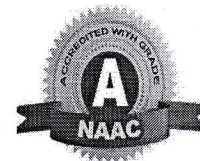


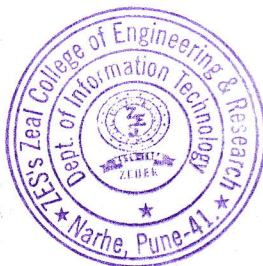


ZEAL EDUCATION SOCIETY'S
ZEAL COLLEGE OF ENGINEERING AND RESEARCH
NARHE | PUNE -41 | INDIA
DEPARTMENT OF INFORMATION TECHNOLOGY



INDEX

6.3.3 Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the A.Y. 2019-20			
Dates (from-to) (DD-MM-YYYY)	Title of the FDP / professional development / administrative training program	No. of participants	Link to relevant document / brochure / report hosted on official institutional website
03/06/2019 to 8/9/2019	One Week Faculty Development Program on Cyber Security	42	
02/12/2019 to 13/12/2019	Internet of Things, Application Development using Raspberry Pi and Python Programming	20	
09/12/2019 to 10/12/2019	FDP on Artificial Intelligence and Machine Learning	2	
09/12/2019 to 11/12/2019	Introduction to R Programming	8	
13/04/2020 to 13/04/2020	Completed of Java Training Spoken Tutorial Project, IIT Bombay	1	
14/05/2020 to 20/05/2020	Networking Essentials (Online Live FDP)	1	
29/06/2020 to 30/06/2020.	Artificial Intelligence with Java Platform	1	

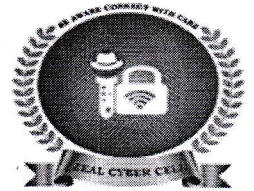


Chauhan

HOD
Dept. of Information Tech. Engg.
ZES's Zeal College
of Engineering & Research,
Narhe, Pune - 411 041



Zeal Education Society's
Zeal College of Engineering & Research, Narhe ,Pune
Department of Information Technology



Report

on

One Week Faculty Development Program
“Cyber Security “

3rd-8th June, 2019

Organized by

Zeal Cyber Cell

Department of Information Technology

Zeal College of Engineering and Research, Pune-411041.

Course Co-ordinator

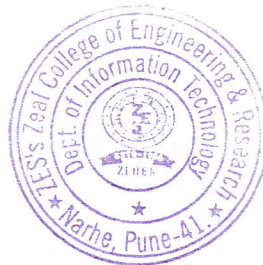
Prof. Pranalini Joshi

Prof. Rahul Bhole

One-week Faculty Development Program on “Cyber Security” under Pandit Madan Mohan Malviya National Mission on Teachers & Teaching, Ministry of HRD Govt. of India in association with Shivaji University Kolhapur, from 03rd June to 08th June 2019, was organized by Zeal Cyber Cell, Information Technology department of Zeal College of Engineering and Research, Pune- 411041.

Cyber security is need of the time, as estimated by the National Association of Software and Services Companies (NASSCOM)'s Cyber security Task Force, there is a need of 1 million trained cyber security professionals in India by 2025. But, currently, there are only 62,000, so to fill this gap there is need to introduce cyber security courses at the graduate and postgraduate levels. Our aim is to train teachers with practical skills so that more and more cyber security experts can be shaped every year. In addition, Cyber Security courses will help in start-ups and employment opportunities. The faculty shall be also trained specifically as a knowledge creator with strong practical 'skills' and theoretical details.

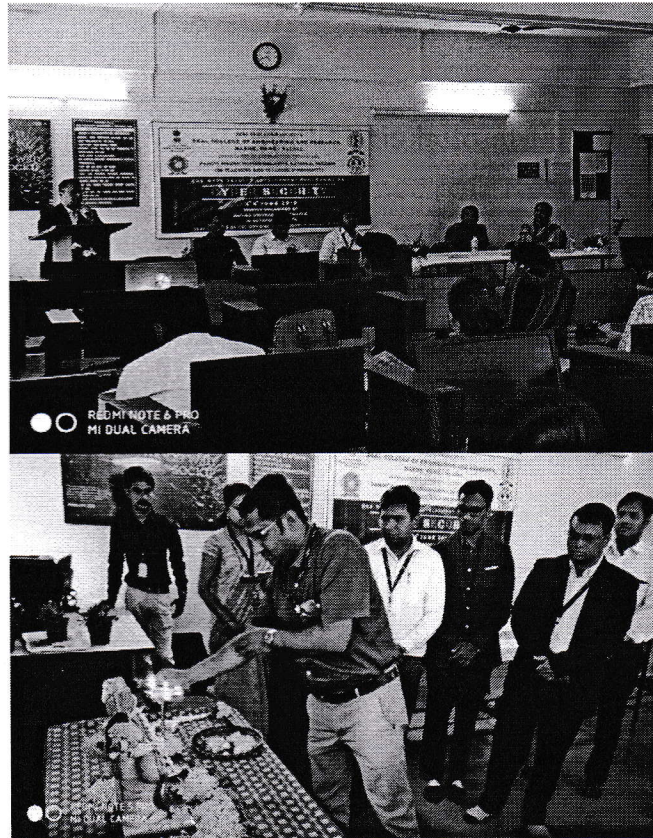
The daily plan of the FDP of five sessions was planned and executed accordingly.



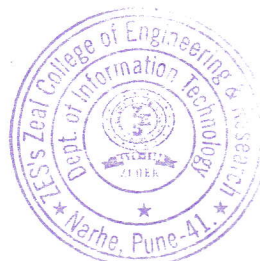
Inaugural Function :

The inaugural function of the FDP was held at 09.30 AM on June 3, 2019. The inauguration accomplished in the presence of Resource Person Mr. Amol Bagal & Mr. Aniket Badami & Dr. A. M. Kate Principal of the Institute, Dr. Y.B. Gurav, Head of Department, Dr. S.A. Ubale, Convener, Prof. Rahul Bhole and Prof. Pranalini Joshi, coordinators. The inauguration was anchored by Mrs. Shital Bachpalle, Faculty of Department of Information Technology

Glimpses of Inaugural Function :



Saraswati Poojan and Address by.Dr.A.M.Kate , Principal,ZCOER



Day 1 (03-June-2019)

Lecture Session: Day 1 started with introduction to cyber security. Mr. Aniket Badami explained importance of security in cyber space very nicely. He also explained some of the important networking concepts. After Lunch hands on session was carried out on linux commands and installation process.

Glimpses of First Day

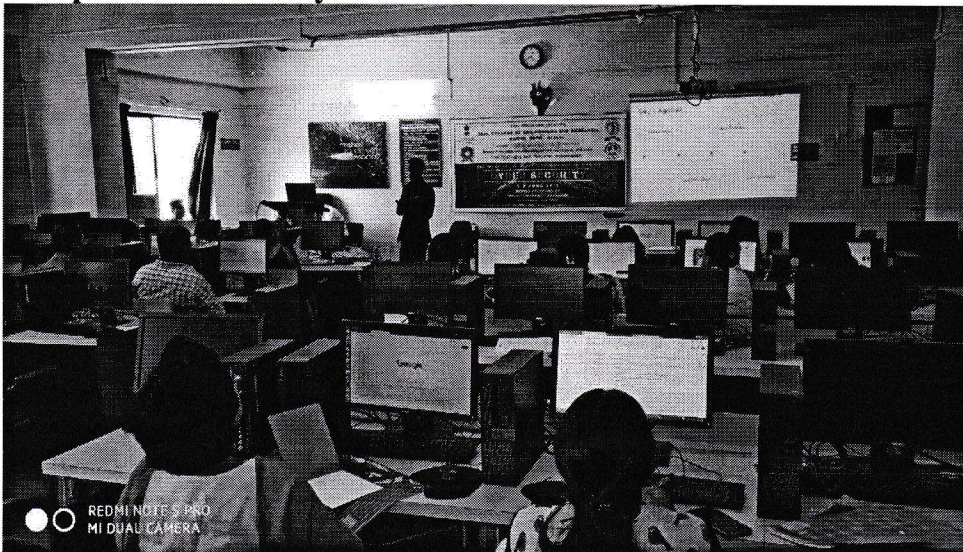


Mr. Aniket Badami explaining importance of cyber security

Day 2 (04-June-2019)

Lecture Session: Day 2 started focusing on understanding and application of ethics while hacking. Mr Aniket Badami explained very nicely how to collect information about target. After Lunch hands on session was conducted and all participants enjoyed the group activity for live machine enumeration.

Glimpses of Second Day



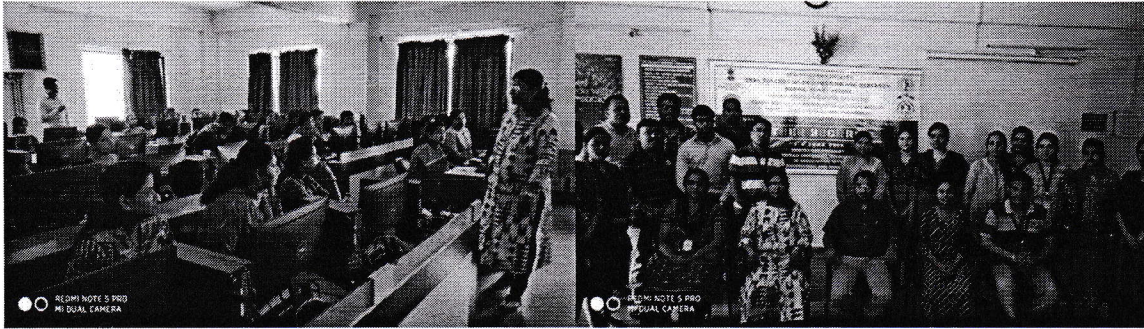
Hands on session given by Mr. Aniket Badami



Day 3 (05-June-2019)

Lecture Session: Mrs. Pradnya Pophalika, Resource person, cleared concept of vulnerability assessment and exploitation. With hands on sessions she cleared all the things related with finding out loopholes, client side attacks and attacking vulnerable services.

Glimpses of Third Day



Mrs. Pradnya Pophalika interacting with participants and organizing team

Day 4 (06-June-2019)

Lecture Session: Mrs. Seema Dixit, Day 4 resource person, focused on data security. She explained practically about implementing encryption on your data using cryptography technique. She also made participants aware of Cyber Laws of India. She had also taken hands on session for understanding techniques implementing browser based security for your safe internet experience

Glimpses of Fourth Day



Mrs. Seema Dixit explaining concepts of data security

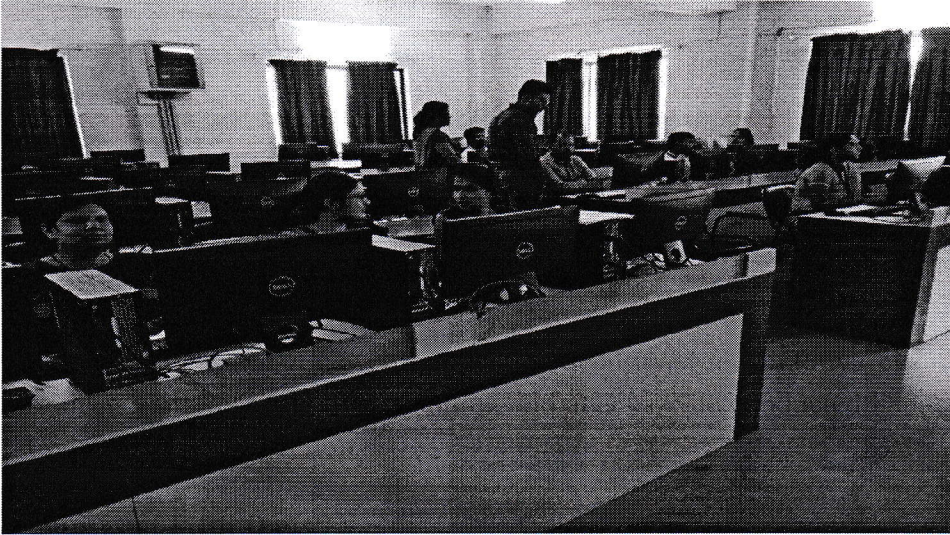


Day 5 (07-June-2019)

Lecture Session:

On Day 5, focus was on web application security. Mrs. Pradnya cleared web app basics and introduced different tools for scanning and attacks. She conducted hands on Nessus, Burp Suite introduction, SQL Injection.

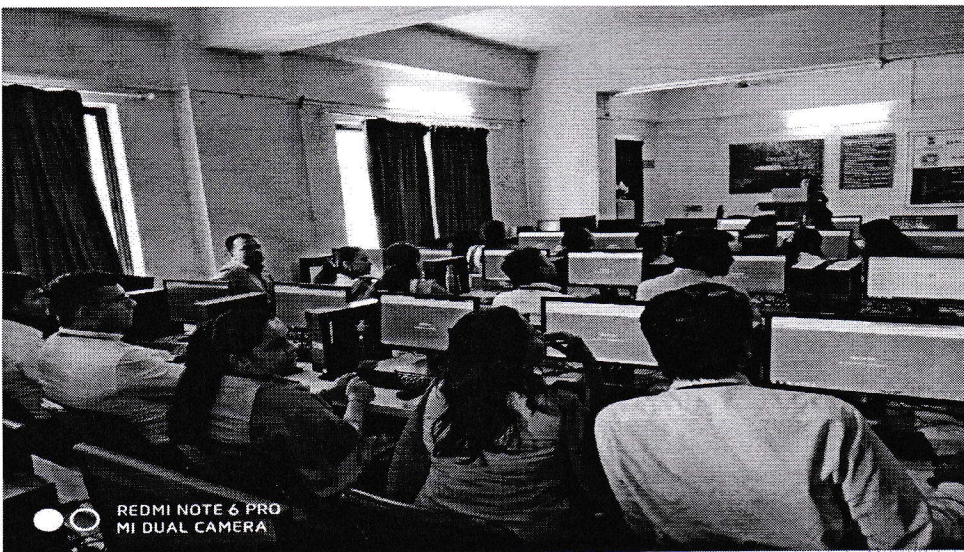
Glimpses of Fifth Day



Hands On session by Mrs . Pradnya Pophlikar

Day 06(08-June-2019)

Lecture Session: On Day 6, Mr. Amol Bagal and Mrs. Pradnya Pophlikar conducted hands on session on parameter tampering, rate limiting, session fixation and also focused on mobile security. Finally session ended with group activity for live website assessment. Also they conducted surprise test for all participants.

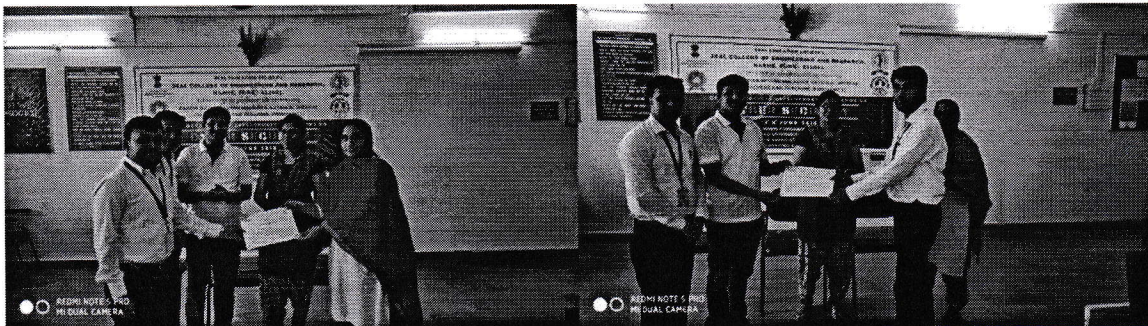


Hands On session by Mrs . Pradnya Pophlikar





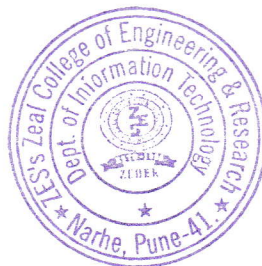
Valedictory function:


A valedictory function was arranged after successful completion of FDP. In valedictory function participants shared their feedback for last five days of FDP. Then certificates were distributed by **Dr. Y.B. Gurav, Dr. S.A Ubale, Mrs. Pradnya Pophlikar, Mr. Amol Bagal** to all participants. Dr. S.A. Ubale convener of the FDP expressed the vote of thanks.



Glimpses of Valedictory Function



Prof.P.A.Joshi/ Prof.R.H.Bhole
Coordinator

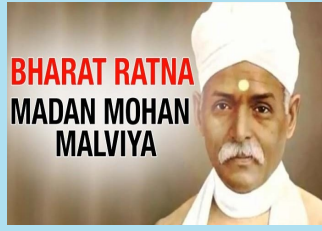



Dr.Y.B.Gurav
HOD IT



Government of India
Ministry of Human Resource
Development

BHARAT RATNA
MADAN MOHAN
MALVIYA



Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT)

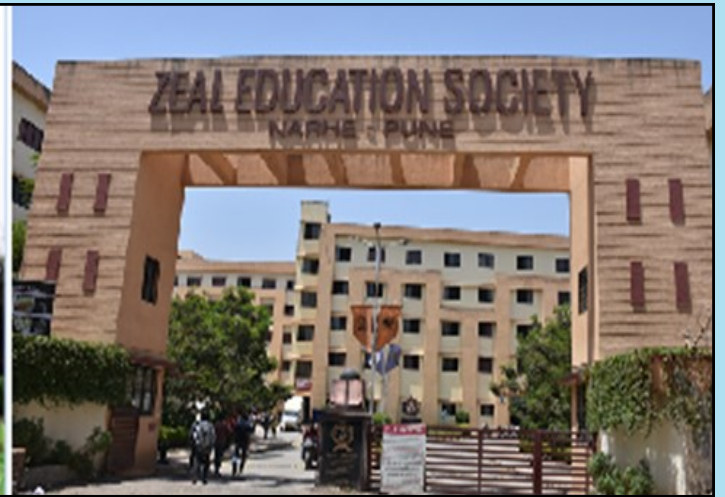
Faculty Development Programme on “Cyber Security”

For

**Faculty in Universities, Colleges and Institutes of Higher Education
(3rd June to 8th June 2019)**

Call for Registration and Participation

**Venue: Zeal College of Engineering and Research, Narhe,
Pune, Maharashtra 411041.**



Jointly Organized by

Shivaji University, Kolhapur

and

Zeal College of Engineering & Research,

S.No.39, Narhe, Pune-411041,

Maharashtra.

About Shivaji University, Kolhapur :

Shivaji University, established in 1962, is named after the Great Maratha Warrior and founder of the Maratha empire Chhatrapati Shivaji. One of the major objectives behind foundation of this University was to cater to the regional needs of South Maharashtra. The jurisdiction of the University is spread over three districts viz. Kolhapur, Sangli and Satara with strength of about 3,00,000 students studying in 280 affiliated colleges and recognized institutes. The recent phase of the University can be termed as "a pursuit of academic excellence". Since last 4-5 years, several attempts are being made to overcome the image of University as a regional University. The University's efforts towards excellence are being recognized by the substantial grants received from funding agencies like UGC, DST, DBT etc. Another indicator of recognition of University is collaborations with premier institutes in the country. Shivaji University has recently signed MOU with Bhabha Atomic Research Centre, Mumbai for research in Material Science. It has also joined hands with Indian Institute of Geo-Magnetism, Mumbai and industries like Phyto-Pharma. Prestigious institutes like Maharashtra Police Academy, Nashik and Centre for Social Studies, Surat have sought affiliation with the Shivaji University. Shivaji University has been re-accredited by National Assessment and Accreditation Council (NAAC) Bangalore, with "A" Grade (CGPA-3.16) (2014). Shivaji University has bagged the 28th position in the rankings announced by the National Institutional Ranking Framework (NIRF) of Union Ministry of Human Resource Development (MHRD). As per the INFLIBNET report, Shivaji University stands second in use of Nature publications Group's (NPG) e-journal usage in the country. The University has also signed MoU with Centre for Development of Advanced Computing (C-DAC), Pune. Under the agreement, the two institutions will exchange information and communication technology.

About Zeal College of Engineering and Research :

Zeal Education Society is established in year 1996 by Hon. Shri S. M. Katkar, an eminent industrialist committed to noble cause of education. Zeal Education Society's Zeal College of Engineering and Research (Formally Known as Dnyanganga College of Engineering and Research) is established in June 2007 which symbolized the beginning of new era in technical education. The Institute has been approved by AICTE, DTE, and affiliated to Savitribai Phule Pune University, Pune. The Institute offers undergraduate and postgraduate Engineering degree programmes in Information Technology, Computer, Electrical, Mechanical, Civil and Electronics & Telecommunication. The institute is also granted as PhD research center in Electronics & Telecommunication and Mechanical Engineering under Savitribai Phule Pune University, since 2013. Well qualified and experienced faculties with good research background are one of the key features of the institute. With state of art research, infrastructural, sports, cultural facilities the campus provides excellent academic ambience for the students. Dedicated Training and Placement Cell of the institute ensures a bright future to its students .

About Zeal Cyber Cell:

Department of Information Technology has facilitated Cyber security Center of Excellence. Cyber security center of excellence ensures cyber security and internet forensics skill enhancement of undergraduate students through various training and global certification programmes considering today's industry requirements. It also facilitates students with career opportunities available in cyber security. Zeal Cyber Cell is one of the prime activities initiated under Cyber Security Center of Excellence to create and promote awareness about cyber security and cyber-crime among Students and Society. Various activities like Encouraging students to take projects on cyber security for development, Providing Training to students on various open source Cyber security tools, Organizing awareness camp in school and colleges ,Poster competition & other competition for promoting the awareness about cyber-crime, Making available reading material, videos regarding cyber-crime & cyber security for students and general public, Organizing exhibition for general awareness, Training to volunteers to conduct awareness program, Planning & executing of cyber security and cyber law training & certification programs, Organizing seminars to promote awareness about career opportunities in cyber security & ethical hacking get conducted under Zeal Cyber Cell

About the Training:

Cyber security is need of the time, as estimated by National Association of Software and Services Companies (NASSCOM)'s Cyber security Task Force, there is need of 1 million trained cyber security professionals in India by 2025. But, currently there are only 62,000, so to fill this gap there is need to introduce cyber security courses at graduate and postgraduate *levels*. Our aim is to train teachers with practical skills so that more and more cyber security experts can be shaped every year. It is expected that the 'Train the Trainers' approach shall percolate to the students in colleges and make them suitable to take up challenges in the domain of Cyber Security which is the need of this decade and will thus improve their employability enhancing campus placement. In addition, Cyber Security courses will help in start-ups and employment opportunities. The faculty shall be also trained specifically as knowledge creator with strong practical 'skills' and theoretical details.

Objectives of the Training:

- Train 2000 faculties
- Building networks of professional
- Forming consortium of industries specialized in cyber security which will interface with Shivaji university Kolhapur
- Sensitizing cyber security to masses at large for strengthening cashless transactions.

Eligibility:

Faculty Members from Science and Technology, Humanities, Social Sciences, Commerce and Management discipline from Universities, Colleges, NITs, IITs, Engineering Colleges and other Institutions of Higher Education. As the number of participants is limited to 30, preference will be given on First Come First Serve basis.

Programme Schedule:

Dates: 3rd June to 8th June 2019

Venue: Zeal College of Engineering and Research, Narhe, Pune, Maharashtra

Day	Date	Course Contents
Day 1	Monday, 03/06/2019	Introduction and Computer Security- I
Day 2	Tuesday, 04/06/2019	Computer Security - I
Day 3	Wednesday, 5/06/2019	Network Security I
Day 4	Thursday, 06/06/2019	Network Security II and Email Security
Day 5	Friday, 07/06/2019	Website Security I
Day 6	Saturday, 08/06/2019	Website Security II and Cyber Law, Mobile Security & Cloud Security

The eligible candidates will be given confirmation on web-portal and it will also be informed through email. All confirmed participants will have to submit a relieving letter from their institution on the first day of the training.

Laboratory Assignments:

- Installing, Configuring and Commissioning of Proxy Server using FOSS. Studying issues like Browser security, email security, difference between http, https etc.
- Perform port scanning using NMAP (Network Mapper).
- Analyse the network traffic using wireshark or any other network sniffer.
- Collect the Owner's information using spyware.
- Steganography: Perform data hiding using covered writing
- Identification of virus infected file using virustotal.com
- Understanding trace route functionality using open visual trace route
- Vulnerability analysis in web application using Zed Attack Proxy
- Isolating WLAN Traffic using Separate Firewall for VPN Connection
- To Create a Virtual Private Network (VPN) over WAN
- To evaluate application response time in the presence and absence of a firewall.
- Managing Security in Small Business Network
- Security Group Policies Management
- Group Policy management

- ICMP Ping
- Sub-netting
- Firewalls
- RIP
- OSPF
- VPN
- VLAN
- Case study on IT Act 2000
- Case study on cyber attack / cyber crime

Registration:

Participants must register through online web-portal only. No need to send any printed documents to the Resource Center Shivaji University.

Registration Link: <http://sangnaksuraksha.com>

Registration details:

Registration of participants is free of cost. Hard copy of the registration form duly forwarded through the Head of the Institute should be submitted to the Co-coordinator on the first day of the programme.

Instructions for the Participants:

- Attendance at all sessions is mandatory.
- Breakfast, Lunch and Tea will be provided.
- Outstation participants will be provided accommodation only on advance intimation.

Technical Requirements from Participants:

- Participants should carry their own laptop as well as debit cards, credit cards, payment wallets, net-banking, UPI, mobile banking, paypal, aadhar, PAN card with them for sample demos.
- Participants should carry Smartphone either android / ios with them.
- Participant should focus on smartphone apps like Truecaller, PayTM, PhonePe, Google Pay, PayZApp, Authenticator, Facebook, WhatsApp, Instagram

Chief Patron

Hon. Prof. Dr. D. B. Shinde

Vice Chancellor,
Shivaji University, Kolhapur

Hon. Prof. Dr. D. T. Shirke

Pro-Vice Chancellor,
Shivaji University, Kolhapur

Dr. V. D. Nanavadekar

Registrar,
Shivaji University, Kolhapur

Hon. Mr. S.M.Katkar

Founder Director ,
Zeal Education Society ,Pune

Hon. Prof. J.S.Katkar

Secretary,
Zeal Education Society ,Pune

Dr. Pradip Khandave

Executive Director ,
Zeal Education Society ,Pune

Patron

Dr. A.M.Kate

Principal, Zeal College of Engineering and Research, Narhe Pune

Mentor

Smt. Meeta Rajivlochan (IAS)

Principal Secretary, State Project Director, RUSA, Maharashtra

Principal Investigator

Dr. R.K. Kamat

IQAC Director
Director, Innovation, Incubation and Linkages
Head, Department of Computer Science,
Shivaji University, Kolhapur

Co-Investigator

Dr. K. S. Oza

Assistant Professor
Department of Computer Science,
Shivaji University, Kolhapur

Organizing Committee

Convener

Dr. S.A.Ubale

Head Department of Information Technology

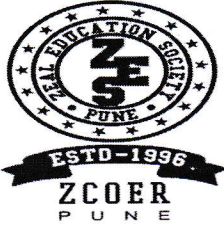
Coordinators

Mr. Rahul.H.Bhole

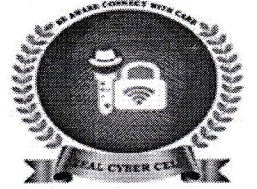
Assistant Professor
Zeal College of Engineering and Research
Email Id: rahul.bhole@zealeducation.com
Mobile No: 7219774770

Mrs.Pranalini.A.Joshi

Assistant Professor
Zeal College of Engineering and Research
Email Id: pranalini.katkar@zealeducation.com
Mobile No: 9960557104



Zeal Education Society's
Zeal College of Engineering & Research, Narhe, Pune
Department of Information Technology

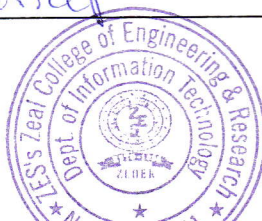


“One Week Faculty Development Program on Cyber Security”



Participants Attendance

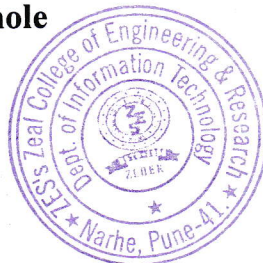
Day and Date: 3/6/2019 (Day 1)


Sr. No	Name of Participant	Sign
1	A.S. Chaudhantoz	
2	P.S. Nawghare	
3	P.A. Chaudhantoz	
4	Sutar Mayuri D.	
5	ms. Shinde V. U.	
6	S.P. Vanjari	
7	Vidhya R. Vaselkar	
8	R.T. Waghmode	
9	Suchita Nanaware	
10	Vandana Tempure	
11	G.F. Jurnake	
12	A.B. Icetwale	
13	S.D. Bachpalle	
14	K.P. Balsaraj	
15	R.S. Apatre	
16	Shakti Tamboli	
17	V.R. Apatre	
18	S.D. Scenaf	

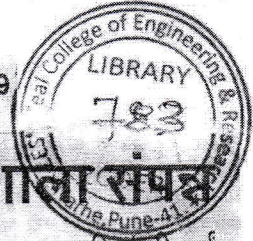


19	Dr R Sunde	<u>RS</u>
20	Balaji Chaugule	<u>Bchaugule</u>
21	Smita Bachaj	<u>Ssach</u>
22	Vaishali Masal	<u>Vm</u>
23	S.S. Shahane	<u>SS</u>
24	A.S. Kale	<u>Akale</u>
25	Thorat madhum	<u>TM</u>
26	Dipak Balasaheb Sathe	<u>DSathe</u>
27	Pawan Mahesh	<u>PM</u>
28	Kolte Priyanka	<u>Kolte</u>
29	Babasaheb mohite	<u>Bmohite</u>
30	Monika Dongre	<u>Monku</u>
31	Aparna Mote	<u>AM</u>
32	Sheutika modhe	<u>SM</u>
33	Swapnil Jawahar	<u>Swapnil</u>
34	Pallavi Yesaware	<u>PY</u>
35	Tejaswini Mane	<u>TM</u>
36	Aritra mahapat	<u>AM</u>
37	P.S. Halgookar	<u>PSH</u>
38	A.V. Yeinkar	<u>AVY</u>
39	Shirke Sonali	<u>Sonali</u>
40	Gopal S. Chandangole	<u>GSC</u>
41	D.A. Lokare	<u>DAL</u>
42	Kailas Tembhe	<u>KT</u>

 
Prof.P.A.Joshi / Prof.R.H.Bhole
Coordinators




Dr.Y.B.Gurav
HOD IT



झील कॉलेज में साइबर सुरक्षा पर कार्यशाला संपन्न

साइबर सिक्योरिटी के बारे में शिक्षकों को प्रशिक्षण व छात्रों को अवसरों की जानकारियां दी गईं

पुणे, 25 जून (आ.प्र.)

झील कॉलेज ऑफ इंजीनियरिंग एंड रिसर्च पुणे की ओर से 'साइबर सुरक्षा' विषय पर हाल ही में एक हफ्ते की कार्यशाला का आयोजन किया गया। भारत सरकार के मानव संसाधन मंत्रालय के सहयोग से पंडित मदन मोहन मालवीय शिक्षक प्रशिक्षण और शिवाजी यूनिवर्सिटी- कोल्हापुर के तहत इस कार्यशाला का आयोजन किया गया था।

सबके लिए सुरक्षा और विश्वसनीय साइबर स्पेस के इस्तेमाल का दृष्टिकोण सामने रखकर आयोजित की गई इस कार्यशाला का उद्घाटन सिक्योरिटी एनालिस्ट अनिकेत बदामी और अमोल बागल ने किया। इस अवसर पर कॉलेज के प्रिंसिपल डॉ. अजीत काटे, विभागप्रमुख डॉ. एस.डी. शिर्बहादुरकर, कम्प्यूटर विभाग प्रमुख डॉ. प्रसाद हलगांवकर, आईटी विभाग प्रमुख डॉ. योगेश गुरव, डॉ. स्वप्नजा उबाले, समन्वयक प्रा. राहुल भोले और प्रा. प्रणालिनी जोशी उपस्थित थीं।



झील कॉलेज ऑफ इंजीनियरिंग एंड रिसर्च, पुणे में साइबर सिक्योरिटी पर आयोजित कार्यशाला में उपस्थित एक्सपर्ट, संस्था के पदाधिकारी व स्टाफ।

डॉ. योगेश गुरव ने कार्यशाला के आयोजन के बारे में बताया, उन्होंने कहा कि बढ़ते साइबर अपराधों के बारे में जागरूकता पैदा करने की जरूरत है। ऐसी कार्यशालाएं इसके लिए बहुत प्रभावी साबित होंगी। प्रिंसिपल डॉ. अजीत काटे ने बताया कि साइबर सिक्योरिटी के बारे में शिक्षकों को प्रशिक्षण देकर उन्हें तैयार

करना और छात्रों को इस क्षेत्र में करियर के अवसरों के बारे में जानकारी देना, इस कार्यशाला का उद्देश्य है। इस कार्यशाला के सफल आयोजन के लिए झील संस्था के अध्यक्ष संभाजी काटकर, सचिव डॉ. जयेश काटकर, कार्यकारी निदेशक डॉ. प्रदीप खांदवे ने सराहना की। डॉ. स्वप्नजा उबाले ने आभार माना।

**A Report of
AICTE sponsored
Two weeks Faculty Development Program
on**

**“Internet of Things, Application Development using
Raspberry Pi and Python Programming”**

Venue: Zeal College of Engineering and Research, Narhe ,Pune-41
(Approved by AICTE, Govt. of Maharashtra & Affiliated to S.P. Pune University)

Date: 02nd Dec – 13th Dec, 2019

Organized by



**Zeal Education Society's
ZEAL COLLEGE OF ENGINEERING AND RESEARCH, PUNE-411041.
Department of Information Technology, Computer Engineering and
Electronics & Telecommunication Engineering**



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1. Introduction to FDP

For the academic year 2019-2020, Zeal Education Society's, Zeal College of Engineering and Research, Department of Computer Engineering, Narhe, Pune has organized a Two Weeks AICTE Approved Faculty Development on "Internet of Things ,Application Development using Raspberry Pi and Python Programming" from 2ndDec - 13th Dec 2019.

This FDP is designed to equip participants with the key skills required to work with various applications of IOT using raspberry Pi and Python Programming. This program will enables the participants to get acquainted with the Internet of things concepts, research directions and hands-on exposure to IoT platforms, Application Development using Raspberry Pi and Python Programming .This FDP is not only intended to explore concept & advancement in IOT but also to discuss the role of Internet of Things (IoT) Enterprise resource growth opportunities and challenges, Business model to embrace IoT, diversity of devices, operating systems for IoT, Hands on Contiki OS, Fractal cities from IT to IoT.

The FDP was attended by 40 participants from Maharashtra and other states of India. We were blessed with notable speakers like Dr. Aditya Abhyankar,Mr. ShrirangKarandikar, Mr. Sandesh Mahanure, Dr. P. N. Mahalle, Dr. Amol Admuthe,Mr. Amol Dhande,Ms. Shubhangi Verma, Dr. Shailaja Patil, Dr. D. N. Sonawane and Mr. Vivek Nikam who showed there imminent presence in this FDP.

The brief details of events which took place in the span of two weeks are highlighted below.

Day 1

Date: 2nd Dec, 2019

Sr. No.	Time	Topic	Resource Faculty
1.	10.00 to 11.30	Inauguration Program	Chief Guest Dr. Aditya Abhyankar Guest of Honor Mr. Amol Nitave
2.	Session 1 11.45 - 01:15	Keynote Speech	Chief Guest Dr. Aditya Abhyankar
3.	Session 2 2:00 to 04:00	Basics of Python programming - Why Python	Shrirang Karandikar,

2. Inauguration Function

The inauguration function of Two Weeks AICTE sponsored Faculty Development Workshop on “Internet of Things, Application Development using Raspberry Pi and Python Programming” was scheduled on 2ndDec, 2019 started at 10.00 am.

This function had a presence of a notable personality Dr. Aditya Abhyankar. He is currently working as Chairman and BOS for Department of Information Technology of SP Pune University.

This function is anchored by Prof. Anuradha V. Yenikar and Prof. Snehal Banarse. This function started with a brief introduction of a FDP followed by Saraswati Poojan. This function witnessed the introduction of the chief guest Dr. Aditya Abhyankar and guest of honor Mr. Amol Nitave. Dr. Suresh Shirbahadurkar, Dean of Academics, gave a brief introduction of FDP and welcomed all participants for FDP. Dr. A. M. Kate, Principal of Zeal College of Engineering, Pune gave introduction of college. Dr. Aditya Abhyankar motivated all participants to enjoy this FDP as a feast of knowledge. He had also given reference from our history i.e. Chatrapati Shivaji Maharaj as a management Guru and his powerful strategies of work are inspiration to all of us. Mr Amol Nitave put lights on Skill development and importance of IoT in day to day life.

Dr. Yogesh Gurav, HoD, Information Technology Department gave vote of thanks for inaugural program.



FDP Inauguration program with all guests

Dr. S. M. Sangve, Dr. U. V. Kulkarni, Dr. S. D. Shirbahadurkar, Mr. Amol Nitave, Dr. Aditya ABhyankar, Dr. A. M. Kate, Dr. A. N. Gaikwad, Dr. Yogesh Gurav (L to R)



Saraswati Pujan by Chief Guest Dr. Aditya Abhyankar



Felicitations of Guest of honor: Dr. U. V. Kulkarni



Felicitations of Guest of honor



Dr. Suresh Shibahadurkar, Course co-ordinator of FDP delivered the objectives

Objectives:

- To explore various research opportunities and challenges in the areas of IoT and Python Programming.
- To understand basics of IoT platform for sensing real and physical data.
- To give practical hands-on exposure in the domain of IoT application development.
- To learn and understand recent tools used for application development in IoT using Python Programming.



Dr. A. M. Kate, Principal, ZCOER, gave information about college

About College:

Zeal Education Society is established in year 1996 by Hon. Shri S. M. Katkar, an eminent industrialist committed to noble cause of education. Zeal Education Society's Zeal College of Engineering and Research (Formally Known as Dnyanganga College of Engineering and Research) is established in June 2007 which symbolized the beginning of new era in technical education. The Institute has been approved by AICTE, DTE, and affiliated to Savitribai Phule Pune University, Pune. The institute offers undergraduate and postgraduate Engineering degree programmes in Information Technology, Computer, Electrical, Mechanical, Civil and Electronics & Telecommunication. The institute is also granted as PhD research center in Electronics & Telecommunication and Mechanical Engineering under Savitribai Phule Pune University, since 2013. Well qualified and experienced faculty members with good research background are one of the key features of the institute. With state of art research, infrastructural, sports, cultural facilities the campus provides excellent academic ambience for the students. Dedicated Training and Placement Cell of the institute ensures a bright future of the students.



Dr. Yogesh Gurav, HoD, Information Technology Department gave vote of thanks for inauguration program

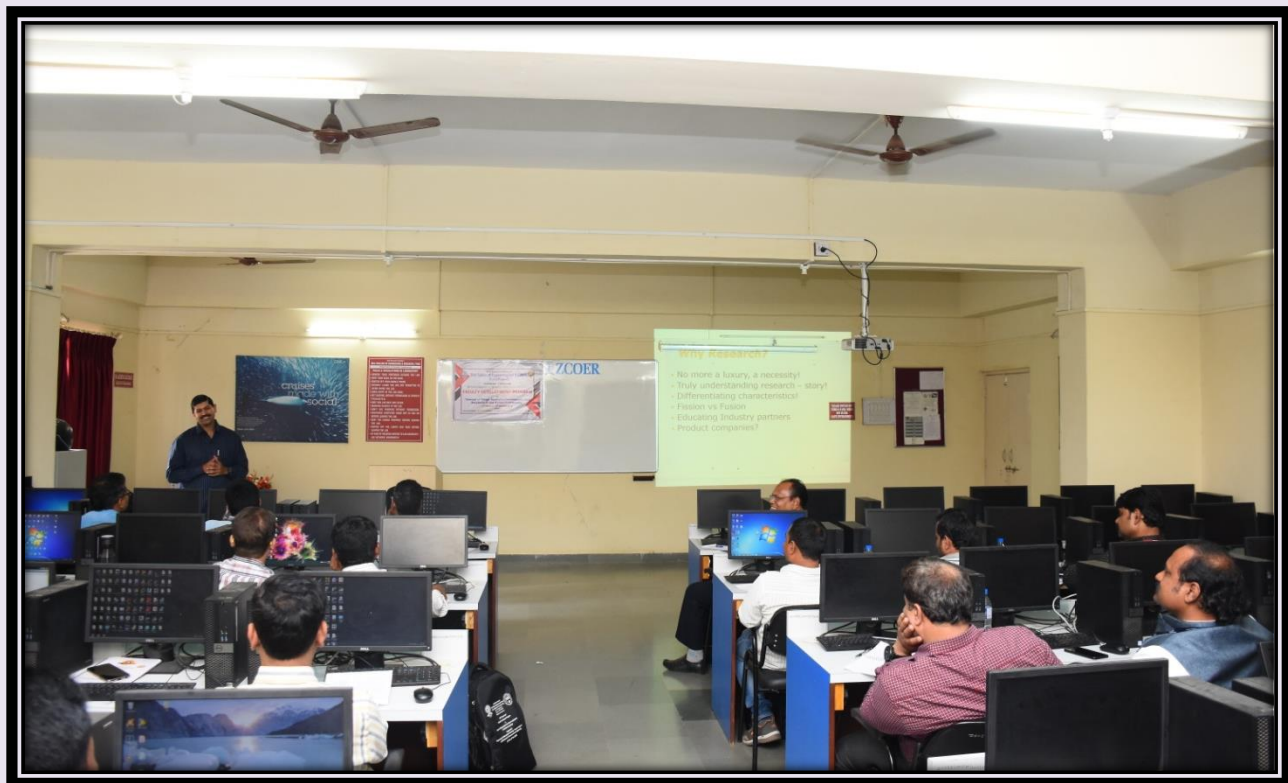


A Group photo with Participants on Inauguration day

3. Session 1 – Key note speech by Dr. Aditya Abhyankar

Dr. Aditya Abhyankar, Chairman and BOS, Department of Information Technology, SPPU, Pune started his speech with a brief introduction of himself and how he started his career as a computer technocrat. His ideas and the way he shaped his life as a genius in field of computer science was a real motivation.

He shared Basics of Python programming - Why Python is important. He has also cleared the doubts from participants. He focused on how IoT was born and how it came into picture since last few years. He spoke for roughly one and half hour from 11.45 am to 1.15 pm on 2nd Dec, 2019.



Session by Dr. Aditya Abhyankar

4. Session 2 – “Basics of Python programming - Why Python” by Shrirang Karandikar

Shrirang Karandikar is a personality who has a vital experience in the field of Python programming and IoT. He delivered his speech on ““Basics of Python programming - Why Python” from 2:00 pm to 4:00 pm on 2nd Dec, 2019.

This session started with his introduction to Python, basic concepts of IoT using Python, how exactly IoT devices work and transfer data and control signals to each other. He illustrated his points on establishment of IoT servers and collection of data by IoT servers. He focused on how we can make optimum use of data collected by various IoT servers placed at various locations across globe.

His presentation and real time motion slides describing the working principle of IoT is the point of importance. He showed how he works on IoT in his laboratory. He discussed with us the contribution that he has made in this field since past few years. He showed few of the IoT notes, devices and Laboratory images.



Felicitation of ShrirangKarandikar

Day 2

Date: 3rd Dec, 2019

Sr. No.	Time	Topic	Resource Faculty
1.	Session 1 9:00 to 11:00	Advance Concepts of Python programming	Mr. Sandesh Mahanure
2.	Session 2 11:15 to 01:15	Advance Concepts of Python programming	Mr. Sandesh Mahanure
3.	Session 3 2:00 to 04:00	Advance Concepts of Python programming	Mr. Sandesh Mahanure

5. Session 1 – “*Advance Concepts of Python programming*” by Mr. Sandesh Mahanure.

Mr. Sandesh Mahanure has a vital experience and hands on familiarity with the Python Programming. He conducted a session in interest to the same on 3rd Dec, 2019.

His generalized the concepts of Python programming were better for understanding. His concepts are very clear and simple in the minds of participants. He continued his session with detailed introduction of topics in Python.



Felicitation of Sandesh Mahanure

6. Session 2 – “Advance Concepts of Python programming” by Mr. Sandesh Mahanure

Mr. Sandesh Mahanure in this session discussed topics of Python with hands-on experience to all participants. This session focused on Advance Concepts of Python programming. Python is a general purpose and high level programming language. He told that one can use Python for developing desktop GUI applications, websites and web applications. Also, Python, as a high level programming language, allows you to focus on core functionality of the application by taking care of common programming tasks.



Hands on Session by Mr. Sandesh Mahanure

7. Session 3 – “*Advance Concepts of Python programming*” by Mr. Sandesh Mahanure.

Sandesh Mahanure has vital hands on experience in Python Programming. This session continued for 2 hours from 2:00 pm to 4:00 pm on 3rd Dec 2019.

In this session participants got hands on experience on how to do programming in Python.

Day 3

Date: 4th Dec, 2019

Sr. No.	Time	Topic	Resource Faculty
1.	Session 1 9:00 to 11:00	Exception Handlings in Python	Mr. Sandesh Mahanure
2.	Session 2 11:15 to 01:15	Advanced python Multithreading	Mr. Sandesh Mahanure
3.	Session 3 2:00 to 04:00	Database connectivity in Python Assignments	Mr. Sandesh Mahanure

8. Session 1 – “Exception Handlings in Python” by Mr. Sandesh Mahanure

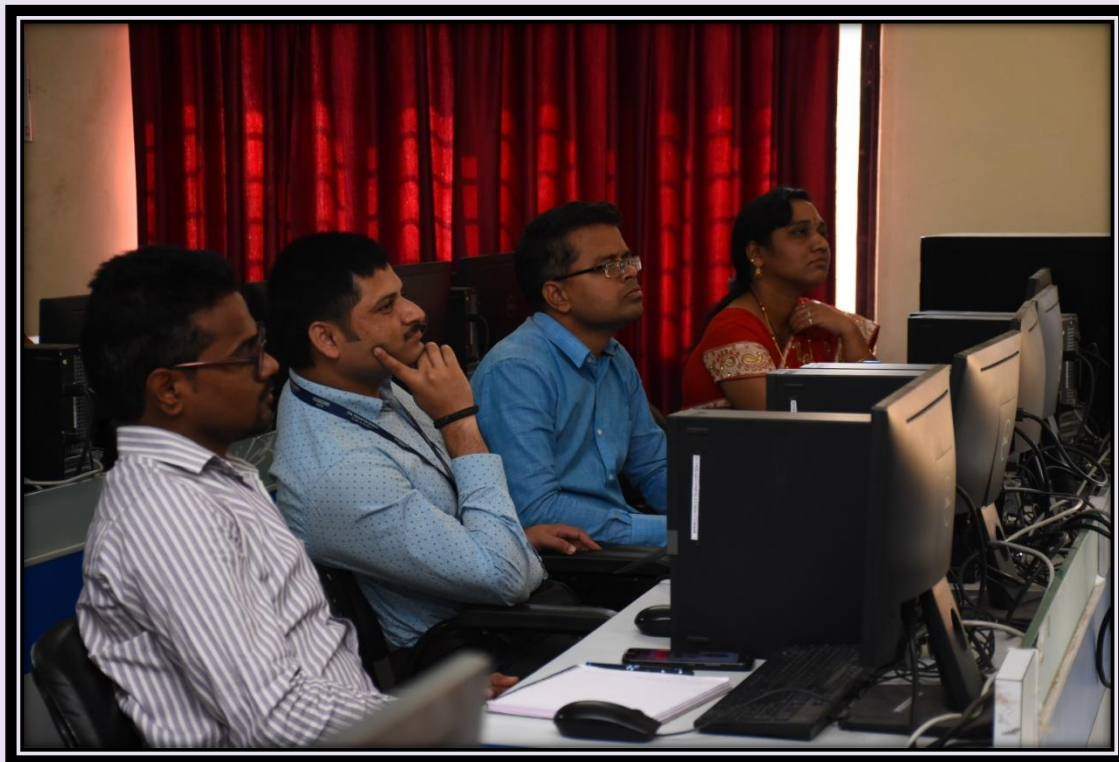
Mr. Sandesh Mahanure who has practical experience in Python projects as they have been working on Python projects in industry. The session was on Exception Handlings in Python conducted on 4th Dec. 2019 from 9.00 to 11.00.



Hands-on Session by Mr. Sandesh Mahanure

9. Session 2 – “Advanced python Multithreading” by Mr. Sandesh Mahanure

Sandesh Mahanure has continued hands-on session for 2 hours from 11:15 am to 1:15 pm on 4th Dec 2019. In this session, he focused on Advance Python Multithreading. He told multithreading is a core concept of software programming that almost all the high-level programming languages support. Hence, the first things you should know are: What is a thread and what does multithreading mean in Computer Science. He has also explained How to Use the Thread Module to Create Threads?



Participants listening to Mr. Sandesh Mahanure

10. Session 3 – “Database connectivity in Python Assignments” by Mr. Sandesh Mahanure

Sandesh Mahanure has continued hands-on session for 2 hours from 02:00 am to 4:00 pm on 4th Dec 2019. In this session, he focused on Database connectivity in Python Assignments.

Day 4

Date: 5th Dec, 2019

Sr. No.	Time	Topic	Resource Faculty
1.	Session 1 9:00 to 11:00	Introduction to IoT	Dr. A. B Patki
2.	Session 2 11:15 to 01:15	Applications of IoT	Dr. A. B Patki
3.	Session 3 2:00 to 04:00	Research Areas in IoT Wireless Sensor Network	Dr. P. N. Mahalle

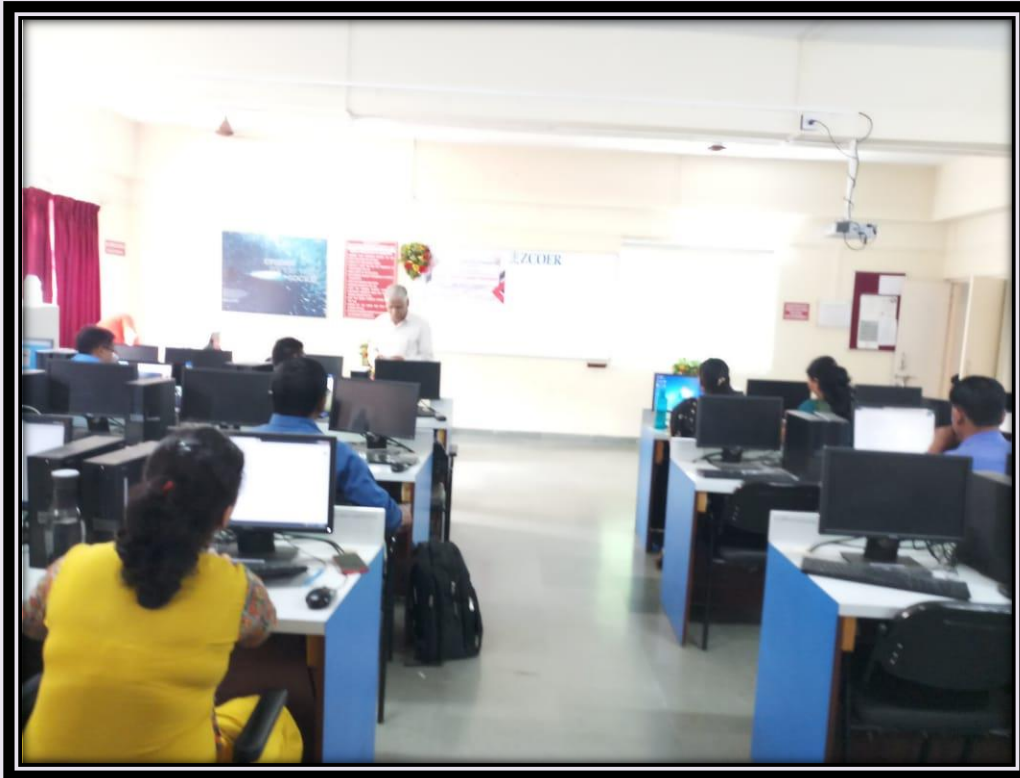
11. Session 1 – “Introduction to IoT” by Dr. A. B Patki

Dr. A. B. Patki has an immense knowledge of IoT devices and sensor networks. He conducted a session on Introduction to IoT on 5th Dec, 2019 from 11.30 to 13.30. His opinion of implementation of smart cities in India is completely IoT based. He shared his experience about IoT devices, role of IoT devices, Pros and cons of IoT devices to the mankind. He told the goal of IoT is to extend to internet connectivity from standard devices like computer, mobile, tablet to relatively dumb devices like a toaster. IoT makes virtually everything "smart," by improving aspects of our life with the power of data collection, AI algorithm, and networks.

He explained how IoT will be useful in making Smart Cities: Smart city is another powerful application of IoT generating curiosity among world's population. Smart surveillance, automated transportation, smarter energy management systems, water distribution, urban security and environmental monitoring all are examples of internet of things applications for smart cities.

IoT will solve major problems faced by the people living in cities like pollution, traffic congestion and shortage of energy supplies etc. Products like cellular communication enabled Smart Belly trash will send alerts to municipal services when a bin needs to be emptied.

By installing sensors and using web applications, citizens can find free available parking slots across the city. Also, the sensors can detect meter tampering issues, general malfunctions and any installation issues in the electricity system.

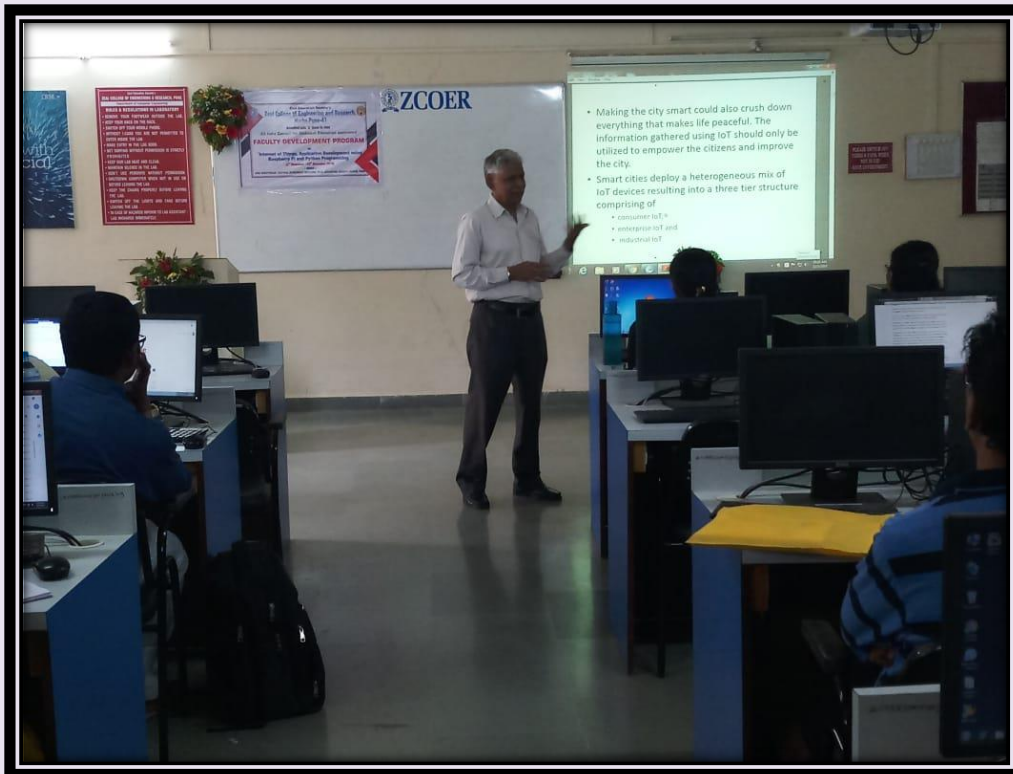


Session by Dr. A. B. Patki

12. Session 2 – “Applications of IoT” by Dr. A. B Patki

Dr. A. B. Patki believes that IoT devices can rule the field of IT in coming years. He shared his thoughts on the concept on smart cities and how IoT can be crucial in making of smart cities. He believes that academicians can take up the responsibility in construction of smart cities and discuss the threats of smart cities to the society.

He ended his session with a list of practical and experiments in IoT. He discussed various projects which can be taken up and done using optimum use of IoT concepts.



Session by Dr. A. B. Patki

13. Session 3 – “Research Areas in IoT” by Dr. P. N. Mahalle

Dr. P. N. Mahalle started session post lunch at 2:00 pm. The entire session focus on Research Areas in IoT along with use of big data, analysis of big data and correlating IoT devices with the help of this data. The live examples given were logistics services, Walmart smart delivery and payment, tracking of household devices. The collection of data and deciding its usefulness plays a vital role in IoT usage.

He has also told Irrespective of the field, there is no IoT without intelligent decision-making on behalf of the devices. As can be seen from the list, both artificial intelligence and machine learning are important research topics. The ability for machines to make decisions depends on the quality of machine learning algorithms.

These research areas focusing on IoT decision-making will only gain more emphasis in the future. The application areas are everywhere but industrial manufacturing is one of the most promising fields in our experience.

In short, IoT can be sometimes a confusing term but it is made up of real embedded systems that need to collaborate and make intelligent decisions. A lot of challenges remain on how to collect the right data, how to communicate it and most importantly, make sense of it in the end.



Felicitation of Dr. A. B. Patki and Dr. P. N. Mahalle

Day 5

Date:6th Dec, 2019

Sr. No.	Time	Topic	Resource Faculty
4.	Session 1 9:00 to 11:00	IoT Concepts - Data Management in IoT	Dr. Amol Admuthe
5.	Session 2 11:15 to 01:15	IoT Security	Dr. Amol Admuthe
6.	Session 3 2:00 to 04:00	Role of Cloud Computing in IoT(Cloud Analytics)	Dr. Amol Admuthe

14. Session 1 – “IoT Concepts - Data Management in IoT” by Dr. Amol Admuthe

Dr. Amol Admuthe has an immense knowledge of IoT devices and sensor networks. His opinion of implementation of smart cities in India is completely IoT based. He shared his experience about IoT devices, role of IoT devices, Pros and cons of IoT devices to the mankind.

He explained Data management in IoT. A comprehensive management framework of data that is generated and stored by the objects within IoT is thus needed to achieve this goal. Data management is a broad concept referring to the architectures, practices, and procedures for proper management of the data lifecycle needs of a certain system.

15. Session 2 – “IoT Security” by Dr. Amol Admuthe

Dr. Amol Admuthe continued his session after a short break of 15 minutes on topic ‘IoT security from 11.15 am to 1.15 pm.



Felicitation of Dr. Amol Admuthe



Session by Dr. Amol Admuthe and team

16. Session 3 – “*Role of Cloud Computing in IoT (Cloud Analytics)*” by Dr. Amol Admuthe

Dr. Amol Admuthe and his team has continued hands-on session for 2 hours from 02:00 am to 4:00 pm on 6rd Dec 2019. In this session, they focused on Role of Cloud Computing in IoT (Cloud Analytics). He told that ‘The Internet of Things (IoT) involves the internet-connected devices we use to perform the processes and services that support our way of life. The worker can use a cloud computing service to finish their work because the data is managed remotely by a server’.

He has also explained IoT generates a vast amount of Big Data and this in turn puts a huge strain on Internet Infrastructure. As a result, this forces companies to find solutions to minimise the pressure and solve their problem of transferring large amounts of data. Cloud computing has entered the mainstream of information technology, providing scalability in delivery of enterprise applications and Software as a Service (SaaS). Companies are now migrating their information operations to the cloud. Many cloud providers can allow for your data to be either transferred via your traditional internet connection or via a dedicated direct link. The benefit of a direct link into the cloud will ensure that your data is uncontended and that the traffic is not crossing the internet and the Quality of Service can be controlled.

Day 6

Date: 9th Dec, 2019



Industrial visit at Primus

17. Industrial Visit

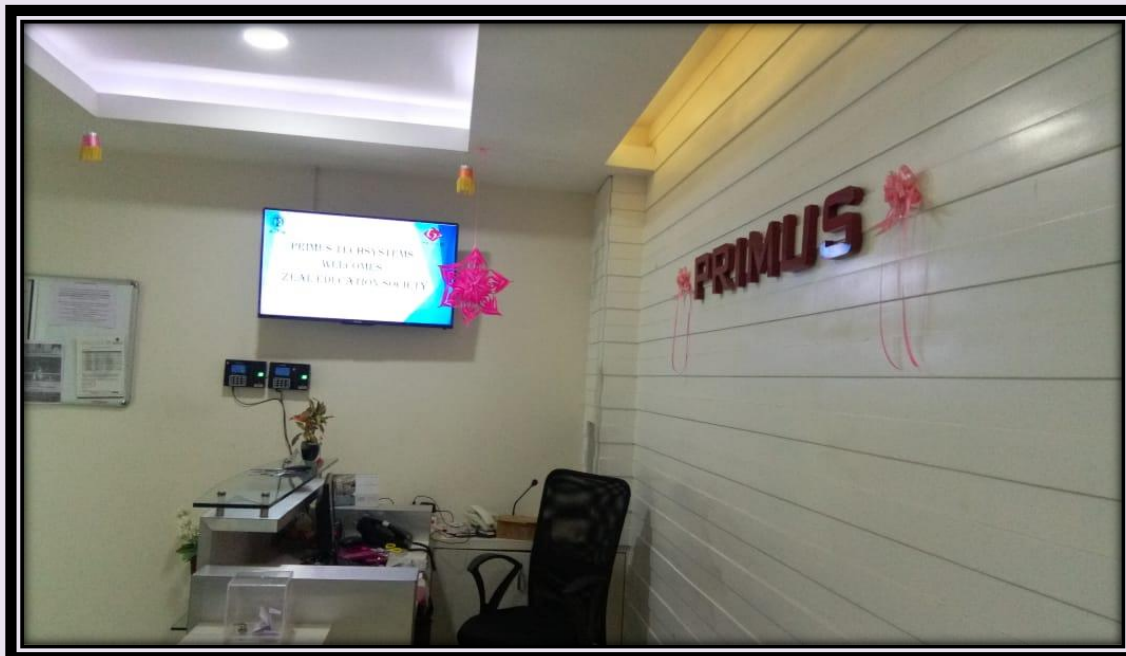
An Industrial visit to two companies named “Primus Pvt. Ltd.” and “Dolphin” was organized by the FDP coordinating team on Monday, 9th December, 2019. Participants along with two faculties visited to Primus Pvt. Ltd.

They had interaction to understand current IoT projects and latest most demanding technologies etc. In this visit participants were very eagerly listening to their demonstration on live projects.

Many of the participants asked different questions to the Technical team on different kits they have used in their projects and how they can use those to teach their students etc. and technical team cleared all the doubt and myths which was in participants mind about the IoT projects. All participants were satisfied after the session.



A click at Primus Entrance



Welcome by Primus Team to all FDP participants



A click at the end of visit at Primus



Dolphin welcomed FDP participant to their company



Dolphin Team explained some of IOT based projects to participants



Dolphin Team showcased their projects in IOT to participants

Day 7

Date: 10th Dec, 2019)

Sr. No.	Time	Topic	Resource Faculty
1.	Session 1 9:00 to 11:00	IoT Basics - Assignment on Web Application (Project Modules)	Amol Dhande
2.	Session 2 11:15 to 01:15	Interfacing with LED, Toy motors Linux Basic Commands	Amol Dhande
3.	Session 3 2:00 to 04:00	Basics of R Pi (History & Elevation), Description of R Pi 3OS Installation, Connectivity of Mouse, Keypad & Display	Shubhangi Verma

18. Session 1 – “IoT Basics - Assignment on Web Application (Project Modules)” by Amol Dhande

Amol Dhande has an immense knowledge of IoT devices and sensor networks. He conducted a session on IoT Basics - Assignment on Web Application (Project Modules) on 10th Dec, 2019 from 09.00 to 11.00. He shared his experience about IoT devices, role of IoT devices, Pros and cons of IoT devices to the mankind.

He has also explained How a web application works? Web applications are usually coded in browser-supported language such as JavaScript and HTML as these languages rely on the browser to render the program executable. Some of the applications are dynamic, requiring server-side processing. Others are completely static with no processing required at the server. The web application requires a web server to manage requests from the client, an application server to perform the tasks requested, and, sometimes, a database to store the information. Application server technology ranges from ASP.NET, ASP and ColdFusion, to PHP and JSP.



Felicitation of Amol Dhande



Session by Amol Dhande

19. Session 2 – “Interfacing with LED, Toy motors Linux Basic Commands” by Amol Dhande

Amol Dhande has continued hands-on session for 2 hours from 11:15 am to 1:15 pm on the same day i.e. on 10rd Dec 2019. In this session, he explained Interfacing with LED, Toy motors Linux Basic Commands.

20. Session 3 – “Basics of R Pi (History & Elevation), Description of R Pi 3 OS Installation, Connectivity of Mouse, Keypad & Display” by Shubhangi Verma

Shubhangi Verma has a fluent knowledge of R. She has explained basics of R Pi (History & Elevation), Description of R Pi 3 OS Installation, Connectivity of Mouse, Keypad & Display.



Felicitation of Shubhangi Verma



Session by Shubhangi Verma

The Raspberry Pi is a popular Single Board Computer (SBC) in that it is a full computer packed into a single board. Many may already be familiar with the Raspberry Pi 3 and its predecessors, which comes in a form factor that has become as highly recognizable. The Raspberry Pi comes in an even smaller form factor. She has used Raspberry Pi as home security cameras, server monitoring devices, cheap headless machines

She conducted a project demo session at the end of session. Her projects highlighted the importance of IoT in the life of human beings.

Day 8

Date: 11th Dec, 2019

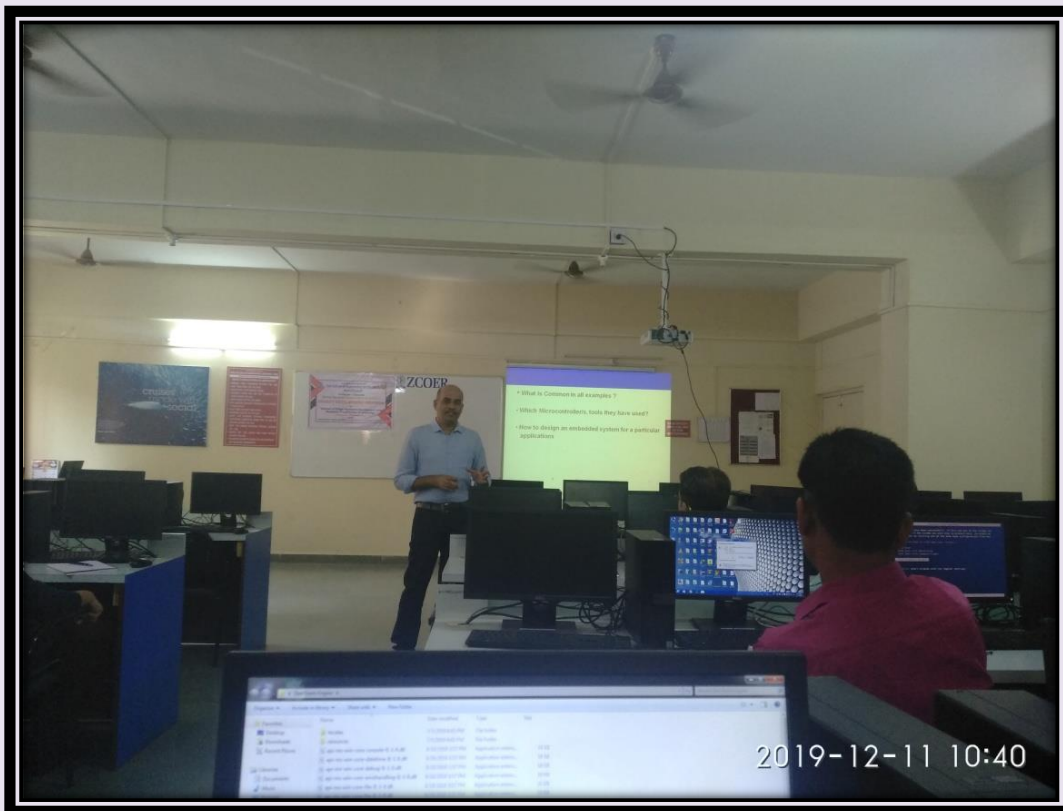
Sr. No.	Time	Topic	Resource Faculty
1.	Session 1 9:00 to 11:00	IoT Application Development - Interfacing with IR Sensor, PIR Sensor	Dr. D. N. Sonawane
2.	Session 2 11:15 to 01:15	Introduction to Numpy Numpy operations	Vivek Nikam
3.	Session 3 2:00 to 04:00	Introduction to Numpy Numpy operations	Vivek Nikam

21. Session 1 – “IoT Application Development - Interfacing with IR Sensor, PIR Sensor ” Dr. D. N. Sonawane

Dr. D. N. Sonawane has an immense knowledge of IoT Application Development - Interfacing with IR Sensor, PIR Sensor. He conducted a session on 11th Dec, 2019 from 09.00 to 11.00. He shared his opinion of use an IR sensor is an electronic device, that produces in order to detect some parts of the environs. An infrared sensor can measure the heat of an object as well as detects the motion. These sensors are used to measure only IR radiation, rather than producing it that is called as a passive infrared sensor..



Felicitation of Dr. D. N. Sonawane



Session by Dr. D. N. Sonawane

22. Session 2 – “Introduction to Numpy and Numpy operations” by Vivek Nikam

Mr. Vivek Nikam given *Introduction to Numpy and Numpy operations* in his session on 11th Dec, 2019. It was a hands-on session along with explanation.

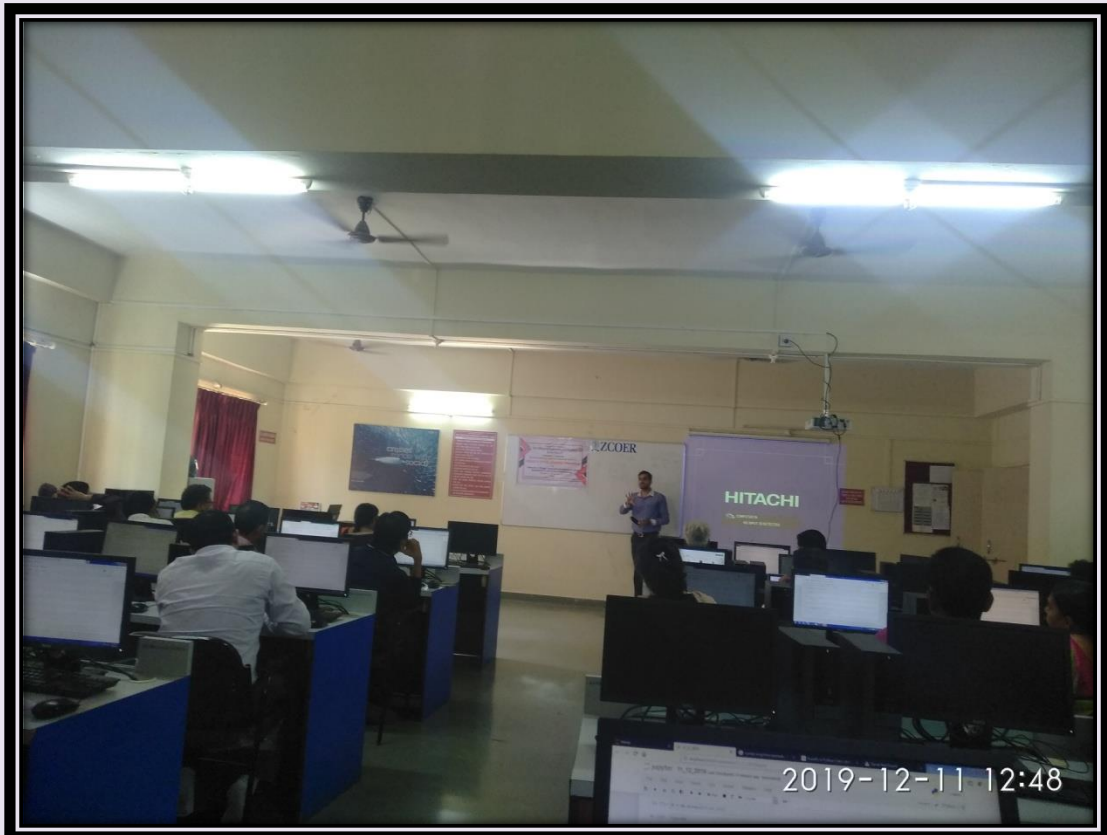
NumPy - It stands for 'Numerical Python'. It is a library consisting of multidimensional array objects and a collection of routines for processing of array. Numeric, the ancestor of NumPy, was developed by Jim Hugunin. Another package Numarray was also developed, having some additional functionality.



Felicitation of Vivek Nikam

23. Session 3 – “Introduction to Numpy and Numpy operations” by Vivek Nikam

He started his hands-on session on Jupyter notebook and covered various topics which come under NumPy. This session continued from 2:00 pm to 4:00pm.



Session by by Vivek Nikam

Day 9

Date: 12th Dec, 2019

Sr. No.	Time	Topic	Resource Faculty
1.	Session 1 9:00 to 11:00	Exploratory analysis in Python using Numpy, Pandas and Matplotlib	Vivek Nikam
2.	Session 2 11:15 to 01:15	Introduction to series and data frames, Plotting using Matplotlib Case Study on Numpy, Pandas and Matplotlib	Vivek Nikam
3.	2:00 to 04:00	Research Areas in IoT Wireless Sensor Network	Shailaja Patil

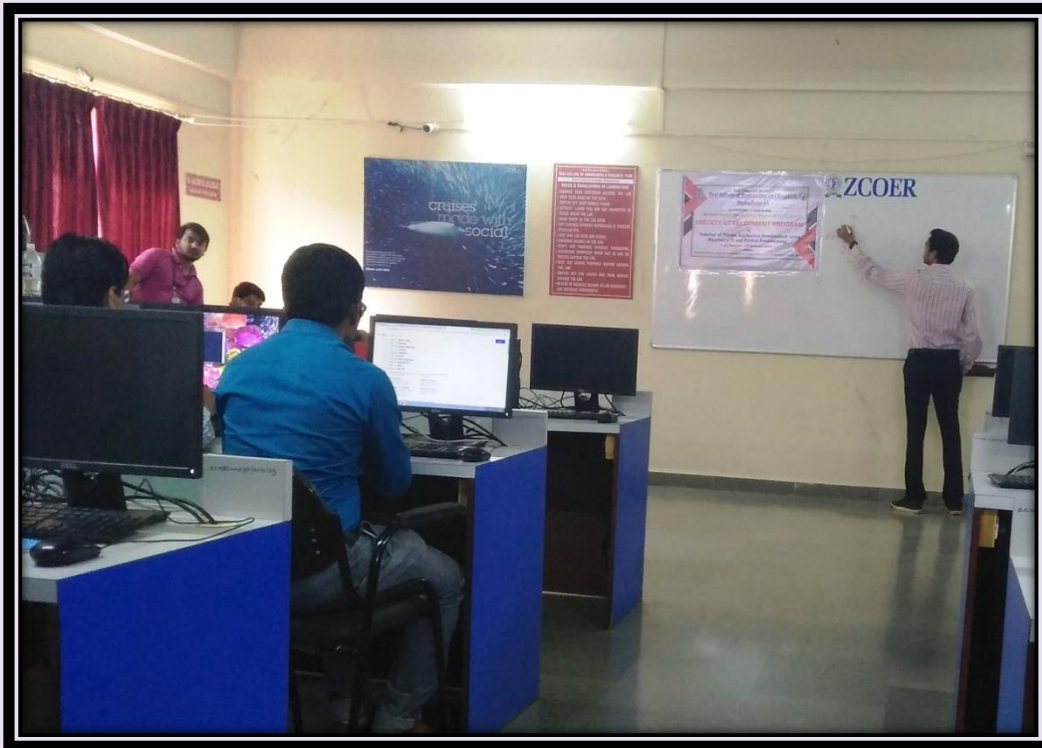
24. Session 1 – *“Exploratory analysis in Python using Numpy, Pandas and Matplotlib”* by Vivek Nikam

Vivek Nikam conducted his session from 9:00 am to 11:00 am. He explained Exploratory Data Analysis or (EDA). He explained EDA understands the data sets by summarizing their main characteristics often plotting them visually. This step is very important especially when we arrive at modeling the data in order to apply Machine learning. Plotting in EDA consists of Histograms, Box plot, Scatter plot and many more. It often takes much time to explore the data. Through the process of EDA, we can ask to define the problem statement or definition on our data set which is very important.

25. Session 2 – *“Introduction to series and data frames, Plotting using Matplotlib Case Study on Numpy, Pandas and Matplotlib”* by Vivek Nikam

Mr. Vivek Nikam gave Introduction to series and data frames, Plotting using Matplotlib Case Study on Numpy, Pandas and Matplotlib. Also explained images—particularly digital images—can be thought of as simply two-dimensional arrays of

numbers representing pixel brightness across the area. Sound clips can be thought of as one-dimensional arrays of intensity versus time. Text can be converted in various ways into numerical representations, perhaps binary digits representing the frequency of certain words or pairs of words. No matter what the data are, the first step in making it analyzable will be to transform them into arrays of numbers.



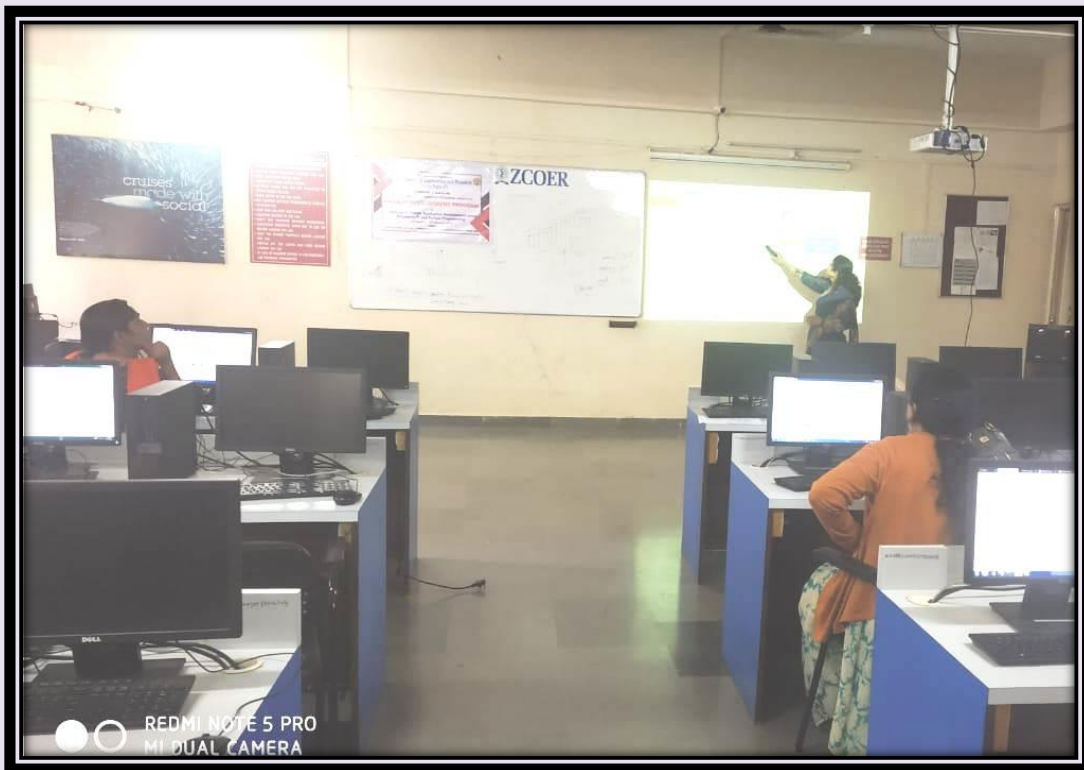
Session by Vivek Nikam

26. Session 3 – “*Research Areas in IoT Wireless Sensor Network*” by Dr. Shailaja Patil

The entire session focus on Research Areas in IoT Wireless Sensor Network by Dr. Shailaja Patil. She has conducted session for 2 hours from 2:00 pm to 4:00 pm. She has explored various topics in the area of Wireless Sensor Network also explained research opportunities in this area.



Felicitation of Dr. Shailaja Patil



Session by Dr. Shailaja Patil

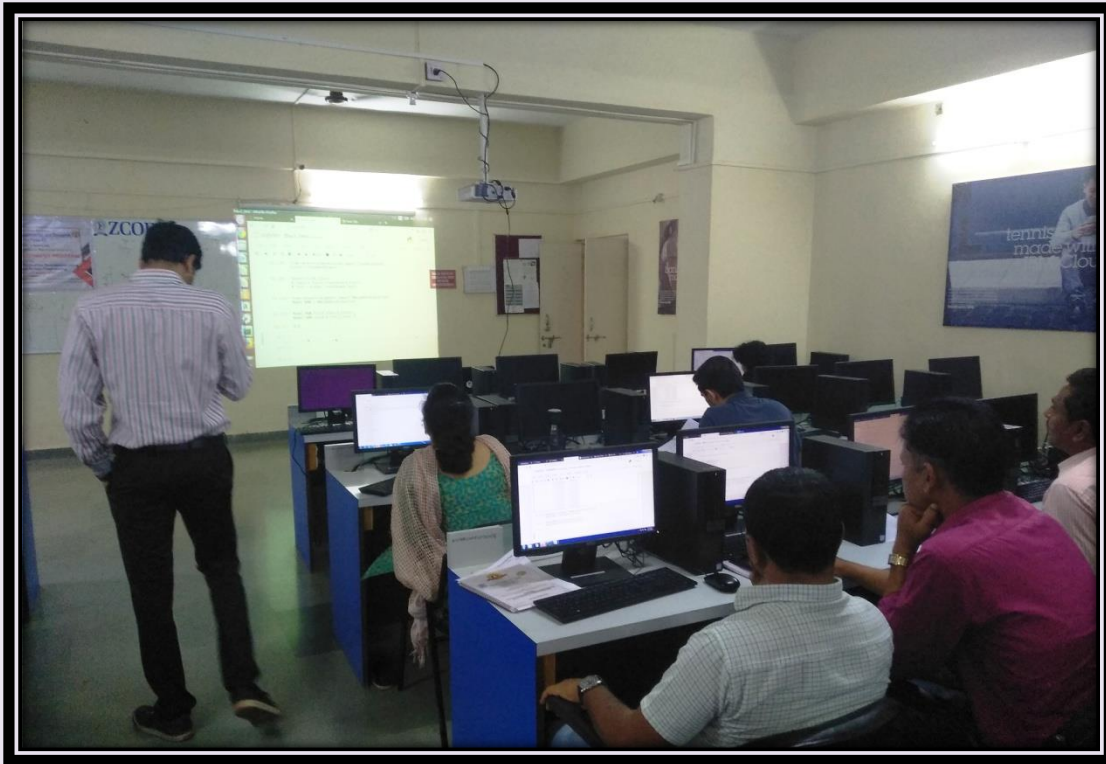
Day 10

Date: 13th Dec, 2019

Sr. No.	Time	Topic	Resource Faculty
1.	Session 1 9:00 to 11:00	Building a Predictive Models in Python (Machine learning), Data Cleaning Linear and Logistic Regression Decision Tree Classification and Clustering	Vivek Nikam
2.	Session 2 11:15 to 01:15	Building a Predictive Models in Python Decision Tree Classification and Clustering	Vivek Nikam
3.	2:00 to 03:00	Examination	
4.	3:15 to 04:00	Valedictory function and certificate distribution	

27. Session 1 – “Building a Predictive Models in Python (Machine learning), Data Cleaning Linear and Logistic Regression” by Vivek Nikam

Mr. Vivek Nikam started his session by explanation on How to build a Predictive Models in Python (Machine learning), Data Cleaning Linear and Logistic Regression Decision Tree Classification and Clustering. Data cleaning and preparation is a critical first step in any machine learning project. He explained it very well with hands-on using Anaconda Jupyter notebook. He introduced the basics of what is mostly required for machine learning and data science.

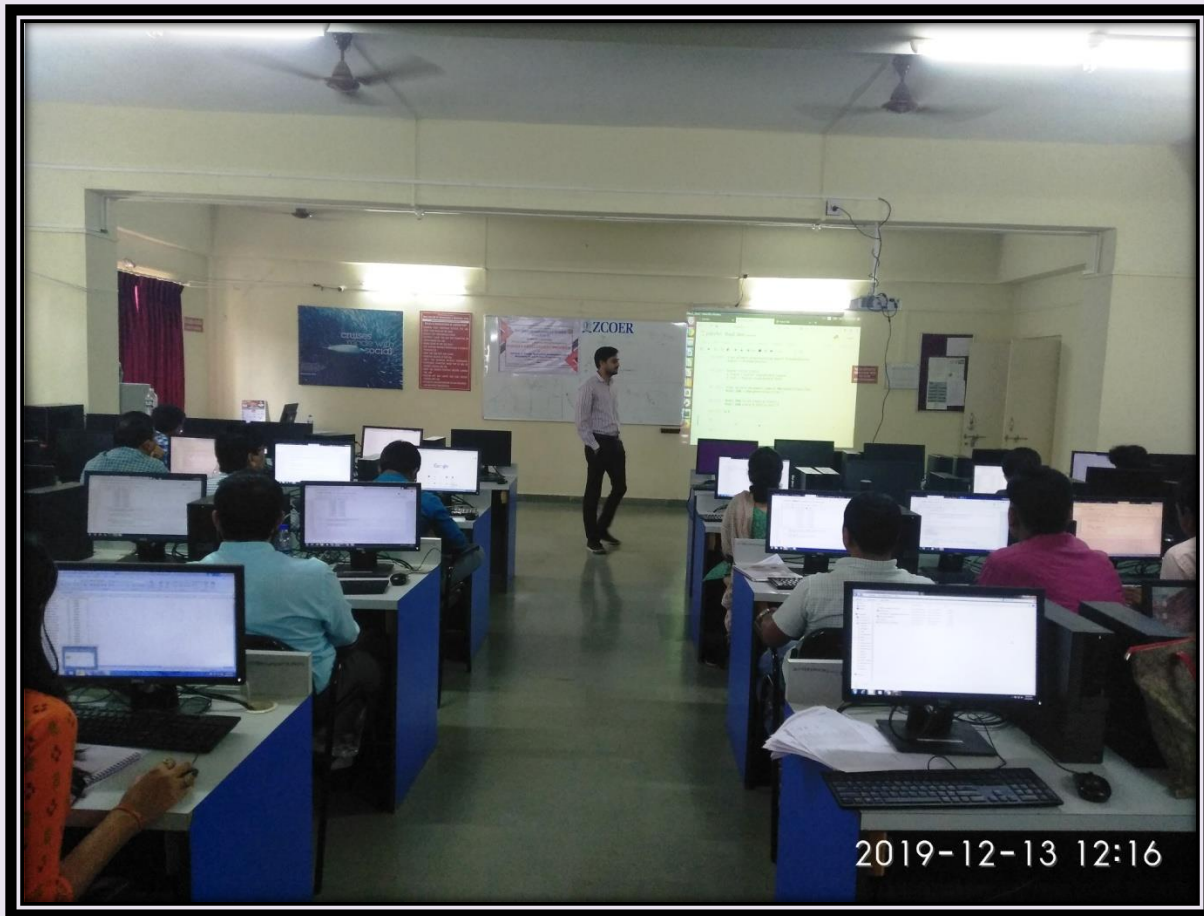


Hands-on Session by Vivek Nikam

28. Session 2 – “Building a Predictive Models in Python Decision Tree Classification and Clustering, Decision Tree Classification and Clustering” by Vivek Nikam

Mr. Vivek Nikam in his last session explained Tree based learning algorithms are considered to be one of the best and mostly used supervised learning methods. Tree based methods empower predictive models with high accuracy, stability and ease of interpretation. Unlike linear models, they map non-linear relationships quite well. They are adaptable at solving any kind of problem at hand (classification or regression).

Methods like decision trees, random forest, gradient boosting are being popularly used in all kinds of data science problems. Hence, for every analyst (fresher also), it's important to learn these algorithms and use them for modeling This session continued till 1: 15 pm.



Hands-on Session by Vivek Nikam

29. Examination

Examination was scheduled on the last of FDP after lunch i.e. from 2:00pm to 3:00 pm. It was a multiple choice question based examination for an hour. The syllabus content was relevant to the content covered in FDP i.e. Internet of things, Python Programming, Interfacing with LED, Wireless Sensor Network etc. Examinations were conducted very smoothly by organizing committee members.



Participants attending Examination

30. Valedictory Function.

Valedictory function marked the end of 2 weeks AICTE sponsored Faculty Development Program on “Internet of Things, Application Development using Raspberry Pi and Python Programming”. This function started from 3.15 pm and ended at 4.00pm on 13thDec 2019. The notable guest was Dr. Amod Markale, Director of ZIBACAR, Zeal Education Society.

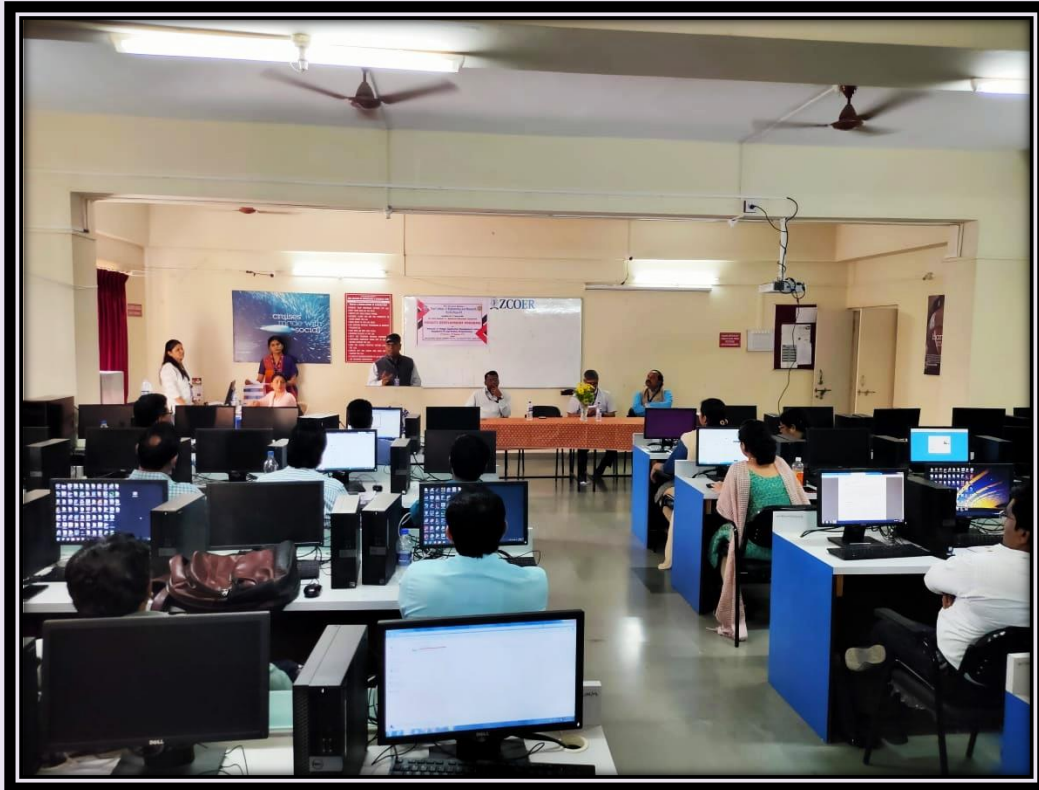
This function is anchored by Prof. Anuradha V. Yenikar. It witnessed a note speech by Dr. Amod Markale, Director of ZIBACAR, Zeal education Society, and Dr. A. M. Kate, Principal, Zeal College of Engineering; Pune. It followed by speech by Dr. Yogesh Gurav, HOD, Information Technology department gave a brief overview of the FDP to the attendees of this function.

Dr. Amod Markale gave a motivational speech to all the participants and Future IT innovators. He encouraged participants for research and contributions to the field of computer science.

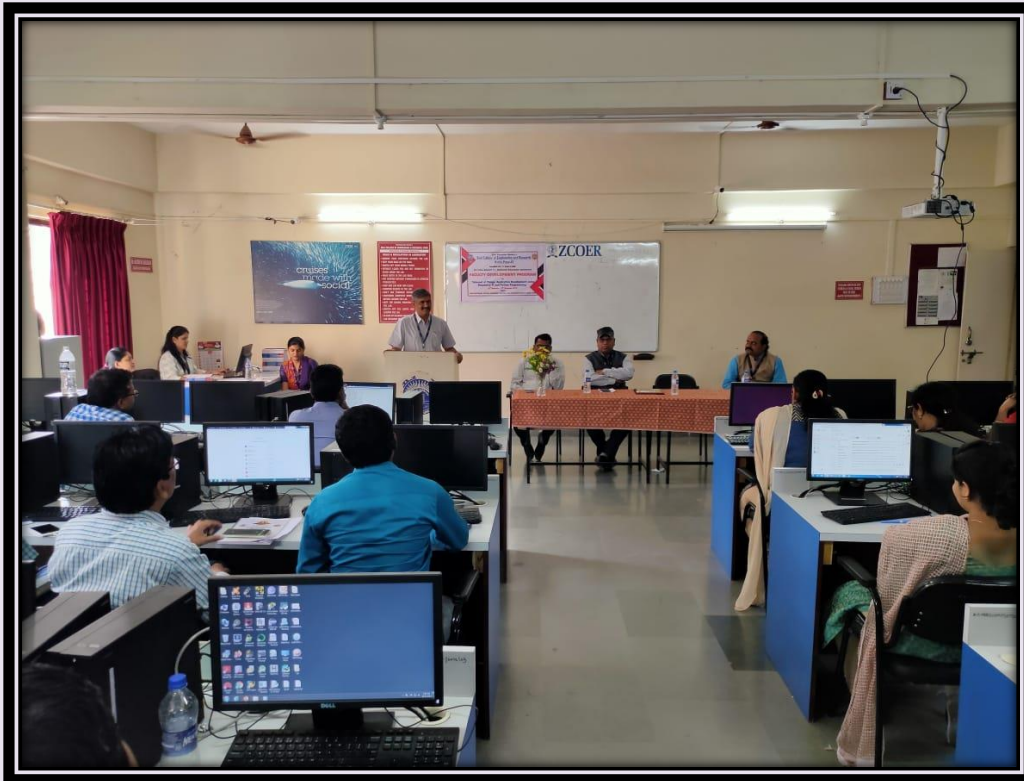
Dr. Suresh Shirbahadurkar gave overview of two weeks faculty development program and shared his experience throughout this FDP. Certificates and a book on ‘Internet of Things’ were distributed to all participants. Finally participants were

asked to come on the dice and share their experience and learning of the whole program. Some participants shared their feedback related to resource person, food, hospitality and specially industrial visit.

Prof. Prakash Kshirsagar shared a vote of thanks on behalf of the department to all the participants and to those who were direct and indirect part of the FDP. He expressed special thanks to AICTE for their sponsorship. The program was concluded with happy note from everyone.



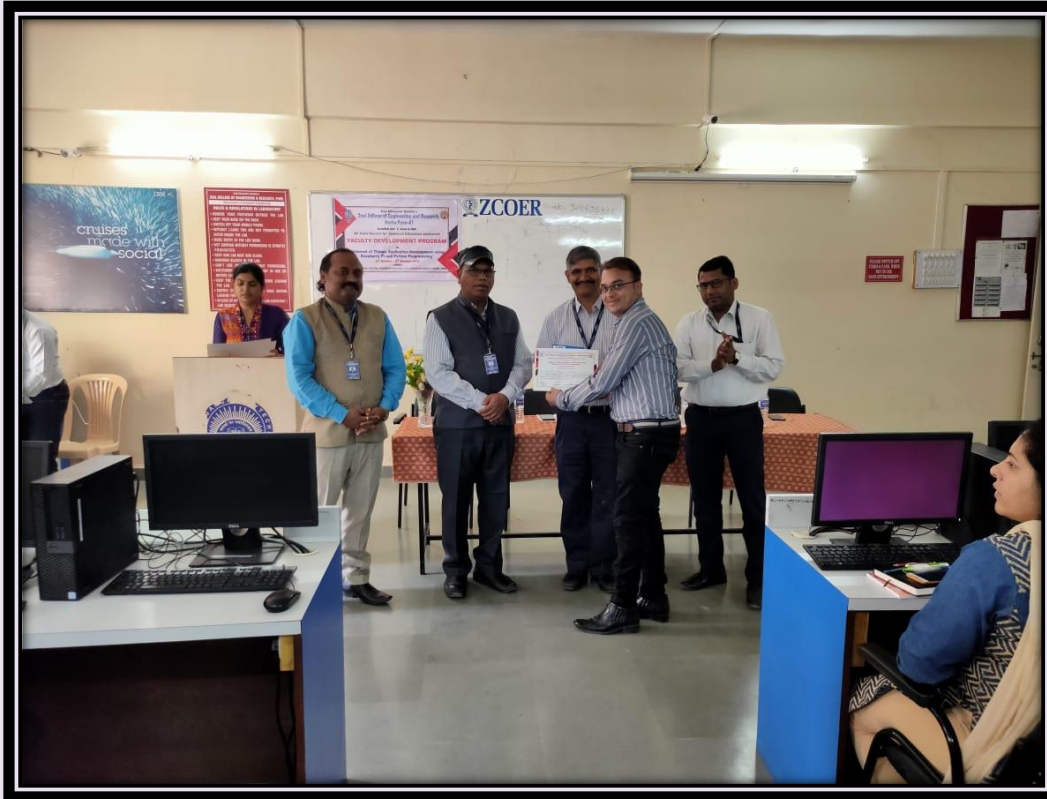
Course Co-ordinator - Dr. Suresh Shirbahadurkar gave FDP overview



Guest - Dr. Amod Markale gave a motivational speech



Certificate and book distribution to participants



Certificate and book distribution to participants



A Group photo with all participants at the end of Valedictory Function

Outcome of FDP:

This FDP brings a robust approach to bear on real challenges that can be used in all sectors of teaching. Participants will be able to

- Interact with the world and rapidly developing IoT applications using Python
- Perform sensor interface with IoT kits such as Raspberry Pi and Arduino.
- Explore various research opportunities & challenges in the areas of IoT application development and Python Programming
- Know recent work/development on key issues in the area of IoT.
- Meet the experts in the field and exchange thoughts and praces.

Around 40 participants from academia and industry were benefited and have attended this FDP. We are very thankful of notable speakers like Dr. Aditya Abhyankar, Mr. Shirang Karandikar, Mr. Sandesh Mahanure, Dr. P. N. Mahalle, Dr. Amol Admuthe, Mr. Amol Dhande, Dr. Shailaja Patil, Dr. Sonawane and Mr. Vivek Nikam who showed there imminent presence and delivered the contents in this faculty development program.

We are thankful to our Management - Founder President of Zeal Education Society's Shri. S. M. Katkar, Secretary Prof. Jayesh Katkar, Executive director Dr. Pradeep Khandve, Principal Dr. A. M. Kate provided valuable guidance to make this FDP successful. Dr. S. D. Shirbahadurkar Course Co-ordinator and Dean of Academics, Dr. A. N. Gaikwad Professor Department of E&TC, Dr. S.M.Sangve Head of Department of Computer engineering, Dr. Yogesh Gurav, Head of Information Technology, Prof. Smita Bhosale, Head of E&T department, and all teaching & non teaching staff for all the help they extended for the successfully organizing this FDP.

List of Participants

Sr.No.	Name of Candidates	Institute/Company Name
1	MRS. JYOTSNA SANDEEP DHOPE	SKNCOE, PUNE
2	DR. UDAY V. KULKARNI	SGGS, NANDED
3	MUKESH KATOLE	SKNCOE PUNE
4	SUNITA PUNJAJI DESHMUKH	NBNSOE, AMBEGAON
5	MR. KANTILAL BHAGWAN KHARAT	NBN SINHGAD SCHOOL OF ENGG., PUNE
6	DR. MAKARAND M. JADHAV	NBN, PUNE
7	MR. SANJAY BAPU THAKARE	GOVERNMENT POLYTECHNIC, NANDURBAR
8	SAGAR B RANAWARE	SKNCOE, PUNE
9	ARCHANA H DESHMUKH	SHRI TULJABHAVANI COE, TULJAPUR
10	MAHADEO KISAN NARAYANKAR	SHRI TULJABHAVANI COE, TULJAPUR
11	PRADIP SURYAWANSHI	SHRI TULJABHAVANI COE, TULJAPUR
12	CHAVAN NITIN R	SHRI TULJABHAVANI COE, TULJAPUR
13	KAVITA SUKDEV PATIL	SANDIP INSTITUTE OF TECHNOLOGY , NASHIK
14	DR. MAHESH NAVALE	SMT. KASHIBAI NAVALE COE PUNE
15	VINOD BHAURAO BHARAT	D Y PATIL SCHOOL OF ENGI ACADEMY, AMBI
16	LAXMIKANT MALPHEDWAR	D Y PATIL SCHOOL OF ENGI ACADEMY, AMBI
17	PROF . AMAN BHIMRAO KAMBLE	MAEER'S MIT CORER, BARSHI
18	DR. VINOD V KIMBAHUNE	SKNCOE, PUNE
19	DR. D. T. MANE	JSPM'S RAJARSHI SHAHU COLLEGE OF ENGINEERING, PUNE
20	DR. PRASHANT B. KUMBHARKAR	JSPM'S RAJARSHI SHAHU COLLEGE OF ENGINEERING, PUNE
21	SANTOSH BORDE	JSPM'S RAJARSHI SHAHU COLLEGE OF ENGINEERING PUNE
22	ARVIND P. MESHARAM	MVP SAMAJ'S KBT COE, NASHIK
23	VIKAS PRALHAD GAWAI	NDMVP'S KBT COE, NASHIK
24	HARSHAD LOKHANDE	NBN SINHGAD SCHOOL OF ENGINEERING, PUNE
25	RAVIKANT T SURYAWANSHI	MKSSS'S CUMMINS COE, PUNE
26	DR SANDEEP SAHEBRAO MUSALE	MKSSS'S CUMMINS COE, PUNE
27	ANURADHA YENKIKAR	RAMAIAH UNIVERSITY, BANGALORE
28	SANTOSH BALIRAM JAVHERI	JSPM RAJARSHI SHAHU COLLEGE OF ENGINEERING, PUNE
29	PRAVIN PRABHAKAR PHULE	TRIPPLE P COMPUTERS PVT LIMITED
30	CHITTARANJAN MAHAJAN	DOLPHIN LABS, PUNE
31	DR. NILESHCHANDRA K PIKLE	BRAINGRID, PUNE
32	MR MILIND ANKLESHWAR	MASS TECHNOLOGIES, PUNE
33	DR SUNIL SANGVE	ZCOER ,PUNE
34	MR KSHIRSAGAR PRAKASH D.	ZCOER ,PUNE
35	HEMBADE YUVRAJ B.	ZCOER ,PUNE
36	DR. SWAPNAJA AMOL UBALE	ZCOER ,PUNE
37	PRANALINI AMIT JOSHI	ZCOER ,PUNE
38	RAHUL BHOLE	ZCOER ,PUNE
39	PRAJAKTA AMOL MORE	ZCOER ,PUNE
40	ANUSHRI N. KULKARNI	ZCOER ,PUNE

Course Co-ordinator

Dr. S. D. Shirbahadurkar
Dean (Academics and administration), ZCOER, Pune

Co-ordinator

Dr. S.M Sangve
HOD (Computer Engineering)

Dr. Y.B.Gurav
HOD (Information Technology)

Prof.S.A.Bhosale
HOD (E&TC)

Organizing Committee

Dr.S.A. Ubale
Prof.P.A.Joshi
Prof.R.H.Bhole
Prof.P.A.Joshi
Prof.R.H.Bhole

Prof.P.D.Kshirsagar
Prof.Y.B.Hembade
Prof.S.A.Bhosale
Prof.S.J.Banarase
Prof.A.V. Yenikar

Prepared By

Prof. A. V. Yenikar

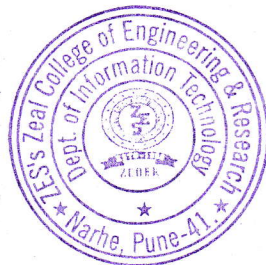
**Zeal Education Society's
Zeal College of Engineering & Research, Pune
Two weeks FDP**

on

**"Internet of Things, Application Development using
Raspberry Pi and Python Programming"**

List of Participants

S.No	Faculty Name	Department
1	ABHIJEET CHANDRAKANT KARVE	Information Technology
2	Amarnath Chadchankar	Information Technology
3	Amruta patil	Information Technology
4	Farooqui Fatima Anwar Ahmed	Information Technology
5	MINAKSHI RAJENDRA SHINDE	Information Technology
6	Nihal Shikalgar	Information Technology
7	Omkar Sunil Joshi	Information Technology
8	Pragati Chowhan	Information Technology
9	Preeti A Chadchankar	Information Technology
10	Rahul Bhole	Information Technology
11	shital dnyanoba bachpalle	Information Technology
12	sneha vanjari	Information Technology
13	Aniruddha Prakash Kshirsagar	Computer Engineering
14	Aparna Vinayak Mote	Computer Engineering
15	Atul B kathole	Computer Engineering
16	Kailas Tambe	Computer Engineering
17	Ms. Riddhi R. Mirajkar	Computer Engineering
18	PRAVIN S PATIL	Computer Engineering
19	Pushpmala S. Nawghare	Computer Engineering



[Signature]
HOD
Dept. of Information Tech. Engg
ZES's Zeal College
of Engineering & Research
Narhe, Pune - 411 004



Date : 24/01/2020

Report

on

Faculty Development Program

The RPG Foundation is a Public Charitable Trust registered under the Bombay Public Trust Act, 1950 to function as a centralized body for the implementation of CSR initiatives of the various group companies of RPG Enterprises. The Foundation adopts and directly manages CSR activities at the group level. Another objective of the Foundation is to oversee and create synergies across group companies to encourage exchange of ideas, adoption of best practices and learning.

RPG Foundation implements initiatives in domains of eye care, women empowerment, education and local community development. RPG Foundation also leads and executes the group companies' social outreach programs. RPG Foundation organizes **Faculty Development Program** as a part of ESD program for new batch (2020-21). Zeal Education Society signed MoU with RGP Foundation on 8th August 2019.

Two days FDP program on "Artificial intelligence and Machine Learning" was organized on 9th and 10th December 2019 at K. J. College of Engineering, Pune. Prof. Viresh M. Chapte and Prof. Shital Bachpalle of Information Technology department attended this FDP. Both got benefitted by excellent knowledge and experience in Faculty Development Program. Importance and deep introduction of Artificial intelligence and Machine Learning was explained during two days FDP program. faculties from various cities and colleges participated in this event.



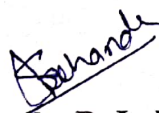
**ZEAL EDUCATION SOCIETY'S
ZEAL COLLEGE OF ENGINEERING & RESEARCH
DEPARTMENT OF INFORMATION TECHNOLOGY**


Sr.no. 39, Narhe, Pune-41. phone no. 020-67206127

Website:www.zcoer.in



FDP on AI / ML at TRINITY College of Engg.


Prof. Sarika D. Lokhande
Zeansar Co-ordinator


Dr. Yogesh B. Gurav
HOD IT



ZEAL EDUCATION SOCIETY'S
ZEAL COLLEGE OF ENGINEERING & RESEARCH
 NARHE, PUNE - 411041.

ICT ACADEMY
 Innovate... Collaborate... Educate...



**Faculty
 Development
 Program**
 on



"Introduction to R Programming"

in association with
ICT Academy, Pune

Organized by

Department of Information Technology & Computer Engineering
 (09/12/2019 to 11/12/2019)

Prerequisite

- Genuine interest in statistical programming
- Prior knowledge of any programming
- Basic understanding of statistics and data structure

Course Outcome

- Understand programming fundamentals of R language
- Understand various data import methods in R
- Understand the Data Manipulation in R
- Create visualizations and Plots using R
- Understand and implement linear regression
- Perform text analysis
- Understand machine learning concepts

Course Objective

- To learn adequate background, conceptual clarity and knowledge of R-Programming.
- To study the fundamental concepts related to R-Programming.
- To understand the practical adaptability of R-programming in real life.

Registration link:
<https://bit.ly/34rSio5>

Important dates:

Last date of registration: 31st november 2019

Chief Patrons

Shri. S.M. Katkar
 Founder Director-ZES, Pune

Shri. J.S. Katkar
 Secretary-ZES, Pune

Patrons

Dr. A.M.Kate
 Principal, ZCOER, Pune

Prof. Pradip Khandave
 Executive Director-ZES, Pune

Convener

Dr. Y.B. Gurav
 HOD (Information Technology)

Dr. S.M. Sangve
 HOD (Computer Engineering)

Organizing Committee

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 9975474722

Prof. U.R. Apara
 9881911755

Prof. S.S. Shahane
 9423331007

Prof. D.A. Lokare
 9763722185

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ZEAL EDUCATION SOCIETY'S
ZEAL COLLEGE OF ENGINEERING & RESEARCH
Sr.no. 39, Narhe, Pune-41. phone no. 020-67206127
DEPARTMENT OF INFORMATION TECHNOLOGY

Date: 14/12/2019

Faculty Development Program Report
On
“Introduction to R-Programming”

Faculty Development Program on: Introduction to R-Programming
FDP Dates: 09 December 2019 to 11 December 2019

Resource person: Mr. Mathivanan Balakrishnan

Venue: 1. Inauguration at CSMA

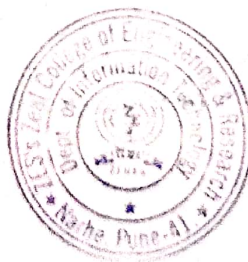
2. Hands-on session at IFC lab and PL Lab, ZCOER, Narhe, Pune.

The Faculty Development Program's inauguration ceremony was done in graceful presence of Honorable Dean (Admin and Academic) Dr. S.D. Shirbahadurkar, State Head of ICT academy Mr. Pravin Jain, Resource person Mathivanan Balakrishnan, respected head of IT department Dr. Yogesh B. Gurav sir and respected head of Computer engineering department Dr. Sunil V. Sangave sir.

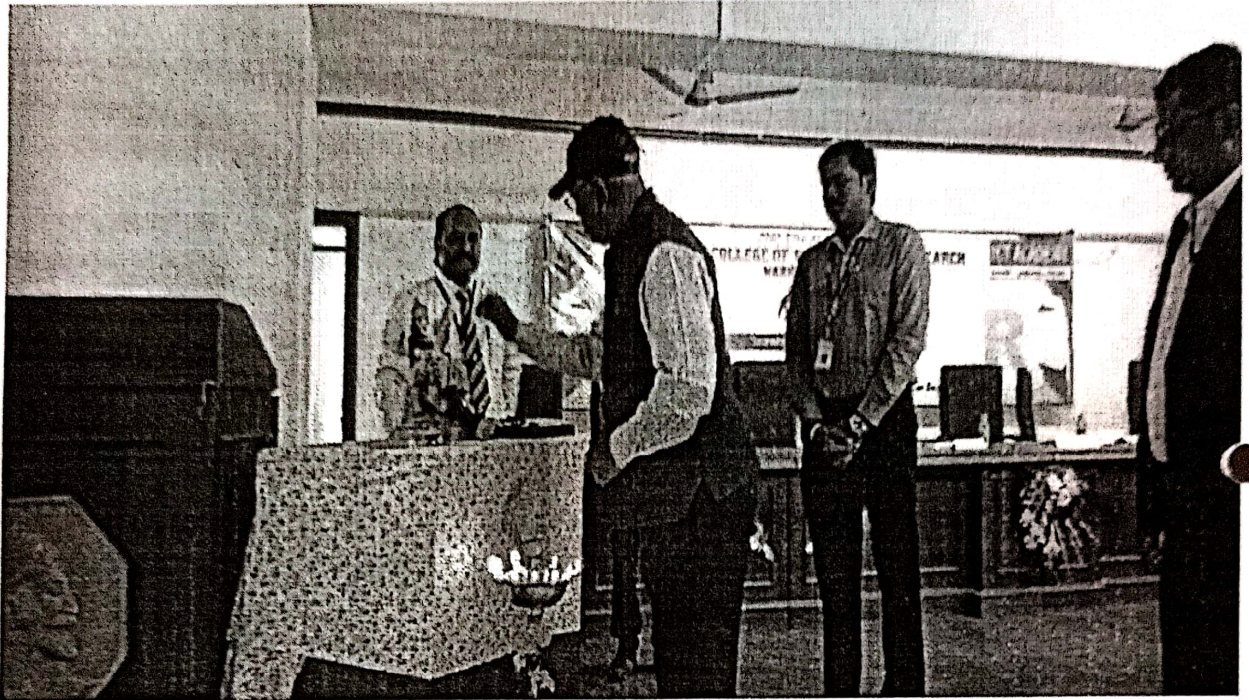
Firstly the Goddess SaraswatiDevi puja is done and then the felicitation ceremony. Dr. S.D. Shirbahadurkar sir felicitated State Head of ICT academy Mr. Pravin Jain, Dr. Sunil V. Sangave sir felicitated Resource person Mathivanan Balakrishnan and Dr. Yogesh B. Gurav sir felicitated Dr. S.D. Shirbahadurkar.

In inauguration ceremony Honorable Dean Dr. S.D. Shirbahadurkar sir briefed about the zeal college of engineering and research, State Head of ICT academy Mr. Pravin Jain sir addressed about the FDP and ICT academy, respected head of IT department Dr. Yogesh B. Gurav sir addressed about the R programming importance and relevance with the organized FDP. He also explained the FDP objectives and outcomes.

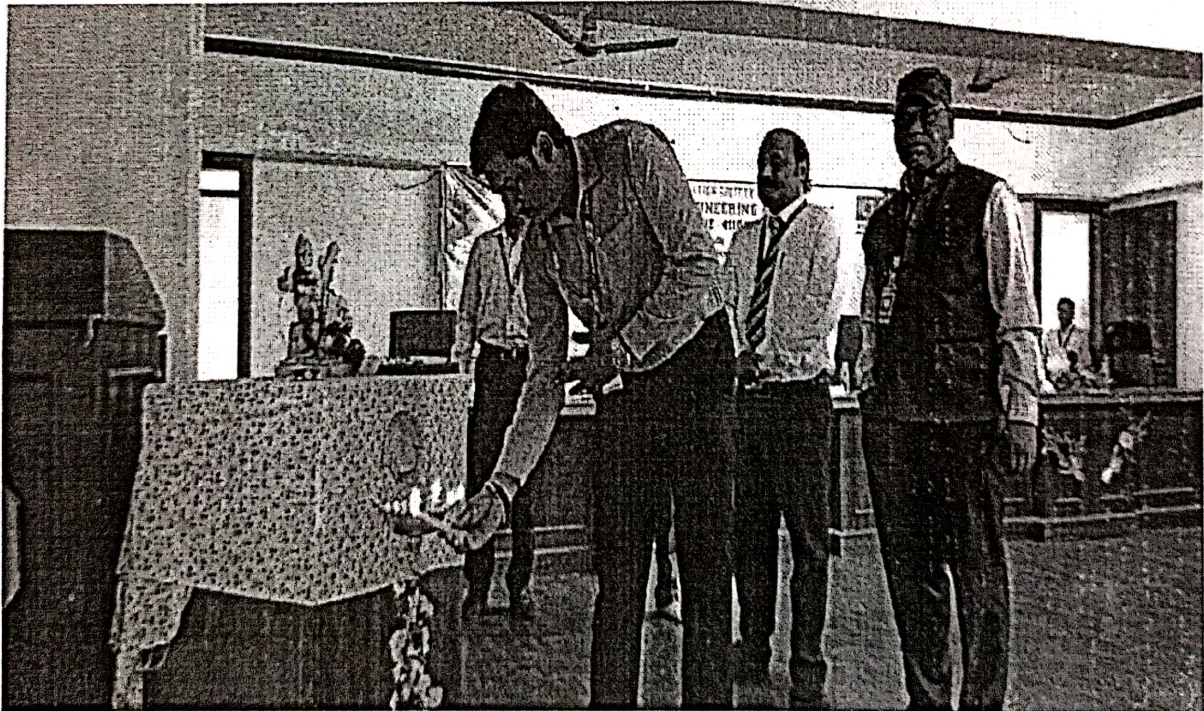
Total 38 participants' admitted in faculty development program and successfully attended 3 days' faculty development program.



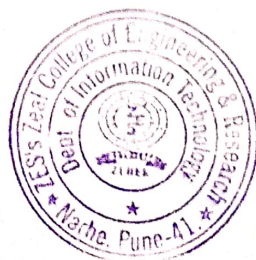
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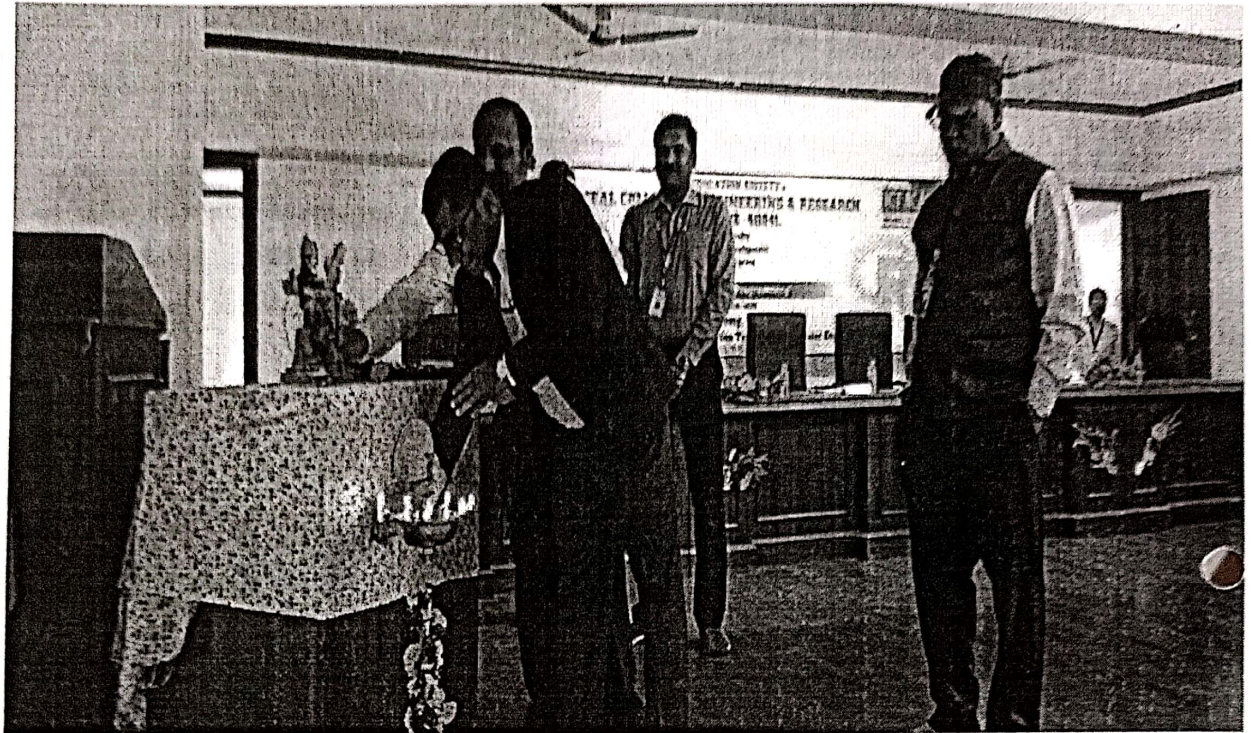


Godess Saraswati Poojan by Dr. S.D. Shirbahadurkar

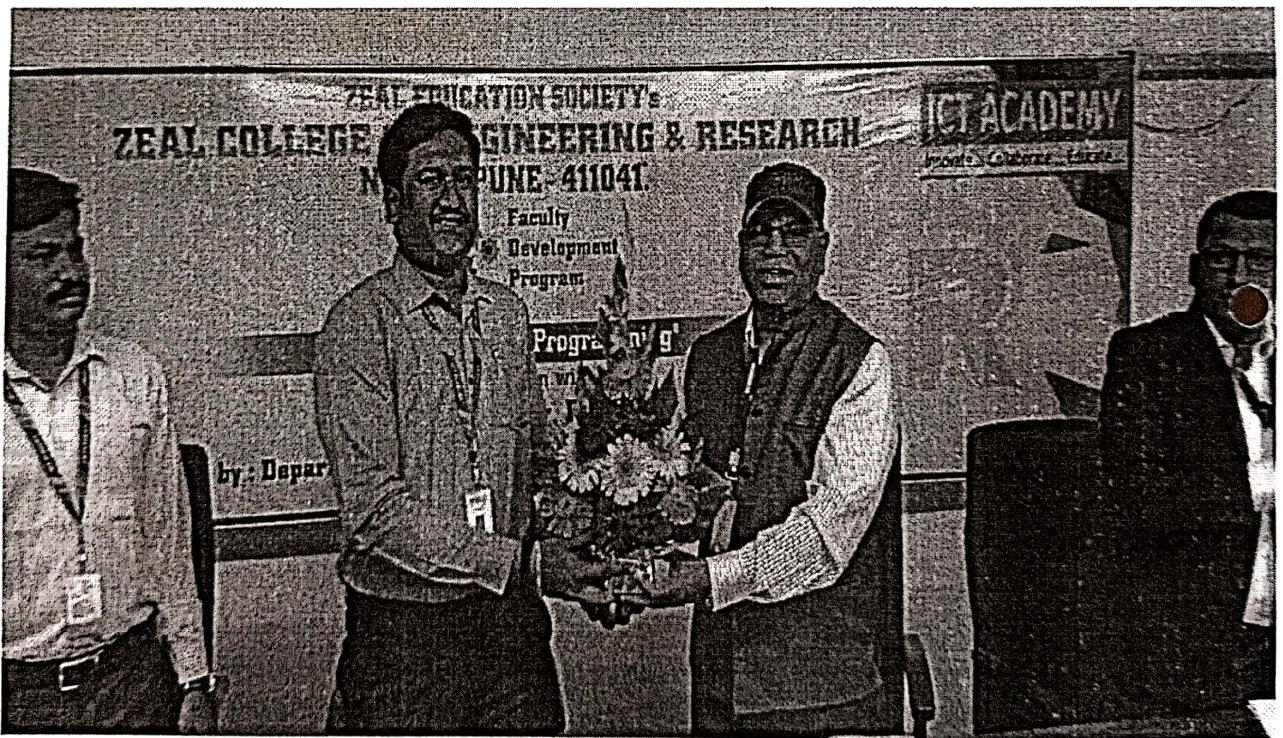


Godess Saraswati Poojan by State Head of ICT academy Mr. Pravin Jain

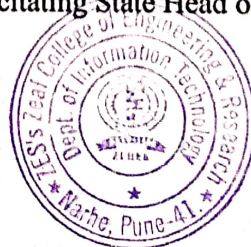


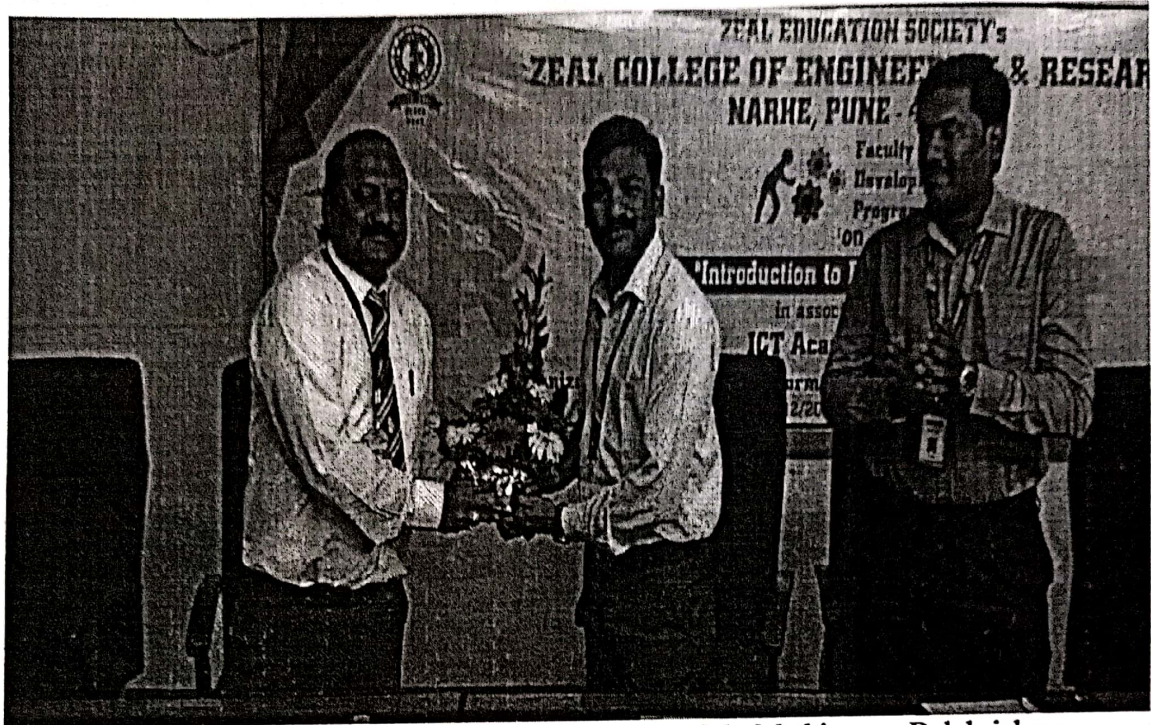


Godess Saraswati Poojan by Dr. Yogesh B. Gurav



Dr. S.D. Shirbahadurkar Felicitating State Head of ICT academy Mr. Pravin Jain



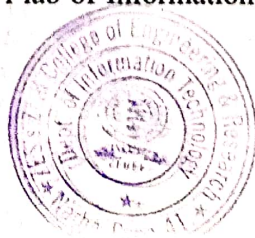


Dr. Sunil V. Sangave Felicitating Resource person Mr. Mathivanan Balakrishnan



Dr. Yogesh Gurav Felicitating Honorable Dean Dr. S.D. Shirbahadurkar

The hand on session on the “Introduction to R-Programming” Faculty Development Program is conducted in IFC lab as well as in PI lab of Information Technology department in presence of



28-30 participants. The resource person Mr. Mathivanan Balakrishnan firstly briefed out about the R programming's history and its importance for the different subjects then he focuses on following points.

Module 1: Introduction to R

Module 2: Simple manipulation numbers, vector objects modes and attributes

Module 3: Ordered and unordered factors

Module 4: Arrays and matrices & Lists and data frames

Module 5: Reading data from files and database

Module 6: Grouping, loops and conditional execution

Module 7: Writing your own functions

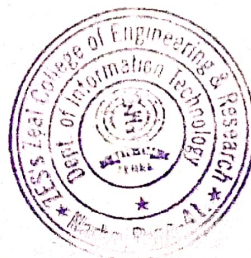
Module 8: Statistical models in R

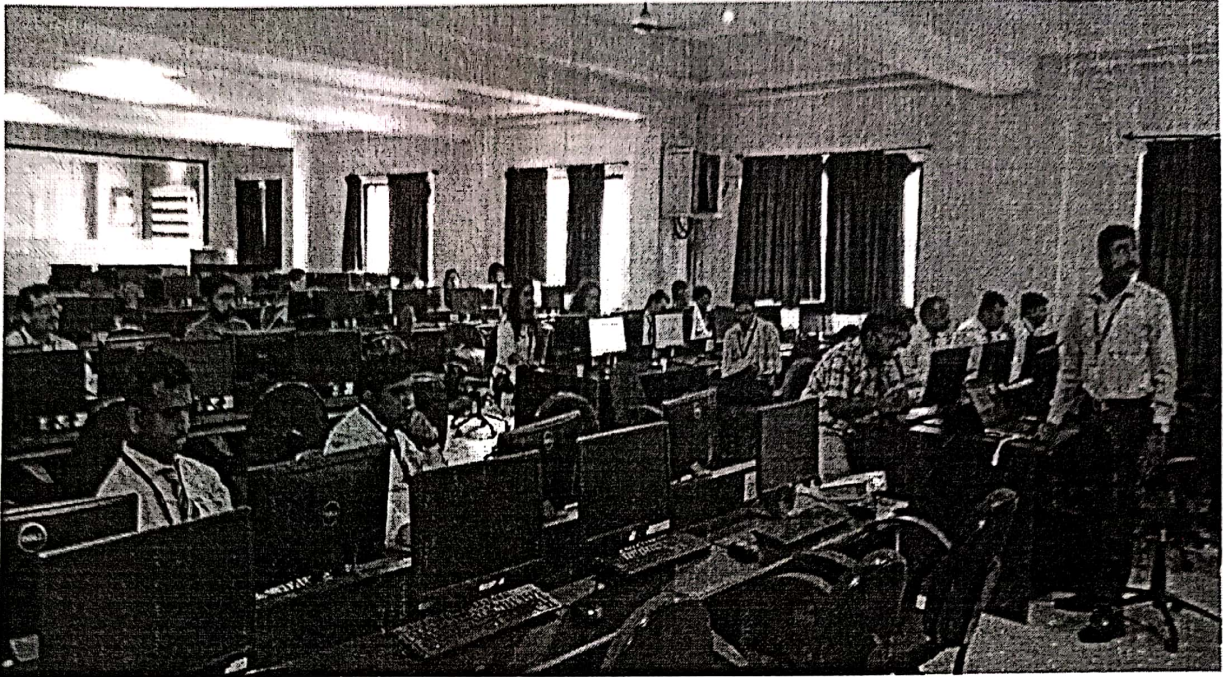
Module 9: Graphical procedures & packages

Photographs:



Hands on session in IFC lab- day first



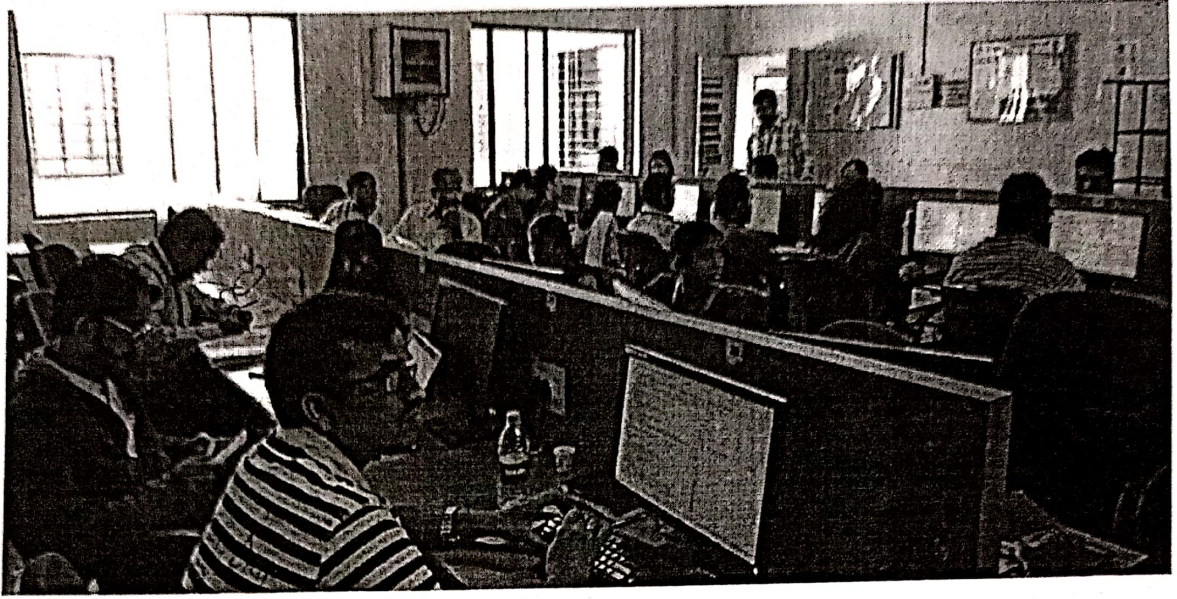


Hands on session in IFC lab- day first



Hands on session in IFC lab- day second

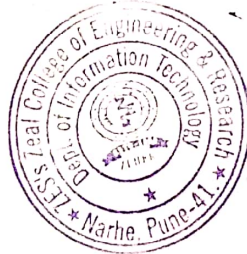


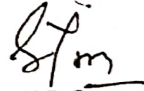


Hands on session in IFC lab- day third

Faculty Development Program on subject "Introduction to R-Programming" is concluded on 11 December 2019 with valedictory speech by Prof. Ulka R. Apare.


Prof. U.R. Apare
FDP Coordinator




Dr. Y.B. Gurav
Head of Department

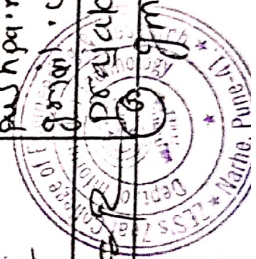


Zeal Education Society's
Zeal College of Engineering & Research
Department of Information Technology & Computer Engineering

FACULTY DEVELOPMENT PROGRAM
ON
"INTRODUCTION TO R PROGRAMING"
(9th December - 11th December 2019)

Participants Attendance List Date: 10/12/2019

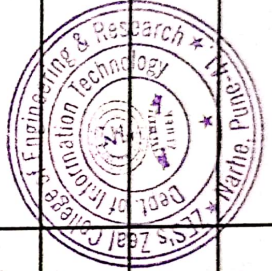
Sr No	Name of the Participant	Organization	E-mail ID	Contact Number	Signature	
					Session 1	Session 2
1.	Ms. Riddhi R. Mirajkar	ZCOER, Pune	mirajkar.riddhi@gmail.com	8007807112		
2.	Mr. Gopal R. Chandengale	ZCOER, Pune	gopal.chandengale@gmail.com	7709649747		
3.	Ms. Rohini S. Naik	ZCOER, Pune	rohini.kokale@gmail.com	9960470660		
4	Mr. Aniruddha P. Kshirsagar	ZCOER, Pune	aniruddha.kshirsagar@zealeducation.com	8180955403 8928373304		
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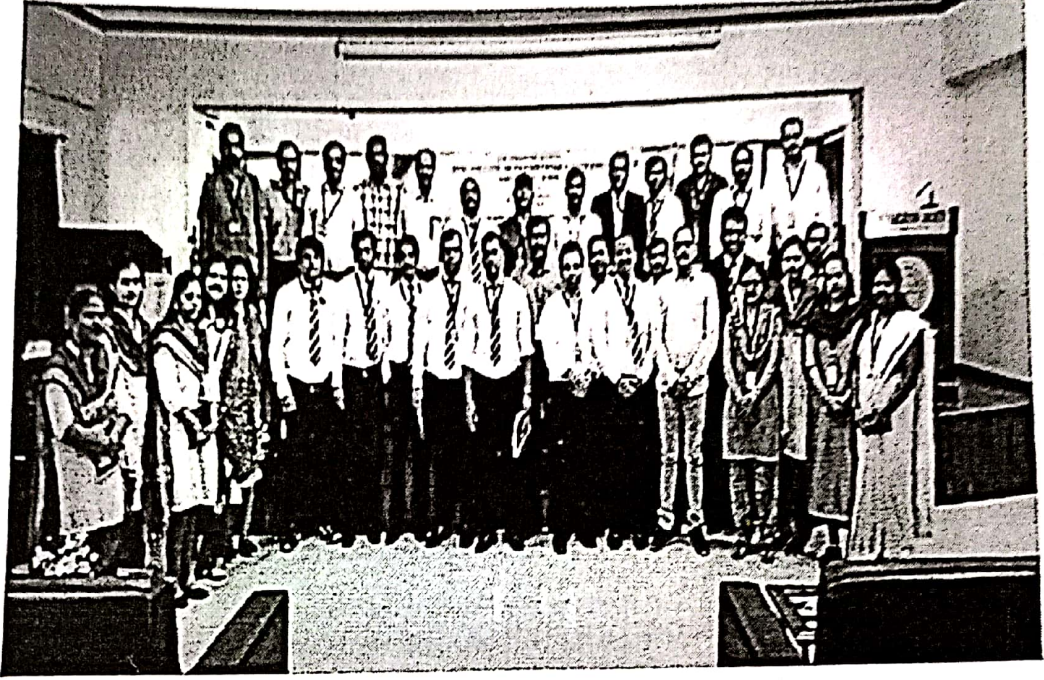
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झील महाविद्यालयामध्ये शिक्षक विकास शिविराचे आयोजन



पुणे - माहिती तंत्रज्ञान व संगणक विभागातर्फे आर प्रोग्रामिंग या विषयावर तीन दिवसीय शिक्षक विकास शिविराचे आयोजन झील महाविद्यालय यामध्ये नुकतेच करण्यात आले.

शिविराच्या उद्घाटन प्रसंगी आ. शैक्षणिक विभाग प्रमुख डॉ. सुरेश शिरबहादूरकर, डॉ. योगेश गुरव, माहिती तंत्रज्ञान विभाग प्रमुख डॉ. सुनील सांगवे, संगणक विभागप्रमुख माधीवान बालकृष्णन, तांत्रिक प्रशिक्षक प्रशिक्षण व संशोधन विभाग आयसीटी प्रवीण जैन, राज्य प्रमुख महाराष्ट्र आयसीटी उपस्थित होते.

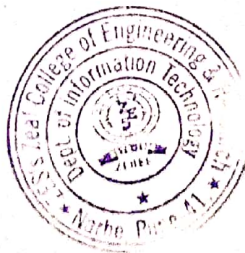
सदर शिविर हे आयसीटी संस्थेने प्रायोजित केलेले आहे. विविध इंजिनिअरिंग कॉलेजमधून चाळीस शिक्षकांनी यामध्ये सहभाग नोंदविला होता. कंपन्यांमध्ये वेगवेगळ्या तंत्रज्ञानानंवर काम चालू असताना त्यांना कौशल्यपूर्ण उमेदवार मिळावे व अशा उमेदवारांना तयार करण्यासाठी शिक्षकांनी कौशल्य आत्मसात करणे या उद्देशाने हे शिविर आयोजित करण्यात आले होते.

संस्थेचे सचिव प्रा. ज्योतीकाटकर, कार्यकारी संचालक प्रा. प्रदीप खांदवे, महाविद्यालयाचे प्राचार्य डॉ. अजित काटे यांनी शिविर यशस्वी आयोजनासाठी मार्गदर्शन केले.

शिविराचा यशस्वी आयोजनासाठी प्रा. उत्का आपरे, प्रा. अमर चडचणकर, प्रा. संकेत सहाणे यांनी परिश्रम घेतले. सूत्रसंचालन प्रा. रोहिणी कोकरे यांनी केले. आभारप्रदर्शन प्रा. स्मिता बाचल यांनी केले.

Ads

 | **ocean**



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Spoken Tutorial

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This is to certify that **Rahul Bhole** has successfully completed **Java** test organized at **Zeal College of Engineering and Research, Pune** by **Dr. Sunil M. Sangve** with course material provided by the Spoken Tutorial Project, IIT Bombay.

Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training. **Prof. Aniruddha P. Kshirsagar** at **Zeal College of Engineering and Research, Pune** invigilated this examination. This training is offered by the **Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India.**

April 13th 2020

A handwritten signature in black ink, appearing to read 'Kannan Moudgalya'.

Prof. Kannan M Moudgalya
IIT Bombay

