useful.
Ratan Rajan Srivastava	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent sessions

**List of participants attended DAY3 session Afternoon with feedback
Resource Person-Dr. Vishnu Shrinivasas Murthy**

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
Anita Dayanand Mhatre	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Dr.P.Malathy	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	excellent
Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	Bo
PRABHU R	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Dr.Ramesh Solanki	Strongly agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	Thanks
SATHIYAPRIYA T	Agree	Agree	Agree	Yes	Yes	Agree	No
Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No

Short Term Training Program on 'Green Internet of Things'

Nithya Jayakumar	Agree	Agree	Strongly Agree	Yes	Yes	Agree	No
Dr.E.THANGASELVI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice program
Manju ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-
Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Prof. Geetabala Siddharth Lendhare	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nice session
Rasika Gajendra Patil	Agree	Strongly agree	Strongly Agree	Yes	No	Agree	Nil
Monali V. Rajput	Strongly agree	Agree	Strongly Agree	Yes	No	Strongly Agree	good session
RAGHVENDRA OMPRAKASH SINGH	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Best
Nahar Sunny Suresh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	no
KUMARNATH J	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Devanand K. Bathe	Agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	nice hands on practice
Dr. Sharon Christa I L	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nil
Dashrath b kale	Agree	Agree	Agree	No	Yes	Agree	Nil
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session.
Mr. H. M. Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Practical oriented sessions
Meena Talele	Strongly agree	Strongly agree	Strongly Agree	No	No	Strongly Agree	Excellent practical knowledge

Short Term Training Program on 'Green Internet of Things'

SUTHAHAR P	Agree	Agree	Agree	Yes	No	Agree	Very Good Informative and Interesting Session
B KARTHIKA	Strongly agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	GOOD SESSION
Dr. Harshali Parag Patil	Agree	Agree	Agree	Yes	No	Agree	-
Nazahat Balur	Agree	Agree	Agree	Yes	Yes	Agree	No
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Thank you
SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Er.Manoj S. Kavedia	Agree	Agree	Agree	Yes	No	Agree	All Good
Diptee S. Patil	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	----
Sachin Govardhan Jagdale	Agree	Agree	Agree	Yes	No	Agree	Thank you
Prof. Shilpa M. Satre	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Session was very informative
Rahul Tiwari	Agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	NA
Dr GNANAJEYARAMAN RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very insightful
Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Shreya Kurne	Agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	Very useful session
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative

Short Term Training Program on 'Green Internet of Things'

Meenakshi Garg	Agree	Agree	Agree	Yes	Yes	Agree	Ok
Madhuri Ghuge	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Good session
VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very good session.
Ssd	Agree	Agree	Agree	Yes	Yes	Agree	No
Manish Bhelande	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Anna N Kurian	Agree	Agree	Agree	May be	No	Agree	Good
Ramassamy Elangovan	Agree	Agree	Agree	Yes	Yes	Strongly Agree	_
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice
Prof. Megha Wankhade	Agree	Agree	Agree	Yes	Yes	Agree	No
MS. PRIYA B. PANDHARBALE	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nil
Mr.Gajanan Purushottam Khapre	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nice
KALESH BUSA	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice session no other comments
Dr.M.Deivakani	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice
Torana Kamble	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Session was good
Bhawana S Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session
Bhawana S Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Hands on session was very informative
ASIF RAJA M	Agree	Agree	Agree	Yes	No	Agree	NO

Short Term Training Program on 'Green Internet of Things'

SUTHAHAR P	Agree	Agree	Agree	Yes	No	Agree	Informative Session
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	Very informative
Nazahat Balur	Agree	Agree	Agree	Yes	Yes	Agree	No
DARSHAN B D	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Kanchan Ganesh Dhuri	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	no
Vijaya Ambadas Dhopte	Agree	Agree	Agree	Yes	Yes	Agree	Thank you
Harsh N Bhor	Agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good
Mahesh M. Bulhe	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good session
Dr. Vaishali Prashant Jadhav	Agree	Agree	Agree	Yes	No	Strongly Agree	Good organization and Management
Vaishali Gatty	Agree	Agree	Strongly Agree	Yes	Yes	Agree	Very interesting session
Dr. Swati Jha	Agree	Agree	Agree	Yes	Yes	Agree	No
Vaishali Satish Joshi	Agree	Agree	Agree	Yes	Yes	Agree	This session was useful.
Ratan Rajan Srivastava	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very productive sessions
Mahesh M. Bulhe	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good sessions
Manju ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-

List of participants attended DAY4 session Morning with feedback

Resource Person-Mr. Nithin Ravi

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good
Anita Dayanand Mhatre	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Rasika Gajendra Patil	Agree	Agree	Agree	Yes	No	Agree	NIL
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Dr. Sushma Jaiswal	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Dashrath Kale	Agree	Agree	Agree	Yes	Yes	Agree	nil
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	EXCELLENT SESSION
Monali V. Rajput	Agree	Agree	Agree	Yes	No	Agree	Good session
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
SUTHAHAR P	Agree	Agree	Agree	Yes	No	Agree	Informative Session
Dr.Ramesh Solanki	Strongly agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	Thank you
B KARTHIKA	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	GOOD SESSIOM
Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No

Short Term Training Program on 'Green Internet of Things'

Prof. Geetabala Siddharth Lendhare	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nice session
SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Madhuri Ghuge	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Good Session
Torana N.kamble	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Session was good
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session.
MS. PRIYA B. PANDHARBALE	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
mrs.Mona Deshmukh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	nice session
Anna N Kurian	Agree	Agree	Agree	May be	No	Agree	good
PRABHU R	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Dr. Harshali Parag Patil	Agree	Agree	Agree	Yes	No	Agree	Please share recordings
SATHIYAPRIYA T	Agree	Agree	Agree	Yes	Yes	Agree	No
Rahul Tiwari	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NA
Meena Talele	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice explanation
Bhawana S. Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Hands on session was very informative
Mr. H M Gaikwad	Strongly agree	Strongly agree	Strongly Agree	May be	No	Strongly Agree	Practical oriented sessions

Short Term Training Program on 'Green Internet of Things'

Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	good session
ASIF RAJA M	Agree	Agree	Agree	Yes	No	Agree	NO
Prof. Shilpa M. Satre	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent Session
Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Manish Bhelande	Strongly agree	Strongly agree	Agree	Yes	Yes	Agree	Nope
Mr.Gajanan Purushottam Khapre	Strongly agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	Yes
VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very Good Session.
Diptee S. Patil	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	
Dr K S Balamurugan	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent explanation about netsim
Sandhya sandeep Drshpande	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Agree	No
RAGHVENDRA OMPRAKASH SINGH	Strongly agree	Strongly agree	Agree	Yes	Yes	Agree	Best
Dr.P.Malathy	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
DARSHAN B D	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Dr.E.THANGASE LVI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice program
Prof. Megha Wankhade	Agree	Agree	Agree	Yes	No	Agree	No
Nithya Jayakumar	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No

Short Term Training Program on 'Green Internet of Things'

Sachin Govardhan Jagdale	Agree	Agree	Agree	Yes	No	Agree	Thank you
Vaishali Satish Joshi	Agree	Agree	Agree	Yes	No	Strongly Agree	This session has increased our knowledge and skill.
Vijaya Ambadas Dhopte	Agree	Agree	Agree	Yes	Yes	Agree	Thank you
Nahar Sunny Suresh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
Meenakshi Garg	Agree	Agree	Agree	Yes	Yes	Agree	Goof
Devanand K. Bathe	Agree	Agree	Agree	Yes	Yes	Strongly Agree	Nice session
Dr. Swati Jha	Agree	Agree	Agree	Yes	Yes	Agree	No
Dr. Sharon Christa I L	Agree	Agree	Strongly Agree	Yes	No	Agree	nil
Er. Manoj S. Kavedia	Agree	Agree	Agree	Yes	No	Agree	All good
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	thank you .amit naik
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	thank you .amit naik
Dr Gnanajeyaraman Rajaram	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very insightful
Nafees Ahmed M. Kazi	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good event management and session
Dr. M. Deivakani	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice
Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Nazahat Balur	Agree	Agree	Agree	Yes	Yes	Agree	No

Short Term Training Program on 'Green Internet of Things'

Vaishali Gatty	Strongly agree	Agree	Agree	Yes	Yes	Strongly Agree	Very interesting session
Shreya Kurne	Strongly agree	Agree	Strongly Agree	Yes	Yes	Agree	Well done
Dr. M. Deivakani	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Kanchan Ganesh Dhuri	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Please provide recordings of session
Ratan Rajan Srivastava	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent Knowledgeable sessions
Mahesh M. Bulhe	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice sessions

List of participants attended DAY4 session Afternoon with feedback

Resource Person- Mr. Vishal Bhatt

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
Dashrath B Kale	Agree	Agree	Agree	Yes	No	Agree	Nik
SS Deshpande	Strongly agree	Agree	Agree	Yes	Yes	Agree	.
Nahar sunny Suresh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very
Meena Talele	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Dynamic iot excellent
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session.
ASIF RAJA M	Agree	Agree	Agree	Yes	No	Agree	NO

Short Term Training Program on 'Green Internet of Things'

ANITA DAYANAND MHATRE	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NO
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-
Prof. Geetabala Siddharth Lendhare	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Wonderful Session
B KARTHIKA	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	VERY NICE SESSION
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
SUTHAHAR P	Agree	Agree	Agree	Yes	No	Agree	Very Informative Session
Dr. Harshali Parag Patil	Agree	Agree	Agree	Yes	No	Agree	Please share recordings
Dr K S Balamurugan	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Dr.P.Malathy	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very good
Nithya Jayakumar	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	no
SATHIYAPRIYA T	Agree	Strongly agree	Agree	Yes	Yes	Agree	Nil
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good
SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Anna N Kurian	Agree	Agree	Agree	May be	No	Agree	Good
Prof. Megha Wankhade	Agree	Agree	Agree	Yes	No	Agree	No
PRABHU R	Agree	Strongly agree	Agree	Yes	Yes	Agree	Nil

Short Term Training Program on 'Green Internet of Things'

Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	very informative sessions
Dr.Ramesh Solanki	Agree	Agree	Strongly Agree	Yes	Yes	Agree	Thank you
Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Diptee S. Patil	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Vaishali Gatty	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative and useful
Rahul Tiwari	Strongly agree	Agree	Agree	Yes	Yes	Strongly Agree	NA
Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Er. Manoj S. Kavedia	Agree	Agree	Agree	Yes	No	Agree	All good
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good session
Meenakshi Garh	Agree	Agree	Agree	Yes	Yes	Agree	Ok
Torana Kamble	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Examples were good
MS. PRIYA B. PANDHARBALE	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nil
Shreya Kurne	Agree	Agree	Strongly Agree	Yes	Yes	Agree	Nice session
Dr.E.THANGASE LVI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent program
Devanand K. Bathe	Agree	Agree	Agree	Yes	Yes	Strongly Agree	Excellent session

Short Term Training Program on 'Green Internet of Things'

Mr. H. M. Gakwad	Strongly agree	Strongly agree	Strongly Agree	May be	No	Strongly Agree	Practical oriented sessions
Madhuri Ghuge	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good session
Amit naik	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Thank you .amit naik
VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very good session
Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
Bhawana S Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Dr. Swati Jha	Agree	Agree	Agree	Yes	No	Agree	No
Monali Rajput	Agree	Agree	Agree	Yes	No	Agree	Good session
Ramassamy Elangovan	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	-
Dr GNANAJEYARA MAN RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very insightful
Prof. Shilpa M. Satre	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very good session
RAGHVENDRA OMPRAKASH SINGH	Strongly agree	Strongly agree	Agree	Yes	Yes	Agree	Best
Dr. Swati Jha	Agree	Agree	Agree	Yes	No	Agree	No
Ratan Rajan Srivastava	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very Informative Sessions
Kanchan Ganesh Dhuri	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Please provide recordings of session
Dr. Vaishali Prashant Jadhav	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nice topics

Short Term Training Program on 'Green Internet of Things'

Dr. Sharon Christa I L	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Harsh Namdev bhor	Agree	Strongly agree	Agree	Yes	No	Strongly Agree	NA
Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Rasika Gajendra Patil	Agree	Agree	Strongly Agree	Yes	No	Agree	Nil
Manish Bhelande	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nope
Manish Bhelande	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nope
Dr.P.Malathy	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very good
Mr.R.SARAVAN AN	Agree	Agree	Agree	Yes	Yes	Agree	Nice
Amit Naik	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Thank you
Mrs Mona Deshmukh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice session
Dr GNANAJEYARA MAN RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very insightful
Sandhya deshpande	Strongly agree	Agree	Agree	Yes	Yes	Agree	.
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	thank you
Dr. M. Deivakani	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice
Nafees Ahmed Mushiroddin Kazi	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good sessions

Short Term Training Program on 'Green Internet of Things'

Vaishali Satish Joshi	Agree	Agree	Strongly Agree	Yes	No	Strongly Agree	This session has useful.
Sachin Agrawal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
DARSHAN B D	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Vijaya Ambadas Dhopte	Agree	Agree	Agree	Yes	Yes	Agree	Thank you
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-

List of participants attended DAY5 session Morning with feedback

Resource Person- Dr. Ajay Kumar Godhara

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
RAGHVENDRA OMPRAKASH SINGH	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Best
Mr.R.SARAVANAN	Agree	Agree	Agree	Yes	Yes	Agree	Good
Devanand K. Bathe	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent session
PRABHU R	Strongly agree	Agree	Strongly Agree	Yes	Yes	Agree	No
Dr GNANAJEYARAMA N RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	VERY INSIGHTFUL
SATHIYAPRIYA T	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	good session

Short Term Training Program on 'Green Internet of Things'

Mrs Mona Deshmukh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice session
Ramesh Solanki	Strongly agree	Agree	Strongly Agree	Yes	No	Strongly Agree	Thank you
Dr. Harshali Parag Patil	Agree	Agree	Agree	Yes	No	Agree	pls share recording
Nahar Sunny Suresh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	no
B KARTHIKA	Strongly agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	GOOD SESSION
Prof. Geetabala Siddharth Lendhare	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nice session
Nithya Jayakumar	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	no
R S M Lakshmi Patibandla	Strongly agree	Strongly Disagree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Rahul Tiwari	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NA
ANITA DAYANAND MHATRE	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NO
Dr.E.THANGASELVI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent program
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session.
Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Er. Manoj S. Kavedia	Agree	Agree	Agree	Yes	No	Agree	All good
Meena Talele	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Live demo excellent
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice session

Short Term Training Program on 'Green Internet of Things'

Dr.M.Deivakani	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice
Dr K S Balamurugan	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Sandhya sandeep Deshpande	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	N
Manish Bhelande	Strongly agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	Knowledgeable
Diptee S. Patil	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	
Harsh Namdev Bhor	Strongly agree	Agree	Strongly Agree	Yes	No	Strongly Agree	Good Session
Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
Monali V. Rajput	Agree	Agree	Strongly Agree	Yes	Yes	Agree	good session
DARSHAN B D	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Prof. (Dr.) Tryambak Hiwarkar	Agree	Agree	Agree	Yes	Yes	Agree	Sessions were excellent and informative
VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good Session
Dr. Swati Jha	Agree	Agree	Agree	Yes	Yes	Agree	No
Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice session
Dashrath B Kale	Agree	Agree	Agree	No	Yes	Agree	Nil
Rasika Gajendra Patil	Agree	Agree	Strongly Agree	Yes	No	Strongly Agree	Nil
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good Session

Short Term Training Program on 'Green Internet of Things'

Ramassamy Elangovan	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	_
SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Ratan Rajan Srivastava	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	very informative sessions
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Dr. Sharon Christa I L	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nil
Madhuri Ghuge	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Good session
Torana Kamble	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Session was nice
PRIYA B. PANDHARBALE	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good session
Sachin Govardhan Jagdale	Agree	Agree	Agree	Yes	No	Agree	Thank you
Prof.(Dr.) Tryambak Hiwarkar	Agree	Agree	Agree	Yes	Yes	Agree	Session were excellent and informative
SUTHAHAR P	Agree	Agree	Agree	Yes	No	Agree	Informative Session
Meenakshi Garg	Agree	Agree	Agree	Yes	Yes	Strongly Agree	ok
ASIF RAJA M	Agree	Agree	Agree	Yes	No	Agree	NO
Vijaya Ambadas Dhopte	Agree	Agree	Agree	Yes	Yes	Agree	Thank you
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	thank you .amit naik
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	thank you .amit naik

Short Term Training Program on 'Green Internet of Things'

Mr. H. M. Gaikwad	Strongly agree	Strongly agree	Strongly Agree	May be	No	Strongly Agree	Goog hands on sessions
Vaishali Gatty	Strongly agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	Very good session
amit naik	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	thank you
Nafees Ahmed Mushiroddin Kazi	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good program
Sachin Agrawal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Nazahat Balur	Agree	Agree	Agree	Yes	Yes	Agree	No
Shreya Kurne	Agree	Agree	Strongly Agree	Yes	Yes	Agree	Useful information provided
Monali Rajput	Agree	Agree	Strongly Agree	Yes	No	Agree	Good one
Dr. Vaishali Prashant Jadhav	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Gud initiative
Vaishali Satish Joshi	Agree	Agree	Agree	Yes	Yes	Strongly Agree	This session has increased knowledge.
Bhawana S Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very nice session
Dr. Swati Jha	Agree	Agree	Agree	Yes	Yes	Agree	No
Prof.Megha Wankhade	Agree	Agree	Agree	Yes	No	Agree	No
Mahesh M. Bulhe	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good presentation
Prof. Shilpa M. Satre	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Dr.M.DEIVAKANI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	NICE
Prof.(Dr.) Tryambak Hiwarkar	Agree	Agree	Agree	May be	Yes	Agree	Very informative

List of participants attended DAY5 session Afternoon with feedback

Resource Person- Dr.Ajay Kumar Godhara

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
Anita Mhatre	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-
ASIF RAJA M	Agree	Agree	Agree	Yes	No	Agree	NO
Dr.P.Malathy	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	very informative
Dashrath B Kale	Agree	Agree	Agree	Yes	Yes	Agree	nil
Nithya Jayakumar	Agree	Agree	Agree	Yes	Yes	Agree	No
Dr. Harshali Parag Patil	Agree	Agree	Agree	Yes	No	Agree	Please share recordings
Mr.R.SARAVANAN	Agree	Agree	Neutral	Yes	Yes	Agree	Good
Mr. H. M. Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good projects demo
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	thank you
Prof. Geetabala Siddharth Lendhare	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Wonderful session
Dr. Sharon Christa I L	Agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nil
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
Er. Manoj S. Kavedia	Agree	Agree	Agree	Yes	No	Agree	All good
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Session Was Good
meena.talele@ves.ac.in	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Aurdino real time demo

Short Term Training Program on 'Green Internet of Things'

Dr. Swati Jha	Agree	Agree	Agree	Yes	No	Agree	No
Dr.E.THANGASE LVI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent program
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session.
Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Kanchan Ganesh Dhuri	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
Dr.Ramesh Solanki	Strongly agree	Agree	Strongly Agree	Yes	No	Agree	Thank you
Vaishali Gatty	Agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Very interesting session
Nahar Sunny Suresh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session
Monali Rajput	Agree	Agree	Agree	Yes	Yes	Strongly Agree	Good session
B KARTHIKA	Strongly agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	Good session
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Diptee S. Patil	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	
Dr K S Balamurugan	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Madhuri Ghuge	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good session

Short Term Training Program on 'Green Internet of Things'

Prof.Megha Wankhade	Agree	Agree	Agree	Yes	No	Agree	No
SUTHAHAR P	Agree	Agree	Agree	Yes	No	Agree	Very Informative Session
SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good
Devanand K. Bathe	Agree	Agree	Agree	Yes	Yes	Strongly Agree	Nice session
Bhawana S Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice session
PRIYA B. PANDHARBALE	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nil
Torana Kamble	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Session was nice
Sandhya sandeep Deshpande	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	..
Manish Bhelande	Strongly agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	Nope
PRABHU R	Agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Nil
SATHIYAPRIYA T	Strongly agree	Strongly agree	Agree	Yes	Yes	Agree	No
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Dr GNANAJEYARA MAN RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very insightful
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice
Meenakshi Garg	Strongly agree	Agree	Agree	Yes	Yes	Agree	Good
DARSHAN B D	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good

Short Term Training Program on 'Green Internet of Things'

Dr. M. Deivakani	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice
Vijaya Dhopte	Agree	Agree	Agree	Yes	Yes	Agree	Thank you
VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very good session.
Nafees Ahmed M. Kazi	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Best sessions
Mahesh M. Bulhe	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent sessions
Mrs Mona Deshmukh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice session
Prof. Shilpa M. Satre	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Thank you
Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Manish Bhelande	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nope
Dr. Vaishali Prashant Jadhav	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Properly organized program
Rasika Gajendra Patil	Agree	Agree	Agree	Yes	No	Agree	Nil
Harsh Namdev Bhor	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	na
amit naik	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	thank you .amit naik
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-
Dr. Vaishali Prashant Jadhav	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Latest topic discussion was gud

List of participants attended DAY6 session Morning with feedback

Resource Person- Mr.Vipin Jain

Mr.Sushil Bedre

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
Manish Bhelande	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nope
PRABHU R	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Dr.E.THANGASELVI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent program
B KARTHIKA	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good session
Dr GNANAJEYARMAN RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	VERY INSIGHTFUL
DARSHAN B D	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Priyasathe123@gmail.com	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nil
Dr Sachin Agrawal	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good
SATHIYAPRIYA T	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
VIJESH MUNDOKALAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good Session.
SUTHAHAR P	Agree	Agree	Agree	Yes	No	Agree	Informative Session
Diptee S. Patil	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	
Mr.R.SARAVANAN	Agree	Agree	Agree	Yes	Yes	Agree	Good

Short Term Training Program on 'Green Internet of Things'

Nithya Jayakumar	Strongly agree	Strongly agree	Agree	Yes	Yes	Agree	No
Sandhya sandeep DESHPANDE	Agree	Agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
Dr.P.Malathy	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Dr HARSHALI PARAG PATIL	Agree	Agree	Agree	Yes	No	Agree	PLEASE SHARE RECORDINGS
Rahul Tiwari	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NA
Prof. Geetabala Siddharth Lendhare	Agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative session
Mr.Gajanan Purushottam Khapre	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very nice
Dr. Swati Jha	Agree	Agree	Agree	Yes	Yes	Agree	No
SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good session
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session.

Short Term Training Program on 'Green Internet of Things'

Ramassamy Elangovan	Agree	Agree	Agree	Yes	Yes	Agree	-
Anita Dayanand Mhatre	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
Er.Manoj S. Kavedia	Agree	Agree	Agree	Yes	No	Agree	All good
Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
Meena Talele	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Excellent practical knowledge share
Sonar Sanjaykumar Vanjirao	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Innovative and informative session
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-
Vijaya Ambadas Dhopte	Agree	Agree	Agree	Yes	Yes	Agree	Thank you
Prof. Shilpa M. Satre	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very informative session
Dr. Sharon Christa I L	Agree	Strongly agree	Agree	Yes	No	Strongly Agree	Nik
Devanand K. Bathe	Strongly agree	Agree	Agree	Yes	Yes	Strongly Agree	Useful information
ASIF RAJA M	Agree	Agree	Agree	Yes	No	Agree	No
Torana Kamble	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Nafees Ahmed M.Kazi	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good session
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	----
Mrs Mona Deshmukh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice session
Mr. H M Gaikwad	Strongly agree	Strongly agree	Strongly Agree	May be	No	Strongly Agree	Goo session

Short Term Training Program on 'Green Internet of Things'

Madhuri Ghuge	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Good session
Harsh Namdev Bhor	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	na
Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Bhawana S Dakhare	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice session
Dr.Ramesh Solanki	Strongly agree	Agree	Strongly Agree	Yes	No	Strongly Agree	Thank you
AMIT NAIK	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	thank you .amit naik
Monali Rajput	Agree	Agree	Agree	Yes	Yes	Agree	Good session
Nahar Sunny Suresh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
RAGHVENDRA OMPRAKASH SINGH	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	Best
Kanchan Ganesh Dhuri	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	no
Mahesh M. Bulhe	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	All sessions excellent
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-
Rasika Gajendra Patil	Agree	Agree	Agree	Yes	No	Strongly Agree	Nil

List of participants attended DAY6 session Afternoon with feedback

Resource Person- Dr. Abhay kshirsagar

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments
P MUTHUMARI	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good
Vishakha krantikumar Gaikwad	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Dashrath b kale	Agree	Agree	Agree	No	Yes	Agree	Nil
Dr GNANAJEYARAMAN RAJARAM	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very insightful
Ramassamy Elangovan	Agree	Agree	Agree	Yes	Yes	Agree	-
Nithya Jayakumar	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	no
SIVARAJ M	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Agree	---
SUTHAHAR P	Agree	Agree	Agree	Yes	No	Agree	Very Informative Session
Devanand K. Bathe	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent session
Dr.Ramesh Solanki	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Thank you
Sachin Agrawal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
ASIF RAJA M	Agree	Agree	Agree	Yes	No	Agree	PPT required for all sessions
Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	good
Sandhya sandeep Deshpande	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Agree	No
Harsh Namdev Bhor	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	na

Short Term Training Program on 'Green Internet of Things'

Prof. Shilpa M. Satre	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	All sessions are very informative
Er.Manoj S. Kavedia	Agree	Agree	Agree	Yes	No	Agree	All good
SHYAMALA M	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Prof. Geetabala Siddharth Lendhare	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative and wonderful sessions
Nafees Ahmed M. Kazi	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Best Sessions
Manish Bhelande	Strongly agree	Agree	Agree	Yes	No	Strongly Agree	Nope
Diptee S. Patil	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	
Dr. Harshali Parag Patil	Agree	Agree	Agree	Yes	No	Agree	-
Nafees Ahmed M.Kazi	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Best organization of program
RAGHVENDRA OMPRAKASH SINGH	Strongly agree	Agree	Agree	Yes	Yes	Agree	Best
Torana Kamble	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Nil
Rahul Tiwari	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	NA
Madhuri Ghuge	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Well organised
Nazahat Balur	Agree	Agree	Agree	Yes	Yes	Agree	No
PRIYA B. PANDHARBALE	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nil
Dr K S Balamurugan	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
B KARTHIKA	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good session

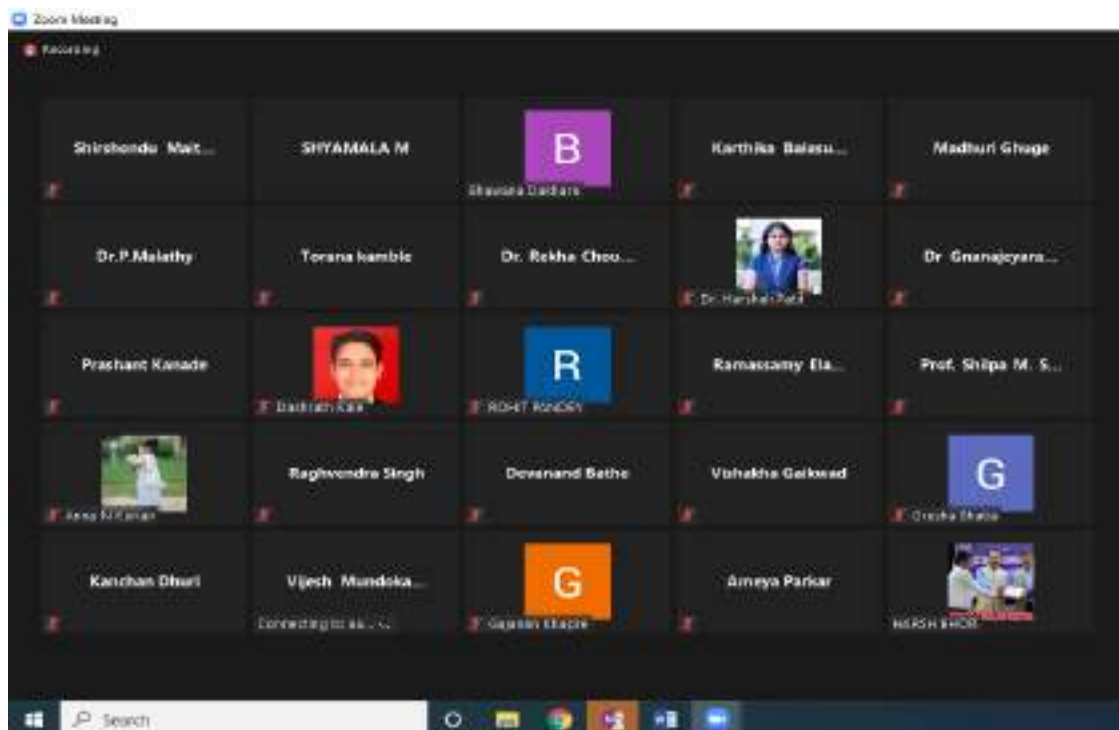
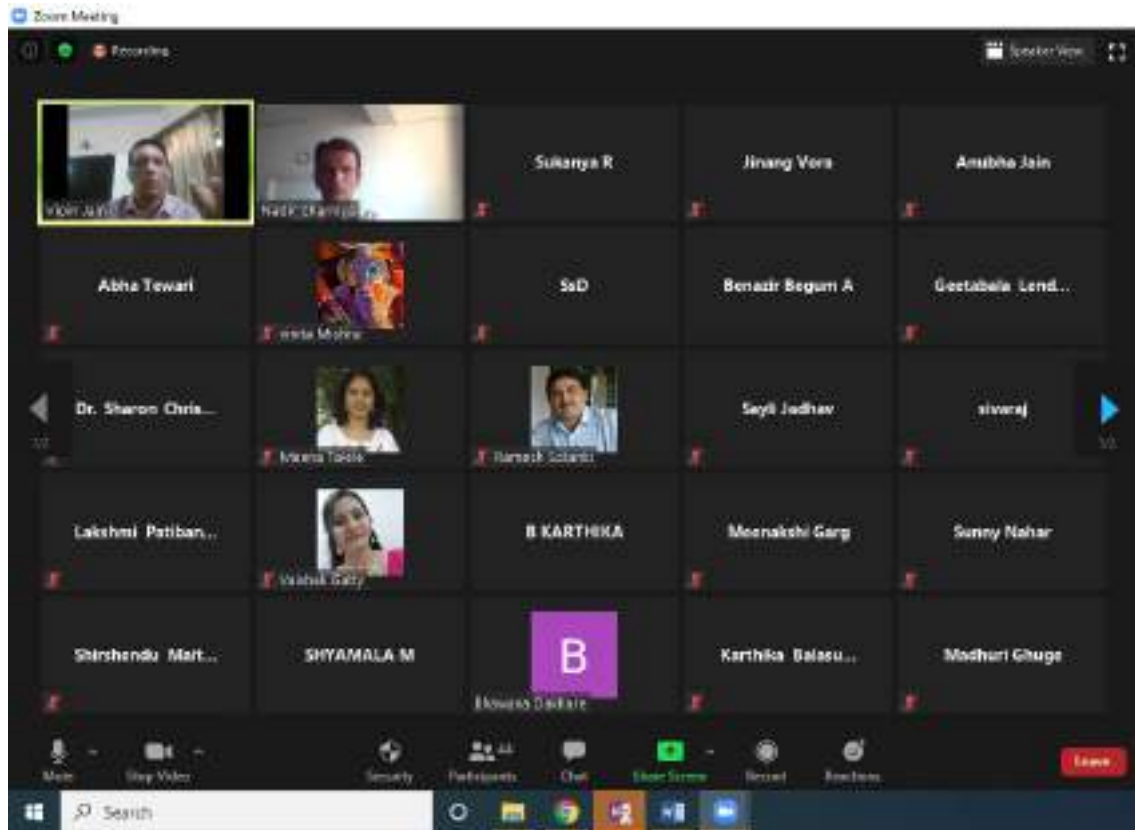
Short Term Training Program on 'Green Internet of Things'

Mrs Mona Deshmukh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Nice session
Monali Rajput	Agree	Agree	Agree	Yes	Yes	Strongly Agree	Good session
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-
Vaishali Gatty	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Great session
Dr. Swati Jha	Agree	Agree	Agree	Yes	Yes	Agree	No
Dr. Rekha Chouhan	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Very Informative session.
Ameya Parkar	Agree	Agree	Agree	Yes	No	Agree	No
PRABHU R	Agree	Strongly agree	Agree	Yes	Yes	Strongly Agree	No
SATHIYAPRIYA T	Agree	Agree	Agree	Yes	Yes	Strongly Agree	Nil
Shreya Kurne	Agree	Agree	Agree	Yes	Yes	Agree	Good session
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Tarun Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Anita Dayanand Mhatre	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	No
DARSHAN B D	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good
Dr. Sushma Jaiswal	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Very informative
Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session
Sanjaykumar Vanjirao Sonar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Informative session

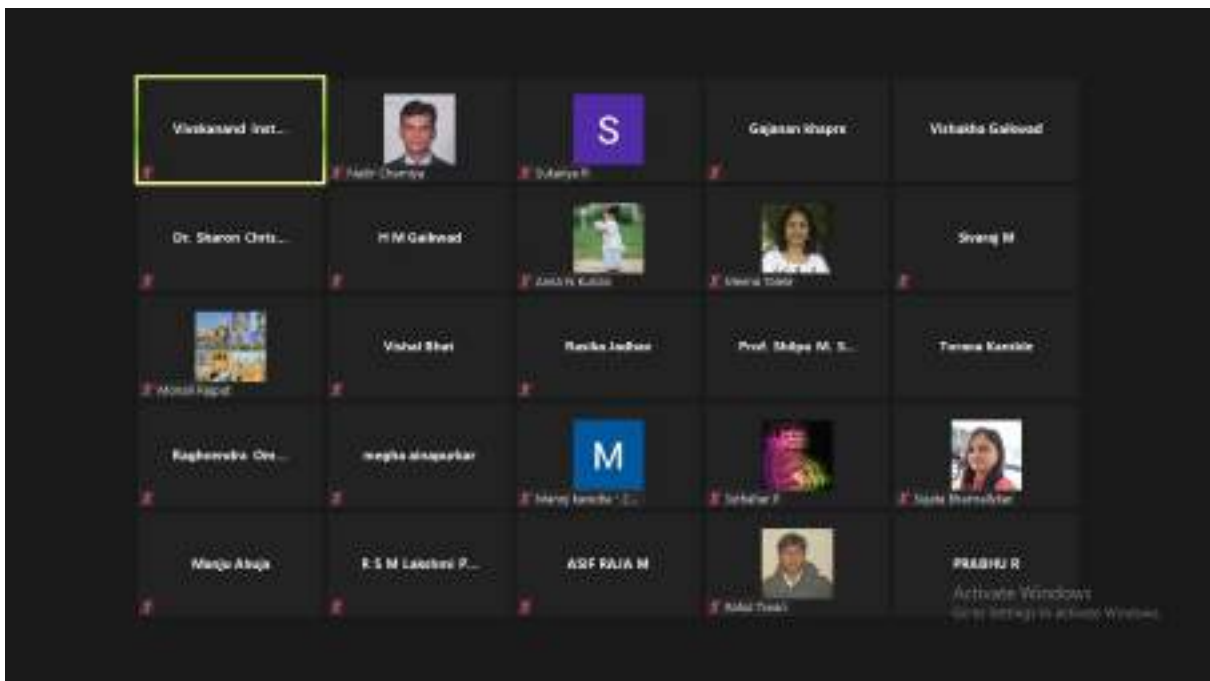
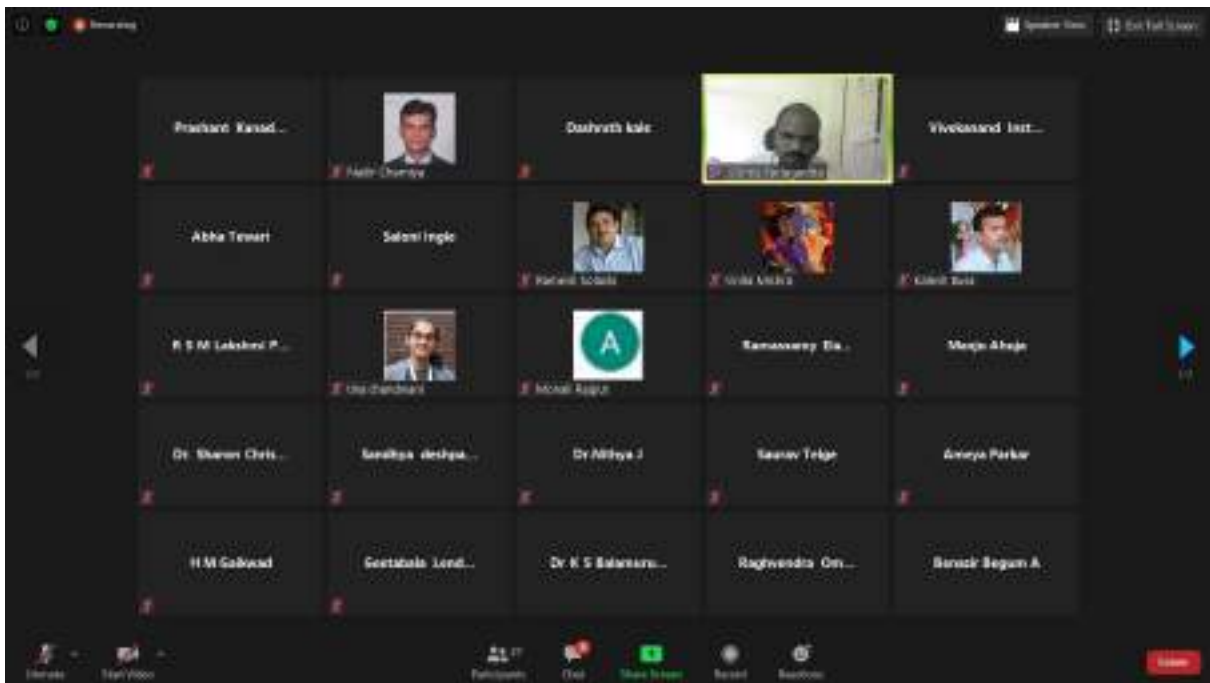
Short Term Training Program on 'Green Internet of Things'

Mrs.SARIKA ATUL PATIL	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
Dr. Sharon Christa I L	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Agree	Please share the recorded videos
Prof.Megha Wankhade	Agree	Agree	Agree	Yes	Yes	Agree	No
Kanchan Ganesh Dhuri	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	no
Prof. Sujata Bhairnallykar	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	Good session
Nahar Sunny Suresh	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	No
Mr. H M Gaikwad	Agree	Agree	Agree	May be	Yes	Agree	contents were already covered by previous experts
Dr K S Balamurugan	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
R S M Lakshmi Patibandla	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Excellent
Vijaya Ambadas Dhopte	Agree	Agree	Agree	Yes	Yes	Agree	Thank you
Mahesh M. Bulhe	Strongly agree	Strongly agree	Strongly Agree	Yes	Yes	Strongly Agree	Good sessions
Manju Ahuja	Strongly agree	Strongly agree	Strongly Agree	Yes	No	Strongly Agree	-
Rasika Gajendra Patil	Agree	Agree	Agree	Yes	No	Agree	Nil
Dr. Swati Jha	Agree	Agree	Agree	Yes	Yes	Agree	No

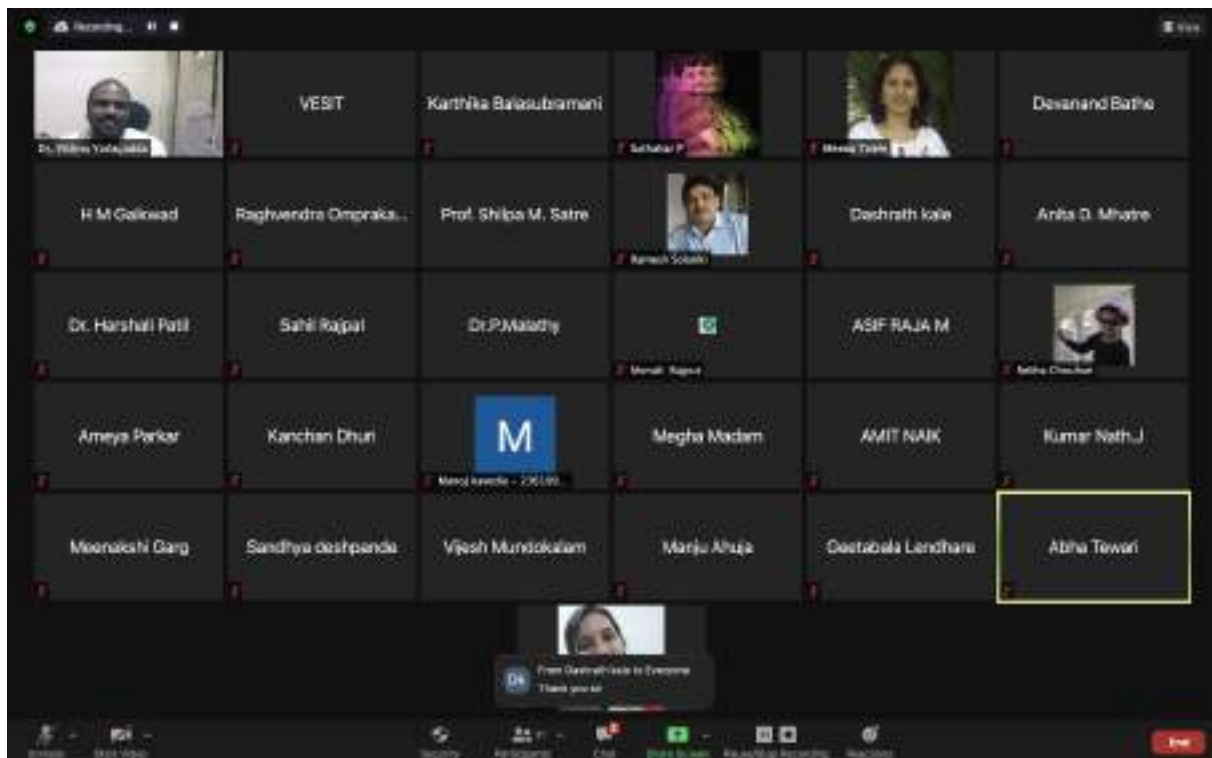
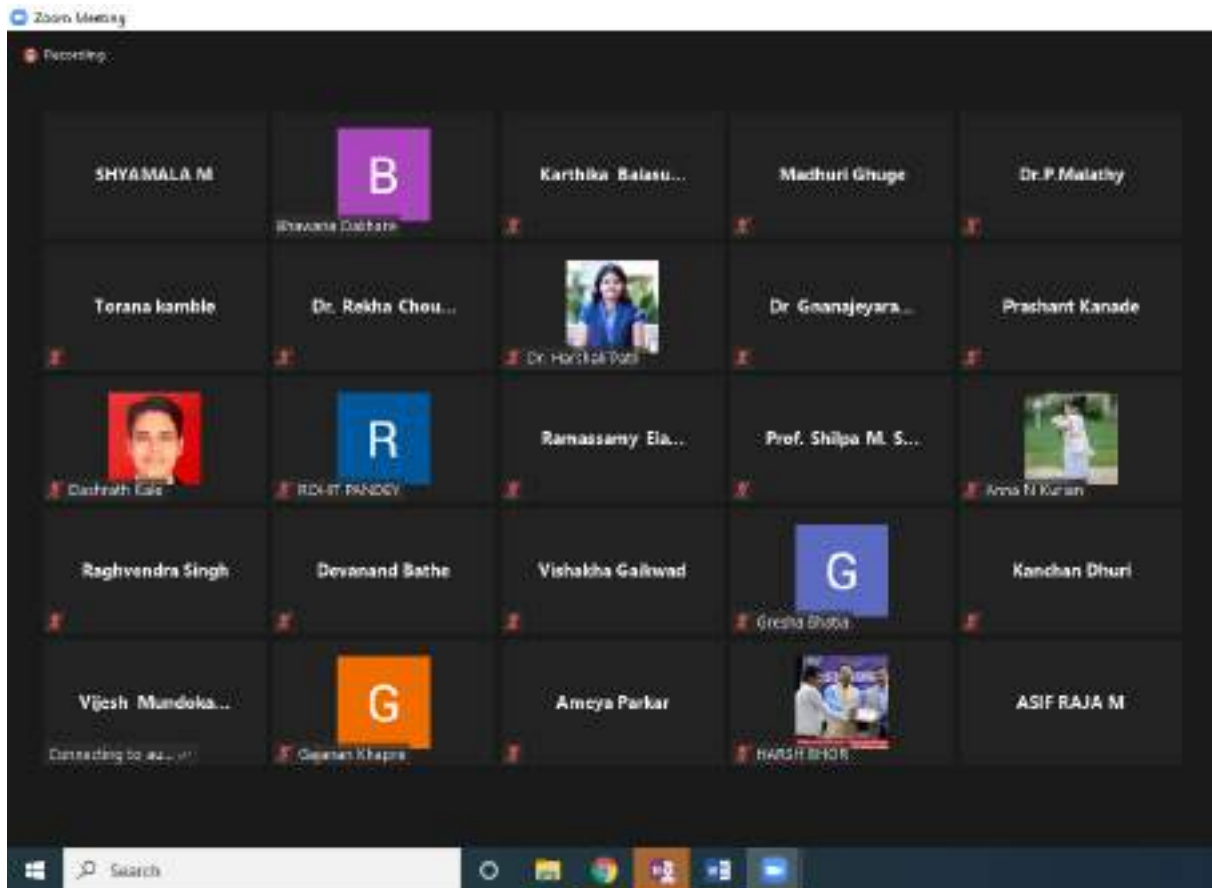
ANNEXURE-VI Grid Photographs



Short Term Training Program on 'Green Internet of Things'

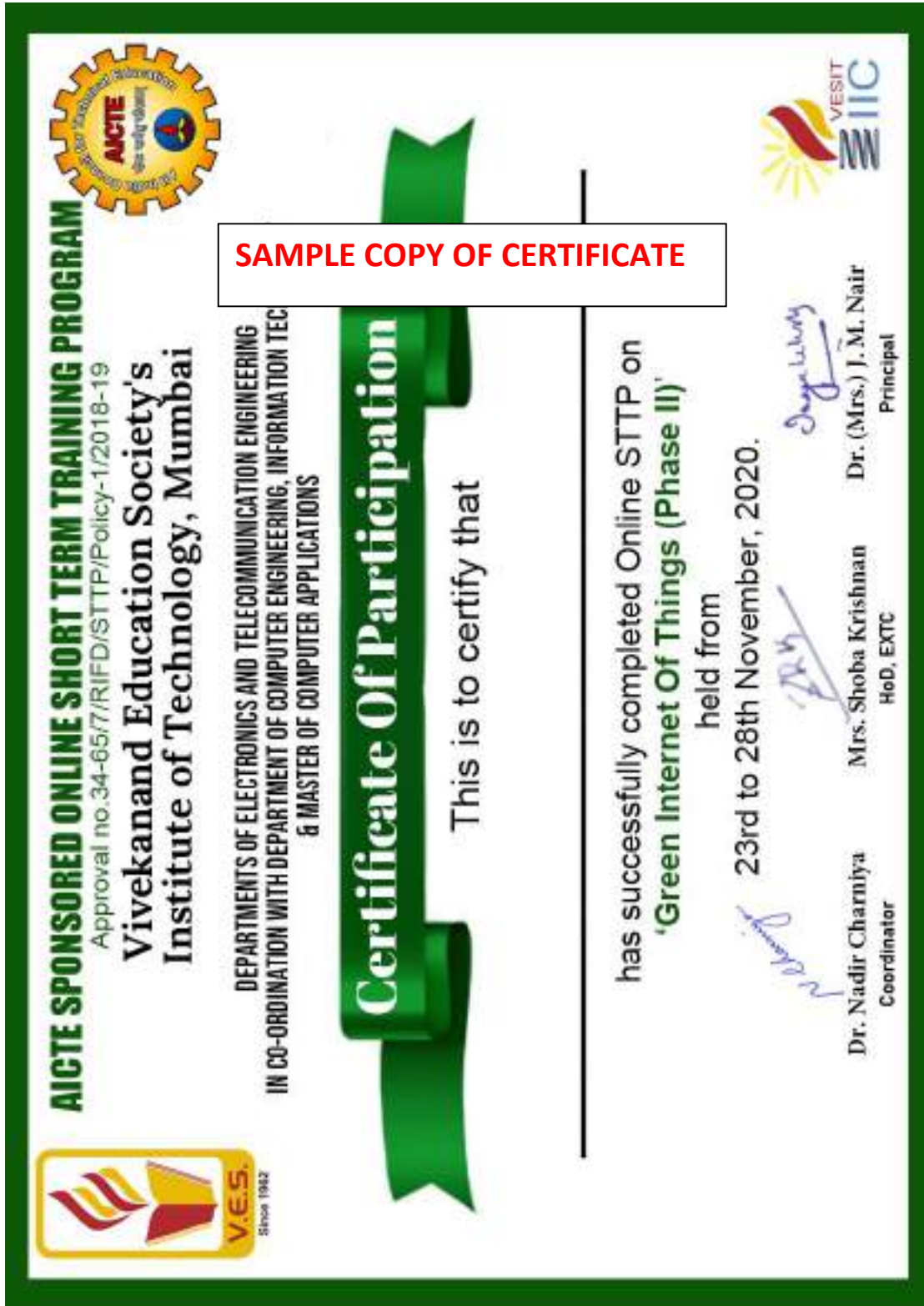


Short Term Training Program on 'Green Internet of Things'



Annexure – VII

Sample Copy of Certificate



ANNEXURE-VIII

STTP Brochure

Vivekanand Education Society's Institute of Technology, Chembur, Mumbai 400074



Department of Electronics and Telecommunication Organizing

One Week AICTE Sponsored Online STTP on

GREEN INTERNET OF THINGS

(November 23rd to November 28th 2020)

Coordinated by

- **Department of Computer Engineering**
- **Department of Information Technology**
- **Department of Master of Computer Applications**

(In Association with VESIT IQAC & IIC)

V. E. S. Institute of Technology, Hashu Advani Memorial Complex, R. C. Marg, Collector's Colony, Chembur,

Mumbai – 400 074, (Maharashtra)

Phone- (022)61 532 532 Fax- (022) 61 532 555

E-mail: vesit@ves.ac.in

<http://www.vesit.ves.ac.in>

About VESIT

Vivekanand Education Society's Institute of Technology (VESIT) established in 1984 is one of the premier engineering colleges affiliated with the University of Mumbai. VESIT offers Bachelors programs in engineering under the following streams: Electronics, Computer Engineering, Electronics & Telecommunication, Information Technology and Instrumentation. VESIT has introduced a new bachelor's degree program in AI and Data Science from the year 2020. In addition to this, VESIT offers Master of Engineering in Instrumentation and Control, Information Technology and Electronics & Telecommunication streams, and Master of Computer Applications. VESIT is a recognised PhD centre for Engineering and Technology of University of Mumbai, and also a Lifelong Learning Centre.

About Green Internet of Things

Internet of things (IoT) applications forecast to have 50 billion connected devices by the end of 2020. IoT promises to connect all industrial and consumer appliances to cloud service providers. IoT is impacting every aspect of our lives from wearable devices such as fitness bands and smart watches to personal health care monitors. IoT devices are making us connected. Homes and white goods appliances are also increasingly becoming IoT edge node candidates. The Smart Home concept where energy consumption is carefully monitored by smart gateways at home and appliances can be remotely controlled. This Short Term Training Program (STTP) on Green Internet of Things is being organized by Department of Electronics and

Telecommunication Engineering, Vivekanand Education Society's Institute of Technology for enhancing skills of faculties and scholars of engineering colleges in the domain of IoT and its initiatives towards green technology. This program focuses on development of various industrial and societal applications using the Internet of Things. The eminent speakers and practitioners from academia and industries will conduct the sessions to motivate the participants to undertake interesting and innovative ideas. The program will further explore research avenues in the domain of IoT and Green IoT through the effective discussion during the training. The objective of this STTP is acquainting academicians and industry personnel with the IoT technology, recent trends and green initiatives, providing exposure to technologies supporting Green IoT, hardware and software development tools and demonstrations, predictive analytics using IoT, security in IoT.



Resource Persons:

Resource persons will be eminent personalities from academia and industries.

Registration Fee:

The course is **FREE**

Who can attend?

- Faculty from AICTE approved Engineering Institutes (Degree/ Diploma) & MCA institutes
- Industry Representative

Registration Link: <https://forms.gle/9on8tis7bXHXqK10A>

Telegram Channel Link: https://t.me/sttp_green_IOT

For enquiries contact:

E-Mail: giot.phase2@ves.ac.in

Patrons:

- Shri B. L. Boolani, President, Vivekanand Education Society.
- Dr. (Mrs.) J. M. Nair, Principal, VESIT
- Dr. (Mrs.) M. Vijayalakshmi, Vice Principal, VESIT
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- Dr. (Mrs.) Shalu Chopra, Head of Department, Information Technology
- Dr. Shiv Kumar Goel, Head of Department
- Master of Computer Applications.

Program Evaluation Committee

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Dr. (Mrs) M. Vijayalakshmi, Vice Principal (Member)

Dr. Nadir Charniya, Prof. EXTC,

STTP Coordinator (Member Secretary)

Mrs. Shoba Krishnan, Head EXTC (Member)

Dr. P. P. Vaidya, Dean, R and D (Member)

Mrs. Kavita Tewari, Head ETRX (Member)

Dr. Ramesh Kulkarni, Deputy Head EXTC (Member)

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Mob: +919764996706

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Advisory Committee

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Director (FDC), AICTE, New Delhi

Prof. D. N. Malkhede.

Adviser, RIFD, AICTE, New Delhi

Organising Committee

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Ms. Sukanya Roychowdhury, Info Tech.

Mrs Meenakshi Garg, Dept of MCA

Mr Sunny Nahar, Dept of MCA

Mrs Vaishali Gatty, Dept of MCA

Mr. Prashant Kanade, Computer Engg

Instructions to Participants:

The faculty members who are willing to join this program need to have the following basic requirements.

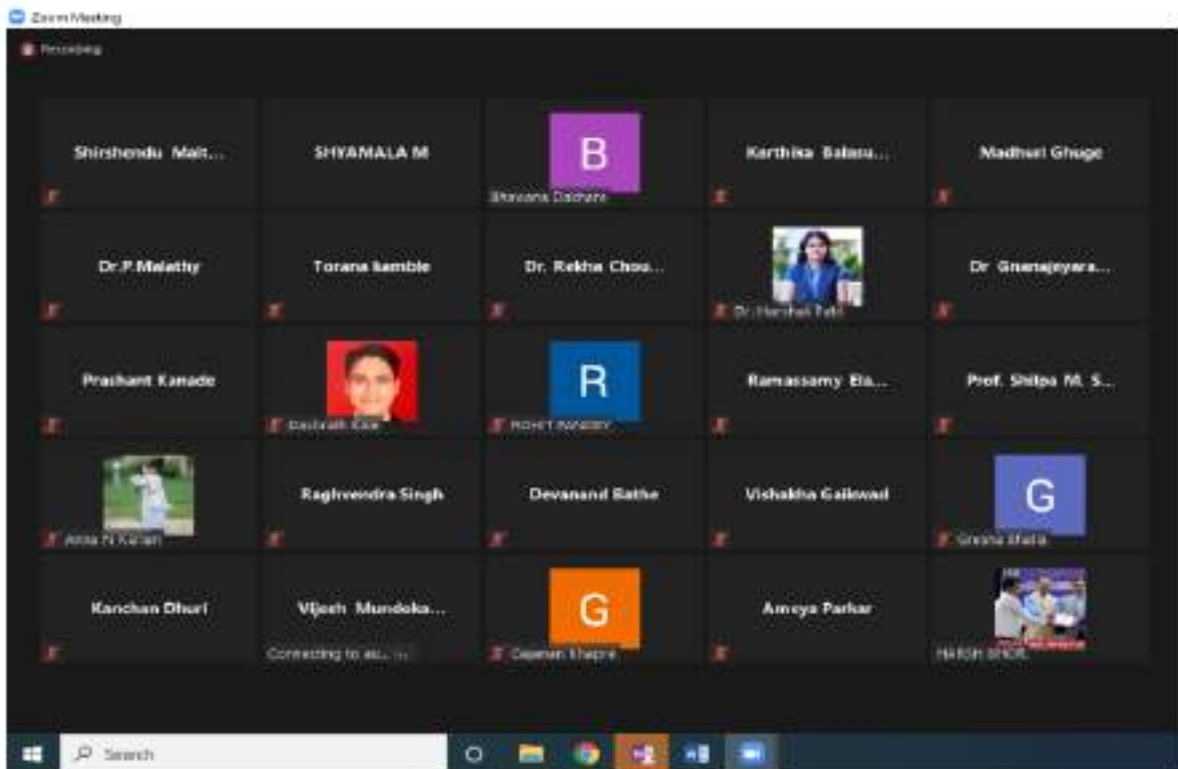
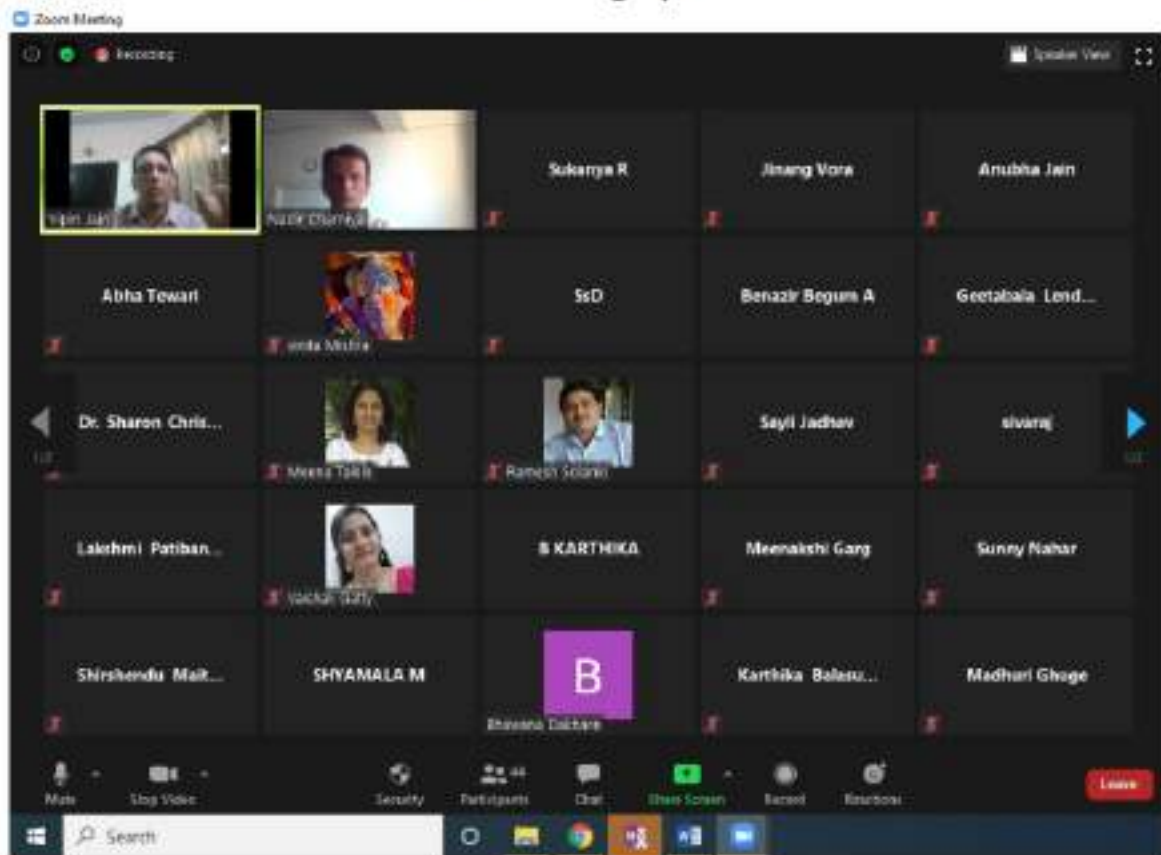
1. Laptop/Desktop with good internet connection and Gmail account.
2. Every participant must register by filling up the online form and join telegram channel thereafter.
3. All communications will be on Telegram channel.
4. Fill the Google registration form carefully and check your name, university/ institution/ college name and e-mail ID before submission.
5. Last Date to fill the registration form is 19th November, 2020.
6. Confirmation of registration will be communicated to the registered e-mail ID by 20th November 2020.
7. Participants need to attend daily online sessions at the scheduled time.
8. It is mandatory to fill up the feedback forms.
9. Online Test, based on all the topics discussed during the program will be conducted. Minimum 40% score is necessary for certification.
10. AICTE certificates will be provided on participants' e-mail ID.

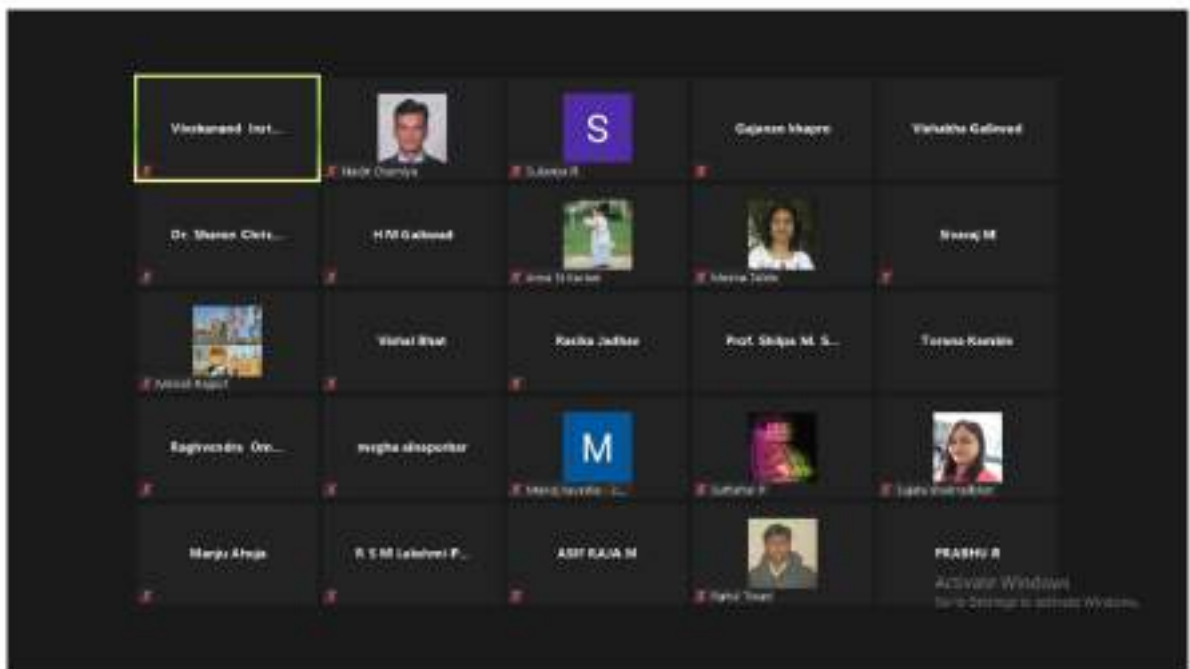
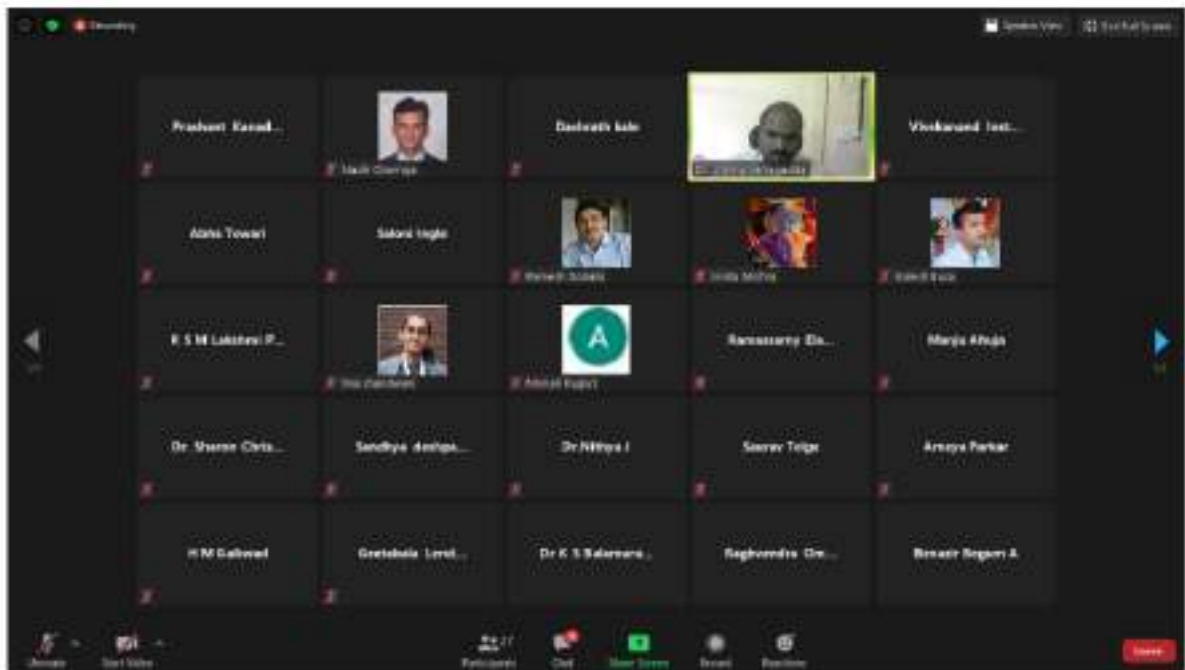


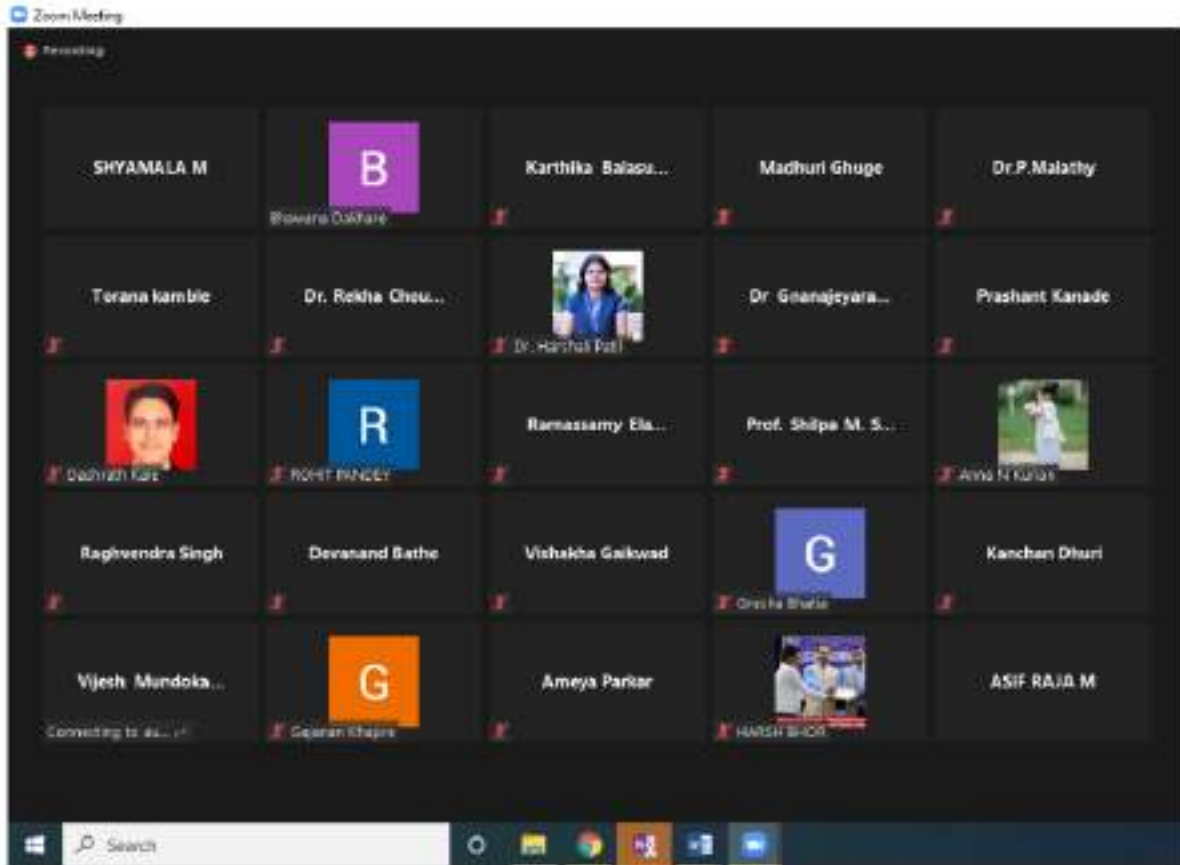
Course material provided by the experts and recording of sessions enclosed herewith in CD/DVD.

STTP on Green IoT--Phase II Photographs

Grid Photographs







**Vivekanand Education Society's
Institute of Technology,
Chembur, Mumbai**

AICTE SPONSORED ONLINE STTP



**Department of
Electronics & Telecommunication
Engineering in Collaboration with
Department of Electronics Engineering
and
Department of Instrumentation
Engineering
(In Association with VESIT IQAC & IIC)**

**Organizes
One Week AICTE Sponsored
Online STTP
on
Green Internet of Things
Phase -III**

(7th to 12th December, 2020)

V. E. S. Institute of Technology,
Hashu Advani Memorial Complex,
R. C. Marg, Collector's Colony,
Chembur, Mumbai – 400 074
Phone: 022 – 61 532 532/500
Fax: 022 – 61 532 555
Email: vesit@ves.ac.in
Website: <https://vesit.ves.ac.in>

About VESIT

Vivekanand Education Society's Institute of Technology (VESIT) established in 1984 is one of the premier engineering colleges affiliated with the University of Mumbai. VESIT offers Bachelors programs in engineering in the following streams: Electronics, Electronics & Telecommunication, Computer, Information Technology, Instrumentation and Artificial Intelligence & data science.

In addition, VESIT offers Master of Engineering in Instrumentation & Control, Information Technology and Electronics & Telecommunication streams. VESIT also offers post graduate course in Master of Computer Applications. VESIT is a recognised Ph.D. Center for Engineering and Technology of University of Mumbai. VESIT has recognised as Lifelong Learning Center by the University of Mumbai.

About Green Internet of Things

The Internet of Things (IoT) has been envisaged to describe a number of technologies and research areas that enable global connectivity of physical objects. Enabling technologies like Radio-Frequency Identification (RFID), sensor networks, biometrics, nanotechnologies and factory automations are now becoming very common, bringing the IoT into real implementations. This addresses varying applications, including smart grid, e-health, smart factories and intelligent transportation etc. Green IoT networks will contribute to reducing emissions and pollutions, exploiting environmental conservation and surveillance, and minimizing operational costs and power consumption.

This Short Term Training Program (STTP) on Green Internet of Things Phase-III is being organized by Department of Electronics and Telecommunication Engineering, in association with the department of Electronics Engineering and Instrumentation Engineering, Vivekanand Education Society's Institute of Technology for enhancing skills of faculty and scholars of engineering colleges in the domain of IoT and its initiatives towards green technology.

The Green Internet of Things (G-IoT) is predicted to introduce significant changes in our daily life towards the vision of "green ambient intelligence". Within few years, we will be surrounded by a massive amount of sensors, devices, and "things," which will be able to communicate via 5G, act "intelligently," and provide green support for users in managing their tasks. These new smart objects will also be context-aware and able to perform certain functions autonomously, calling for new forms of green communication between people and things and between things themselves, where power consumption is optimized and bandwidth utilization is maximized. This development would be relevant not only to researchers, but also to corporations and individuals alike. Considering these facts, the aim of this STTP is to focus on both theoretical and implementation aspects in networks that can be utilized in providing green systems through IoT enabling technologies.

Course Objective

The objective of this STTP is acquainting academicians and industry personnel with the IoT technology, recent trends and green initiatives, providing exposure to technologies supporting Green IoT, hardware and software development tools and demonstrations, predictive analytics using IoT, security in IoT.

Course Contents

- ❖ Introduction to IoT
- ❖ IoT Architecture
- ❖ Concepts of Green IoT
- ❖ IoT Protocols
- ❖ Wireless Sensor Network for IoT
- ❖ Details of IoT Simulators
- ❖ Cloud computing for IoT
- ❖ Open Source platform for IoT
- ❖ IoT Analytics
- ❖ IoT Security and Privacy Issues
- ❖ IoT Standards and Legislation
- ❖ Green IoT Applications
- ❖ Hands-on sessions

Resource Person:

The speakers would be eminent personalities from academia and industries.

Registration Fee:

STTP Course is Free

Last date of Registration:

25th November, 2020

Who can attend?

Faculty from AICTE approved Engineering Institutes (Degree/ Diploma) & MCA institutes
Industry Representative.

Registration Form Link:

<https://forms.gle/4EwNXgiQWvmJB7ds9>

Telegram Channel Link:

<https://t.me/joinchat/QBqOxEa5O50FvGuPRb-FGA>

For enquiries contact:

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Mob: +919821686947
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Mr. Kader Shaikh
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Mrs. Kavita Tewari, Head, ETRX

STTP Coordinator:

Dr. Nadir Charniya, Professor, EXTC

Program Evaluation Committee for the STTP:

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Dr.Ramesh Kulkarni, Deputy Head, EXTC (Member)

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Prof.D.N.Malkhede,Advisor,RIFD,AICTE,New Delhi.

Course Coordinator:

Dr.Abhay Kshirsagar, Associate Professor, ETRX
Mr.Kader Shaikh, Assistant Professor, INST

Organizing Committee:

Mrs. Naveeta Kant, Deputy Head, ETRX
Mrs.Sangeetha Prasanna Ram, Deputy Head, INST
Mrs. Madhumati Khuspe, Assistant Professor, INST
Mr. Yogesh Pandit, Assistant Professor, ETRX
Mrs. Sarika Kuhikar, Assistant Professor, ETRX
Mrs. Jayashree Ramakrishnan, Assistant Professor, INST
Mrs. Mugdha Joglekar, Assistant Professor, INST
Mrs. Amrita Jhaveri, Assistant Professor, ETRX
Mrs. Namrata Bonde, Assistant Professor, INST
Mrs. Anushree Prabhu, Assistant Professor, ETRX

Instructions to Participants:

The person willing to join this program need to have the following basic requirements:

- ❖ Laptop/Desktop with good internet connection and Gmail account.
- ❖ Telegram App should be installed on mobile. Zoom App, Google App, Google Meet, MS Teams should be installed on a Laptop/Desktop.
- ❖ Every participant must register by filling up the online form and join telegram channel thereafter.
- ❖ All communications will be on Telegram channel.
- ❖ Fill the Google registration form carefully and check your name, university/ institution/ college name and e-mail ID before submission.
- ❖ No correction in the certificate will be done due to incorrect information provided in the registration form.
- ❖ Last Date to fill the registration form is 25th November, 2020.
- ❖ Confirmation of registration will be communicated to the registered e-mail ID by 2nd December, 2020.
- ❖ Participants need to attend daily online sessions at the scheduled time.
- ❖ It is mandatory to fill up the feedback forms.
- ❖ Online Test, based on all the topics discussed during the program will be conducted. Minimum 40% score is necessary for certification.
- ❖ AICTE certificates will be provided on participants' e-mail ID.



Proceedings of

One Week AICTE Sponsored Online STTP

On

GREEN INTERNET OF THINGS

(PHASE-III)

From 7th Dec to 12th Dec, 2020

Organized by:

Department of Electronics & Telecommunication

In Collaboration with

Department of Electronics Engineering and

Department of Instrumentation Engineering

In Association with IQAC and IIC

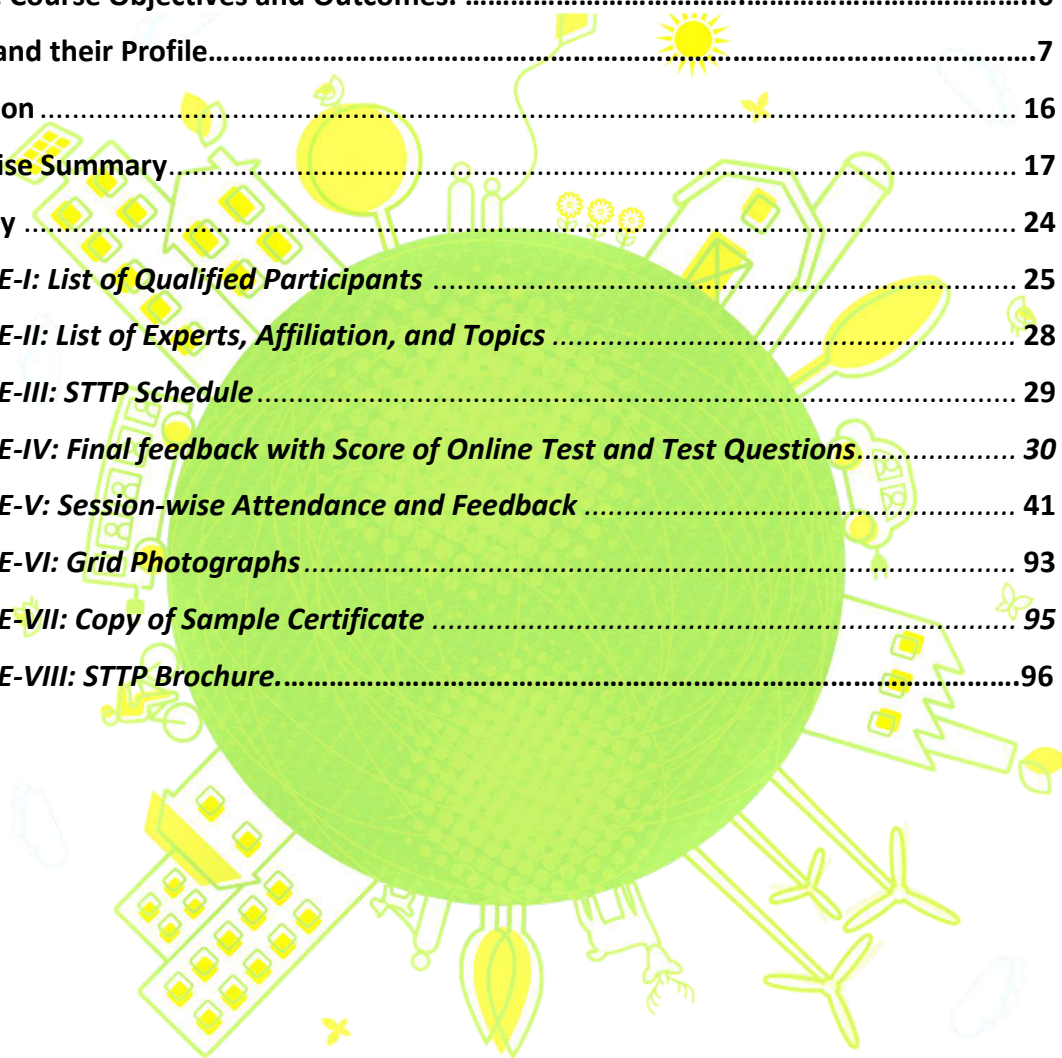
Vivekanand Education Society's Institute of Technology

Hashu Advani Memorial Complex, Collectors Colony

Chembur (East), Mumbai – 400 074

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FOREWORD



I am very much delighted to know that our departments of Electronics Engineering and Department of Instrumentation Engineering in association with Electronics and Telecommunications Department are arranging an AICTE sponsored Faculty Development Program on “Green Internet of Things”. As all of you know, IOT has the potential to revolutionize the world, similar to what internet did earlier. It can be considered as a facilitator of ‘Smart World’ which connects devices with unique addresses to interact with each other and with outside world. i.e. It enables physical objects to see, hear, think and perform jobs by having them talk to each other, to share information and co-ordinate decisions. The applications are of mainly three kinds, IOT for Consumers, IOT for Enterprises and IOT for process industries (IIOT). Alexa, Wearable device used by miners, and Smart grid falls under these categories respectively. Green IOT targets ‘sustainable smart world’ by reducing energy consumption of the IOT devices and processes. It envisages the practice of designing, manufacturing, using, and disposing of computers, servers, and associated sub systems, and networking and communications systems efficiently and effectively with minimal or no impact on the environment.

I am very happy to note that the technical experts from industries, such as, Siemens Ltd, Radisys India, Panache Digilife Ltd, and Tarana Wireless, and researchers from academia are sharing their expertise in this workshop. Hope that the participants of this workshop will make full use of this golden opportunity, and initiate, IOT related projects in their respective educational institutions leading to tangible research in this interdisciplinary, emerging area.

Dr. (Mrs) J. M. Nair

PRINCIPAL, VESIT

PREFACE



Phase-III of the AICTE sponsored online training program on *Green Internet of Things* has been organized by Department of Electronics and Telecommunication Engineering, in collaboration with dept. of Electronics Engineering, and dept. of Instrumentation Engineering, in association with IQAC and IIC, of Vivekanand Education Society's Institute of Technology for enhancing skills of faculties and scholars of engineering colleges in the domain of IoT and its initiatives towards green technology.

Internet of Things (IoT) is a system of interconnected devices, things or sensors over the internet. This network is growing exponentially due to demand of smart consumer appliances, wearable devices, smart home, industrial devices, cloud services and many. This has opened up new challenges and research majorly in managing the energy resources for IoT, and energy efficiency by various means.

'*Green IoT*' is the initiative and concept motivated by achieving a low power consumption IoT. Green IoT is possible by using Ultra low power consumption hardware, Software algorithms and protocols to minimize power consumption, Using unconventional energy resources, Smart grids, Designing IoT itself for minimizing power consumption and many.

The STTP would provide various concepts, theory, and practical demonstrations on IoT, and Green initiatives to IoT.

The eminent speakers and practitioners from academia and industries are conducting the sessions and demonstrations to motivate the participants to undertake interesting and innovative ideas. The program helps to explore research avenues in the domain of IoT and Green IoT through the effective discussion during the training.

Short Term Training Program on 'Green Internet of Things'

We express profound sense of gratitude towards AICTE for Sponsoring Training Program on Green Internet of Things and also giving the opportunity to conduct it online due to COVID crisis.

We are grateful to AICTE, New Delhi and dignitaries from AICTE for the funding the STTP and guidance received. Special thanks to the experts invited for the sessions, Dr. J. M. Nair Principal, VESIT, Dr. M. Vijayalakshmi, Vice Principal VESIT, Prof. Shoba Krishnan Head, Electronics and Telecom Dept, Prof. Kavita Tewari, Head, Electronics Engineering Dept, Dr. P. P. Vaidya, Dean R & D and Head, Instrumentation Engineering Dept, Program Evaluation Committee members, the STTP team and the PAN India participants.

I am confident that the sessions, hands-on, and demonstrations during the training will be an invaluable experience and add-on to the learnings to carry out concrete research.

Dr Nadir Charniya

Course Coordinator

Prof. Electronics and Telecom, VESIT

PROGRAM COMMITTEE

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Col. B. Venkat. Director (FDC), AICTE, New Delhi

Technical Coordinators

Dr. Abhay Kshirsagar, Associate Professor, Electronics Engineering Dept.

Mr. Kader Shaikh, Assistant Professor, Instrumentation Engineering Dept.

Organizing Committee:

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Mrs. Mugdha Joglekar, Assistant Professor, Instrumentation Engineering Dept.

Mrs. Amrita Jhaveri, Assistant Professor, Electronics Engineering Dept.

Mrs. Namrata Bonde, Assistant Professor, Instrumentation Engineering Dept.

Mrs. Anushree Prabhu, Assistant Professor, Electronics Engineering Dept.

GREEN IoT

Course Objectives:

1. Acquainting participants with the technology of Internet of things (IoT) and exposure to recent trends in IoT.
2. Introducing and exploring the technologies supporting Green IoT
3. Exposure to security and privacy in IoT and Green initiative.
4. Demonstrating Hardware and Software platforms and tools for IoT.
5. Providing exposure and demonstration on IoT applications and Artificial Intelligence (AI) based predictive analytics using IoT.

Course Outcomes:

On completion of the course participants will be expected to:

1. Have good understanding of IoT Technology, emerging trends in IoT and various concept and features of Green IoT technology.
2. Comprehend and apply different hardware and software tools used for implementation of IoT.
3. Have good understanding of cloud platform for IoT, security and privacy in IoT, and Green initiatives towards IoT.
4. Apply predictive data analytics with the fusion of AI and IoT using Cloud and programming in python.
5. Develop IoT applications with the aid of IoT tools and AI tools.

SPEAKERS AND THEIR PROFILE

Mr. Dhananjay Jadhav (*Senior Technical Consultant, Siemens Ltd, Mumbai*)



Mr. Dhananjay Jadhav is serving as a Senior Technical Consultant in Siemens Ltd. He is working in Siemens for over nine years in the field of factory automation, products and providing consultancy in various domain like Automotive , W&WW, Pharma, F&B OEM market etc. in view of automation, digitalization and edge technology implementation .

Mr. Shashank Karmarkar (*Solution Architect Radisys India, Mumbai*)



Mr. Shashank Karmarkar is purely a Telecom professional. He worked with companies like BPL mobiles, Reliance communication, and Huawei India. He also worked in network planning,

deployment, operation of CDMA/2G/3G/4G/IOT. He has around 22 Years of experience. Currently he is working as Solution Architect in Radisys India, Mumbai

Mr. Nishant Singh (*Technical Trainer, Mumbai*)



Mr. Nishant Singh, Technical Trainer & Patent Holder for 'Home Aquarium Monitoring System'. He is a Technical expert and a passionate trainer having vast experience in Research & Development, Technical Training and Project Management. He has a proven work record of delivering more than 200 workshops and Technical Training in various technologies and domains including IITs, NITs and other premier educational organizations.

Prior to this, he has worked with Kaizen (UAE), Saudi Arabia, Dubai & Abu Dhabi. There he trained participants on Internet of Things for data analytics using MQTT protocols and AWS, Robotics & 3D printing. He has also trained Siemens employee on applications of IoT and data analytics in automation. He has conducted one week Faculty Development Program on Python, Internet of Things and its integration with AWS, and machine learning at various engineering colleges under Mumbai University.

Mr. Amit Rambhia (*Chairman and Managing Director– Panache Digilife Ltd, Mumbai*)



Mr. Amit Rambhia with over 25 years of experience in innovation. His dedication and hard work is an inspiration to many new entrepreneurs and has instrumented his success in the field of business. He is an accomplished MBA – IIM Indore with Bachelor's Degree in Computer Science from University of Mumbai. He is passionate about making Panache Digilife a world class, competitive and internationally recognized company. Mr. Amit always had a passion for technology. He ventured into ICT hardware business in 1993 while he was in second year engineering at VESIT, Mumbai. It started as a computer assembly business and soon it moved into white box manufacturing for innovative computing systems. He was the first to bring Small Form Factor computers into India. From there on, there has been no looking back; Company has continuously added innovative products to its portfolio under their brand Panache. The company is now focusing on IOT & ICT devices and solutions. Mr. Amit has made Panache Digilife a versatile Product Design to Manufacturing Enterprise with the ability to bring original concepts and ideas into series of production. The company provides cost effective electronic manufacturing solutions adhering to highest standard of service, delivery and quality. It has ability to produce complex products at affordable costs with the use of innovative technology skills. Under the robust leadership of Mr. Amit the Company has been recognized by several awards like CRN Excellence Award for Big Data & Analytics, Intel IoT Group Partner Award, Edge Innovation Award, SME National Award for Excellence in IT, CRN Best System Builder, Intel Embedded Hero award and accolades for the kind of innovations

they have made. Mr. Amit has recently been recognized amongst The Most Influential Marketing Leader by The World Marketing Congress. With his vision and dedication, the company has been listed on the NSE (NSE Symbol: PANACHE) Platform on 25th April 2017, with name "PANACHE DIGILIFE LTD." The company's vision of "Making Human Life Easy" has led to contribute them towards the Digital India reforms and are front runners in "Make In India" campaign.

Dr. Y. S. Rao (Vice Principal, Sardar Patel Institute of Technology, Mumbai)



Dr. Y. S. Rao has 30 years of vast experience in Engineering, Research and Consultancy. He is working as Professor, Head of Dept. and Vice Principal at SPIT Andheri, Mumbai. He has done Master's in Electronics Engineering in 1997 and Ph.D. (ES) from IIT Bombay in 2010. He has completed various funded as well as consultancy projects in India and abroad and guiding 7 candidates for their Ph.D. research work.

He has carried responsibilities in the capacity of Board of Studies, Local Managing Committee, and member of MPSC and member of LIC committee of Univ. Of Mumbai and also has been awarded and recognized by IEEE Computer Society. He has patents to his credit along with more than 80 research publications.

Dr. Saurabh N. Mehta (*Chief academic officer and Professor, VIT, Mumbai*)



Dr.Saurabh N. Mehta has more than 18 years of professional, research, and teaching experience in wireless system development all together. He is currently working as a chief academic officer and professor in the department of electronics and telecommunication at Vidyalankar Institute of Technology, Mumbai.

He is responsible for integrating academia and industry collaboration, research program, planning, and educational training for Vidyalankar institute of technology, Mumbai. He holds B.E., M.S., and PhD. degrees in Electronics Engineering from Mumbai University, Mumbai, India, Ajou University, South Korea, and Inha University, South Korea, in 2002, 2005, and 2011, respectively.

He has over 75 research articles published in books, journals, national and international conferences, and several technical contributions to IEEE standards. He has been a reviewer, technical committee member, and editorial board for many international/national conferences and journals. Currently he is also serving as TPAC at IEEE Bombay Section. He has won several prizes for the technical papers and projects. He is member of many international and national professional organizations including fellow of IETE, Senior Member of IEEE , Senior Life Members of CSI, Senior Member of IACSIT, Singapore, life members of ISTE to name a few. He has also released course on IoT and Sensor network in public domain to contribute in skill/digital India initiative.

His research interests are Wireless Networks, RF-ID Technology, Ubiquitous Computing, Game Theory, and Educational Technology. He is also running his own "Sun Wireless

Technologies”, a consultancy firm in the area of embedded System, wireless technology, education, and technical market research. Beside technology he loves to spend his time in watching movies, reading books and educating people about HAM Radio.

Dr. Abhay Kshirsagar (Asso. Professor, V.E.S Institute of Technology, Mumbai)



Dr. Abhay Kshirsagar is Ph.D in Electronics Engineering from Nagpur University. He has over 21 years of experience in teaching as well as in Research Areas. His areas of interest includes Wireless Sensor Networks, Embedded Systems and Internet of Things. Currently, he is serving as Asso. Professor in Vivekanand Education Society's Institute of Technology, Mumbai.

Dr. Anjali Yeole (Asst. Professor, V.E.S Institute of Technology, Mumbai)



Dr. Anjali Yeole is currently serving as an Assistant Professor, in Vivekanand Education Society's Institute of Technology (VESIT), Mumbai University, Mumbai, India. She is Ph.D from University of Mumbai. She has published various research papers in international journals and international conferences including IEEE, ACM, Springer and peer reviewed journals. She co-

authored two books "Information Management" and "Internet of Everything". She has reviewed many papers for conferences and journals. She has reviewed two books "Computer Organization and Architecture" and "Internet of Things" by Shriram K. Vasudevan, Abhishek S. Nagarajan, and R. M. D. Sundaram". She is a Staredu certified IoT trainer. She has completed Microsoft Certification for "Cryptography and System Security". Her areas of interest are IoT, Distributed Computing, Cloud Computing, System Security and Web Technology. She has also delivered and conducted workshops, seminars and expert talks. She has patented innovative idea for her research work.

Mr. Gopalakrishnan N. (Asst. Prof, V.E.S Institute of Technology, Mumbai)



Prof. Gopalakrishnan Narayan has 5 years of industry experience consulting companies like BARC, L & T and SME's and 12 years of Teaching experience. Currently he is serving as Assistant Professor in Instrumentation department, VESIT, Mumbai.

He has done masters from Mumbai University. He has expertise in embedded system, signal conditioning and IoT technologies

Mr. Anurag Chugh (Sr. Syst SW Engineer, Tarana Wireless, Pune)



Mr. Anurag Chugh is an Electronics engineer, currently working as Senior Systems Software Engineer at Tarana Wireless, Pune, developing the next generation of fixed wireless networking devices with beamforming capabilities for the telecom sector.

Before this, he has worked in RLARD as one of the founder directors, where they manufactured dental loupes and LED headlamps under the brand name Ergoptix. Prior to that he was with Greenvity Communications's India Development Centre (Pune), India as a Senior Software Engineer, developing embedded software (linux kernel modules) for power line communications. Before that, he has also served at TCS (Tata Consultancy Services) as an I.T. analyst, where he was part of team which developed embedded software for Automotive Infotainment Systems.

Prior to that, Mr. Anurag Chugh worked for Laboratory for Applied Research in Electronics in Navi Mumbai, India, where he spearheaded the development of a modular prototyping system for students and professionals called UNIBlocks. These modules can be used to quickly assemble and test proof-of-concept prototypes for new embedded systems designs. They are sort of like LEGO Bricks for Embedded Systems. Mr. Anurag Chugh started his career from L& T Technology Services as a Systems Engineer.

Dr. Nadir N. Charniya (Professor, V.E.S Institute of Technology, Mumbai)



Dr. Nadir N. Charniya, is serving as Professor, Dept of Electronics and Telecom Engineering, Vivekanand Education Society's Institute of Technology, Chembur, Mumbai. He is doctorate in Electronics Engineering with specialization in Design of Intelligent Sensors using Neural Networks Approach. He more than 30 years teaching and research experience. He has published more than 50 research papers including IEEE transactions and Journals, Elsevier Journals, Springer book chapters and international conferences.

He has two patent to his credit. He has been awarded First Prize for his Ph.D. research in the Inter-University Research Exhibition "AVISHKAR-2008". He has received various Grants from AICTE, Universities, DST, TEXAS Instruments. Coordinated Research and Consultancy Projects. His projects guided to students received awards including First Prize in I.S.T.E.s' Maharashtra State Engineering Design Award. He has been invited to conduct workshops and as resource person in the domain of Neural Networks, Intelligent Sensors, Matlab and other fields at numerous institutions. He has organized numerous Workshops, AICTE-ISTE Training Programs, and Conferences. He is reviewer of IEEE, Elsevier Transactions/ Journals and Conferences.

INAUGURATION

Inauguration of one week AICTE sponsored online short term training programme on 'Green Internet of Things (Phase-III)' organized by Department of Electronics and Telecommunication Engineering in collaboration with Department of Electronics Engineering and Department of Instrumentation Engineering was conducted on 7th Dec. 2020. The program was organized in association with VESIT- Internal Quality Assurance Cell and Institution's Innovation Council. The function began in presence of dignitaries and guests with lighting the digital lamp in front of Maa Saraswathi and Lord Ganesha.

Dignitaries and guests for the inauguration function included Dr. (Mrs.) J. M. Nair, Principal (VESIT), Dr. (Mrs) M. Vijayalakshmi, Vice Principal (VESIT), Prof. Shoba Krishnan (Head, Electronics and Telecom Dept., VESIT), Prof. Kavita Tewari (Head, Electronics Engineering Dept), Dr. P.P. Vaiya, (Head, Instrumentation Engineering Dept), PEC members, and the participant. The session moderator Ms Anushri Prabhu welcomed the dignitaries and guests, and expressed gratitude towards AICTE for sponsoring the Short-Term Training Program.

Course Coordinator, Dr. Nadir Charniya, Professor from Department of Electronics & Telecommunication gave the course overview. He mentioned that about 200 PAN India participants from Tamilnadu, Andhra Pradesh, Telangana, Karnataka, Gujarat, UP, MP, Jharkhand, Haryana etc. registered online, 82 were shortlisted based on AICTE approval of Institute and stream of participants. 78 gave confirmation for attending the course. After the course overview Dr. (Mrs.) J. M. Nair, Principal, VESIT addressed the gathering mentioning the significance of IoT in every field of engineering and research. She thanked AICTE for sponsoring the programs and enabling to conduct three training programs online. She gave best wishes to the learnings and proceedings of the STTP. She also advised to take the benefit of the training and implement some interdisciplinary projects further that would help the society at large.

Further, audience were addressed by Prof. Kavita Tewari (Head, Electronics Engineering Dept., VESIT). She motivated the participants by mentioning the potential of IoT to solve the challenging real world problems; and suggested take innovative projects in the domain of IoT. The function concluded with vote of thanks.

SESSION-WISE SUMMARY (Day 1 to Day 6)

Day-1, 7th December 2020

Dr. Abhay Kshirsagar, Associate Professor, Department of Electronics Engineering, VESIT, Mumbai, was the speaker for the session-1 on Day-1. Session 1 started with Introduction to IoT and some aspects of Green IoT. IoT refers to Internet technology for connecting devices, machines and tools by means of wireless technologies. Things connected to the internet are projected to cross 20 billion in the near future. It also represents unification of technologies, such as, low power embedded systems, cloud computing, Big Data, machine learning and networking.

Dr. Kshirsagar explained about the importance of Green IoT in today's scenario. Energy efficiency optimization of IoT objects and principles that leads to Green IoT. He also discussed about different IoT Application areas such as Energy management, Smart Agriculture, Smart Industry & Smart City. Different IoT characteristics, physical design of IoT were dealt in details further. He then explained about different IoT protocols, such as, Publish Subscribe Communication Protocol, MQTT protocols, etc., followed by six different IoT levels and 10 steps in IoT Design Methodology. He then explained about Wireless Sensor Networks and its crucial application in human health monitoring.

Session-2 in the afternoon was conducted by Dr.Y.S. Rao, Professor, Department of Electronics Engineering, Sardar Patel Institute of Technology, Mumbai. The topic of his talk was 'Classification of IoT: A case study on Biomedical Engineering'. He emphasized on how the new normal due to the pandemic has affected us and how it directly or indirectly affects IoT industry. He quoted the example of thermal sensors and its use during pandemic for social distancing based human temperature measurement, whereas before it was only used for measurement of temperature of boilers in industries. He explained on how a simple physics based phenomenon which was the idea behind invention of BLUE LED and how it has changed the things for the engineering industry.

He then spoke about different disruptive technologies and its impact on Product Life Cycle, & characteristics of successful Product Development. He briefed about classification of IoT

applications based on Constraints- such as Life critical, Business Critical, Mission critical applications, etc. Thereafter, he dealt about Bio-medical signals processing and its applications in IoT. He concluded by saying "Technology has to be wisely chosen based on its applications".

Day-2, 8th December 2020

Dr. Anjali yeole, Assistant Professor, Department of computer science Engineering, VESIT delivered session-1 of Day-2 on the topic 'IoT security and COOJA simulator'. She began the session with IOT ecosystem. Any IoT application requires sensors to sense data and actuators to take action. For making an entire industry to be IoT enabled huge amounts of data is being generated by various sensors that data has to put on Cloud. Hence security of that Big Data is a major concern.

Dr. Yeole explained the importance of IoT security in today's scenario. She also discussed different IoT Application areas, such as, Smart Parking System, Smart City, Smart Highways, IoT enabled hospitals and its application in various healthcare systems. She also explain how Smart Industry i.e. Industry 4.0 and today's industry differ in their operations. Different security aspects for any IoT enabled application were dealt in detail next. She further explained about top 10 IoT vulnerabilities OWASP. She also introduced COOJA simulator with basics and also suggested there are many such simulators but the choice of any depends on its speed, for encryption and decryption capabilities.

Session-2 in the afternoon was conducted by Mr. Shashank Karmarkar, solution Architect, Radisys India on the topic 'IoT Analytics'. He began his session with what is Smart City? and what are various security risks confronted by the IoT platform. He then discussed which IoT technology should be selected, various other aspects that an IoT application designer should take care. He then discussed why analytics are important?

He explained about NB IoT devices, cellular IoT, 3GPP standards and gave an overview of modular industry, IoT module vendors. He then spoke about how NB IoT is deployed in India with the help of various base stations, IoT platform server, and Application server. Next he discussed the two optimizations - control plane and user plane optimization.

He briefed about different IoT applications like watering meter, smart lighting, smart agriculture, connected cow, sheep tracing, etc. He also gave an example of a 5G remote ultrasonic system.

Day-3, 9th December 2020

Mr. Dhananjay Jadhav, Manager, Siemens Ltd, Mumbai was speaker for Session-1 on Day-3. His topic was 'Hardware for IoT & Edge Technology'. He started his talk by briefing about multiple domains of Siemens Company. He also talked about growing digital revolution in India. Before starting his presentation he conducted a short quiz with the participants using mentimeter to know how much the participants identified with the existing and latest technological developments. He quoted that the right communication network is the key to IoT establishments. He pointed out the drawbacks of traditional manufacturing and how IoT enabled manufacturing through cloud communication helps overcome those flaws.

The levels of communication in industries were explained using an automation pyramid diagram distinguishing between Internet Technology and Operational Technology. He spoke about horizontal & vertical integration in a company and how IoT technology is necessary for seamless functioning. The switch from older technology PROFIBUS to the newer PROFINET was explained under the Industrial Ethernet. Mr Dhananjay stated that the amalgamation of OPC UA and PROFINET makes the perfect collaboration for a capable IoT-enabled system.

He also highlighted about: IoT device structure, Cloud based IoT systems, IIoT 20-40, Simulation using Node-Red, Industrial Edge Technology, IIoT in PCB designing. He showed number of videos to demonstrate the concepts and made it easy and to give an insightful view onto a particular topic. The session ended with a quiz that was taken on menti.com which included questions from the topics those were covered in the presentation.

Mr. Anurag Chugh, Senior Systems Software Engineer was the speaker for Session-2 of Day-3 and his topic was 'IoT Protocols, WSN & IoT Applications'. He stressed on the importance of designing before coding and how this makes the process of coding easier. He briefed about the milestones of his illustrious career that spanned over working at MNCs, Startups and

NGOs as well. He explained about the 5 levels of Industrial IoT: Unplugged, EDGE Intelligence, Remote Monitoring, Predictive and Omnipresent Intelligence.

He then gave an in-depth insight into all the projects that he has worked on in the past and his learning from them. Some of them are: Delhi Metro Project, Cell Site Battery Monitoring, Health Telematics, ADS-B (Automatic Dependent Surveillance System), Home Network Setup, Open WRT Development, Linux Single Board Computers, Wifi Attendance System, Solution to overcrowding of WiFi networks, Weather Stations, Electrical Energy Meter. He advised the participants to implement some projects to collect some data and have detailed insights into it. He stressed upon the fact that a project should never be left incomplete, because there is always a feasible solution to every problem.

Day-4, 10th December 2020

Prof.Dr.Saurabh Mehta, Chief Academic officer and professor in the Department of Computer Science Engineering, Vidyalkar Institute of Technology, Mumbai, the speaker of Day-4 Session 1 started his talk on the topic – 'Open Source tools and Hardware for IoT'. He discussed different software and hardware platforms available for IoT, Comparison of WSN and IOT, Aduino types like Lilypad & others.

Dr.Saurabh Mehta explained the use of Thingspeak for IoT projects. He also discussed different IoT Components, major Industry players in the field of IoT. He also explained about popular hardware platforms like Arduino, Raspberry-pi, Node-MCU. Comparative study of various hardware tools were dealt in details. He further explained about cloud computing architecture and challenges associated with it. He also explained comparative study of various Wireless sensor network simulator.

Session2 on Day-4 in the afternoon was conducted by Mr.GopalaKrishnan, Assistant Professor, Instrumentation department, VESIT, Mumbai. His topic was "Intelligent Transport Design AIS140". He began his session with the content history, design specification, and implementation. He further discussed Why AIS140?, its architecture, specification of its GPS system. He then discussed Global Navigation Satellite System (GNSS), acquisition and tracking sensitivity in detail. He also explained about SBAS, SBAS

segment and why it is required. Different GPS Available, block diagram of L89, NMEA were dealt next.

He explained the communication specification and gave an overview of Q-locator in L89. He then spoke about how message specification, activation SMS from the server, & how emergency response systems work. Further he also discussed FOTA, and its need. He briefed about different BOOT loader logic and its classification.

Day-5, 11th December 2020

Mr. Nishant Singh, Technical trainer, Mumbai who has previously worked with Kaizen, Abu Dhabi, Dubai & UAE was the speaker for both sessions of Day-5 and his topic was 'Cloud computing for IoT' with Hands-on. Mr. Nishant Singh started his talk by giving real world examples faced by him in his projects in the industry. In the first case study, he took temperature monitoring system for a Silk Manufacturing Unit and he discussed about the challenges to be taken care while designing for such a system- secure encrypted data, internet connectivity issues, how to get missing data and how to achieve these results using Google cloud or AWS IoT.

He also gave example of how IoT deployment can improve the spectrum of business for any industry – illustrated this with Nike company, how from sportswear they can expand to gym and hospital and adding sensors in the shoes and collecting and analyzing data obtained from there to feed different promotional businesses. He explained about how to send sensor data to cloud. Due to lack of hardware in the current situation, he illustrated this with the help of a python code and generated random data and sent to cloud using MQTT protocol. He threw more light on the advantages of MQTT protocol and compared with HTTP protocol and how MQTT is more suitable for telemetry data. QoS (Quality of Service) and different levels of QoS, persistent and non-persistent connections were discussed at length.

He explained how to store data on cloud using AWS IoT. The three steps to be followed while dealing with AWS IoT were: Things, Certificate, & Policy. He gave hands-on on how to make a Thing, create a Certificate, and how to attach a Policy. He cleared the difference between a subscriber and a publisher in the IoT system and how AWS acts as a broker between the

two.

The next part of the session included insights on how to integrate Amazon SNS (Simple Notification Service). This type of service is used for applications to send time-critical messages to multiple subscribers. He even tested the SNS service by mailing the messages to the participants. This gave the participants a life and practical experience of the same. Mr Singh kept the session interactive as he asked the suggestions of the participants. At the end, he also explained the concept of 'Last Will' in depth with respect to AWS IoT, which sends message even when system fails or sudden problem arises, and still it would be communicated.

Day-6, 12th December 2020

Mr. Amit Rambia, Chairman and managing director "Panache Digilife Limited" and Speaker of Day-6 Session-1 started the session on the topic –Design of connected worlds and achieving the goal of making human life easy and healthy. He started the session by requesting all of us to contribute towards making human life easy. He introduced the journey of Panache which is a unique technology driven engineering company with 150 hardware setups with core focus areas like smart computing, smart education, AV & display telematics, smart water for educational institutes.

Further, he discussed various electronics gadgets and smart village. He also emphasizes the role of AI in making teaching learning more effective. His discussion mainly focused on three major IoT solutions- Retail IoT, Smart education, and LYF-KYN Samay IoT solution. He then explained why retailers are adopting IoT, omnichannel IoT, personalised retails, smart shelves, and smart fulfillment. Smart Digital Signage, student tracking, attendance tracking, basic health management, smart pen, interactive white board are various IoT solutions provided by" Panache "

He concluded his session by showing videos of product which designed for Covid"DWAAR" featuring baggage scanning, hand and body sanitizing, temperature measurement for smart schools and campuses.

Session-2 of Day-6 was conducted by Dr.Nadir Charniya, Professor Electronics and Telecommunication Engineering department Vivekanand Education Society's Institute of Technology, Mumbai. He delivered his session on 'Fusion of IoT with ML- DL - Some Novel Applications'. Dr. Charniya started his session by asking participants what comes to their mind after seeing crowded buses, local trains, crowded stations & various scenerious. He discussed crowd incidents at different places. He proposed solutions to the crowd incidents by image analysis with crowd density estimation system and making it more efficient using IoT. He highlights proposed features of these crowd density estimation systems. He furhter discussed the motivation behind using Machine Learning and Deep Learning (ML-DL) for crowd density estimation with IoT. Furhter Dr. Nadir explained about learning based, detection based, DL based and feature based approach with its advantages, problems as well as limitations in detail. He then discussed crowd density estimation using CNN and its performance and results with optimal design of CNN architecture. He concluded his session by discussing how crowd density estimation systems can be implemented for similar application. He concluded his session by video demonstration of NIC project - social distancing system for public areas and Lake cleaning robot using IoT and AI.

VALEDICTORY

Valedictory function of the one week AICTE sponsored online short term training programme on 'Green Internet of Things (Phase-III)' organized by Department of Electronics and Telecommunication Engineering in collaboration with Department of Electronics Engineering and Department of Instrumentation Engineering was conducted on 12th December 2020. The program was organized in association with VESIT- Internal Quality Assurance Cell and Institution's Innovation Council. The function started in the presence of dignitaries and guests. Dignitaries and guests for the valedictory function included Dr. (Mrs.) J. M. Nair, Principal (VESIT), Dr. (Mrs) M. Vijayalakshmi, Vice Principal (VESIT), Prof. Shoba Krishnan (Head, Electronics and Telecom Dept., VESIT), Prof. Kavita Tewari (Head, Electronics Engineering Dept), Dr. P.P. Vaiya, (Head, Instrumentation Engineering Dept), Prof. Naveeta Kant (Dy. Head, Electronics Engineering Dept., VESIT), Prof. Sangeeta Prasanna (Dy. Head, Instrumentation Engineering Dept., VESIT), PEC members, and the participants.

Participants shared their extraordinary learning experience during the STTP. The STTP received excellent feedback from the participants during the valedictory function. Further, Prof. Kavita Tewari (Head, Electronics Engineering Dept., VESIT) and Prof. Sangeeta Prasanna (Dy. Head, Instrumentation Engineering Dept., VESIT) addressed the participants with the importance of Green IoT and thanked the organizers and the team of STTP.

An overall online feedback on the STTP was also taken and final quiz based on the 6-day sessions of the STTP was conducted. The regular attendance of the participants and passing in the quiz was compulsory to become eligible for AICTE-STTP certification.

Immense efforts were made by the technical committee and various teams of the STTP to make it a success. All the sessions were conducted at the scheduled time seamlessly without any unnecessary delay in the sessions.

Valedictory function was signed-off with the summary about the sessions conducted during the STTP and vote of thanks by Prof. Naveeta Kant (Dy. Head, Department of Electronics Engineering, VESIT).

ANNEXURE-I

List of Qualified Participants

Sr. No.	Name	Designation	Department	Institute/Industry	State
1	Mr.Ajit Kumar Singh	Research Scholar	ECE	IIIT Ranchi	Ranchi Jharkhand
2	Dr.Amit V Patel	Associate Professor	Charusat Space Research and Technology Centre	Chandubhai S Patel Institute of Technology	Changa. Gujarat
3	Mrs.AnciManon Mary A	Assistant Professor	EEE	Karpagam College Of Engineering	Coimbatore Tamilnadu
4	Mrs.A.Angulakshmi	Assistant Professor	ECE	Christian College of Engineering and Technology	Chennai Tamilnadu
5	Mrs.Mugdha Joglekar	Assistant Professor	Instrumentation	V.E.S.Institute of Technology	Mumbai Maharashtra
6	Mrs.Gautami Aniruddha Pujare	Sr. Lecturer	Computer	VPM's Polytechnic Thane	Thane Maharashtra
7	Ms.A.Mariyammal	Assistant Professor	ECE	Vivekanandha College of Engineering for Women [Autonomous]	Chennai Tamilnadu
8	Dr.Asawari Ashok Dudwadkar	Assistant Professor	Electronics Engineering	V.E.S.Institute of Technology	Mumbai Maharashtra
9	Mr.Ashok Kumar S	Assistant Professor	CSE	Manakula Vinayagar Institute of Technology	Kalitheerthalkuppam Puducherry
10	Mr.Selvaraj S	Assistant Professor	CSE	Kongu Engineering College	Perundurai Tamilnadu
11	Mrs.Sarika Pravin Kuhikar	Assistant Professor	Electronics Engineering	V.E.S.Institute of Technology	Mumbai Maharashtra
12	Mr.Darshan B D	Assistant Professor	ECE	SJB Institute of Technology	Bangalore Karnataka
13	Mr.Jani Dilip Batukray	Associate Professor	Mechanical	Government engineering college	Dahod Gujrat
14	Mrs.Dhanamma Jagli	Assistant Professor	MCA	V.E.S.Institute of Technology	Mumbai Maharashtra
15	Dr.Dilip Kumar Sharma	Assistant Professor	Mathematics	Jaypee University of Engineering and Technology	Guna Madhya Pradesh
16	Mrs.Dipti Jigar Karani	Assistant Professor	Electronics Engineering	V.E.S.Institute of Technology	Mumbai Maharashtra
17	Er. Manoj S. Kavedia	Assistant Professor	Electronics and Telecommunication	Thadomal Shahani Engineering College	Bandra Maharashtra
18	Mr.Harshavardhan Vijay Kulkarni	Assistant Professor	Electrical And Electronics Engineering	Acharya Institute Of Technology	Bengaluru Karnataka
19	Dr.Abhay Kshirsagar	Associate Professor	Electronics Engineering	V.E.S.Institute of Technology	Mumbai Maharashtra

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20	Mr. Shaikh Kader Basha Tajuddin	Assistant Professor	Instrumentation	V.E.S.Institute of Technology	Mumbai Maharashtra
21	Mr.Inderjit Singh Dhanjal	Assistant Processor	Electronics	K.J Somaiya College Of Engineering	Mumbai, Maharashtra
22	Dr.T. Joby Titus	Assistant Processor	ECE	Sri Ramakrishna Institute of Technology	Chennai Tamil Nadu
23	Mrs.Kadambari Arun Sharma	Assistant Professor	Instrumentation Engineering	V.E.S.Institute of Technology	Mumbai Maharashtra
24	Mr.Kartik Patel	Assistant Professor	Electronics and Telecommunication Engineering	K. J. Somaiya College of Engineering, Mumbai-77	Mumbai Maharashtra
25	Mrs.Anushree Ashish Prabhu	Assistant Professor	Electronics Engineering	V.E.S.Institute of Technology	Mumbai Maharashtra
26	Mr. Ranjit Arjun Katkar	Assistant Professor	Civil Engineering	AGTI's Dr.DaulatraoAher College Of Engineering	Karad. Maharashtra
27	Mr.Lokesh M. Giripunje	Asst. Prof.	E&TC	DY Patil IEMR	Pune (MS)
28	Dr. Lakshmi Ranganatha	Assistant Professor	Department of Chemistry	National Institute of Engineering	Mysore Karnataka
29	Dr.Jayant R Mahajan	Assistant Professor	Electronics and Telecommunication Engineering	Rajiv Gandhi Institute of Technology,	Mumbai Maharashtra
30	Mrs.J Manjula	Assistant Professor	CSE	BVR Inst of Tech	Narsapur Telangana
31	Mrs. Amrita Jhaveri	Assistant Professor	Electronics Engineering	V.E.S.Institute of Technology	Mumbai Maharashtra
32	Mrs.Nilima D. Zade	HOD	Electronics	PVPPO C O Engg	Mumbai (MS)
33	Ms.VARSHA N	Assistant Professor	Information Science and Engineering	Vidya Vikas Institute of Engineering and Technology	Mysuru Karnataka
34	Dr.PERARASI T	Assistant Professor	ECE	Bannari Amman Institute Of Technology	Erode Tamilnadu
35	Mrs.RaginiGaikwad	Assistant Professor	Instrumentation Engineering	Ramrao Adik Institute Of Technology, Nerul	Navi Mumbai Maharashtra
36	Mr.Sandeep Singh	Assistant Professor	Electrical Engineering	Vaish College of Engineering	Rohtak Haryana
37	Mrs.Gaikwad Sarika Ganpat	Assistant Professor	E&TC	SVPM'S C.O.E Malegaon	Baramati Maharashtra
38	Dr.Sanjay B.Waykar	Assistant Professor	Computer Engineering	SIT,	Lonavala Maharashtra
39	Mrs Smita D Khandagale	Lecturer	Instrumentation	V.P.M's Polytechnic	Thane Maharashtra
40	Mr.Surendra Sutar	Assistant Professor	Electronics and Telecommunication Engineering	MCT's Rajiv Gandhi Institute of Technology	Mumbai Maharashtra
41	Mr.S.Gnanamurugan	Assistant Professor	ECE	Vivekanandha College Of Engineering For Women	Chennai Tamilnadu

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42	Ms. ShamalSalunkhe	Assistant Professor	Instrumentation Engineering	RAIT, Nerul	Navi Mumbai Maharashtra
43	Mr.Shankar A	Assistant Professor	ECE	Sri Ramakrishna Institute of Technology	Chennai Tamilnadu
44	Mr.Shivanand Bhimashankar Konade	Assistance Professor	EXTC	G V Acharya college shelu	Mumbai Maharashtra
45	Mrs.Namrata Bonde	Assistant Professor	Instrumentation	V.E.S.Institute of Technology	Mumbai Maharashtra
46	Mrs. K. Shruthi	Assistant Professor	Mechanical	IFET college of engineering	Villupuram Tamil nadu
47	Mr.Sajid Shaikh	Assistant Professor	Electrical	Pillai HC ET	Rasayani Maharashtra
48	Mr. Suraj Prabhakar Khandare	Assistant Professor	I.T	Fr. Conceicao Rodrigues Institute of Technology, Vashi	Navi Mumbai Maharashtra
49	Mrs.TruptiFuria	Assistant Professor	Instrumentation	Vidyavardhini's College of Engineering and Technology	Vasai (MS)
50	Mr.Vaibhav Prakash	AGM	Operations	Carnation Infotech	Lucknow, UP
51	Mrs.Jayassre Ramakrishnan	Assistant Professor	Instrumentation	V.E.S.Institute of Technology	Mumbai (MS)
52	Mr. Yogesh Pandit	Assistant Professor	Electronics Engineering	V.E.S.Institute of Technology	Mumbai (MS)

Annexure – II

List of Experts, Affiliation, and Topics

S. no.	Speakers	Topics covered
1	DR. ABHAY KSHIRSAGAR, V E S INSTITUTE OF TECHNOLOGY, CHEMBUR, MUMBAI	WSN, IoT, Levels of IoT, Applications od IoT.
2	DR. Y SRINIVASA RAO, SADAR PATEL INSTITUTE OF TECHNOLOGY, MUMBAI	IoT and Case studies on biomedical applications of IoT
3	DR. ANJALI YEOLE, V E S INSTITUTE OF TECHNOLOGY, CHEMBUR, MUMBAI	Security in IoT, COOJA Simulator
4	Mr. SHASHANK KARMARKAR, RADISYS INDIA, MUMBAI	IoT analytics
5	MR. DHANANJAY JADHAV, SIEMENS LTD, MUMBAI	IoT HW, Edge technology
6	MR. ANURAG CHUGH, TARANA WIRELESS, PUNE	IoT protocols and Applications
7	DR.SAURABH N. MEHTA, VIDYALANKAR INST OF TECHNOLOGY, WADALA, MUMBAI	Open source tools for IoT and HW
8	MR. N. GOPALAKRISHNAN, V E S INSTITUTE OF TECHNOLOGY, CHEMBUR, MUMBAI	Intelligent transport design AIS140
9	MR.NISHANT MANOJ SINGH, TECHNICAL TRAINER, MUMBAI	Cloud computing and hands-on training
10	MR. AMIT RAMBHIYA, PANACHE DIGILIFE LTD, MUMBAI	IoT in industrial applications
11	DR. NADIR N CHARNIYA, V E S INSTITUTE OF TECHNOLOGY, CHEMBUR, MUMBAI	Fusion of IoT with Machine learning and Deep learning

ANNEXURE-III

STTP Schedule

	07/12/2020	08/12/2020	09/12/2020	10/12/2020	11/12/2020	12/12/2020
10.00 to 11.30 AM	Inauguration Session1- Introduction to IoT and Green IoT: by Dr. Abhay Kshirsagar	IoT Security and COOJA simulator by Dr. Anjali Yeole	Hardware for IoT & Edge technology by Mr. Dhananjay Jadhav, Siemen's	Open source tools and hardware for IoT by Dr Saurabh Mehta, VIT	Cloud Computing for IoT with Hands-on by Mr. Nishant Singh,	Applications of IoT and Case Studies Used cases of IoT by Mr. Amit Rambhiya
11.30 AM to 1.00 PM	Session-1- Introduction of IoT and Green IoT by Dr. Abhay Kshirsagar	IoT Security and COOJA simulator by Dr. Anjali Yeole	Hardware for IoT & Edge technology by Mr. Dhananjay Jadhav, Siemen's	Open source tools and hardware for IoT by Dr Saurabh Mehta, VIT	Cloud Computing for IoT with Hands-on by Mr. Nishant Singh	Applications of IoT and Case Studies: Use cases of IoT by Mr. Amit Rambhiya
2.00 PM to 3.30 PM	Classification of IoT - a case study on Biomedical Engg by Dr. Y. S. Rao, SPIT	IoT Analytics by Mr. Shashank Karmarkar	IoT Protocols, WSN and IoT with Applications by Mr. Anurag Chugh	IoT Application Design and Implementation by Mr. N. Gopalakrishnan	Cloud Computing for IoT with Hands-on by Mr. Nishant Singh	Fusion of IoT with ML-DL: Some Novel Applications by Dr. Nadir Charniya
3.30 PM to 5.00 PM	Classification of IoT - a case study on Biomedical Engg by Dr. Y.S. Rao, SPIT	IoT Analytics by Mr. Shashank Karmarkar	IoT Protocols, WSN and IoT with Applications by Mr. Anurag Chugh	IoT Application Design and Implementation by Mr. N. Gopalakrishnan	Cloud Computing for IoT with Hands-on by Mr. Nishant Singh	Valedictory Ceremony Final Quiz on the STTP

ANNEXURE-IV

Final feedback with Score of Online Test and Test Questions

Q1: The STTP sessions delivered the information that I expected to receive

Q2: The STTP was successful in its objectives

Q3: How would you rate the effectiveness of the demonstrations shown during the sessions?

Q4: How would you rate the duration of the program?

Q5: How would you rate the online arrangements for the entire STTP?

Q6: Write any three takeaways or outcomes of the STTP.

Name	Q1	Q2	Q3	Q4	Q5	Q6	Any other comments	Score (40)
ANCI MANON MARY	5	4	5	4	Excellent	good	Good	24
JANI DILIP BATUKRAY	5	5	5	5	Excellent	Excellent	Excellent	26
Dr. Amit V Patel	5	5	5	5	Excellent	In depth knowledge of theory and Practical session, Hands of experience, real time application developments	Good	37
Lokesh Giripunje	5	5	5	5	Excellent	Green IOY,AIS,and WSN		35
Mrs. Smita D Khandagale	5	5	5	4	Very Good	Hardware for IOT & Edge technology,Cloud computing	All session are good	35
Vaibhav Prakash	4	4	4	4	Excellent	ibformativ e knowledge	share slides	30
Abhijit Hindurao Kumbhar	5	5	5	5	Excellent	-		0
DARSHAN B D	5	5	5	5	Excellent	Greent IoT, Diffrent Protocols, Applicatio	good	34

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						ns, Designs		
Mrs.A.ANGULAKSH MI	4	5	4	5	Excellent	Know more about IOT	Good	33
Mrs. Gautami Pujare	4	5	5	4	Very Good	Details and implementation of IoT		35
Mr. AJIT KUMAR SINGH	5	5	5	5	Excellent	Learn green iot in detail,aws cloud, application of iot in current scenario		38
Dr. Dilip Kumar Sharma	5	5	5	5	Excellent	1. Nicely organized 2. All sessions were good 3. Entire team was working hard	I congratulate to all for this successful Event.	35
Dr. T .JOBY TITUS	5	5	5	5	Excellent	TRENDS IN GREEN IOT, Industrial IOT, Health care IOT	-	36
Mr. Kartik Patel	5	5	5	5	Excellent	Hardware and software tools of IoT, NB-IoT and IoT using machine learning and deep learning	In future hardware sessions can be organized on the applications of IoT in healthcare and agricultural applications	36
Surendra Sutar	5	5	5	5	Excellent	Green IOT applications	All sessions were informative	35
Dr. Asawari Dudwadkar	5	5	5	4	Excellent	IoT applications in healthcare, environmental	Good sttp, great team work	31

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						monitoring, surgical & office, protocols, industry applications, models etc		
Mrs Nilima Zade	4	4	3	4	Very Good	Cooja simulator understanding, aws cloud hands on, various industrial application scope	-	33
Mr Harshavardhan Vijay Kulkarni	5	5	5	5	Excellent	iot applications having social impact	excellent	33
Mr.Sandeep Singh	5	5	5	5	Excellent	Use of IOT IN HOUSE INDUSTRIAL	-	36
Dr.Sanjay B.Waykar	5	5	5	5	Excellent	Applications, in-depth insight	Good	30
Mr. Sajid Shaikh	3	3	3	3	Good	Python, IoT, levels of IoT, Green IoT, Cooja simulator	-	36
Mr. S. SELVARAJ	5	5	5	5	Excellent	IOT, cloud, applications	Very good	38
Ms. VARSHA N	5	5	5	5	Excellent	-	-	23
Ms. Shamal Salunkhe	5	5	5	5	Excellent	Good data sharing	Excellent FDP	37
Dr. Lakshmi Ranganatha V	5	5	5	5	Excellent			22
Mrs. Ragini Gaikwad	5	5	5	5	Excellent	1. Real world problems 2. BEACON Technology 3. Vehicle tracking system.	All the sessions were excellent. Thank you	38

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Mrs.Kadambari Sharma	4	5	5	4	Very Good	BEACON technology, vehicle tracking system , different simulators .		38
Dr.JAYANT R. MAHAJAN	5	5	5	4	Excellent	1) Use of IoT in daily life. 2) Designing aspects of IoT devices 3) Hands on of IoT	Excellent Co-ordination	33
Rakhi Vijay Gupta	4	3	4	3	Good	Amazon Simple Notification Service is a notification service provided as part of Amazon Web Services since 2010		30
SHIVANAND BHIMASHANKAR KONADE	5	5	5	5	Excellent	Good	Good	22
Mrs. Dipti Jigar Karani	5	5	5	5	Excellent	Learned many practical application basics of IoT working with tracking		36
Mr.S.Gnanamurugan	4	4	4	4	Good	Green IoT is best for future generation	good	31
DR VANDANA B PATIL	5	5	5	5	Excellent	here are 7 crucial IoT characteristics: Connectivity. This doesn't need too much further	overall excellent	23

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						explanatio n. ... Things. Anything that can be tagged or connecte d as such as it's designed to be connecte d. ... Data. ... Communi cation. ... Intelligenc e. ... Action. ... Ecosyste m.		
Mrs.Manjula J	3	4	1	1	Excellent	-	-	22
Mrs Sandhya sandeep DESPANDE	5	5	5	5	Excellent	1)Recent research topic. 2)two core branch work together 3)Alcte certificate	Good job	23
Mr.Shankar A	5	5	5	5	Excellent	Applicatio n, innovative , Informativ e	Nice Session, Gain good Knowledge	33
Mrs. K. SHRUTHI	4	4	4	4	Good	All r new topics, learned more	Good session	27
Er.Manoj S. KAvedia	4	4	4	4	Very Good	WSN , AWS, Health care Robots	All good	32
Ms. Brinzel Rodrigues	3	3	3	5	Very Good	What is IoT? IOT levels. IOT protocols		37
Suraj Prabhakar Khandare	5	5	5	5	Excellent	IoT in biomedica l has lot of scope AWS IoT hands on IoT to	Thank you for the wonderful STTP	34

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						grow tremendously in future		
Dr.T.Perarasi	5	4	4	4	Very Good	IoT APPLICATION; TOOLS USED; COOJA SIMULATOR	Good & Informative. Share the PPT of the sessions.	35
INDERJIT SINGH DHANJAL	4	4	4	5	Excellent	Green IoT Applications and concept Using AWS services (connecting sensor value to the cloud) AIS 140 (Smart transport) Citizen science using lot	Very good learning experience	37
DHANAMMA JAGLI	5	5	5	5	Excellent	IOT Applications		33
Mrs Trupti Furia	5	5	5	5	Excellent	IoT is essential in smart cities and industry 4.0		37
Mr. RANJIT ARJUN KATKAR	5	5	5	5	Excellent	Valuable information and knowledge gaining experience.	All sessions were very useful and informative. Collective information and effective presentation with suitable examples and explanation with interaction. Knowledge gaining experience. Arrange few more sessions	36

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							like this of same resource persons with more duration and interaction.	
Mrs. Vishakha krantikumar Gaikwad	5	5	5	5	Excellent	Nil		32
ASHOK KUMAR S	5	5	5	5	Excellent	Knowledgeable and useful sttp	Informative sessions thank you	35
Ms.A.MARIYAMMAL	4	4	5	5	Excellent	Green IoT is best for future generation	GOOD	30
Mrs Sangita Mahendra Rajput	5	5	5	5	Excellent	insights of IoT Various challenges of IoT need and implementation of Green IoT	Excellent STTP. All Speakers were too good	33
Mrs.Gaikwad Sarika Ganpat	5	5	4	4	Very Good	different Green IOT applications, cloud computing learned under this	-	31
Dr. Abhay Kshirsagar	4	5	4	5	Excellent	Informative, case studies, technical contents	All the best.	32
Mr. SHAIK RAHIL HUSSAIN	5	5	5	5	Very Good	Advances in IOT future Applications and present technological trends	Great sessions	34
Mrs. Anushree Ashish Prabhu	5	5	5	5	Excellent	best session, best speakers, interesting sttp	-	35
Mr. Yogesh Sharad Pandit	4	4	4	5	Excellent	IoT applications, Introduction to G--IoT	-	34

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Mrs. Sarika Pravin Kuhikar	5	5	5	5	Excellent	All sessions of sttp were very informative		35
Mrs. Amrita Jhaveri	5	5	5	5	Excellent	1 .Smart hospital and role of IOT in the field of health care and cooja simulator to test IOT based projects. 2.Application of IOT in the field of education smart campus and school in current pandemic covid , project Dwaar" 3. smart water meter for schools abd educational institutes .	Excellent STTP very wellplanned , cordinated and executed also discuss major areas in the field of Green IOT.	36
Mrs. Mugdha Ruturaj Jogalekar	5	5	4	4	Excellent	Basics of IoT cleared		31
Namrata Bonde	5	5	5	5	Excellent	Yes		30
Mr. SHAIKH KADER BASHA TAJUDDIN	5	5	5	5	Excellent	1. Conceptual knowledge of systems. 2. Understanding of components. 3. Understanding of protocols.		31

						4. Knowledge of simulators .	
Jayassre Ramakrishnan	5	5	5	5	Excellent	Keep learning new technologies and implement in projects, handson gives more knowledge and understanding	36

• Final Test Questions

STTP Quiz Questions

Q.N.	Question
1	Mention two major ways to achieve Green IoT design?
2	What is difference between Level 1 and Level 6 IoT?
3	Name any Three protocols used in IoT.
4	WSN applications are what level IoT applications?
5	How the IoT is useful in Biomedical field?
6	What are the different IoT communication patterns?
7	What are intelligent sensors?
8	What are four key pillars of IoT?
9	What is difference between 2G and 4G network?
10	What is the importance of IPv6?
11	What are the 5 levels of Intelligence in an Industrial IoT?
12	What are the advantages of twisted pair cable over others, especially while being used for different communication protocol?
13	What is difference between WSN and IoT?
14	List the different sensors that we can use for Arduino board project?
15	What are different variations in Raspberry Pi?
16	What is node MCU?
17	Which open source software is useful in WSN?
18	What are the important Components of an Internet of Things?
19	What are the major Privacy and Security Issues in case of IoT?
20	What is the role of Gateway in smart grid architecture IoT?
21	What are advantages of MQTT protocol compared to HTTP?
22	What is difference between persistent connection and non persistent connection?

MCQ				
1	Warren Buffet says that "Cyber security is the biggest threat facing mankind, even more dangerous than _____"			
	nuclear weapons	war	calamity	strick
2	In IoT DOS attack takes place on which layer?			
	Application	Network	Middleware layer	perceptuion layer
3	Which of the following is a simulator for IoT ?			
	contiki	tiny	cooja	rtos
4	Which is the top most challenge for adoption of Internet of Things?			
	Security	Money	Implementation	Users
5	In Cooja simulator programs are written in which programming language ?			
	java	python	C	cobol
6	GNSS supports which satellites			
	GPS	Baidu	IRNSS	All Global Satellites
7	AIS stands for-----			
	Automotive Industry Standards	Automation Industry Standards	Active Industry Standard	Aerospace Industry Standards
8	GPS communicates using-----			
	NMEA protocol	I2C protocol	Modbus protocol	RS232 protocol
9	Which of the following is not data link layer technology?			
	UART	Bluetooth	HTTP	WiFi
10	Which language is preferred for IoT analytics?			
	C++	HTML	Python	PHP
11	What is the example of smart grid edge device for utility?			
	Smart Home	Smart Car	Smart Meters	Smart College
12	API enables services portability between-----			
	Systems	Devices	Networks	Services
13	----- services are the way in which the IoT is connected to data.			
	Bigdata	Internet	Network	Cloud
14	Which of the following supports low energy radio operation?			
	IETF 6 LowPAN	IEFT CoAP	RFID/NFC	Bluetooth
15	Which among the following is more powerful?			

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	Raspberry Pi 2 model	Raspberry Pi 3 model	Galileo Gen 2 board	Galileo Gen 1 Board
16	AIS 140 is an application developed for-----			
	Smart City	Smart Lab	Smart Transport	Smart Home
17	What is MQTT protocol?			
	Message Queuing Telemetry Transport	Message Queuing Text Transport	Media Queuing Transport Things	Media Queuing Telemetry Things
18	Which environment does Global Sensor Network work on?			
	C++	JAVA	HTML	C
19	Which axis accelerometer is mostly used in IOT?			
	1 axis	2 axis	3 axis	Combination of all
20	The design of the Internet protocol suites adhere to the _____ principle.			
	Data corruption	Connection oriented	End to End principle	Reliability

ANNEXURE – V

Session wise Attendance and Feedback

List of Participants attended Day-1, Session-1 and Feedback

Resource Person: Dr. Abhay Kshirsagar

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
VARSHA N	5	5	It was informative session	-
Er.Manoj S. Kavedia	4	4	Concepts of Green IOT	All good
JANI DILIP BATUKRAY	5	5	Excellent knowledge	Excellent program
Dr S Srinivasulu Raju	5	5	Green IoT design	
Mr.Shankar A	4	4	informative	Nil
Ms. Shamal Salunkhe	5	5	IoT	Good
Mr. Sajid Shaikh	3	3	IoT introduction	
Mrs J Manjula	5	5	Good	No
Dr.T.Jobby Titus	5	5	IOT and green IOT	NIL
SHIVANAND BHIMASHANKAR KONADE	5	5	Good	Good session
Dr. Lakshmi Ranganatha V	4	5	--	--

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			Understanding IoT design methodologies, IoT levels, deployment template and applications	
Mr. Kartik Patel	5	5		Good session
Ms	5	5	Understood concept of Green IoT	
Mr.Harshavardhan Vijay kulkarni	5	5	To know iot applications, green iot implementation	Nil
Mr.R.Karthickmanoj	5	5	iot	
Mrs.V Mosherani	5	5	I learned about iot	Nice session
Mrs Dipti Jigar Karani	5	5	6 level in iot , application of iot , different layer protocol, managing space in cloud	
Mr.	5	5	Green IoT	
Ms. Diptee S. Patil	5	5		
Dr. Gargi Sameer Phadke	3	4	good	good
Mr. AJIT KUMAR SINGH	5	5	Learn green iot	
Mrs.A.Angulakshmi	4	4	Know basics of IOT	Good
Mrs. Ragini Gaikwad	5	5	Interesting research topics cloud data handling and processing, cyber security management.	Excellent session.
Dr.Asawari Dudwadkar	5	5	IOT protocols usage, open source solution, use of available hardware, research areas	Good going

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VANDANA B PATIL	5	5	<p>“Anytime, anywhere communication” has been a long-time dream and fueling advances in wireless communication technologies. Accordingly today, the ratio between radios and humans is almost one to one</p>	EXCELLENT
Mr. RANJIT ARJUN KATKAR	5	5	<p>Excellent presentation with suitable examples and explanation with interaction. Knowledge gaining experience.</p>	

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Mrs. Vishakha krantikumar Gaikwad	5	5	Very informative	Nil
ASHOK KUMAR S	5	5	Informative	
Mrs.Gaikwad Sarika Ganpat	5	4	understand importance of green IOT	NICE SESSION
Mr.	5	5	after successful completion of this session, i can able to understand IOT levels and Protocols used in IoT.	very much useful.
Mrs.	5	4	Very apt overview of green IoT and how it is going to be helpful for the society.	
Mrs Sangita Mahendra Rajput	5	5	Overview of IOT , importance of IOT, need of green IOT	Thank you so much

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Vaibhav Prakash	4	4	good knowledge	share slides
SANDEEP SINGH	5	5	Sensing is for collecting various data	NO
Mr Anand Bali	5	5	Levels of IoT	
Mr vemireddy suryanarayanareddy	5	5	Learned new things	
Dr. Amit V Patel	5	5	We learnt most critical technologies used for green IoT and keeping our environment and society smarter and green.	NO
DHANAMMA JAGLI	5	5	designing energy efficient datacenters, energy efficient transmission of data from sensors,	
Arunkumar Mishra	5	5	Today's dependency is on IoT and power management is best with IoT	None
Dr. JAYANT R. MAHAJAN	5	5	Now a days, how IoT plays important role in our daily life	Session is very useful

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			<p>Takeaways :</p> <ol style="list-style-type: none"> 1. Common sensors used in IoT 2. IoT levels and deployment templates with case studies 3. IoT application domains 4. IoT characteristics 5. Green IoT: Overview 6. IoT Protocols 7. Communication models in IoT 8. IoT Design Methodology (with 10 steps involved) 9. Wireless sensor networks process and its applications 10. Research areas in IoT 	
INDERJIT SINGH DHANJAL	5	5		NA
Suraj Khandare	5	5	Green IoT, IoT deployment levels and its examples, IoT Design Methodology	
Mrs.Kadambari Sharma	4	4	great understanding regarding the basics of green IOT	

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Mrs. Smita D Khandagale	4	4	Need for GIOT design	Useful session
Rahul Tiwari	5	5	Internet of Things (IoT) is an emerging concept, which aims to connect billions of devices with each other. The IoT devices sense, collect, and transmit important information from their surroundings. This exchange of very large amount of information amongst billions of devices creates a massive energy need. Green IoT envisions the concept of reducing the energy consumption of IoT devices and making the environment safe. Inspired by achieving a sustainable environment for IoT.	NA

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Ms. Brinzel Rodrigues	5	5	Green iot and ways to achieve that	
Ranjit Arjun Katkar	5	5	Valuable information and knowledge gaining experience.	
Mr.E.Udayakumar	5	4	Knowledge	
Rupesh Kumar Dutta	5	5	Very good session	
Mrs. Trupti Furia	5	5	Green IoT is essential in current situation.	
Dr. Dilip Kumar Sharma	5	5	Was very good	NIL
Mr. Surendra Sutar	4	4	Ways to design green iot	Nicely organized
Ms.A.MARIYAMMAL	4	4	reducing energy consumption of IoT devices	
Mr.S.GNANAMURUGAN	4	4	reducing energy consumption of IoT devices	good
Pratik Mukund Gumble	5	5	Excellent session on green concept	
Rakhi Yashwant Jadhav	4	4	new technology	No
Mrs. K. SHRUTHI	4	4	Basic r clear	Good
DARSHAN B D	5	5	Green iot	Good
Mr. SHAIK RAHIL HUSSAIN	4	4	major ways to achieve Green IoT design	

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Mrs. Sarika Pravin Kuhikar	5	5	Session was very informative	
Mrs. Amrita Jhaveri	5	5	Session explains about IOT applications, Various protocols , WSN	Excellent session
Anushree Ashish Prabhu	5	5	lot is upcoming field	No comment
Mrs.Mugdha R. Jogalekar	5	5	Green IOT basics	
Jayassre Ramakrishnan	5	5	There are six IoT levels 1 to 6 . We can start working from level 1 with simple applications and move towards time critical, mission critical applications, there are 10 deployment steps to be followed for successful implementation of IoT	Session is very good
Namrata Bonde	5	5	Overall session was good	
Mr.Yogesh Pandit	5	5	informative	No

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Mr. Shaikh Kader B T	5	5	Simple explanation	
ANCI MANON MARY A	5	4	Good	Good

List of Participants attended Day-1, Session-2 and Feedback

Resource Person: Dr. Y. S. Rao

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
JANI DILIP BATUKRAY	5	5	Excellent knowledge	Excellent
SHIVANAND BHIMASHANKAR KONADE	5	5	Good	Good
Dr. Lakshmi Ranganatha V	4	5	-	Nil
Mr. Sajid Shaikh	3	3	Various application of IOT	
Ms. VARSHA N	5	5	-	-
Mr. Kartik Patel	5	5	Applications of IoT in biomedical field	Very informative session
Mr.Shankar A	5	5	Real time applications	nil
ASHOK KUMAR S	5	5	Good	
Mrs.A.Angulakshmi	5	4	IOT in medical field	Good
Ms. Rakhi Vijay Gupta	3	4	The IoT world is all about communication between devices, gateways, and the Cloud;	
Mrs Smita D Khandagale	5	5	Excellent session explained along with medicine and engineering	Excellent session
Mrs.	5	5	How IoT is important and helpful in healthcare sector. It can be	Nice informative session

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			used for fast diagnosis and treatments of patient.	
Prateek Gumble	5	5	*	
Mr. Arunkumar Mishra	3	5	Sensors do provide lots of data but they are also unstructured data. There must be some smart algo in healthcare and processing. There are many common compenents in IoT and healthcare components.	Good session but bit lengthy.
Ms.Sakshi M.Hosamani	5	5	Understood application of IoT	
Mrs. Ragini Gaikwad	5	5	Taxonomy in research related to IoT and cloud computing for biological data handling.	Nice session. Day 1 both the sessions were informative. Thank you.
Mr.Harshavardhan Vijay Kulkarni	5	5	Application insights of iot n biomedical feild	Excellent lecture
Dr.T.Joby Titus	5	5	New technology	nil
Mrs Dipti Jigar Karani	4	4	Application in medical field some circuit of bp measures EEG ECG spo2 glucose measurements	
AJIT KUMAR SINGH	5	5	Application of lot in biomedical	
Dr. Amit V Patel	5	5	In depth idea of Biomedical and how IoT is useful in that field.	NA
Ms. Brinzel Rodrigues	5	5	Communication models in iot	
Suraj Khandare	5	5	Biomedical IoT devices like SpO2 and ventilators have a lot of potential as seen during the Pandemic. Edge computing on the devices	

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			also has a lot of potential	
Ms. Shamal Salunkhe	5	5	Good	Good
Rakhi Yashwant Jadhav	4	4	new technology	no
Vaibhav Prakash	4	4	Informative knowledge	share slides
DHANAMMA JAGLI	5	5	lot application	
Mr. Surendra Sutar	4	4	Biomedical applications	Nicely organized
Mrs J Manjula	5	5	Good session	No
Sanjay B.Waykar	5	5	Approaches to different WSN applications	No
Mr.	4	4	basic things about IoT based Bio-medical applications	Good
Mrs.Kadambari Sharma	4	4	different project ideas for implementation	
Mrs. K. SHRUTHI	4	4	Good	Nice session
Dr. JAYANT R. MAHAJAN	5	5	Use of IoT in biomedical field with different sensors.	Very useful session
Mr.R.Karthickmanoj	5	5	Good	
Mr.Sandeep Singh	5	5	IoT use in human health care, use of microprocessors and microcontrollers	No
Dr. Asawari Dudwadkar	5	5	lot in health care applications, biomedical	Good session
Mr. Anand Bali	5	5	Biomedical application WRT IoT	
Mr. RANJIT ARJUN KATKAR	5	5	Valuable information and knowledge gaining experience.	Arrange few more sessions like this with more duration and interaction.
Mrs. Vishakha krantikumar Gaikwad	5	5	Very informative	
vemireddy suryanarayanareddy	5	5	Learned new things	
Dr. Dilip Kumar Sharma	5	5	Fruitful	Nil
Mr.E.Udayakumar	5	4	Knowledge	
Mr. DARSHAN B D	5	5	Good	Good
Mrs.V Mosherani	5	5	The take-away is something they will remember, something	Good session

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			someone said, an activity they did, a comment someone made or a personal commitment they are planning to make as a result of the session	
Er. Manoj S. Kavedia	4	4	How lot can be used to take care of Health	all good
Mr. Tanveer Husain Shaikh Feroz Khatik	5	4	IoT communication patterns	Plz provide YouTube link. Because due to some network issues some part get missed.
Mr. SHAIK RAHIL HUSSAIN	4	4	How IOT is used in current situation	
INDERJIT SINGH DHANJAL	5	5	<ol style="list-style-type: none"> 1. How invention of Blue LED had impacted the world. 2. Characteristics of successful product development. 3. Information on Disruptive technologies. 4. Classification of Applications based on constraints 5. Various Biological signals 6. GAPS in information, communication and computation 7. Data-oriented IoT and service oriented IoT 8. Architecture of IoT 9. IoT Communication patterns 10. IoT protocol and platforms. 	Overall Rating: 9/10
Mr	5	5	Green IoT in biomedical engineering	

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Ms.A.Mariyammal	4	4	Green lot in medical equipment	
Mr S GNANAMURUGAN	4	4	Green IoT in medical components	Good
Mrs. Gaikwad Sarika Ganpat	4	4	Aware about biomedical applications	Nice session
ANCI MANON MARY A	5	4	Good	Good
Mrs. Sarika Pravin Kuhikar	5	5	Session was very interesting and useful for biomedical applications	
Mrs. Amrita Jhaveri	5	5	classification of IoT applications , Life critical, Business Critical, Mission critical, etc.Bio medical signals in IoT most imp message that sir gave is "Technology has to be wisely chosen based on its application."	Nice session
Anushree Ashish Prabhu	5	5	Best	No comments
Mrs. Mugdha Raturaj Jogalekar	5	5	uses in biomedical	
Jayassre Ramakrishnan	5	5	There are many disruptive technologies like IoT, 3D printing, cloud technology, automation, electric vehicle - we need to keep on updating even in designing a product- constant upgradation is required.	
Dr.Abhay Kshirsagar	4	4	Nice explanation about communication patterns, application of IoT	Nice session
Namrata Bonde	5	5	YES	NO
Mr.Yogesh Pandit	5	5	Informative	No

List of Participants attended Day-2, Session-1 and Feedback

Resource Person: Dr. Anjali Yeole

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
Jani dilip Batukray	5	5	Excellent presentation	Excellent program
ANCI MANON MARY A	4	4	Good	Good
Mr. DARASHAN B D	5	5	Good	Good
Dr. Asawari Dudwadkar	4	5	How to work with Cooja simulator	Good
Mr. Sajid Shaikh	3	3	Various application of IoT	
Dr Lakshmi Ranganatha V	5	4	-	-
Mr.R.KARTHICKMAN OJ	5	5	GOOD	
Mrs.Kadambari Sharma	4	4	Software learning contiki2.7	
Mr.Shankar A	5	5	Infromative	nil
Mrs. GAUTAMI PUJARE	4	4	Technical details regarding implementation of IoT for securities.	
Ms. VARSHA N	5	5	-	-
Dr.T.Joby Titus	5	5	Technology	Nil
Mrs Trupti Furia	5	5	In the context of Internet of Everything, any vulnerability can be exploited and cyber security is of prime importance. The security measures can be tested by using Cooja simulator environment.	
Mr. Kartik Patel	5	5	IoT attacks, Challenges for adoption of IoT, IoT security	Good session

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			requirements, Simulation of IoT network	
Mr	5	5	Cooja simulator for IOT	
SHIVANAND BHIMASHANKAR KONADE	5	5	Good	Good
Mr. SHAIK RAHIL HUSSAIN	5	5	Upcoming technologies and threats	
Mrs Smita D Khandagale	5	5	Implementation of IOT for securities	good session
Vaibhav Prakash	4	4	Informative knowledge	please share slides
Mr Harshavardhan Vijay Kulkarni	5	5	iot security	nil
Mrs Dipti Jigar Karani	5	5	Security is major thing to consider while design IOT project ,eco iot system	
Mr. Shrikant Balasaheb Shelke	5	5	IoT security issue	na
Mrs.A.Angulakshmi	5	5	IoT in home appliances	Good
Dr. Dilip Kumar Sharma	5	5	Nice Session	Nil
Mrs. K. SHRUTHI	4	4	Clarify the results	Good
Suraj Khandare	5	5	IoT Eco system was introduced IoT Enable Healthcare devices with classification into various categories New threats and attack vectors How to incorporate security Cooja Simulation and Contiki OS introduction	Wonderful session and thanks to all
Mrs.Ragini Gaikwad	5	5	Cooja Simulator was interesting part.	Nice session. Thank you
Mr Anand Bali	5	5	IoT simulator	
Mrs J Manjula	5	4	Good	No

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Sanjay B.Waykar	5	5	security aspects in iot	good
Mrs Nilima Zade	4	3	Security protocols can be implemented and tested for any application using cooja simulator	
Ashok Kumar S	5	5	Updation of knowledge	
Mrs.Gaikwad Sarika Ganpat	4	5	Simulation of COOJA network understood	Good session
Rakhi Yashwant Jadhav	4	4	New technology	No
Mrs.V Mosherani	5	5	Commans attacks	Good session
Mr. RANJIT ARJUN KATKAR	5	5	Valuable information and knowledge gaining experience. Excellent presentation with suitable examples and explanation with interaction. Knowledge gaining experience.	Arrange few more sessions like this of same resource person with more duration and interaction with explanation and hand on practice.
Dr. JAYANT R. MAHAJAN	5	5	Use of IoT in smart city and other applications and their security. How cooja simulator are important in different sensor network.	Informative session
Mr. Ranjit Arjun Katkar	5	5	Valuable information and knowledge gaining experience.	Arrange few more sessions like this with more duration and interaction.
Mr.	5	5	IoT Security issues and cooja simulations	Nice presentation
Mr. Surendra Sutar	4	4	Applications	Nicely organized
DHANAMMA JAGLI	5	5	COOJA	

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Ms. Rakhi Gupta	4	3	Smart cities, retail points, smart grids, agriculture and farming, homes and offices The Internet of Vehicles (IoV) Connected cars	
Mr.sandeep singh	5	5	Cyber security and application of iot	No
Ms. Shamal Salunkhe	5	5	Good	Good
Er.Manoj S. Kavedia	4	4	How python can be used for Analytics	All good
INDERJIT SINGH DHANJAL	4	5	1. IoT Ecosystems with several examples 2. Information on various attacks on IoT 3. Challenges for adopting IoT 4. Cooja simulator Demo 5. IoT Enable healthcare devices	Overall rating: 8/10
Mr. Vemireddy suryanarayanareddy	5	5	Learned iot security	
AJIT KUMAR SINGH	5	5	BASICS OF Cooja simulator and a bit about java	
Pratik Mukund Gumble	5	5	Essential part of security in IOT and cloud applications	
Mrs. Vishakha Gaikwad	5	5	very informative	
Dr. Amit V Patel	5	5	To learn and understand IoT OS and implementation	NA
Ms.A.MARIYAMMAL	4	4	GREEN IOT DEVICE ARCHITECTURE	GOOD
Mr. Arunkumar Mishra	4	5	Simple template for	Very informative

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			many IoT command	
Mr.S.GNANAMURUGAN	4	5	GREEN IOT DEVICE ARCHITECTURE	OK
Ms. Brinzel Rodrigues	5	5	Attacks on iot system, iot simulation	
Dr.PERARASIT	5	4	Understood the concept related with IoT	good
Mr.E.Udayakumar	5	4	Knowledge	
Mrs. Sarika Pravin Kuhikar	5	5	Session was interesting and informative based on COOJA Simulator	
Anushree Ashish Prabhu	5	5	Network simulator	No comments
Mrs. Amrita Jhaveri	5	5	Various security and design aspects of any IOT based applications , introduction to Cooja simulator to test any IOT application	Well delivered
Mrs. Mugdha Raturaj Jogalekar	5	5	Cooja simulator basics	
Jayassre Ramakrishnan	5	5	Understood importance of IoT security in today's scenario.	
Dr.Abhay Kshirsagar	4	4	Nice info about simulators, pen sources and applications	Nice Session
Namrata Bonde	5	5	yes	no
Mr. Shaikh Kader B T	5	5	Simple understanding	
Mr.Yogesh Pandit	5	5	Introduction to Cooja simulator	No

List of Participants attended Day-2, Session-2 and Feedback

Resource Person: Mr. Shashank Karmarkar

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
Dr. Asawari Dudwadkar	5	5	NB - IOT & architectures, low power modes	Good going
Dr.T. Joby Titus	5	5	technology	nil
ANCI MANON MARY A	4	4	Good	Good
Mr. Kartik Patel	5	5	Green IoT, Smart city and applications	Good Session
SHIVANAND BHIMASHANKAR KONADE	5	5	Good	Good
Mr.Shankar A	4	3	informative	nil
Mrs Nilima Zade	3	3	Smart city mission is feasible due to IoT	
JANI DILIP BATUKRAY	5	5	Excellent	Excellent
Mrs.A.Angulakshmi	4	5	Smart city	Good
Dr. Lakshmi Ranganatha V	5	5		
Ranjit Arjun Katkar	5	5	Collective information and effective presentation with suitable examples and explanation with interaction. Knowledge gaining experience.	Arrange few more sessions like this with more duration and interaction.
Dr.Sanjay B.Waykar	5	5	smart city case study	good
Dr. Amit V Patel	5	5	More steps ahead from the basic knowledge	NA
Mrs. Ragini Gaikwad	5	5	Architectural considerations, NB-IoT for LPWA application, Power Saving and CP-UP optimization	Got new things to know. Informative session. Thank you
Mr. RANJIT ARJUN KATKAR	5	5	Knowledge gaining	Very useful and informative

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			experience and valuable information acquired.	session. Well planned and organized. Excellent presentation with suitable examples and explanation with interaction. Knowledge gaining experience. Arrange few more sessions like this of same resource person with more duration and interaction with explanation and hand on practice.
Mrs J Manjula	5	5	Good	No
Mrs. K. SHRUTHI	4	4	Good session	Useful
mrs. Vishakha Gaikwad	5	5	very informative	
Mr	5	5	Security of IoT	
Mrs. Trupti furia	5	5	Overview NB IoT and its usage. Applications of IoT in Smart City. Discussion on use cases for the same.	Being an instrumentation engineer , understanding the core telecommunication discussions was difficult, but the overall scenario of essential aspects is understood.
Mr. Sajid Shaikh	3	3	Introduction of iot analytics	
V Mosherani	5	5	TCP/ip and primary function	Good session
Mr. Surendra Sutar	4	4	Important applications	Nicely organized
Mr.R.Karthickmanoj	4	4	Good	
Ms. VARSHA N	5	5	-	-
Mr Shrikant Shelke	5	5	Nb IoT	Provide PPT and video if possible for future reference
Mrs. Dipti Jigar Karani	4	5	Architecture of iot ,risk in iot, cellular iot application	
Dr. Dilip Kumar Sharma	5	5	Nice	Nil
Ms. Brinzel Rodrigues	5	5	Importance of ipv6, pillars of iot,	
Mr.	5	5	Smart city need 5G technology	Good

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AJIT KUMAR SINGH	5	5	key pillars of IoT	
INDERJIT SINGH DHANJAL	5	5	Smart city Grid IoT brief architectures Smart city engineering jobs Green IoT ecosystem Why IoT analytics is important Narrow Band IoT Principles MTC: Machine to machine communication Use cases of NB-IoT Use cases of Industrial IoT	Overall Session: 9/10
Miss Rakhi Vijay Gupta	4	3	Gateway. Gateway enables easy management of data traffic flowing between protocols and networks.	
Suraj Khandare	5	5	Government can make smart cities with the help of 5G technology only IoT network and smart city teams Principles to follow for Green IoT	Thank you for the wonderful session
Ms. Shamal Salunkhe	5	5	Good	Good
Mr.Sandeep Singh	5	5	APPLICATION OF IOT HOW TO USE IOT	No
Mr. Arunkumar Mishra	5	5	All samsung defined protocol and IoT based systems with cloud and ip based IoT	Very informative and useful
Mr. Darshan B D	5	5	Good	Good
Mr Karthik Kumar Vaigandla	4	4	.	Good
Dr.PERARASI T	4	4	Understood the Protocols for IoT	Informative
Mr Harshavardhan Vijay Kulkarni	5	5	EXPOSURE TO SMART CITY ECOSYSTEM	NIL
Mr.E.Udayakumar	5	4	Knowledge	

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Mrs.Kadambari Sharma	4	4	Network evolution to 5G was interesting	
Mrs. Gautami Pujare	4	5	Technical importance of all important pillars of IoT	Good session
Rakhi Yashwant Jadhav	4	4	technology	No
DHANAMMA JAGLI	5	5	iot APPLICATIONS	
Mrs.Gaikwad Sarika Ganpat	4	5	Its beneficial for understanding IoT application in city like energy ,water,transport management purpose	Nicely topic covered
Anand Bali	5	5	IoT architecture, IoT design, and it's implementation in smart city	
Dr.JAYANT R.MAHAJAN	5	5	Understanding of 5G and Home Automation	Informative session
Mrs Smita D Khandagale	5	5	Technical importance of all important pillars of IOT	Excellent session
Mr. SHAIK RAHIL HUSSAIN	4	4	IMPORTANCE OF IPV6	
Vaibhav Prakash	4	4	Informative knowledge	please share slides
Mr.S.Gnanamurugan	4	4	Protocols for IOT	GOOD
Ms.A.MARIYAMMAL	4	4	Protocols for IOT	OK
Mrs. Sarika Pravin Kuhikar	5	5	Session was very informative.	
Anushree Ashish Prabhu	5	5	Best session	No comments
Mrs. Amrita Jhaveri	5	5	Various components of IOt protocols	Nice session
Dr.Abhay Kshirsagar	4	4	Nicely introduced to NB IoT, Applications	Nice Session
Namrata Bonde	5	5	YES	

List of Participants attended Day-3, Session-1 and Feedback

Resource Person: Mr. Anurag Chugh

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
JANI DILIP BATUKRAY	5	5	Excellent	Excellent
Sajid Shaikh	4	4	Introduction of Siemens appliances via iot	
Shankar A	5	5	knowledge on IoT	nil
Dr. Lakshmi Ranganatha V	5	5		
Udayakumar E	4	5	Knowledge	
Dr. Dilip Kumar Sharma	5	5	Good	Nil
Mrs J Manjula	5	5	Innovative session	No
DARSHAN B D	5	5	Good	Good
Dr.T.Joby Titus	5	5	Technology	NIL
VARSHA N	5	5	-	-
Dr. Asawari Dudwadkar	5	5	Edge technology, profibus, communication protocol in industry, safety procedure, security aspects.	Great session, industry outlook & securityaspects
V Mosherani	5	5	Profinet and edge technology	Good session
Mrs. Trupti Furia	5	5	Protocols and technology used in OT and IT.	
Ms. Shamal Salunkhe	5	5	Good	Good
SELVARAJ S	5	5	IIoT, Edge Computing	very useful.
KARTIK PATEL	5	5	Cutting edge technology, challenges, applications, case studies	Good session with mentimeter quiz
A.Angulakshmi	4	5	Hardware in IOT	Good
Lokesh M. Giripunje	5	5	IOT using Edge Technology	
Nilima Zade	3	4	Tried to make aware about industrial iot	
Shrikant Balasaheb Shelke	5	5	.	.
Dr. JAYANT R. MAHAJAN	5	5	Importance of EDGE	Informative session

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			technology in industrial applications	
Sanjay B.Waykar	5	5	edge technology	good
Harshavardhan Vijay Kulkarni	5	5	lot in industry	Nil
Suraj Khandare	5	5	Technologies used in Siemens for IIoT Applications using Edge Computing	Thank you for the wonderful session
Dr. Amit V Patel	5	5	Good knowledge of Industrial Edge IoT and applications.	NA
Dipti Jigar Karani	5	5	Application of profibus. Edge standard plc and scada with IOT personal cloud	
Mr. RANJIT ARJUN KATKAR	5	5	Valuable information and knowledge gaining experience.	Very useful and informative session. Excellent presentation with suitable examples and explanation with interaction and question answers session. Arrange few more sessions like this of same resource person with more duration and interaction with explanation and hand on practice.
SANDEEP SINGH	5	5	understanding of Industrial Edge technology and profinet	No
DR VANDANA B PATIL	5	5	Thus, the adoption of Industrie 4.0 business models in the manufacturing industry is accelerated	
Vaibhav Prakash	4	4	informative knowledge	please share slides

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Ragini Gaikwad	5	5	Industrial edge-Trend edge computing, Automation tools with edge runtime, hybrid solutions, python app.	Nice session.
Gautami Aniruddha Pujare	5	5	Details of Edge Technology and IoT	
INDERJIT SINGH DHANJAL	4	5	1. Siemens company setup information and cutting-edge technologies that enable autonomous manufacturing. 2. IoT enabled manufacturing in Siemens 3. Automation Pyramid communication to each level 4. Critical requirements of industrial network 5. Profinet and Profibus overview 6. Integration of IoT with other technologies 7. Data logging to smart data case studies 8. Cloud-based Open IoT operating system. 9. IoT Gateway 10. IIoT demo 11. Siemens Industrial edge devices and technology 12. PCM cutting machine case study	NA
Er. Manoj S. Kavedia	4	4	How to use IOT Hardware , Its Benefit	All good
Shivanand konade	5	5	Good	Good
Mr. Surendra Sutar	4	4	Edge technology	Nicely organized

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AJIT KUMAR SINGH	5	5	industrial edge technology in green iot	
Kadambari Sharma	4	4	different protocols needed in IOT	
Prof.Gaikwad Sarika Ganpat	4	4	Understand industrial edge technology	No
Mr. Anand Bali	5	5	Industry standards	
Mr. SHAIK RAHIL HUSSAIN	5	5	Upcoming industrial technologies	
Rakhi Yashwant Jadhav	4	4	Technology	No
ANCI MANON MARY A	4	5	Good	Good
Vishakha Gaikwad	5	5	Very informative	
Dr.T.Perarasi	4	4	Understood basic hardware with IoT; PROFINET Vs PROFIBUS	good
S.Ashok Kumar	5	5	Knowledgeable	
DHANAMMA JAGLI	5	5	EDGE technology	
Mrs. K. SHRUTHI	4	4	New idea	Good
Arunkumar Mishra	5	5	Session was nice but bit of lagging. I got to know many new concepts about industry level automation via IoT sensors	None
S.GNANAMURUGAN	5	4	architecture Design with communication network	OK
A.MARIYAMMAL	4	4	architecture Design with communication network	ok
Mrs Smita D Khandagale	5	5	Industrial Edge technology	Nice session
Mrs. Sarika Pravin Kuhikar	5	5	Session was very informative.	
Anushree Ashish Prabhu	5	5	Nice	No comments
Mrs. Mugdha Ruturaj Jogalekar	5	5	technologies	
Jayassre Ramakrishnan	5	5	Learnt about traditional vs IoT enabled manufacturing, automation pyramid different levels,	

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			horizontal & vertical integration	
Dr. Abhay Kshirsagar	4	4	Understood edge technology, IIoT applications	Nice Session
Namrata Bonde	5	5	YES	
Mr. Shaikh Kader B T	5	5	Simple understanding	
Mr.Yogesh Pandit	5	4	IIoT, Edge Computing etc	No

List of Participants attended Day-3, Session-2 and Feedback

Resource Person: Mr. Dhananjay Jadhav

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
ANCI MANON MARY A	3	3	Good	Good
VARSHA N	5	5	-	+
Jani dilip Batukray	5	5	Excellent	Excellent
Shankar A	5	5	informtive	nil
Dr. T.Joby Titus	5	5	Technology	Nil
Nilima Zade	4	4	Understood Hardware implementeren	
Vardhan Vijay Kulkarni	5	5	lot manufacturing	Nil
Sanjay B.Waykar	5	5	Real life examples	Good
Mrs Trupti Furia	5	5	Implementing IoT projects in home network	
J Manjula	5	5	Good	No
vishakha Gaikwad	5	5	Very informative	
A.Angulakshmi	4	4	Industrial IOT	Good
Dr. Lakshmi Ranganatha V	5	5		Nil
Gautami Pujare	4	4	Technical details of installation and implementation of IoT projects	Good informative session
SANDEEP SINGH	5	5	IoT Protocols, WSN and IoT with Applications	NO
Dr. Asawari Dudwadkar	5	5	Edge technologies, industrial lot applications, use of microcontrollers.	No

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INDERJIT SINGH DHANJAL	5	5	Learn a lot during this session: 1. Citizen Science using IoT 2. DIY IoT projects in-home apartments 3. Extremely detailed informative Projects case studies of a. Wired Sensor Network, b. Delhi Metro rail Corporation c. Cell Site Battery Monitoring system d. Health Telematics f. ADS-B receiver g. Home Network Set-up h. Electric Energy meter case study i. Wifi Attendance System j. Weather station and ambient sensors. 4. OpenWRT Router	Ratings: 10/10
Dipti Jigar Karani	5	5	We can take project in our daily life with some knowledge	
Ragini Gaikwad	5	5	Development Board, home network setup, Boeing application	Nice session
S.Ashok Kumar	5	5	Informative and useful	
Udayakumar E	4	5	Knowledge	
Dr. Amit V Patel	5	5	In depth and practical knowledge of IIoT	NA
Dr.T.Perarasi	5	5	Protocols used for IoT in industrial standards	Informative. Kindly share the lecture notes
Vemireddy suryanarayanareddy	5	5	Learned application of iot	

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Kartik Patel	5	5	Advantages of twisted pair cables, OpenWRT projects, Cots and Microcontroller projects	Good Session
Suraj Khandare	5	5	Five levels of intelligence in IIoT Delhi metro project information Twisted pair cable use Cell site battery monitoring system Keep on learning and trying projects	Thank you for the wonderful information by speaker
Dr. Dilip Kumar Sharma	5	5	Good	Nil
Mr. SHAIK RAHIL HUSSAIN	5	5	Levels of intelligence	
SELVARAJ S	5	5	OpenWRT ,IIOT	Super
AJIT KUMAR SINGH	5	5	Industrial iot	
SHIVANAND BHIMASHANKAR KONADE	5	5	Good	Good
Prof.Gaikwad Sarika Ganpat	4	4	How to build IOT project in different applications understand	No
Sajid Shaikh	4	4	Introduction of industrial iot	
DHANAMMA JAGLI	5	5	EDGE TECHNOLOGY, INDUSTRIAL IOT	
Er.Manoj S. Kavedia	4	4	With coding How to do programing of RPi using Node Red, Wireless Sensor network	All good
B. BALAJI	5	5	Yes	
V Mosherani	5	5	Communication protocol	Good session
Dr. JAYANT R. MAHAJAN	5	5	Importance of IoT in our daily life	Informative session
Mrs. K. SHRUTHI	4	4	New	Good
Arunkumar Mishra	5	5	Protocols and procedures for setting up the wireless	very Good

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			networks with sensors	
S.GNANAMURUGAN	4	5	used to carry both analog and digital data.	OK
A.MARIYAMMAL	4	5	IoT protocol and wireless sensor network	OK
KARTHIK KUMAR VAIGANDLA	4	4	GOOD SESSION	GOOD
Kadambari Sharma	4	4	Intelligence levels in iot	
Mr. Surendra Sutar	4	4	Different IOT applications	Nicely organised
Mrs Smita D Khandagale	5	5	intelligence in industrial IoT communication protocol	Good session
Rakhi Yashwant Jadhav	4	4	Technology	No
Anushree Ashish Prabhu	5	5	Nice	No commentsno com
Mrs. Sarika Pravin Kuhikar	5	5	Session was very useful	
Jayassre Ramakrishnan	5	5	Design before coding is important. Projects should not be left halfway, keep extending further and develop a product	
Dr. Abhay Kshirsagar	5	5	Excellent explanation about small applications, hardware importance in IoT	Nice Session
Namrata Bonde	5	5	YES	
Yogesh Pandit	4	4	Informative and useful	No

List of Participants attended Day-4, Session-1 and Feedback

Resource Person: Dr. Saurabh N. Mehta

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
JANI DILIP BATUKRAY	5	5	Excellent	Excellent
Ms. Shamal Salunkhe	5	5	Good	Good

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Kartik Patel	5	5	Hardware and software platforms of IoT, Projects, Versions of Arduino and Raspberry pi	Good Session
AJIT KUMAR SINGH	5	5	IoT, basics of wsn	
Vishakha Gaikwad	5	5	Very informative	
Sajid Shaikh	3	4	Introduction	
Dr. Dilip Kumar Sharma	5	5	Good	Nil
SHIVANAND BHIMASHANKAR KONADE	5	5	Good	Good
Dr. Asawari Dudwadkar	5	5	WSN, protocols, tools etc. nS2 NS3, & comparison.	Good going
Dr.T.Joby Titus	5	5	IOT Devices	nil
A.Angulakshmi	4	4	Hardware & Software in IOT	Good
Dipti Jigar Karani	5	5	Selection of hardware for particular application	
Sanjay B.Waykar	5	5	cloud architecture	good
J Manjula	5	5	Good	No
Mr. Anand Bali	5	5	Comparison of simulation and hardware	
VARSHA N	5	5	-	-
DHANAMMA JAGLI	5	5	Wsn, raspberry pi	
ANCI MANON MARY A	4	4	Good	Good
Dr.JAYANT R. MAHAJAN	5	5	Use of open source software and hardware in different network.	Very informative session
Lokesh Giripunje	5	5	Simulation Softwares	
Er. Manoj s. Kavedia	4	4	RaspberryPi, cloud Technology , Think Speak	All good
Ragini Gaikwad	5	5	Beagle Board cape, built in networking Remote access, Simple linking Wifi Platform, Comparison of different Wireless networks,	Informative session Thank you.

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S.Ashok Kumar	5	5	Good knowledgeable session	
HARSHAVARDHAN VIJAY KULKARNI	5	5	LEARNT ABOUT IOT APPLICATION IN TRANSPORTATION	NIL
SELVARAJ S	4	4	Various kinds of IOT devices and software tools, cloud support for IOT	good
Mr. Arunkumar Mishra	5	5	Loads of simulation tools and wsn tools with their comparison. Open source resources are well discussed	Very good
INDERJIT SINGH DHANJAL	4	4	1. Future of IoT with facts and figures, 2. Industrial players in IoT. 3. Popular hardware used in IoT. 4. Arduino types, its IDE, big 6 concepts, and Arduino board projects. 5. R pi hardware and software platforms. 6. Information on Node MCU and beagle board and PSOC. 7. Comparative study of hardware tools. 8. Cloud computing: its applications, data storage, hardware infrastructure, examples of cloud services. and challenges in cloud computing. 9. Comparative study of WSN simulation tools.	NA

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Kadambari Sharma	4	4	wireless network, simulation tools, comparison of different network	
SANDEEP SINGH	5	5	Raspberry Pi Arduino ,WSN Vs IOT	No
Mr. Surendra Sutar	4	4	Detailed wsn	Nicely organized
Suraj Khandare	5	5	Facts and Figures of IoT Open source tools Applications of WSN WSN vs IoT Hardware like Arduino, Raspberry Pi, Beagle Board, PSOC	Thank you for the wonderful session
DR VANDANA B PATIL	5	5	Compare Raspberry Pi 400 vs Raspberry Pi 4 vs Raspberry Pi 3 A+ vs Raspberry Pi 3 B+ vs Raspberry Pi 3 vs Raspberry Pi 2 vs Raspberry Pi Zero	excellent
Prof.Gaikwad Sarika Ganpat	4	5	Different tools and IoT hardware	No
Shankar A	5	4	Informative	Nil
SHAIK RAHIL HUSSAIN	4	4	variations in Raspberry Pi	
Nilima zade	2	2	Very introductory session which was almost covered in previous sessions.	
Dr. Amit V Patel	5	5	Hardware and software knowledge of IoT	NA
Gautami Pujare	5	5	Details of IoT applications and implementation	Nice session
Vaibhav Prakash	4	4	Informative knowledge	please share slides
Dr. PERARASI T	4	4	Various hardware for IoT & Tools used	Informative
Dr. Lakshmi Ranganatha V	5	5		Nil

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Ms.A.MARIYAMMAL	4	4	Open source tools USED for green IoT	OK
Mr. RANJIT ARJUN KATKAR	5	5	Valuable information and knowledge gaining experience. Excellent presentation with suitable examples and explanation with interaction.	Excellent presentation with suitable examples and explanation with interaction. Knowledge gaining experience. Arrange few more sessions like this of same resource person with more duration and interaction with explanation and hand on practice.
Mr.S.Gnanamurugan	4	4	Open source tools USED for green IoT	OK
Mrs. K. SHRUTHI	4	4	Nice	Good
V Mosherani	5	5	Raspberry Pi	Good session
KARTHIK KUMAR V	4	4	.	GOOD
Rakhi Yashwant Jadhav	4	4	technology	No
Udayakumar E	5	4	Knowledge	
Anushree Ashish Prabhu	5	5	Nice	No comment m
Mrs. Amrita Jhaveri	5	5	Different hardware and software platform and databases were discussed	Very well delievered
Mrs.Mugdha Raturaj Jogalekar	5	5	Raspberry Pi basics	
Dr. Abhay Kshirsagar	4	5	Nice explanation about devices used in lot and their importance	Nice Session
Namrata Bonde	5	5	YES	
Mr. Shaikh Kader B T	5	5	Simple understanding	

List of Participants attended Day-4, Session-2 and Feedback

Resource Person: Mr. Gopalakrishnan Narayan

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
ANCI MANON MARY A	4	4	Good	Good
JANI DILIP BATUKRAY	5	5	Excellent	excellent
Dr.T.Jobey Titus	5	5	Technology	Nil
Dipti Jigar Karani	5	5	Standards for GPS and software for it	
Nilima Zade	4	4	Details about vehicle tracking system	Good topic
A.Angulakshmi	4	4	Smart transport design	Good
SHIVANAND BHIMASHANKAR KONADE	5	5	Good	Good
Prof.Gaikwad Sarika Ganpat	4	4	GPS application	No
J Manjula	5	5	Good	No
Arunkumar Mishra	5	5	Ais140, AT command, GPS navigation, ARM processors	Very nice and informative
Ms. Shamal Salunkhe	5	5	Good	Good
Dr.PERARASI T	5	4	Understood the Communication protocols and standards	Good & Informative
Dr. Dilip Kumar Sharma	5	5	Good	Nil
Vishakha Gaikwad	5	5	Informative	
SELVARAJ S	5	5	AIS 140 Architecture, GSM and GPS communication standards, GSM AT commands for IOT Applications	good
Kadambari Sharma	4	4	New terms like POTA, FOTA and practical implementations of GPS.	
VARSHA N	5	5	-	-
Dr. Lakshmi Ranganatha V	5	5		Nil
Dr. JAYANT R. MAHAJAN	5	5	AIS 140 standards	Informative Session

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Ms.A.MARIYAMMAL	4	4	Intelligent Transport Design AIS 140	OK
Trupti Furia	5	5	Design of vehicle detection system	
Mr.S.Gnanamurugan	4	5	Intelligent Transport Design AIS 140	OK
Mrs. K. SHRUTHI	4	4	Nice	Good session
Er. Manoj S. Kavedia	4	4	How GPS will be helpfull	all good
AJIT KUMAR SINGH	5	5	More about gps	
Dr. Asawari Dudwadkar	4	4	NMEA protocol, GPS & demo	No
Mr. RANJIT ARJUN KATKAR	5	5	Valuable information and knowledge gaining experience.	Excellent presentation with suitable examples and explanation with interaction and question answers session. Knowledge gaining experience. Arrange few more sessions like this of same resource person with more duration and interaction with explanation and hand on practice.
Kartik Patel	5	5	AIS 140, Vehicle tracking system, AIS 140 Basic architecture	Good Session
Ragini Gaikwad	5	5	Bootloader classsification, GNSS, DOP- Dilution of prcision	Nice session
SANDEEP SINGH	5	5	POTA, Emergency Response System , Health Check sms from server.	No
S.Ashok Kumar	5	5	Useful	
Lokesh Giripunje	5	5	AI	
INDERJIT SINGH DHANJAL	4	5	1. History, specification, design, and implementation	NA

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			of the intelligent transport system 2. Need for AIS140 (5 why ?) 3. Basic architecture and block diagram of the AIS 140 system 4. Information on Global Navigation Satellite System (GNSS) 5. Why SBAS is required? 6. NMEA Format 7. GSM specification and Set-up GSM 8. Activation SMS from server and Health check SMS from server 9. Implementation parameters over the Air (POTA)	
Vemireddy suryanarayanareddy	5	5	Learn iot application to statellite communication	
DHANAMMA JAGLI	5	5	DESIGN , IMPLEMENTATI ON	
Vaibhav Prakash	4	4	Informative Knowledge	Please share slides
Suraj Khandare	5	5	Big epaper display GPS and GNSS AIS 140 approved GPS tracking device	
SHAIK RAHIL HUSSAIN	5	5	GPS Communication	
KARTHIK KUMAR VAIGANDLA	4	4	-	GOOD
Rakhi Yashwant Jadhav	4	4	technology	No
Sanjay B.Waykar	5	5	hardware details	good
DARSHAN B D	5	5	Some standard s	Good
Udayakumar	5	4	Knowledge	
Mrs. Sarika Pravin Kuhikar	5	5	Session was very informative	

Short Term Training Program on 'Green Internet of Things'

Anushree Ashish Prabhu	5	5	Nice	No
Mrs. Amrita Jhaveri	5	5	Highlights automobile tracking using IOT	Good session
Mrs. Mugdha Raturaj Jogalekar	5	5	Applications	
Dr. Abhay Kshirsagar	4	4	IoT application in transport system, use of GPS	Nice Session
Namrata Bonde	5	5	YES	
Mr. Shaikh Kader B T	5	5	Application development	
Mr. Yogesh Pandit	4	5	Informative	No

List of Participants attended Day-5, Session-1 and Feedback

Resource Person: Mr. Nishant Singh

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
ANCI MANON MARY A	5	4	Good	Good
Dr. Dilip Kumar Sharma	5	5	Good	Nil
Dr.T.Jobey Titus	5	5	Technology	Nil
AJIT KUMAR SINGH	5	5	AWS cloud iot system,mqtt and compare with other protocol	
Nilima Zade	5	5	Real time implementation of lot application	Such hands on session should be arranged at least for two to three days continuously
Kartik Patel	5	5	Working on AWS cloud, MQTT protocol working	Good hands on session
DARSHAN B D	5	5	Good	
J Manjula	5	5	Good session	No
Sajid Shaikh	3	3	Aws iot	
Dr. Asawari Dudwadkar	5	5	lot python programing hands on	Good
Karthik Kumar Vaigandla	4	4	.	Good
Brinzel Rodrigues	5	5	Case study explain, protocol used	

Short Term Training Program on 'Green Internet of Things'

Mr. RANJIT ARJUN KATKAR	5	5	Valuable information and knowledge gaining experience. Excellent presentation with suitable examples and explanation.	Arrange few more sessions like this of same resource person with more duration and interaction with explanation and hand on practice. Any advance and relevant topics and technologies based sessions.
Er.Manoj S. Kavedia	4	4	How to implment MQTT and Thing Speak	All good
Dipti Jigar Karani	5	5	Use of Aws software how to take over loss data due to internet	
Prof.Gaikwad Sarika Ganpat	5	5	Realize MQTT,COAP difference	No
A.Angulakshmi	4	4	Hands on training	Good
SANDEEP SINGH	5	5	Cloud Computing for IoT with Hands-on	No
VARSHA N	5	5	-	-
Ms.A.MARIYAMMAL	4	4	Computing for IoT with Hands-on	OK
Dr. JAYANT r.MAHAJAN	5	5	Use of AWS in real time applications	Informative session
JANI DILIP BATUKRAY	5	5	Excellent	Excellent
DHANAMMA JAGLI	5	5	Handshand practice	
Suraj Khandare	5	5	Real time example of Nike Difference between MQTT and HTML HiveMQ, Active MQ, MQTT Dashboard	Thank you for the wonderful session
S.Ashok Kumar	5	5	Knowledge gaining	
Dr. Lakshmi Ranganatha V	5	5		Nil
INDERJIT SINGH DHANJAL	5	5	1. Real-time case studies for the deployment of IoT for improvement. 2. Deployment of IoT application using AWS IoT	NA

Short Term Training Program on 'Green Internet of Things'

			services to use cloud services 3. Information on MQTT, HTTP, and CoAP 4. Recent developments in IoT 5. Demo in ThingSpeak 6. Fields of applications that use MQTT protocol 7. MQTT working and brokers information 8. Sending Sensor data over MQTT	
Kadambari Sharma	4	4	IOT protocols	
SELVARAJ S	5	5	AWS cloud	Good
Ragini Gaikwad	5	5	Handson sessions are interesting	Interactive session. Thank you
Vishakha Gaikwad	5	5	Very informative	
Shankar A	5	5	Informative	nil
Dr. Amit V Patel	5	5	In depth knowledge and practical implementation	NA
Arunkumar Mishra	5	5	Be account creation on AWS and IoT cloud with QoS	Good session
Mrs Trupti Mane	5	5	Cloud computing	
DR VANDANA B PATIL	5	5	HTTP occurs when we reuse the single connection for sending multiple messages	
Lokesh Giripunje	5	5	IOT	
Sanjay B.Waykar	5	5	AWS IOT	Good
Mrs. K. SHRUTHI	4	4	New think	Good
SURENDRA TUKARAM SUTAR	4	4	Use of cloud computing	Nicely Organised
Mrs Smita D Khandagale	5	5	Cloud computing	Good
Gautami Pujare	4	5	Details regarding mqtt	
Ms. Shamal Salunkhe	5	5	Good	Good
SHAIK RAHIL HUSSAIN	5	5	real time case studies explained by the speaker for deployment of IoT for improvement	

Short Term Training Program on 'Green Internet of Things'

Mr.S.Gnanamurugan	5	4	Computing for IoT with Hands-on TRAINING	OK
V Mosherani	5	5	Development of iot	Good session
Vaibhav Prakash	4	4	Informative knowledge	Please share slides
Rakhi Yashwant Jadhav	4	4	technology	no
E.Udayakumar	5	5	Knowledge	
Anushree Ashish Prabhu	5	5	Good	No
Mrs. Sarika Pravin Kuhikar	5	5	Session was very informative.	
Mrs. Amrita Jhaveri	3	3	Hands-on on making a thing create a certificate and how to attach apolicy	No
Mrs. Mugdha Raturaj Jogalekar	5	5	Basics of cloud computing	
Mr. Shaikh Kader B T	5	5	Simple understanding	
Mr.Yogesh Pandit	5	4	Good session and Informative	No
Jayassre Ramakrishnan	5	5	AWS IoT, AWS SNS, AWS quicksight can be learnt - hands on gives better practical knowledge	

List of Participants attended Day-5, Session-2 and Feedback

Resource Person: Mr. Nishant Singh

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
ANCI MANON MARY A	4	4	Good	Good
JANI DILIP BATUKRAY	5	5	Excellent	Excellent
Lokesh Giripunje	5	5	Cloude computing in IOT	
Dr.T.Jobey Titus	5	5	Technology	Nil
Shankar A	5	5	Informative	Nil
VARSHA N	5	5	-	-
Mrs. K. SHRUTHI	4	4	Nice	Good
J Manjula	5	5	Good	No
AJIT KUMAR SINGH	5	5	depth knowledge of cloud	
Dr. Dilip Kumar Sharma	5	5	Good	Nil

Short Term Training Program on 'Green Internet of Things'

Sajid Shaikh	4	4	Introduction Aws iot	
A.Angulakshmi	4	4	Hands on training	Good
nilima Zade	5	5	implementation of iot application using cloud	very nice session , these topic should have been covered in two to three days in detail
sandeep singh	5	5	how to use Cloud Computing	No
SHAIK RAHIL HUSSAIN	4	4	Three steps to be followed while publishing data to cloud	
Kartik Patel	5	5	Working on AWS server	Good hands on session
Prof.Gaikwad Sarika Ganpat	4	4	AWS IOT applications.Publi sher,subscriber,br oker like different insurance services IoT based	No
Dipti Jigar Karani	5	5	How to publish and read data in cloud	
Ms.A.MARIYAMMAL	4	4	Cloud Computing for IoT with Hands-on	OK
Trupti Mane Furia	5	5	Cloud computing	
Mr.S.Gnanamurugan	5	4	Cloud Computing for IoT with Hands-on	OK
Mrs Smita D Khandagale	5	5	Publishing data to cloud	Excellent session
Dr.Asawari Dudwadkar	5	5	Cloud data handling, rules, attributes, AWS, google cloud services, etc.	No
SELVARAJ S	5	5	publishing data to the cloud	very nice
DHANAMMA JAGLI	5	5	Cloud computing fot IOT	
Er. Manoj S. Kavedia	4	4	How Amazon Web Services to setup and use	All good
Ragini Gaikwad	5	5	Filter Notification in AWS subscription, GIOT Applications.	Nice session. Thank you
Shamal Salunkhe	5	5	Good	Good
SHIVANAND BHIMASHANKAR KONADE	5	5	Good	Good

Short Term Training Program on 'Green Internet of Things'

Mr. RANJIT ARJUN KATKAR	5	5	Valuable information and knowledge gaining experience. Gain all aspects, insights and advances in the field of Cloud Computing for IoT	Arrange few more sessions like this of same resource person with more duration and interaction with explanation and hand on practice. Any advance and relevant topics and technologies based sessions.
Suraj Khandare	5	5	AWS IoT core working Learning new things for IoT cloud	Thank you for the wonderful hands on session
Dr. JAYANT R. MAHAJAN	5	5	How to use AWS for cloud computing	Informative session.
B. BALAJI	5	5	Yes	
Arunkumar Mishra	5	5	Writing engine rule. Setting up subscription for SMS and configuration etc	Very new and useful
V Mosherani	5	5	Engine format	Good session
Dr. Lakshmi Ranganatha V	5	5		Nil
INDERJIT SINGH DHANJAL	5	5	1. Steps to be followed while publishing data to the cloud 2. Rule Engine format for incoming messages? 3. last Will feature in AWS services 4. AWS Lambda service feature and demo 5. Billing with free Tier account	NA
Vaibhav Prakash	4	4	informative knowledge	share slides
Vishakha Gaikwad	5	5	Very informative	
DARSHAN B D	5	5	APPLICATIONS	GOOD
SURENDRA TUKARAM SUTAR	4	4	How to use AWS for cloud computing	Infomative session

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Rakhi Yashwant Jadhav	4	4	technology	no
Udayakumar E	5	4	Knowledge	
Anand bali	5	5	a	
Kadambari Sharma	4	4	Filter notification in AWS subscription,GIOT Applns	
Anushree Ashish Prabhu	5	5	Nice	No
Mrs. Sarika Pravin Kuhikar	5	5	Session was very interesting and useful	
Mrs. Amrita Jhaveri	3	4	the advantages of MQTT protocol when compared with HTTP protocol and how MQTT is more suitable for telemetry data. QoS(Quality of Service) and different levels of QoS, persistent and non-persistent connections	No
Mrs. Mugdha Ruturaj Jogalekar	5	5	cloud basics	
Jayassre Ramakrishnan	5	5	Even if the device fails, Last will message can be communicated to the user	

List of Participants attended Day-6, Session-1 and Feedback

Resource Person: Mr. Amit Rambhiya

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
Dr. Lakshmi Ranganatha V	5	5		Nil
DARSHAN B D	5	5	Products	Good
Dr.T.Jobey Titus	5	5	Technology	Nil
AJIT KUMAR SINGH	5	5	Application of lot in different areas	
Mrs Nilima Zade	3	3	Introduction about industrial application	
Kartik Patel	5	5	IoT Retails and applications	Good session
Kadambari Sharma	4	4	Great applications of IoT	

Short Term Training Program on 'Green Internet of Things'

VARSHA N	5	5	-	-
Er.Mano0j S. Kavedia	4	4	How lot with different technology make life esay	All good
Dr. Dilip Kumar Sharma	5	5	Good	Nil
JANI DILIP BATUKRAY	5	5	Excellent	Excellent
Sanjay B.Waykar	5	5	IOT applications	Good
J Manjula	5	5	Good	No
A.Angulakshmi	4	4	How to make life easy ?	Good
Dr. Asawari Dudwadkar	4	4	Big data, AI role in lot applications, panache products in iot, atmanirbhar bharat , make in India product development etc.	No
Mr. RANJIT ARJUN KATKAR	5	5	Valuable information and knowledge gaining experience.	Arrange few more sessions like this of same resource person with more duration and interaction with explanation and hand on practice.
Prof.Gaikwad Sarika Ganpat	5	4	Understood about Panache DigiLifes different and IoT applications	No
PERARASI T	4	4	"Making Human Life Easy"	GOOD
Shankar A	5	4	Informative	Nil
Dipti Jigar Karani	5	5	Devices for daily usages, for retail shop for reducing theft	
INDERJIT SINGH DHANJAL	4	4	1. Information of Panache digiLife company and its business overview 2. Education footprint devices, pen devices, and AI Teach TV developed by Panache 3. Electronics Gadgets contributed by	NA

Short Term Training Program on 'Green Internet of Things'

			Panache Digi Life Limited 4. Various IoT solutions like a) Retail IoT solutions b) Smart education solutions c) Samay IoT solution d) Smart shelves 5. Beacon technology	
ANCI MANON MARY A	5	5	Good	Good
SELVARAJ S	5	5	Many kinds of iot applications and devices which are manufactured by panache digilife ltd.	Superb session.
Dr. JAYANT R. MAHAJAN	5	5	Different IoT devices made by Panache Digi Life Ltd. , and use in our daily life.	Informative session.
SANDEEP SINGH	5	5	IoT application	NO
Lokesh Giripunje	4	5	Digital platforms provided by panache Digi Life	
Arunkumar Mishra	5	5	IoT and ICT device and interconnection of smart devices. Product range	Good session
Suraj Khandare	5	5	How Beacon works Panache Design philosophy Electronic gadgets by Panache Retail IoT solutions Smart education IoT solutions IoT Market Size is about to increase a lot	Thank you for the wonderful session
DR VANDANA B PATIL	5	5	Yes	
Ragini Gaikwad	5	5	Retailers adopting IoT, BEACON Technology, Omnichannel	Very nice session. Thank you

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			retail, Smart shelves	
SHAIK RAHIL HUSSAIN	4	5	various Electronics Gadgets contributed by Panache Digi Life Limited	
HARSHAVARDHAN VIJAY KULKARNI	5	5	IOT USING CLOUD	NIL
Mrs Smita D Khandagale	5	5	digital life	Excellent session
Vemireddy suryanarayanareddy	5	5	lot application	
Gautami Pujare	4	5	IoT based products by Panache Digi Life Limited	
Sajid Shaikh	3	3	Introduction	
Mr. Suendra Sutar	5	5	Different IOT devices made by Panache Digi Life Ltd., and use their use in our daily life.	Informative session
Mrs Trupti Furia	5	5	Design of connected devices	
Dr. Amit V Patel	5	5	Good knowledge about session	NA
SHIVANAND BHIMASHANKAR KONADE	5	5	Good	Good
Ms.A.MARIYAMMAL	4	5	Designing of connected world and achieving the goal of Making Human Life Easy and Healthy	OK
Mr.S.Gnanamurugan	4	4	Designing of connected world and achieving the goal of Making Human Life Easy and Healthy	GOOD
Mrs. K. SHRUTHI	4	4	Nice class	Good
DHANAMMA JAGLI	5	5	SMART REMOTE CLEANER	
Mrs Sangita Mahendra Rajput	5	5	The future of IoT is exceptionally bright	Thank you so much Rambhiya Sir
Rakhi Yashwant Jadhav	4	4	technology	no
anand bali	5	5	New innovative devices	

Short Term Training Program on 'Green Internet of Things'

Anushree Ashish Prabhu	5	5	Nice	No
Mrs. Amrita Jhaveri	5	5	AI can be used to make teaching learning system more effective	Wonderful session
Dr. Abhay Kshirsagar	4	4	Nice information shared about startups in IoT	Nice Session
Mr. Shaikh Kader B T	5	5	Application development example	
Mr. Yogesh Pandit	5	5	Informative	No

List of Participants attended Day-6, Session-2 and Feedback

Resource Person: Dr. Nadir Charniya

Name	Is delivery of the session as per expectation?	How would you rate the topics covered in this session?	Write takeaways or outcomes of the Session.	Any other comment.
Jani dilip batukray	5	5	Excellent	Excellent
ANCI MANON MARY A	5	5	GOOD	GOOD
AJIT KUMAR SINGH	5	5	Introduction of deep learning and machine learning	
Vemireddy suryanarayanareddy	5	5	lot related to machine learning	
MS. Shamal Salunkhe	5	5	Good	Good
Nilima Zade	3	3	ML and FL for novel applications	
Dilip Kumar Sharma	5	5	Good	
HARSHAVARDHAN VIJAY KULKARNI	5	5	SOCIAL IMPACT APPLICATIONS USING IOT	
Sandhya Deshpande	5	5	GoT is very imp.topic of reseatch	Good
Lokesh Giripunje	5	5	Projects done and AI ML Applications	
J Manjula	5	5	Good	
Dr. Asawari Dudwadkar	5	5	Crowd management application, deep learning architecture, decision making algo etc.	
Sajid Shaikh	3	3	Introduction	

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Kartik Patel	5	5	Applications of IoT with machine learning in deep learning	Good case study example
A.Angulakshmi	4	5	Know MI & DL with IoT	Good
SELVARAJ S	5	5	various IoT applications like lake cleaning robot, crowd density estimation, etc.	Nice
Sanjay B.Waykar	5	5	IOT applications	Good
Er.Manoj S. Kavedia	4	4	How machine can be trained to make human work easy	All good
Gautami Pujare	5	5	Details & application of CNN	
Mrs. Trupti Furia	5	5	Machine learning, Deep learning	
Dr. Amit V Patel	5	5	Good knowledge of practical implications of Fusion of IoT with ML and DL	
Shankar A	5	5	Infomative	
prof.Gaikwad Sarika Ganpat	5	4	Understand Machine learning and Deep learning fusion with IOT applications	
Ms.Sakshi M.Hosamani	5	5	Understood 3d printing applications	
INDERJIT SINGH DHANJAL	5	5	1. Need for crowd counting and crowd density estimation 2. Crowd management in Best buses 3. Feature-based and deep learning-based approach 4. Crowd density estimation using CNN 5. Social distancing system for public access	

Short Term Training Program on 'Green Internet of Things'

			6. Lake cleaning robot using IoT and AI	
Dr. JAYANT R. MAHAJAN	5	5	New approach of ML and DL	Informative session
SANDEEP SINGH	5	5	machine learning, deep learning, CNN, Data set collection, smart fulfillment	
Mrs. S.D.khandagale	5	5	Details and application of CNN	good session
Mr. Surendra Sutar	4	4	applications based on Machine learning and Artificial Intelligence	Informative Session
V Mosherani	5	5	Machine and deep learning	Good session
DARSHAN B D	5	5	Deep learning concepts	Good
Mr. RANJIT ARJUN KATKAR	5	5	Valuable information and effective knowledge gaining experience.	Very useful and informative session. Collective information and effective presentation with suitable examples and explanation with interaction and. Arrange few more sessions like this.
Kadambari Sharma	4	4	Machine learning and deep learning	
Dipti Jigar Karani	5	5	Good combination of embedded with intelligence ML and DL	
PERARASI T	4	4	ML Vs DL; IoT APPLICATIONS	GOOD
Mrs. Ragini Gaikwad	5	5	Real world problems can be taken up and solved using Deep learning and Machine Learning approach.	Nice session. Thank you
Suraj Khandare	5	5	Fusion of IoT with ML-DL crowd management in	Thank you for the wonderful presentation

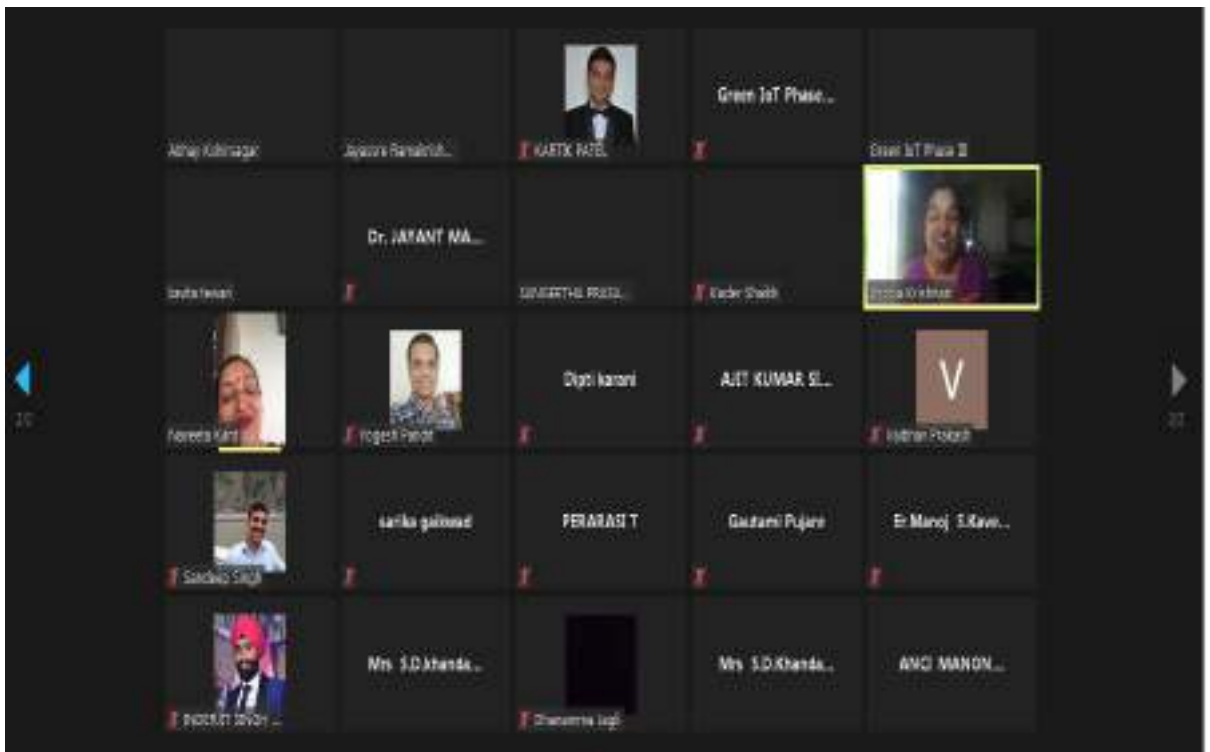
Short Term Training Program on 'Green Internet of Things'

			buses and trains Lake cleaning robot using IoT and AI	
SHIVANAND K	5	5	Good	Good
Dr.T. JOBY TITUS	5	5	Technology	
VARSHA N	5	5	-	-
Dr. Lakshmi Ranganatha V	5	5		
Ms.A.MARIYAMMAL	4	4	Fusion of IoT with MI-DL for some novel applications	OK
Mr.S.Gnanamurugan	4	4	Fusion of IoT with MI-DL for some novel applications	GOOD
Mrs. K.SHRUTHI	4	4	Overall Gud	Good
SHAIK RAHIL HUSSAIN	5	5	machine learning and deep learning	
DHANAMMA JAGLI	5	5	IOT APPLICATIOIS	
Vishakha Gaikwad	5	5	Nil	
Mrs Sangita Mahendra Rajput	5	5	IoT is having endless applications in almost all domains	Thank you so much for an informative sessions
Rakhi Yashwant Jadhav	4	4	Technology	
Anand bali	5	5	A	
Anushree Ashish Prabhu	5	5	Nice	
Mrs. Amrita Jhaveri	5	5	Crowd density estimation system lake cleaning boot and features of these projects	Excellent session
Mrs. Mughda Raturaj Jogalekar	5	5	Fusions of IOT	
Dr. Abhay Kshirsagar	4	4	Very good explanation about ML AI and IoT	Nice Session
Mr. Shaikh Kader B T	5	5	Application development using videos	
Mr.Yogesh Pandit	5	5	Informative	
Jayassre Ramakrishnan	5	5	Keep learning new techniques	

ANNEXURE-VI Grid Photographs



Short Term Training Program on 'Green Internet of Things'



Annexure – VII

Sample Copy of Certificate



Annexure – VIII

BROCHURE

**Vivekanand Education Society's
Institute of Technology,
Chembur, Mumbai**

AICTE SPONSORED ONLINE STTP





**Department of
Electronics & Telecommunication
Engineering in Collaboration with
Department of Electronics Engineering
and
Department of Instrumentation
Engineering
(In Association with VESIT IQAC & IC)**

About VESIT
Vivekanand Education Society's Institute of Technology (VESIT) established in 1984 is one of the premier engineering colleges affiliated with the University of Mumbai. VESIT offers Bachelors programs in engineering in the following streams: Electronics, Electronics & Telecommunication, Computer, Information Technology, Instrumentation and Artificial Intelligence & data science.
In addition, VESIT offers Master of Engineering in Instrumentation & Control, Information Technology and Electronics & Telecommunication streams. VESIT also offers post graduate course in Master of Computer Applications. VESIT is a recognised Ph.D. Center for Engineering and Technology of University of Mumbai. VESIT has recognised as Lifelong Learning Center by the University of Mumbai.

About Green Internet of Things
The Internet of Things (IoT) has been envisaged to describe a number of technologies and research areas that enable global connectivity of physical objects. Enabling technologies like Radio-Frequency Identification (RFID), sensor networks, biometrics, nanotechnologies and factory automations are now becoming very common, bringing the IoT into real implementations. This addresses varying applications, including smart grid, e-health, smart factories and intelligent transportation etc. Green IoT networks will contribute to reducing emissions and pollutants, exploiting environmental conservation and surveillance, and minimizing operational costs and power consumption.
This Short Term Training Program (STTP) on Green Internet of Things Phase-III is being organized by Department of Electronics and Telecommunication Engineering, in association with the department of Electronics Engineering and Instrumentation Engineering, Vivekanand Education Society's Institute of Technology for enhancing skills of faculty and scholars of engineering colleges in the domain of IoT and its initiatives towards green technology.

Organizes
**One Week AICTE Sponsored
Online STTP**
on
**Green Internet of Things
Phase -III**
(7th to 12th December, 2020)
V. E. S. Institute of Technology,
Hashu Advani Memorial Complex,
R. C. Marg, Collector's Colony,
Chembur, Mumbai – 400 074
Phone: 022 – 61 532 532/500
Fax: 022 – 61 532 555
Email: vesit@ves.ac.in
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The Green Internet of Things (G-IoT) is predicted to introduce significant changes in our daily life towards the vision of "green ambient intelligence". Within few years, we will be surrounded by a massive amount of sensors, devices, and "things," which will be able to communicate via 5G, act "intelligently," and provide green support for users in managing their tasks. These new smart objects will also be context-aware and able to perform certain functions autonomously, calling for new forms of green communication between people and things and between things themselves, where power consumption is optimized and bandwidth utilization is maximized. This development would be relevant not only to researchers, but also to corporations and individuals alike. Considering these facts, the aim of this STTP is to focus on both theoretical and implementation aspects in networks that can be utilized in providing green systems through IoT enabling technologies.

Course Objective
The objective of this STTP is acquainting academicians and industry personnel with the IoT technology, recent trends and green initiatives, providing exposure to technologies supporting Green IoT, hardware and software development tools and demonstrations, predictive analytics using IoT, security in IoT.

Course Contents

- ❖ Introduction to IoT
- ❖ IoT Architecture
- ❖ Concepts of Green IoT
- ❖ IoT Protocols
- ❖ Wireless Sensor Network for IoT
- ❖ Details of IoT Simulators
- ❖ Cloud computing for IoT
- ❖ Open Source platform for IoT
- ❖ IoT Analytics
- ❖ IoT Security and Privacy Issues
- ❖ IoT Standards and Legislation
- ❖ Green IoT Applications
- ❖ Hands-on sessions

Resource Person:
The speakers would be eminent personalities from academia and industries.

Registration Fee:
STTP Course is Free

Last date of Registration:
25th November, 2020


Who can attend?
Faculty from AICTE approved Engineering Institutes (Degree/ Diploma) & MCA institutes Industry Representative.

Registration Form Link:
<https://forms.gle/4EwNXq1OWxmJB7d89>

Telegram Channel Link:
<https://t.me/joinchat/0BqOxEnEs5O50E3xGmPRb-EGA>

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Patrons:
Shri. B. L. Boolani, President, VES Trust
Dr. (Mrs.) J. M. Nair, Principal, VESIT
Dr. (Mrs.) M. Vijayalakshmi, Vice Principal, VESIT
Mrs. Shobha Krishnan, Head, EXTC
Dr. P.P.Vaidya, Head, INST and Dean R & D
Mrs. Kavita Tewari, Head, ETRX

STTP Coordinator:
Dr. Nadir Charniya, Professor, EXTC

Program Evaluation Committee for the STTP:
Dr. (Mrs.) J. M. Nair, Principal (Chairperson)
Dr. (Mrs.) M. Vijayalakshmi, Vice Principal (Member)
Dr. Nadir Charniya (Member Secretary)
Mrs. Shobha Krishnan, Head, EXTC (Member)
Dr. P.P.Vaidya, Head, INST and Dean R & D (Member)
Mrs. Kavita Tewari, Head, ETRX (Member)
Dr. Ramesh Kulkarni, Deputy Head, EXTC (Member)

Advisory Board for the STTP:
Col.B.Venkai, Director (FDC), AICTE, New Delhi
Prof.D.N.Malkhede, Advisor, RIFD, AICTE, New Delhi.

Course Coordinator:
Dr. Abhay Kshirsagar, Associate Professor, ETRX
Mr. Kader Shaikh, Assistant Professor, INST

Organizing Committee:
Mrs. Navetta Kant, Deputy Head, ETRX
Mrs. Sangeetha Prasanna Ram, Deputy Head, INST
Mrs. Madhumati Khauspe, Assistant Professor, INST
Mr. Yogesh Pandit, Assistant Professor, ETRX
Mrs. Sarika Kulkar, Assistant Professor, ETRX
Mrs. Jayashree Ramakrishnan, Assistant Professor, INST
Mrs. Meghdha Joglekar, Assistant Professor, INST
Mrs. Anurita Jhaveri, Assistant Professor, ETRX
Mrs. Namrata Bonde, Assistant Professor, INST
Mrs. Anushree Prabhu, Assistant Professor, ETRX

Instructions to Participants:
The person willing to join this program need to have the following basic requirements:

- Laptop/Desktop with good internet connection and Gmail account.
- Telegram App should be installed on mobile.
- Zoom App, Google App, Google Meet, MS Teams should be installed on a Laptop/Desktop.
- Every participant must register by filling up the online form and join telegram channel thereafter.
- All communications will be on Telegram channel.
- Fill the Google registration form carefully and check your name, university/ institution/ college name and e-mail ID before submission.
- No connection in the certificate will be done due to incorrect information provided in the registration form.
- Last Date to fill the registration form is 25th November, 2020.
- Confirmation of registration will be communicated to the registered e-mail ID by 2nd December, 2020.
- Participants need to attend daily online sessions at the scheduled time.
- It is mandatory to fill up the feedback forms.
- Online Test, based on all the topics discussed during the program will be conducted.
- Minimum 40% score is necessary for certification.
- AICTE certificates will be provided on participants' e-mail ID.

Course material provided by the experts and recording of sessions enclosed herewith in CD/DVD.

STTP on Green IoT--Phase III Photographs

Grid Photographs





VIVEKANAND EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY

"आरोहण"

Arise Awake and Asend

(Faculty Development Program)

4th July 2016 to 9th July 2016

Date	Time	Event	Organised By
4th July 2016	9.50 am - 10.00 am	Inauguration function	Capability Building, Mahindra & Mahindra Auto & Farm Sector
	10.00 am - 11.10 am	Team Building workshop	
	11.10 am - 11.30 am	Tea Break	
	11.30 am - 1.30 pm	Team Building workshop	
	1.30 pm - 2.15 pm	Luch Break	
	2.15 pm onwards	Team Building workshop	
5th July 2016	10.00 am - 11.30 am	Team Building workshop	
	11.30 am - 11.50 am	Tea Break	
	11.50 am - 1.00 pm	Team Building workshop	
	1.00 pm - 1.45 pm	Luch Break	
	1.45 pm - 3.30 pm	Team Building workshop	
7th July 2016	9.45 am - 10.00 am	Tea Break	Emotional Intelligence Firm
	10.00 am - 12.30 pm	session I : Multiple Intelligence	
	12.30 pm - 1.30 pm	Luch Break	
	1.30 pm - 3.30 pm	session II : Multiple Intelligence	
8th July 2016	9.00 am - 9.30 am	Tea Break	Integre Advisory Group
	9.30 am - 11.00 am	Talk on "Health is Wealth"	
	11.00 am - 2.30 pm	Body check up	
	2.30 pm - 3.30 pm	Talk on Autonomy	
9th July 2016	9.30 am - 10.30 am	"Office Yoga"	Ami Yoga Solutions Private Limited
	11.00 am - 12.30 pm	Talk on Autonomy	
	12.30 p.m - 1.30 p.m	Luch Break	
	1.30 p.m - 3.30 p.m	Talk on Autonomy	External Expert

**Vivekanand Education Society's
Institute Of Technology**

आरोहण - Faculty Development Programme

(4th to 9th July 2016)

Report

A one week Faculty Development Programme, 'आरोहण', was held at Vivekanand Education Society's Institute of Technology from 4th July to 9th July, 2016. The FDP provided a wonderful opportunity to faculty members for augmenting and elevating their effective conversation skills, team building skills and multiple intelligence. The Programme also envisioned to cultivate the acquaintance of the participants with the importance of good health and autonomy. It was attended by all the regular faculty members of the college.

INAUGURAL SESSION

Mrs. Kadambari, Assistant Professor, Department of Instrumentation, welcomed all the respected dignitaries and participants. In her welcome speech, she underlined the importance and objectives of attending such FDP programmes and briefed the participants about the subjects chosen for the same. Dr. Nair, Principal, VESIT, and Dr. M.Vijayalakshmi, Vice-Principal, VESIT, appreciated the efforts of VRC team for organizing this programme and accentuated the benefits of this kind of resourceful activity.

Day 1 and Day 2

4-5 July 2016

Effective Conversation

Distinguished speakers Dr. Prince Augustine, Executive Vice- President, Human Capital and Leadership Department and Dr. Nandakumar both from Mahindra and Mahindra Group enlightened the participants on a usually untouched topic of ‘Capability Building’. Though the participants were from diverse academic background and age group, they showed equal acute interest in contents of the programme, specifically towards effective listening, asking powerful questions and giving and receiving feedback. In today’s era of innovations in communication technology, effective and skilful use of communication tools has become mandatory for the faculty in Engineering Colleges as effective conversation skills largely regulate the success of the teaching –learning process regardless of the technical knowledge and proficiency of the faculty. The sessions enabled all the teachers to apply the principle of effective conversation in day to day teaching learning process which included apposite teaching, methods of class control, participative learning etc. The speakers had also included a lot of interesting activities to help the faculties to evaluate their present communication styles and build conversational bridges at work, get their point across and steer discussions in the right direction.



1. Dr. Nair ,Principal ,VESIT Felicitating Resource person from Mahindra and Mahindra



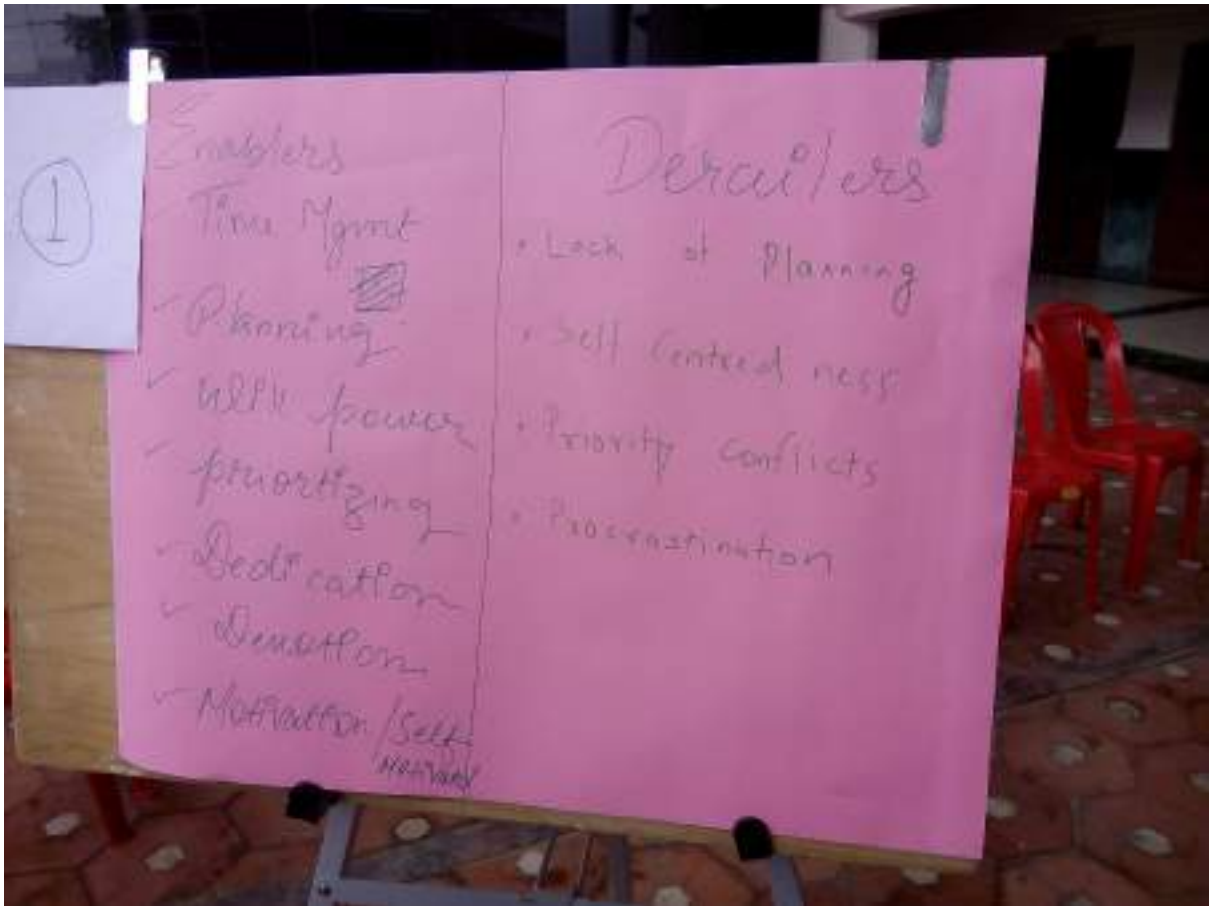
2. Dr. Nair ,Principal ,VESIT Felicitating Resource person from Mahindra and Mahindra



3. Outdoor Team Building Activities



4. Role Play Activity



5. Activities done by participants



6. Activities done by participants



7. Outdoor Team Building Activities

Day 3

7 July 2016

Multiple Intelligence

On third day, Mr Y. Dattatreya, Leadership and Od Consultant, acquainted the faculty with the theory of multiple intelligence and how it can be competently used to cater the needs of different types of students. The theory suggests that the traditional notion of intelligence, based on I.Q. testing, is far too limited. He highlighted one of the most fundamental feature of the theory i.e. it provides eight different potential pathways to learning. He also recommended innovative and ingenious ways for teachers to facilitate effective learning rather

than relying on the more traditional linguistic and logical ways of instruction .Learning was made fun with several fun filled activities like MI Test, which the participants thoroughly enjoyed. It also assisted them to know their personality types and the areas where they require improvement.



9. Mr Y. Dattatreya addressing Audience



10 Dr. Nair Facilitating Mr Y. Dattatreya

Day 4

8 July 2016

Health is Wealth

Educators undoubtedly make a gigantic impact on their students – however, because of their busy schedules and standing for long hours, they face many challenges, which may result in low back, neck and shoulder pain; headaches, insomnia and stress. The resource person Mr. Puneet Anand from Integre Advisory Group started his discussion with the very basic idea of importance of maintaining good health for the persons belonging to teaching profession. He emphasized that only a strong mind and healthy body makes a complete person. The next session was taken by Dr. Kavita Puri, Medical Coordinator, Good Health Foundation. She accustomed the faculty with the occupational health

hazards of teaching profession like aching and tired legs, varicose veins, spondylitis etc. She also demonstrated some of the exercises which can be really helpful to get rid of lassitude and fatigued muscles. It was followed by a medical health check-up of all the faculties. The post lunch session was taken by Dr. Nair who is a very renowned Orthopaedic Surgeon from Zen Hospital. He delivered a health talk on prevention of osteoarthritis & osteoporosis.



11. Dr. Rakesh Nair addressing Audience



12. Mrs. Asha Bharabhe, Mrs. Shamila Sengupta : Body Check-up



13. Dr.Nadir Charniya checking BMI

Day 5

9 July 2016

Yoga and Autonomy

The fifth day started with a yoga session organized by Ami Yoga Solutions Private Limited. Before beginning the Asanas and various breathing exercises, the yogacharya pin pointed the importance of yoga in our day to day life and how it offers a holistic rejuvenation to our body, mind and soul. Various Asanas were demonstrated which are really helpful for the teaching faculty like Surya Namaskar, Pawan puktasan, Shawasan etc. She also explained the right manner in which they should be done, the precautions to be taken and the likely effect they have on the body and mind. All the Asanas and Pranayamas were enthusiastically done by the faculty members. The second session was handled by Mr.,from, who had familiarised the faculty with the concept of ‘Autonomy’ and its effect on management, faculty, staff and students. The post lunch session was jointly taken by Mr. Abhay Kshirsagar, Associate Professor, Electronics Department and Dr. C.D.Rawat, Associate Professor, Electronics and Telecommunication Department. They had given a power point presentation on the current status of work done so far for attaining autonomy .

Finally, the Faculty Development Programme came to a close, with a vote of thanks proposed by Prof. Kadambri. All the faculty members found the sessions very enlightening and expedient as the discussed areas match with the requirements of their current working domain.



14. Mrs. Palavi Pawar explaining importance of Yoga

Aarohan Faculty Development Program Photographs



1. Dr. Nair ,Principal ,VESIT Felicitating Resource person from Mahindra and Mahindra



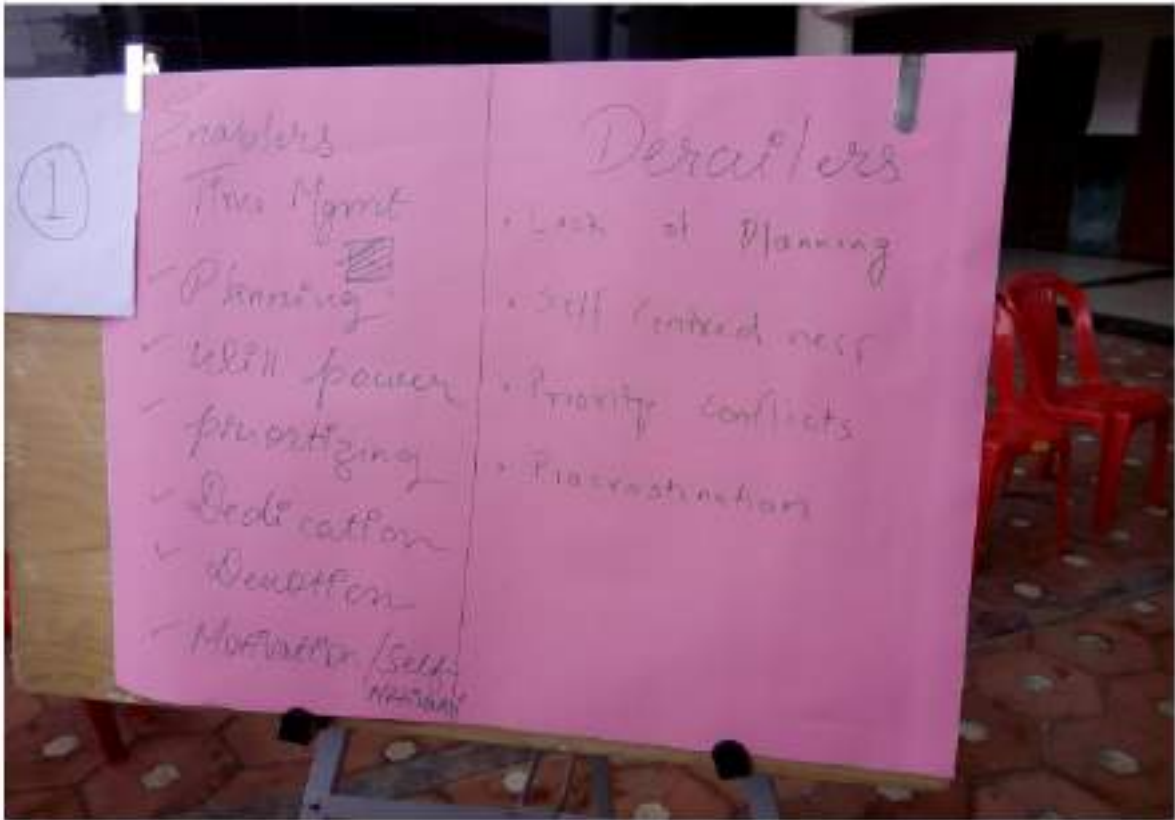
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3. Outdoor Team Building Activities



4. Role Play Activity



5. Activities done by participants



6. Activities done by participants



7. Outdoor Team Building Activities



9. Mr Y. Dattatreya addressing Audience



10. Dr. Nair Facilitating Mr Y. Dattatreya



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14. Mrs. Palavi Pawar explaining importance of Yoga

FDP on EPNCVII 4th to 11th Jan 2017

(Embedded systems, Power Electronics, Networks, Communication, VLSI and Industry Interaction)

By

Department of Electronics Engineering, VESIT

Day and Date	Time	Topic	Resource Person
Day 1- Wednesday 4 th Jan 2017	11 to 12 noon	Theory session Introduction : Advance Networks	Dr. Rajani Mangala
4 th Jan 2017	1 to 3pm	Demo on NTOP & ZEN Map Advance network tools	Mrs. Rupali Patil
Day 2 - Thursday 5 th Jan 2017	11 to 12 noon	Theory session Introduction : Low Power RISC Devices	Mrs. Asawari Dudwadkar
5 th Jan 2017	1 to 3 pm	Embedded cortex Kits Demo	Company representative
Day 3- Friday 6 th Jan 2017	10 am onwards	Industrial visit to Adtron Technologies Ltd. Thane	Mr. Joshi from Adtron
Day 4 -Monday 9 th Jan 2017	11 to 12 noon	Theory session Image Processing	Mr. P.Birajdar
9 th Jan 2017	1 to 3 pm	Demo Power Electronics kits	Mrs. Gauri Sahoo
Day 5 -Tuesday 10 th Jan 2017	11 to 12noon	Theory session : Statistics for communication	Mrs. Navita Kant
10 th Jan 2017	1 to 3 pm	Demo on Electrical Machines	Ms. Rakhi Jadhav
Day 6 Wednesday 11 th Jan 2017	11 to 12.15 pm	Demo on CVLSI	Mrs. Amrita Zaveri
11 th Jan 2017	1 to 3 pm	Demo of Advance Instruments.	Aplab technology

FDP on EPNCVII 4th to 11th Jan 2017

(Embedded systems, Power Electronics, Networks, Communication, VLSI and Industry Interaction)

By

Department of Electronics Engineering, VESIT

Department of Electronics has organized One week Faculty Development Program EPNCVII (FDP) from 4th to 11th Jan 2017. The aim of this workshop is cover different Subject Seminars and Demonstrate various software and Electronic educational kits. In these FDP Seminars are arranged on all the days of workshop. The schedule for the workshop is as follows.

Day and Date	Time	Topic	Resource Person
Day 1- Wednesday 4 th Jan 2017	11 to 12 noon	Theory session Introduction : Advance Networks	Dr. Rajani Mangala
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11 th Jan 2017	1 to 3 pm	Demo of Advance Instruments.	Aplab technology

Day 1- 4th January – Dr. Mrs. Rajani Mangala took a session Advance Networks. In her session she told about latest technologies in computer networking, such as Routing techniques, Networking Protocol, Wireless networks, etc. She also summarizes about different applications and importance of Advance Networks.

The second session of the day is handles by Mrs. Rupali Patil where she demonstrated two tools NTOP and Zen Map used for performing experiments of Advance Networking Technologies.

Day 2- 5th January- Mrs. Asawari Dudwadkar explained various Low Power RISC Devices in this session. The Embedded devices requires microcontroller based device to work and Low Power RISC Devices are very efficient to use in these Embedded System.

In Second Hal of the Day Mr. Chintan from Edutech – Baroda demonstrated the working of Cortex M3 based Boards used for Embedded System Experiments. In his session he showed the different practicals that can be performed on these Boards.

Day 3- On this day Staff of Electronics Department visited the Adtron Technologies Ltd. Thane. In this Industry various Kits were manufactured. And Mr. Joshi showed the process of manufacturing these kits. The various Educational kits used for Analog and digital circuits were manufactured in this company.

Day 4- On this day Mr. Parmeshwar Birajdar took session on Image Processing. In his session he told about various projects that can be done using Image Processing.

The second session of Day 4 is conducted by Mrs. Gauri Sahoo. She showed the different kits used for Power Electronics Experiment and explained the working and process of performing practical.

Day 5 – Mrs. Naveeta kant conducted session on Statistics for communication in the first half. She explained about Various Mathematical concepts involved in Communication.

In second session Ms. Rakhi Jadhav explains the working of various Electrical machine. She demonstrated the Experiments performed using AC and DC motors in Lab 215.

Day 6 – Mrs. Amrita Jhaveri conducted session on AVLSI on this day. She took hands on session using Cadence tool. This tool is used for Designing of VLSI Circuits and Simulation. In this session participants performed designing of basic Digital circuit using the tool.

In the second half of the day a Demonstration / Showcase of Advance Instruments in collaboration with Aplab Limited is organized. In this session representative from Aplab Limited Demonstrated various equipment's. These equipment are 1GHz Synthesized Signal Generator Model 2110, 150MHz DDS Signal Generator Model DDS150, 6 ½ Digit DMM Model DMM5061, 1.5GHz Spectrum Analyzer with Tracking

Generator Model SA3015, MASG10M- 10MHz Multi waveform Arbitrary Signal Generator, D37070A- 70MHz ,2 Channel, 1 GS/s Digital Storage Oscilloscope



1 Mrs. Kavita Tewari felicitating Resource person from Aplab Technologies



2. Resource person from Aplab Tech. explaining advanced instruments introduced by company



3. Ms. Rakhi Jadhav explaining working of various motors.

Faculty Development Program (FDP) on EPNCVII Photographs



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