MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY

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ATAL Sponsored 1 week Online FDP on Internet of Things-A Practical Approach

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REPORT

ATAL sponsored 1 week online FDP on the topic "Internet of Things-A Practical Approach" was conducted from 6-10 December, 2021. 194 participants from 21 states have registered for this FDP. The speakers for the FDP were as below:

Sr No	Expert Name	Designation	Institute	Phone Number
1	Dr. Md. Iftekhar Hussain	Associate Professor	North Eastern Hill University, Shillong, Meggalaya	9436337792
2	Prof. Kamaljit Singh Saini	Professor	Chandigarh University, Chandigarh	9779249188
3	Prof. G. K. Srinivas	Professor	NITTTR, Chandigarh	9731696526
4	Dr. Nikhil Marriwala	Assistant Professor	Kurukshetra University, Haryana	9416668482
5	Dr. Debashis De	Professor	Maulana Abul Kalam Azad University of Technology, West Bengal	9830363215
6	Prof. Amit Prakash	Professor	GGSIP University, New Delhi	9717963311
7	Dr. Lalit Kumar Singh	Scientist	NPCIL-BARC, Govt. of India, Mumbai, Maharashtra	9757237734
8	Dr. Anju Bala	Associate Professor	Thapar University, Patiala, Punjab	9417205339
9	Sister Monica	Brahma Kumari	New Delhi	9810012148
10	Mr. Umang Kejriwal	Managing Director	Finland Labs, Gurugram, UP	8470968612

The schedule of the FDP is as below:

Day – to – Day Program (ONLINE MODE)
(Program Inaugural on 06/12/2021 at 9.00 AM)

To Register: https://www.aicte-india.org/atal

	09:30 AM – 11:00AM		11:30 AM – 1:00 PM		2:00 PM – 3.30 PM	
MONDAY 06/12/21	**Session 1** Introduction to IoT *Speaker: Dr. Md. Iftekhar Hussain, Associate Professor, North-Eastern Hill University, Shillong, Meghalaya*	11:00 – 11:30 AM	**Session 2** IoT Sensors, Actuators and Protocols *Speaker: Prof. Kamaljit Singh Saini, Chandigarh University, Punjab*	1:00 – 1:30 PM	**Session 3** Research Directions / Challenges in IoT *Speaker: Prof. G K Srinivas, NITTTR, Chandigarh, Punjab*	3:30 – 4:00 PM
TUESDAY 07/12/21	**Session 4** Introduction to IoT based Simulation Tools *Speaker: Prof. G K Srinivas, NITTTR, Chandigarh, Punjab*		**Session 5** LabVIEW Fundamentals and IoT enabled Artificially Intelligent Fuzzy based Greenhouse Controller *Speaker: Dr. Nikhil Marriwala, HOD, ECE, UIET, Kurukshetra University, Haryana*		**Session 6** IoT Design & Methodology: A Hand-on Approach with Arduino and Sensors *Speaker: Prof. Kamaljit Singh Saini, Chandigarh University, Punjab*	
WEDNESDAY 08/12/21	**Session 7** Cloud / Fog / Edge Computing *Speaker: Dr. Debashis De, Professor and Director, Deptt. of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal*	Q/A Session	**Session 8** Application of IoT in Agriculture Science *Speaker: Prof. Amit Prakash, USICT, GGSIP University, New Delhi*	Q/A Session	**Session 9** Reliability Analysis of IoT communication protocol for Safety Critical Systems *Speaker: Dr. Lalit Kumar Singh, Scientist, NPCIL-BARC, Deptt. Of Atomic Energy, Govt. of India, Mumbai, Maharashtra*	Q/A Session
THURSDAY 09/12/21	**Session 10** Cloud-Based Real-Time IoT Design using LabVIEW *Speaker: Dr. Nikhil Marriwala, HOD, ECE, UIET, Kurukshetra University, Haryana*		**Session 11** Data Analytics on IoT Data: Introducing Apache Hadoop *Speaker: Dr. Anju Bala, Associate Professor, Thapar University, Patiala, Punjab*		**Session 12** Digital Wellness *Speaker: Sister Monica, Brahma Kumari, New Delhi*	
FRIDAY 10/12/21	**Session 13** IoT Design & Methodology: A Hand-on Approach with Raspberry Pi and Sensors *Speaker: Mr. Umang Kejriwal, Finland Labs, Gurugram, Haryana*		**Session 14** Demo of ThingSpeak Cloud & its Integration with ESP8266 *Speaker: Mr. Umang Kejriwal, Finland Labs, Gurugram, U.P.*		**Session 15** Assessment, Feedback and Valedictory Function	

Total number of participants Registered: 194

The list of participants is:

Sr. No	Name	Institute Name	Designation	District	State
1	Mrs. Sonika Malik	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
2	Mrs. Jyoti Khurana	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
3	Dr. KOYEL DATTA GUPTA	Maharaja Surajmal Institute of Technology	Associate Professor	Delhi	DELHI
4	Mr. navdeep bohra	Maharaja surajmal institute of technology, new delhi	Assistant Professor	Bhiwani	HARYANA
5	Miss Nikita Malik	Maharaja Surajmal Institute	Assistant Professor	Delhi	DELHI
6	Mr. Surender Singh	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
7	Dr. GEETIKA DHAND	Maharaja Surajmal Institute of technology	Associate Professor	Delhi	DELHI
8	Mrs. Ashish kumari	MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY, NEW DELHI	Assistant Professor	Gurgaon	HARYANA
9	Dr. Prabhjot Kaur Sidhu	Maharaja Surajmal Institute of Technology	Associate Professor	Delhi	DELHI
10	Mr. Vikrant Shokeen	MSIT Delhi	Assistant Professor	Delhi	DELHI
11	Dr. ANUPAMA KAUSHIK	Maharaja Surajmal Institute of Technology	Associate Professor	Delhi	DELHI
12	Dr. Kavita Sheoran	Maharaja Surajmal institute of Technology	Associate Professor	Delhi	DELHI

13	Mr. AKSHAY SINGH	Maharaja Surajmal Institute Of Technology	Assistant Professor	Delhi	DELHI
14	Mrs. SHALLU HASSIJA	PT. JLN GOVERNMENT COLLEGE	Professor	Gurgaon	HARYANA
15	Mrs. Jyoti	DPGITM, Gurugram	Assistant Professor	Delhi	DELHI
16	Dr. Rinky	maharaja Surajmal Institute of Technology	Associate Professor	Delhi	DELHI
17	Mrs. Suman lata	Maharaja Suraj Mal institute of technology	Assistant Professor	Rohtak	HARYANA
18	Miss Preeti Rathee	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
19	Dr. Naveen Dahiya	Maharaja Surajmal Institute of Technology	Associate Professor	Delhi	DELHI
20	Dr. Menal Dahiya	Maharaja Surajmal Institute	Associate Professor	Delhi	DELHI
21	Miss Jyotsna Rathee	MSIT	Assistant Professor	Jhajjar	HARYANA
22	Dr. NISHTHA JATANA	Maharaja Surajmal Institute of Techology	Assistant Professor	Delhi	DELHI
23	Dr. Vasantha lakshmi M	BMS COLLEGE OF ENGINEERING	Assistant Professor	Bangalore	KARNATAKA
24	Mr. PRASEED KUMAR	FR.C.RODRIGUES INSTITUTE OF TECHNOLOGY	Associate Professor	Mumbai Suburban	MAHARASHTRA
25	Dr. Suman Mann	Maharaja Surajmal Institute of Technology	Associate Professor	Delhi	DELHI
26	Mrs. Mamta Rani	Maharaja Surajmal Institute of Technoligy	Assistant Professor	Delhi	DELHI
27	Dr. Azhar Equbal	Jamia Millia Islamia	Assistant Professor	Delhi	DELHI
28	Mrs. D Saritha	narayana engineering college	Assistant Professor	Sri Potti Sriramulu Nellore	ANDHRA PRADESH
29	Mrs. Ananya Banerjee	Narula Institute of Technology	Assistant Professor	North Twenty Four Parganas	WEST BENGAL
30	Miss Rajyalakshmi Jaiswal	L D College of Engineering, Ahmedabad	Assistant Professor	Ahmadabad	GUJARAT
31	Dr. Jullie	Kings Engineering College	Professor	Chennai	TAMIL NADU
32	Mrs. VIMAL GAUR	MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY	Assistant Professor	Delhi	DELHI
33	Mrs. Shaily Malik	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
34	Mrs. Jyoti Sahadev Shinde	SVERIs COE,Pandharpur	Assistant Professor	Solapur	MAHARASHTRA
35	Mrs. Rajani Jampana	St. Andrews high school	Teacher	Hyderabad	TELANGANA
36	Dr. Varsha	CT Institute of engineering, management and Technology	Associate Professor	Jalandhar	PUNJAB
37	Mrs. Rama Rajan Jhangiani	St. Marks Sr. Sec. Pub. School Meera Bagh	Computer Teacher	Delhi	DELHI

38	Mrs. Shefali Bhatnagar	St. Mark's Sr. Sec Public School, Meera Bagh, New Delhi	Computer Teacher	Delhi	DELHI
39	Dr. Arun.C.A	VEL TECH RANGARAJAN DR.SAGUNTHALA R&D INSTITUTE OF SCIENCE AND TECHNOLOGY	Associate Professor	Namakkal	TAMIL NADU
40	Miss Monika Chhikara	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
41	Dr. Meena Rao	Maharaja Surajmal Institute of Technology	Associate Professor	Delhi	DELHI
42	Mr. SITENDER	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
43	Dr. SANGEETA	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
44	Mrs. Poonam Sharma	Shri Atmanand Jain Institute of Management &Technology,Ambala City	Assistant Professor	Ambala	HARYANA
45	Mr. DINESH PRATAP SINGH	Oriental Institute of Science and Technology ,Bhopal	Assistant Professor	Bhopal	MADHYA PRADESH
46	Dr. Dr. Mahadev Kalyanrao Patil	Bharati Vidyapeeth's Abhijit Kadam Institute of Management and Social Sciences	Assistant Professor	Solapur	MAHARASHTRA
47	Mrs. Rakhi Kamra	Maharaja Surajmal Instiute of Technology	Assistant Professor	Delhi	DELHI
48	Dr. Dr Savita Ahlawat	Maharaja Surajmal Institute of Technology	Associate Professor	Delhi	DELHI
49	Mrs. Poonam	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
50	Mr. M Krishna Kishore	Vasavi college f engineering	Assistant Professor	Hyderabad	TELANGANA
51	Miss Meena	Maharaja Surajmal Institute of Technology Delhi	Assistant Professor	Delhi	DELHI
52	Miss Komal Subhash Jadhav	VPKBIET, Baramati	Assistant Professor	Pune	MAHARASHTRA
53	Dr. Tripti Sharma	MSIT	Associate Professor	Delhi	DELHI
54	Miss vandna tomar	aimt greater noida	Assistant Professor	Gurgaon	HARYANA
55	Dr. DILEEEP KUMAR P	Sri Venkateswara Engineering College	Associate Professor	Chittoor	ANDHRA PRADESH
56	Mr. karn umeshkumar dave	IGNOU	student	Anand	GUJARAT
57	Mrs. Surinder Kaur	Bharati Vidyapeeth's College of Engineering	Assistant Professor	Delhi	DELHI
58	Dr. GANESH KUMAR C	Amrita Vishwa Vidyapeetham, Chennai Campus	Assistant Professor (Senior Grade)	Tirunelveli	TAMIL NADU
59	Mrs. Swati Jain	Vivekananda institute of professional studies	Assistant Professor	Ghaziabad	UTTAR PRADESH
60	Mr. PIYUSH OJHA	KIET Group of Institutions	Assistant Professor	Ghaziabad	UTTAR PRADESH
61	Miss Pallavi Dattatray Jawalkar	VPKBIET,Baramati	Assistant Professor	Pune	MAHARASHTRA

62	Dr. Deepesh Sharma	Deenbandhu Chhotu Ram University of Science and Technology, Murthal, Sonepat, Haryana	Assistant Professor	Sonipat	HARYANA
63	Mrs. Sakthi Abirami Balakrishnan	Amrita School of Engineering, Chennai	Faculty associate	Theni	TAMIL NADU
64	Mrs. RAJNI CHOUDHARY	Government Engineering College Bharatpur	Assistant Professor	Bharatpur	RAJASTHAN
65	Dr. Shaifali M.Arora	Maharaja Surajmal Institute of Technology	Associate Professor	Delhi	DELHI
66	Mr. NIRAV NATWARLAL DATTANI	Dr. V. R. Godhaniya IT College	Assistant Professor	Porbandar	GUJARAT
67	Dr. C. RAJU	Sri Venkateswara Engineering College	Associate Professor	Chittoor	ANDHRA PRADESH
68	Mr. Manikandan Sundaram	Karapgam College of Engineering	Assistant Professor	Coimbatore	TAMIL NADU
69	Miss SWATI SHARMA	SRM IST	Assistant Professor	Delhi	DELHI
70	Mrs. Fatima Alamshaha Tamboli	Sarhad College of Arts, Commerce and Science, Katraj, Pune.	Assistant Professor	Satara	MAHARASHTRA
71	Mr Anuj Sharma	Gurgaon	Software engineer	Delhi	DELHI
72	Dr. Anoop Kumar	banasthali vidyapith	Assistant Professor	Tonk	RAJASTHAN
73	Mr. Satish Gulabrao Kamble	Pune Vidyarthi Ghriha's College of Engineering and Technology, Parvati, Pune-09	Assistant Professor	Pune	MAHARASHTRA
74	Mr. AMANDEEP SANDHU	TRINITY INSTITUTE OF MANAGEMENT AND TECHNOLOGY	Assistant Professor	Jalandhar	PUNJAB
75	Mrs. Vrushali Bhagwat	Prof. Ram Meghe College of Engineering and Management, Badnera, Amravati	Research Scholar	Amravati	MAHARASHTRA
76	Dr. Jeetu sharma	Mody University of Science and Technology	Assistant Professor	Sikar	RAJASTHAN
77	Dr. SENTHIKUMAR G	PANIMALAR ENGINEERING COLLEGE	Associate Professor	Chennai	TAMIL NADU
78	Miss Jaishree Murugesan	SRI KRISHNA COLLEGE OF TECHNOLOGY	Assistant Professor	Coimbatore	TAMIL NADU
79	Mr. Mahendra Babu	Karpagam Academy of Higher Education	Assistant Professor	Coimbatore	TAMIL NADU
80	Mr. Zatin Gupta	KIET GROUP OF INSTITUTIONS, Delhi -NCR, Ghaziabad	Assistant Professor	Ghaziabad	UTTAR PRADESH
81	Mr Deepak Gupta	Pusa Institute of Technology	Assistant Professor	Delhi	DELHI
82	Dr. Surjeet	Bharati Vidyapeth's College of Engineering, New Delhi	Associate Professor	Rohtak	HARYANA
83	Mrs. Anshul Pareek	MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY	Assistant Professor	Gurgaon	HARYANA
84	Mr. Suraj Pal Chauhan	Maharaja Surajmal Institute	Assistant Professor	Delhi	DELHI
85	Mr Ranjeet Bhagat	Gurgaon	Senior Executive	Delhi	DELHI
86	Dr. Nazneeen Banu	Govt. Women's First Grade College, Jewargi Colony, Gulbarga	Assistant Professor	Gulbarga	KARNATAKA
87	Mr. Girish Talmale	G H Raisoni College of Engineering,Nagpur	Assistant Professor	Nagpur	MAHARASHTRA

88	Dr. KUMAR GAURAV	Maharaja Surajmal Institute	Assistant Professor	Delhi	DELHI
89	Dr. Monika Singh	Maharaja surajmal institute	Assistant Professor	Delhi	DELHI
90	Miss Aanchal Dabas	Maharaja Surajmal Institute	Assistant Professor	Delhi	DELHI
91	Dr. Manju Dhillon	Maharaja Surajmal Institute	Assistant Professor	Delhi	DELHI
92	Dr. ANITA SHARMA	Maharaja Surajmal Institute	Associate Professor	Ghaziabad	UTTAR PRADESH
93	Dr. Navneet Kaur	Chandigarh University, Gharuan	Professor	Sahibzada Ajit Singh Nagar	PUNJAB
94	Mr. PARVEEN KUMAR	MSIT	Assistant Professor	Delhi	DELHI
95	Miss Gungewale Savita Mohan	Shree Siddheshwar Women's College of Engineering, Solapur	Assistant Professor	Solapur	MAHARASHTRA
96	Mrs. Kanika kundu	Maharaja Surajmal Institute	Assistant Professor	Delhi	DELHI
97	Dr. Bharti Sharma	maharaja Surajmal institute of technology	Assistant Professor	Delhi	DELHI
98	Miss Sonica Upadhyay	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
99	Mrs. Saba Khanum	MSIT	Assistant Professor	Delhi	DELHI
100	Miss DEEPIKA	Deenbandu Chottu Ram University of Science and Technology	Research scholar	Sonipat	HARYANA
101	Mr. Sachit Rathee	Maharaja surajmal institute of technology	Assistant Professor	Jhajjar	HARYANA
102	Miss PRIYANKA	MAHARAJA SURAJMAL INSTITUTE, NEW DELHI	Assistant Professor	Chandigarh	CHANDIGARH
103	Mr. Khushal Singh	GGSIPU Delhi	Research Scholar	Delhi	DELHI
104	Mrs. Shimpy Goyal	Inderprastha Engineering College(affliated to Dr. A.P.J. Abdul Kalam Technical University)	Assistant Professor	Delhi	DELHI
105	Mr. Manoj kr malik	MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY	Assistant Professor	Delhi	DELHI
106	Miss Indu chandran	VISAT	Assistant Professor	Alappuzha	KERALA
107	Dr. Shalu	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
108	Mrs. shyama.m	VISAT Engineering college	Assistant Professor	Kottayam	KERALA
109	Mr. Sagar Vanarase	Cummins College of Engineering for Women	Assistant Professor	Pune	MAHARASHTRA
110	Mrs. SUSHMA N	Malnad College of Engineering	Assistant Professor	Hassan	KARNATAKA
111	Mrs. Savitha Devaraj	Lokmanya Tilak college of Engineering	Assistant Professor	Thane	MAHARASHTRA
112	Miss Riya Sharma	Thapar Institute of Engineering and Technology	Student	Mandi	HIMACHAL PRADESH
113	Mr. SUYASH KUMAR	Hansraj College, University of Delhi	Assistant Professor	Ghaziabad	UTTAR PRADESH

114	Dr. PARVEEN KAKKAR	DAVIET, JALANDHAR	Assistant Professor	Jalandhar	PUNJAB
115	Dr. Deepti Khanna	Jagan Institute of Management Studies - JIMS Rohini	Associate Professor	Delhi	DELHI
116	Mrs. P.Hema	Jai Shriram Engineering College	Assistant Professor	Tiruppur	TAMIL NADU
117	Miss Parul Chaudhary	MSIT	Assistant Professor	Delhi	DELHI
118	Dr. BUDDESAB	The Oxford College of Engineering Bangalore	Assistant Professor	Bangalore	KARNATAKA
119	Mr. SUBIN S T	coimbatore Institute of technology	PhD RESEARCH SCHOLAR	Thiruvananthapuram	KERALA
120	Mr. Vishal Panwar	Maharaja Surajmal Institute of Technology	Techical Assistant	Delhi	DELHI
121	Mr. RITESH MAURYA	Sri Ramswaroop Memorial University	Assistant Professor	Lucknow	UTTAR PRADESH
122	Mr. Christal Anand S	GEMS Polytechnic College	Assistant Professor	Aurangabad	BIHAR
123	Mr. Ranjan Patowary	Central Institute of Technology Kokrajhar	Assistant Professor	Kamrup	ASSAM
124	Mr. VARISA SASIBHUSHANARAO	RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES-SRIKAKULAM	Assistant Professor	Srikakulam	ANDHRA PRADESH
125	Mr. NUTHAKKI RAMESH BABU	RGUKT-SRIKAKULAM	Assistant Professor	Krishna	ANDHRA PRADESH
126	Dr. DEVANG SHANTILAL PANDYA	Adani Institute of Infrastructure Engineering	Assistant Professor	Ahmadabad	GUJARAT
127	Dr. Sonia Rathee	MSIT	Assistant Professor	Gurgaon	HARYANA
128	Mrs. MAyuri Arya	UGI ,LARU,AMBALA	Assistant Professor	Sahibzada Ajit Singh Nagar	PUNJAB
129	Mrs. Snehal Pradeep Patil	D. Y. PATIL INSTITUTE OF MASTER OF COMPUTER APPLICATIONS AND MANAGEMENT	Assistant Professor	Pune	MAHARASHTRA
130	Mr. Akshat Tyagi	Maharaja surajmal institute of technology	Student	Delhi	DELHI
131	Mr. TAPAS RANJAN SAHOO	Institute of textile technology,Choudwar	Lecturer	Cuttack	ODISHA
132	Mr. LAV TIWARI	MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY	Student	Delhi	DELHI
133	Mrs. Jayshree M. Jadhav	Rajarshi Shahu Mahavidyalay (Autonomous) Latur	Assistant Professor	Latur	MAHARASHTRA
134	Dr. Ravneet Kaur	Thapar Institute of Engineering and Techonology, Patiala	Assistant Professor	Sahibzada Ajit Singh Nagar	PUNJAB
135	Dr. VAISHALI P. RAMTEKKAR	Lokmanya Tilak College of Engineering	Assistant Professor	Raigarh	MAHARASHTRA

136	Mrs. Neelam Barak	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
137	Mr. Pravin Basavraj Hole	TERNA ENGINEERING COLLEGE	Assistant Professor	Thane	MAHARASHTRA
138	Dr. Jindagi Kumari	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
139	Mr. Kumaraswamy S	Global Academy of Technology	Professor	Bangalore	KARNATAKA
140	Mr. DHARMACHARI NADAKUDURU	LAKIREDDY BALIREDDY COLLEGE OF ENGINEERING	Assistant Professor	Krishna	ANDHRA PRADESH
141	Mrs. Niharika Solanki	Parul University	Assistant Professor	Vadodara	GUJARAT
142	Mrs. MONALI UDDHAV MORE	VPKBIET,BARAMATI	Assistant Professor	Pune	MAHARASHTRA
143	Mr. E.Balraj	M.Kumarasamy College of Engineering	Assistant Professor	Karur	TAMIL NADU
144	Mrs. Minal Dhankar	Maharaja Surajmal Institute	Assistant Professor	Delhi	DELHI
145	Mrs. Shefali Parihar	Poornima Group	Assistant Professor	Jaipur	RAJASTHAN
146	Mr. Himangshu Sekhar Nath	Central Institute of Technology	Student	Bongaigaon	ASSAM
147	Dr. KAVITHA J.C	REVA UNIVERSITY	Associate Professor	Bangalore	KARNATAKA
148	Mrs. Sapna Sitaram Kaushik	NIE First Grade College, Mysore	Assistant Professor	Mysore	KARNATAKA
149	Mrs. DEEPSHIKHA YADAV	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
150	Mr. Boobalakrishnan Sadasivam	Christ University	Research Scholar	Bangalore	KARNATAKA
151	Dr. K PRAVEEN KUMAR	kakatiya institute of technology and science	Assistant Professor	Warangal (Uraban)	TELANGANA
152	Mrs. SAKSHI RAJPUT	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
153	Mrs. Rashmita Kumari Mohapatra	Thakur College of Engineering & Technology	Assistant Professor	Mumbai	MAHARASHTRA
154	Miss Patil Dhanashree K	Cusrow Wadia Institute of Technology, Pune	Lecturer	Pune	MAHARASHTRA
155	Mrs. Varsha Sharma	Bhagwan Parshuram Institute of Technology	Assistant Professor	Delhi	DELHI
156	Dr. Ana Bali	University of Jammu	Lecturer	Jammu	JAMMU AND KASHMIR
157	Mr. Sumithmon KS	SJCET Palai ,Kottayam,Kerala PIN 686579	Assistant Professor	Kottayam	KERALA
158	Mr. NARENDER SINGH	MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY	Assistant Professor	Delhi	DELHI
159	Miss Sri Silpa Padmanabhuni	PSCMRCET	Associate Professor	Krishna	ANDHRA PRADESH

| 160	Mrs. Pooja Mudgil	BPIT	Assistant Professor	Delhi	DELHI
161	Dr. BRIJPAL SINGH	MSIT,JANAKPURI, DELHI	Associate Professor	Delhi	DELHI
162	Mr. JYOTI RANJAN JENA	MITS, RAYAGADA	Assistant Professor	Kandha mal	ODISHA
163	Dr. Subodh Kumar Singhal	JUET, Guna	Assistant Professor	Guna	MADHYA PRADESH
164	Miss SHIKHA SHOKEEN	MAHARAJA SURAJMAL INSTITUTE, NEW DELHI	Assistant Professor	Delhi	DELHI
165	Mrs. Randeep Kaur Kahlon	Terna Engineering College	Assistant Professor	Thane	MAHARAS HTRA
166	Dr. RUCHIKA GAHLOT	MAHARAJA SURAJMAL INSTITUTE	Assistant Professor	Delhi	DELHI
167	Mrs. NISHA TOKAS	MAHARAJA SURAJMAL INSTITUTE	Assistant Professor	Delhi	DELHI
168	Mrs. Rohini Patil	Terna engineering college	Assistant Professor	Mumbai	MAHARAS HTRA
169	Dr. Anju Dhillon	Maharaja Surajmal Institute of Technology	Assistant Professor	Delhi	DELHI
170	Miss Sangeetha Singarapu	kakatiya institute of technology and science	Assistant Professor	Waranga l (Uraban)	TELANGA NA
171	Mr. Surender	MSIT	Assistant Professor	Delhi	DELHI
172	Dr. Ajay Gahlot	MSIT	Associate Professor	Delhi	DELHI
173	Mr. HRISHIKESH RAY	CENTRAL INSTITUTE OF TECHNOLOGY, KOKRAJHAR, ASSAM	Student	Goalpara	ASSAM
174	Mr. Rakesh Kumar Sharma	Arya College of Engineering & Information Technology	Associate Professor	Jaipur	RAJASTHA N
175	Mr. Suraj Vishnu Kurde	D Y Patil College of Engineering Akurdi Pune	Assistant Professor	Pune	MAHARAS HTRA
176	Dr. Thanuja	SASTRA DEEMED UNIVERSITY	Assistant Professor	Thanjavu r	TAMIL NADU
177	Mrs. AISHWARYA MISHRA	IES college of Technology	Associate Professor	Bhopal	MADHYA PRADESH
178	Mr. J Swami Naik	G.Pulla Reddy Engineering College	Associate Professor	Kurnool	ANDHRA PRADESH
179	Dr. PinakiPratimAcharjya	Haldia Institute of Technology	Professor	West Tripura	TRIPURA
180	Mr. HARI OM SHARMA	CMS Government Girls polytechnic Daurala Meerut	Lecturer	Meerut	UTTAR PRADESH
181	Mrs. Sneha Bendale	Terna Engineering College	Assistant Professor	Mumbai Suburba n	MAHARAS HTRA
182	Dr. Chanchal Sharma	Arya college of Engineering and IT	Assistant Professor	Jaipur	RAJASTHA N
183	Miss Ritu Singhal	I.P.College	Assistant Professor	Delhi	DELHI
184	Mrs. Heena Gupta	ACEIT Jaipur	Associate Professor	Jaipur	RAJASTHA N

185	Dr. JIGNESHKUMAR MEVADA	GNU-U. V. PATEL COLLEGE OF ENGINEERING	Professor	Ahmada bad	GUJARAT
186	Mrs. Pramila Bhaskarrao Mate	terna engineering college, nerul	Assistant Professor	Thane	MAHARAS HTRA
187	Mr. KAMALJEET SINGH KALSI	Gyan Ganga College of Technology, Jabalpur, Madhya Pradesh	Assistant Professor	Jabalpur	MADHYA PRADESH
188	Mrs. MRS MANISHA KUVESKAR	MIT POLYTECHNIC, PUNE	Assistant Professor	Pune	MAHARAS HTRA
189	Mr. SRIDHAR RADHAKRISHNAN	SARANATHAN COLLEGE OF ENGINEERING	Assistant Professor	Thanjavu r	TAMIL NADU
190	Miss Vinita Rohilla	maharaja surajmal institute of technology	Assistant Professor	Delhi	DELHI
191	Dr. Amit Choudhary	Maharaja Surajmal Institute	Associate Professor	Delhi	DELHI
192	Mr. SANGRAM RAMCHANDRA JADHAV	Ramrao Adik Institute of Technology, Nerul, Navi Mumbai	Assistant Professor	Thane	MAHARAS HTRA
193	Miss SUBHASHINI R	Cambridge institute of technology	Assistant Professor	Kolar	KARNATA KA
194	Mr. AVINASH KUMAR SHARMA	Gyan ganga institute of technology and science	Assistant Professor	Jabalpur	MADHYA PRADESH

Inaugural Session

The inaugural session of FDP started on 6 December, 2021 at 9 am with the Lamp lighting. The Chairman (Er. Kaptan Singh) and Director (Col.(Dr.) Ranjit Singh) of the institute addressed the participants and congratulated then for registering this FDP. They also discussed the importance of IoT in the field of agriculture and defence. At the end HOD of the department delivered the vote of thanks. Some snapshots of the inaugural session are:
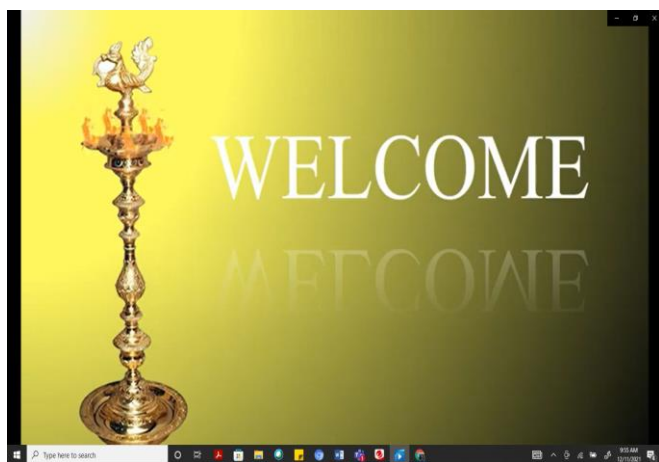
Day 1 (6th Dec., 2021)

The first session started with the **Introduction to Internet of Things** by **Dr. Md. Iftekhar Hussain** on 6-12-2021. Dr Hussain is currently working as an Associate Professor in Department of Information Technology at North-Eastern Hill University, Shillong, Meghalaya. The session was facilitated by Ms. Sonika Malik and the speaker initiated with the background of IoT that includes IoT Architecture, IoT protocol stack, Next-Gen IoT. He also explained the challenges and research opportunities in IoT like Heterogeneity, Scalability, Interoperability, Security and Privacy, Quality-of-Service, Machine Learning etc. The talk of session-1 was concluded with a glimpse on IoT Testbed.

The speaker for the second session was Dr. Kamaljit Singh Saini, Professor, CSE Department, Chandigarh University, Punjab. Dr. Saini guided us about IoT Sensors, Actuators and Protocols. The session was facilitated by Mr. Akshay Singh and the speaker initiated with the history and definition of IoT. Dr. Saini walked us through the characteristics, structure and architecture of IoT. He delivered the talk in depth on IoT Sensors, Actuators and Protocols. The session was concluded with the threats in the field of IoT.

The session-3 was very well explained by Dr. K G Srinivasa. He is currently working as a Professor at NITTTR, Chandigarh, Punjab. The topic for this session was Research Directions and Challenges in the field of Internet of Things. Dr. Srinivasa initiated the lecture with the introduction to Node-Red and NPM. He beautifully elaborated a Demo on Tracking Space Station on Map using Node-Red. The last session of Day-1 of ATAL FDP ended well with a vote of thanks to all the eminent speakers and participants who made all the sessions very interactive and fruitful.
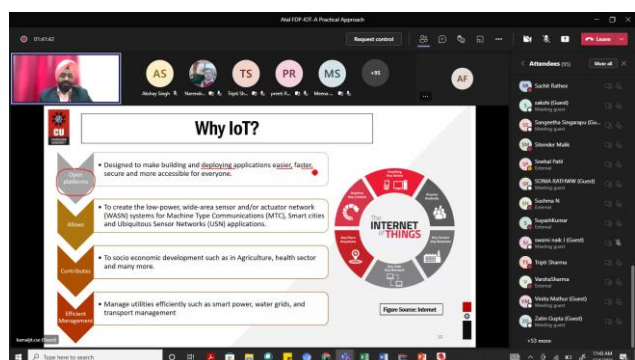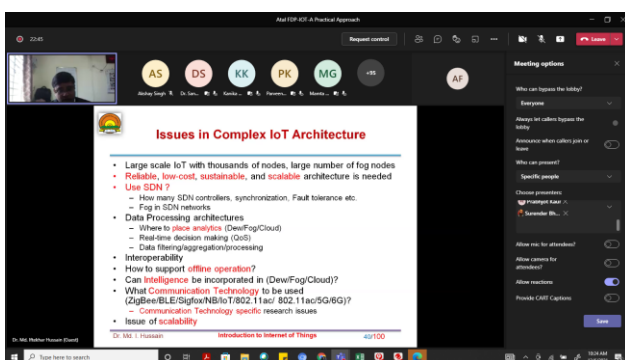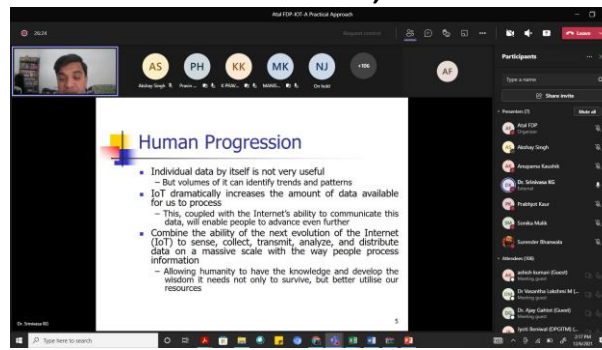
Day 2 (7th Dec., 2021)

The first session was conducted by Prof. G. K. Srinivas, Professor, NITTTR, Chandigarh. His topic was Introduction to IoT based simulation tools. In this session he gives the exposure to various IoT based simulation tools.

Dr. Nikhil Marriwala Assistant Professor and Head of the Department Electronics and Communication Engineering Department, in University Institute of Engineering and Technology, Kurukshetra University was the eminent speaker on day 2 session 2. He discussed about the Labview fundamentals and he took various examples for hands on experience on that tool. He also discussed about fuzzy logic concepts and IoT enabled AI fuzzy based Green house controller.

Prof. Kamaljit Singh Saini professor and research coordinator AIT-CSE Department, University Institute of Engineering, Mohali, was the eminent speaker on day 2 Session 3. He discussed about IOT Design & Methodology: A hand-on Approach with Arduino and Sensor. He took various examples to explain the concepts and to provide in depth information about Arduino and sensors. All the sessions were very interactive and informative.
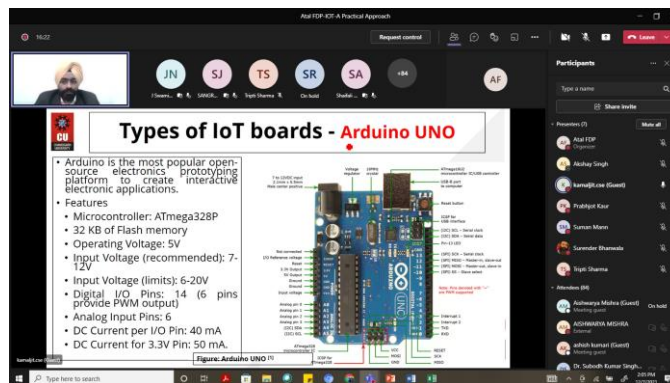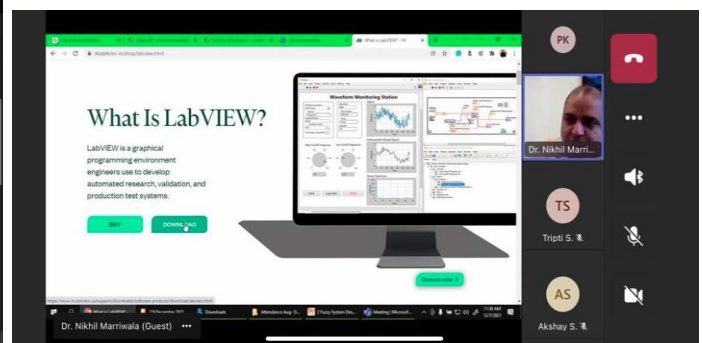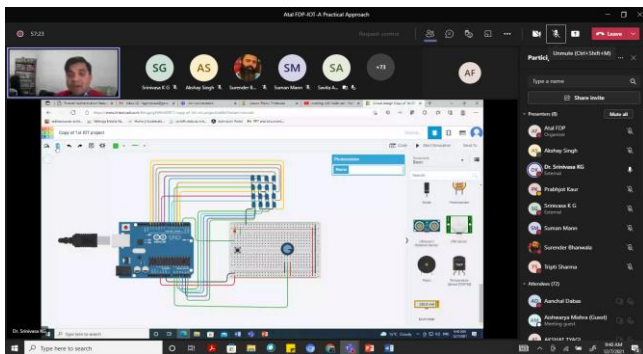
Day 3 (8th Dec., 2021)

The speaker of the first session was Dr. Debashis De. He is Professor, in the Department of Computer Science & Engineering and Director of School of Computational Science in Maulana Abul Kalam Azad University of

Technology, Kolkota,, West Bengal. His research interests include Mobile Edge Computing and IoT. His H index is 33 and citations are 4500. The topic of session was "Cloud, Fog and Edge Computing". This session was attended by 90 participants. In the beginning Dr. Debashis De gave the detailed introduction on IOT and what is the relation between IOT and cloud computing. After that he explained Cloud, Fog and Edge Computing. And on Edge Computing he defined the Drone functionality with internal structure as well as he explained the algorithm used behind that. He also explained Mobile Edge Computing with examples and had a wonderful question answer session. As per the feedback received from the participants it was very good learning experience, the lecture helped them in their understanding the Cloud, Fog and Edge Computing.

The Speaker for session 2 was Prof. Amit Prakash Singh. He is working as Professor at University School of Information, Communication & Technology, Guru Gobind Singh Indraprastha University, Delhi. He has research experience in Artificial Neural Network, Machine Learning and Digital System Design. He has published approximately 60 research paper in Scopus Indexed Journal and conferences. The topic of the session was "Application of IOT in agriculture". He discussed about deep learning challenges and Popular approaches for implementation of deep learning. He also talked about his research paper where he created a mobile application to classify and identify tomato plant successfully.

The Speaker of session 3 was Dr. Lalit Kumar Singh. He is a Scientist in Department of Atomic Energy, NPCIL-BARC Government of India, since 20 years, and has distinction of working on Pressurized Heavy Water Reactors(PHWR) and Light Water Reactors (LWR). His Research Interests includes Software Engineering, Software Reliability, Networking, Data Structures, Image Processing, System Reliability, System Safety and Mathematical Modeling. Sir has published around 50 journals and many conference papers. The topic of the session was "Reliability analysis of IOT communication protocol for safety critical systems". He has explained about the reliability prediction of safety critical system with the help of case study.
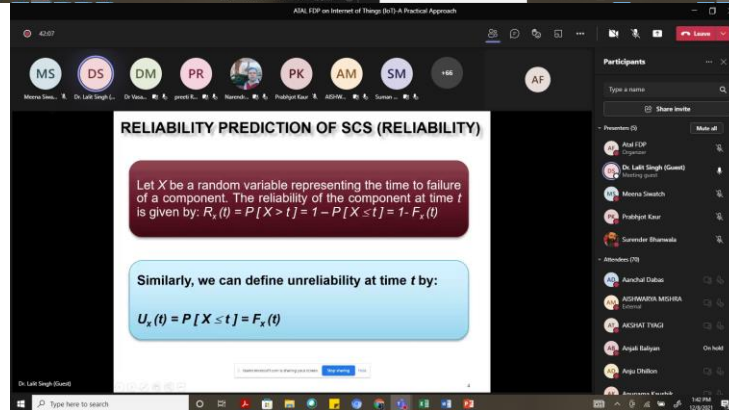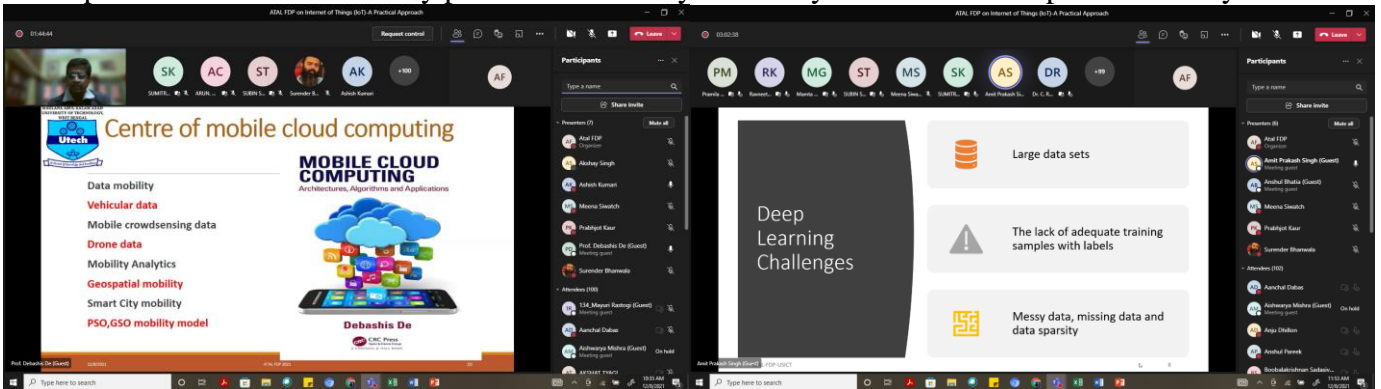
Day 4 (9th Dec., 2021)

The 1st session on the topic "Cloud-based Real-Time lOT Design using LabView "was held on Dec 9, 2021, at Microsoft Teams as a part of the ATAL Faculty Development Program. Ms. Preeti Rathee facilitated the session, and the speaker of the session was Dr. Nikhil Marriwala, HOD, ECE, UIET, Kurukshetra University, Haryana.

The session focused on cloud computing and how we can use it to benefit ourselves. Cloud computing refers to a flexible way of delivering hardware, software, or data resources via the network at a user's request. This is opposite to the use of running a software application on a local computer. As we continue to investigate how our new technology era is growing, the societal benefits of a cloud-based system are constantly revealed. This development is growing exponentially as ever more complicated applications are released from use in a single physical place. Certain factors should be weighed when selecting a cloud service provider. Though cloud-based systems are usually based on a pay-per-use approach, various providers frequently have pricing schemes that must be considered. The topic of building an application was deeply explained by Dr. Nikhil. Applications are called Virtual instruments. This all sums up the Cloud-based Real-Time loT Design using LabView and how we can use LabView to build an application and use it effectively.

The speaker for 2nd session was **Dr. Anju Bala**, Associate Professor, CSE Department, Thapar University, Patiala. She guided through the concepts of **Big Data**, **Cloud Computing**, and **Hadoop** throughout the session. The session commenced with a brief overview of **Big Data analytics** and an Introduction to Cloud Computing. **Cloud computing** is the delivery of different services through the Internet. These resources include tools and applications like data storage, servers, databases, networking, and software. Some of the popular **cloud services** are Google Cloud, Amazon Web Services, Microsoft Azure, and IBM Cloud. Dr. Bala enlightened the audience by revealing that IIT and Thapar university have their personalized cloud. **Baadal**, the **Cloud of IITD,** has 10 TB of virtualized storage and 32 blade servers.

Dr. Bala threw light upon some major Big data challenges such as Load Balancing. **HAProxy(High Availability Proxy)** is used to handle sudden load surges, higher resource utilization, and failure of servers. The purpose and working of HAProxy were explicated impeccably by Dr. Bala. The Implementation and Experimented results were illustrated and unraveled as well.

Eventually, the concept of **Hadoop** was put across by the speaker. Apache Hadoop is an open-source framework used to efficiently store and process large datasets ranging in size from gigabytes to petabytes of data. The points of **HDFS**(Hadoop Distributed File System), properties of HDPS, implementation, and instances were unfolded by Dr. Bala.

After completing the shared presentation, Dr. Bala shared a video of an IoT project, **Pothole detection**.

Session 3 was a beautiful session **by Sister Monica**. **Ms. Jyoti Khurana** facilitated the session. The sole purpose of the session was to make people aware of the harms/negative effects of OVERUSE of digital technologies. The sole aim is to help all of us live a meaningful and happy life governed by our own will. As we know that we are surrounded by all manner of technology. From our personal laptops, tablets, and phones. Technology is here to stay and help people make their life easy, but it's always morphing and expanding. As each new technology enters the scene, it has the potential to improve lives if we use it in a wise manner. But, in some cases, it also has the potential to negatively affect physical and emotional health. According to many studies, this has been stated that nowadays, we people are addicted to technology, and that causes a lot of negative effects on our mental, emotional and physical health.

This all sums up the ill-effects of technology as a whole and how we can overcome the addiction we are having towards it, even though we can't deny the fact that technology is an essential part of our life. So, one must balance their social life.
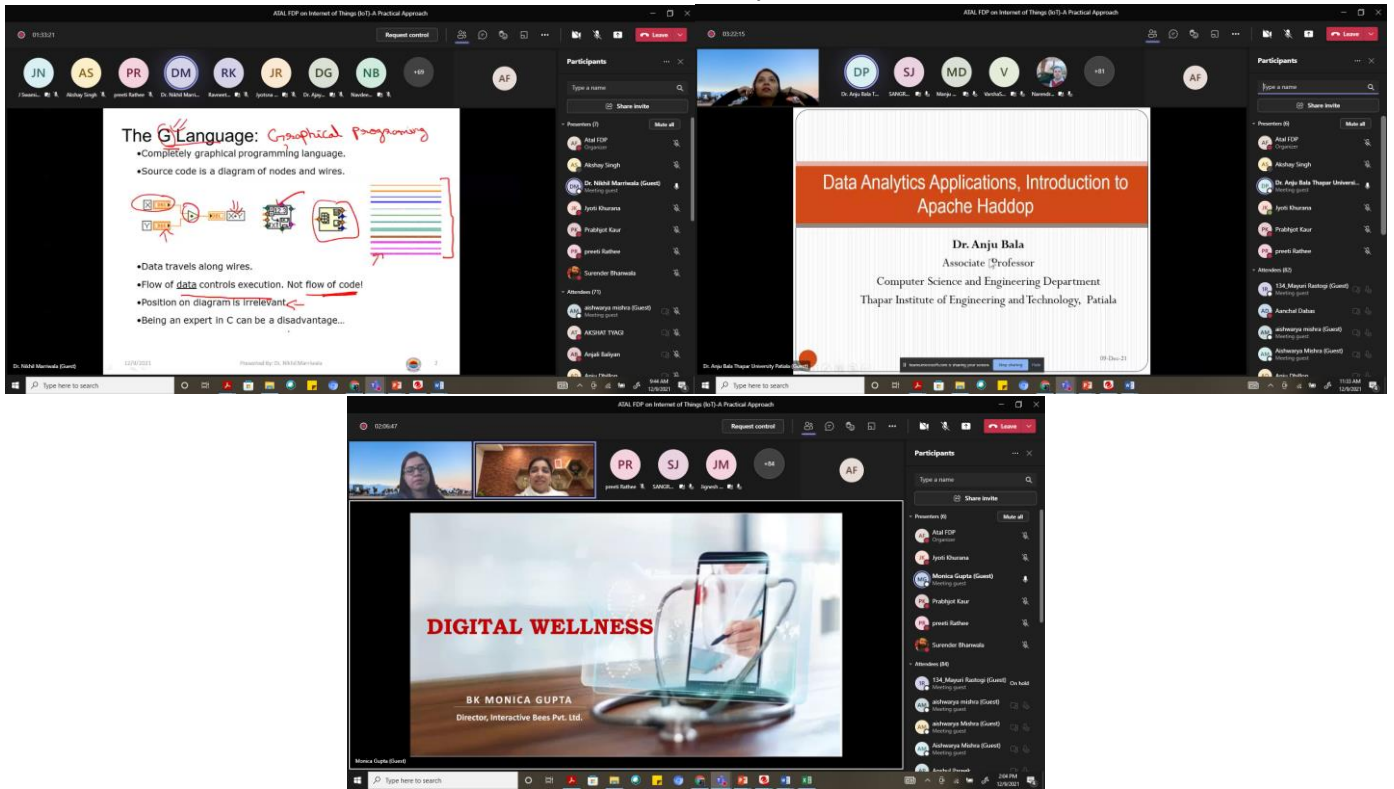
Day 5 (10th Dec., 2021)

Both the sessions on the last day were conducted by Mr. Umang Kejriwal, Managing director in Phinland labs, Gurugram Haryana. He has experience in the field of "Robotics & Embedded System, Android App Development, Web Development, Python, Data Science, Machine Learning, AI, Deep Learning and Internet of Things" for more than 7 years. In first session he discussed about IoT Design and Methodology: A hand on Approach with Raspberry Pi and sensors. It was very interactive session. The second session was continued by Mr Umang Kejriwal and in this session he discussed about Demo of ThingSpeak Cloud and its integration with ESP8266.He explained the basic concepts of Clouds and Demo of ThingSpeak cloud and its integration with ESP8266.
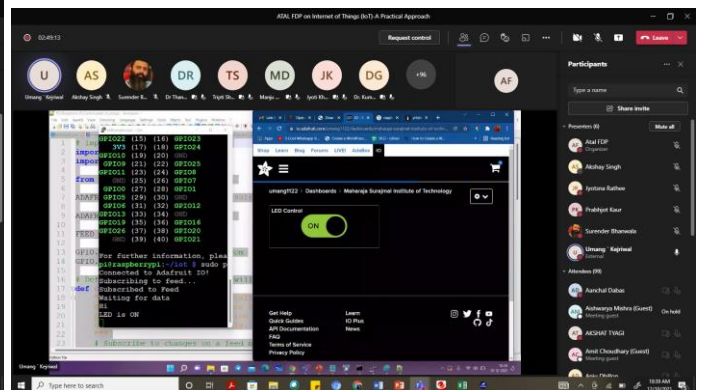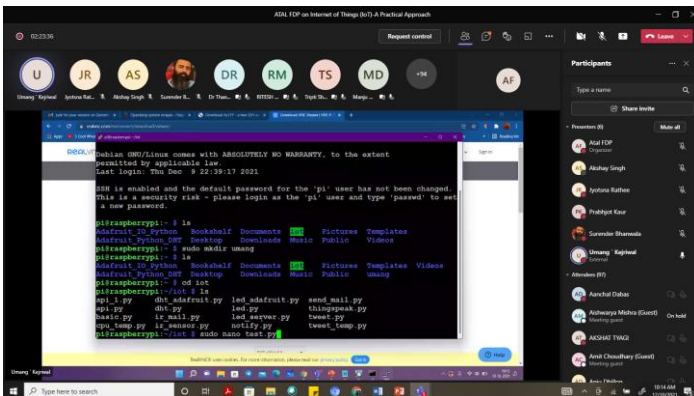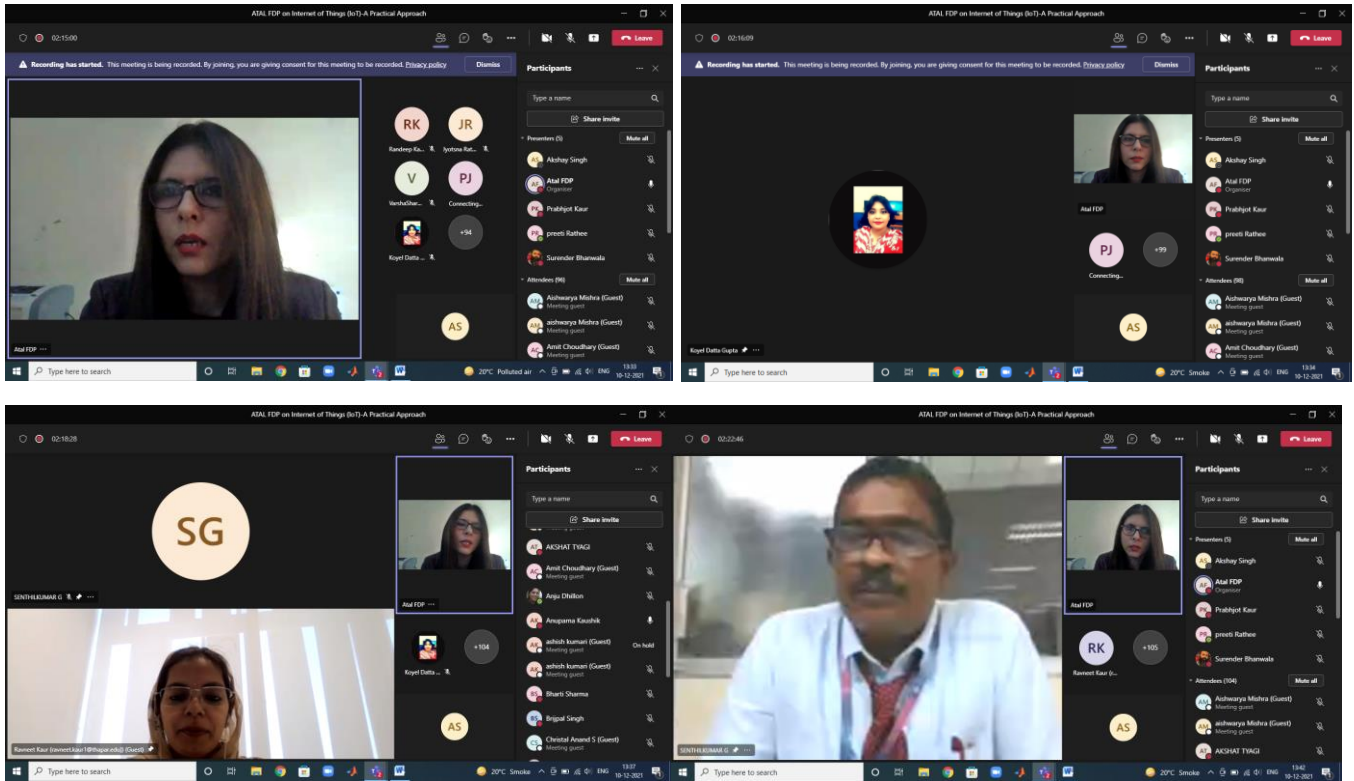
<u>**Veledictory Session**</u>

At the end, at 2 pm, feedback session was conducted by the coordinator of the FDP, Dr. Prabhjot Kaur. Many participants gave the feedback and asked queries about the test. At the end the coordinator gave vote of thanks to the participants, management, director of the college and the organizing team.

Dr. Prabhjot Kaur Sidhu

Coordinator, FDP