A BRIEF REPORT ON ONE WEEK TRAINING PROGRAM FROM 28TH NOVEMBER-5TH DECEMBER ON "RECENT TRENDS AND INNOVATIONS IN COMPUTER SCIENCE AND ENGINEERING UNDER THE SCHEME OF STUTI

Department of Computer Science and Engineering, School of Engineering Sciences and Technology organized one week training program from 28th November-5th December on "Recent Trends and Innovations in Computer Science and Engineering under the scheme of STUTI. This one week event witnessed a gathering of attendees from various research institutions and provided them with an excellent and exceptional platform for learning. With around 80 participants who registered for the training 30 participants including faculties, Research Scholars and PG students from all over India were shortlisted belonging to various renowned Universities like AMU, JMI, University of Lucknow, DTU, MRIIRS, GD Goenka, DAV Institute of Management, Faridabad and BSAITM.

The training program Inaugral event was blessed by chief guest Dr. K K Agarwal, Chairman NBA, Guest of Honour, Dr Pratishta Pandey, Head, R&D Infrastructure, DST, Govt of India presided by Hon'ble Vice Chancellor Jamia Hamdard. Prof. Dr. Raisuddin, Head IQAC and DST STUTI coordinator Prof. Dr. Suhel Parvez were also among the dignitaries in the inaugural event.

The training program showcased lectures and hands on from renowned Professors from NIT Kurushetra, Jamia Millia Islamia, JNU, GGS IP University, Amity Institute of Information Technology, Amity University, IIIT Delhi and South Asian University and also internal faculties of the Department. Professors highlighted some very important topics like: Federated Learning, 5G and its Applications, Innovation and Creativity using Critical AI and Tableau Design, Design and Simulation of Nanoelectronic Circuits, Powering Future Generation Technology, AI Based Big Data Analytics, Role of Ontology, Data Science in IoT, Artificial Intelligence redefining Media Landscape, Latex, SMART Computing, Machine Learning for Healthcare, Smart Agriculture, Biomedical Data Analysis, Image Processing using Matlab, University Facility Visit, Peer-to-Peer Mental Health Counselling, Social Network Analytics, Sales-force Administration, Card View in Android App development, Industry 4.0, Changing Instructional Paradigm (With Special reference to NEP 2020 and Paradigms of Parallel Programming. Participants were also taken for University Facility visit. Valedictory session was blessed with Chief Guest Prof. Dr. M N Dooja Director IIIT Sonipat and was presided by Hon'ble VC JH Prof. M. Afshar Alam. The learning experience continued throughout and helped the trainers with best possible solutions.

The vast arrays of topics covered by the different invited speakers from the Day 1 to the Day 7 of the workshop include:

- "Data Science in IoT" by Prof M.K. Soni, Retired Professor, NIT, Kurushetra and Director General, IIMT Group of Colleges, Greater Noida.

- "Artificial Intelligence redefining Media Landscape", by Prof M Kasim, Professor and Hony. Director, AJK Mass Communication, Research Centre and Hony. Director IQAC, Jamia Millia Islamia, New Delhi, Former Advisor TRAI Govt of India.

- "Innovative Technologies in Smart Agriculture" by Ms. Shabina Gafir and Dr. Parul Agarwal.

- "Topical and Methodological trends in Biomedical Data Analysis", by Prof. Shandar Ahmad, School of Computational and Integrative Sciences, JNU, New Delhi.

- "Application of IoT in Agriculture" by Prof Amit Prakash Singh, USICT, GGS IP University, New Delhi.

- "Introduction to Image Processing using Matlab" by Dr. Safdar Tanweer and Mr.Syed Sibtain Khalid.

- "Federated Learning" by Dr. Ihtiram Raza Khan.

- "5G and its Applications" by Prof. D. K. Lobiyal, School of Computer & Systems Sciences, JNU, New Delhi.

- "Innovation and Creativity using Critical AI and Tableau Design (Lecture and Hands-on)" by Dr. Sherin Zafar and Dr. Siddhartha Sankar Biswas.

- "Design and Simulation of Nanoelectronic Circuits" by Prof. M. Nizamuddin, Department of Electronics & Communication Engineering, Jamia Millia Islamia, New Delhi.

- "Powering Future Generation Technology : Evolution and Revolution" by Dr. Harleen Kaur.

- "AI Based Big Data Analytics using cloud and IoT Applications in real life" by Prof. Mansaf Alam, Department of Computer Science, Jamia Millia Islamia, New Delhi.

- "Role of Ontology in Semantic Web" by Dr. Suraiya Parveen and Dr. Jawed Ahmed.

- "Internet of Things and its related Research Areas." by Prof. Ajay Vikram Singh, Amity Institute of Information Technology, Amity University, Noida.

- "Introduction to Latex Typesetting Software" by Dr. Mohd Abdul Ahad and Mr. Aqeel Khalique.

- "Emerging Trends in SMART Computing" by Prof. Dr. Syed Afzal Murtaza Rizvi, Department of Computer Science, Jamia Millia Islamia, New Delhi.

- "Securing Internet of Things and IoT Interoperability" by Prof. Tanya Singh, Dy. Director (Academics), Amity School of Engineering and Technology, Amity University, Noida.

- "Machine Learning for Healthcare" by Dr. Farheen Siddiqui.

- "Dialog Understanding in Peer-to-Peer Mental Health Counseling by Dr. Md Shad Akhtar.

- "Social Network Analytics: Characteristics, Challenges and Research Directions by Prof. Muhammad Abulaish, Chairperson of the Department of Computer Science, South Asian University (SAU), New Delhi.

- "Sales-force Administration Training" by Dr. Bhavya Alankar.

- "Card View in Android App development" by Mr. Tabish Mufti and Mr. Nafisur Rahman.

- "Industry 4.0 by Dr. Md Tabrez Nafis.

- "Changing Instructional Paradigm (With Special reference to NEP 2020) by Prof. M. N. Hoda, Director at Bharati Vidyapeeth Institute of Computer Applications and Management (BVICAM), New Delhi.

- "Paradigms of Parallel Programming by Dr. Bashir Alam, Head, Department of Computer Engineering, Jamia Millia Islamia, New Delhi.

The workshop was attended by 30 participants which included Assistant professors and research scholars from different institutions namely AMU, JMI, University of Lucknow, DTU, MRIIRS, GD Goenka, DAV Institute of Management, Faridabad and BSAITM.

At the end of the workshop, Nukkad Natak was also conducted by Epoch society students for participants. Also, questionnaires were distributed to the participants to get their feedback of the training methodology, training materials and to get views on how to improve workshop in future. Overall, the participants were positive in their feedback and considered the workshop to have met its objectives. The participants considered the schedule of the workshop and technical arrangement of the practical sessions to be well organized. Their enthusiasm and interest was apparent from their 100% attendance on all days, presence throughout the long working hours, constant interactions and zeal to know more. Even the refreshment break and Lunch provided on all days was enjoyed by them. In fact, they expressed the desire to attend more workshops on several topics to master the skills for becoming good researchers. They were also taken for a tour to the prominent heritage sites to witness the rich culture and traditions of Lucknow.

Hardware and Software Facilities:

The IT facilities in the campus include computer centre with latest hardware, network equipment's and software. The whole campus is Wi-Fi enabled. The computing facility also includes a computerized library management system and well-equipped seminar halls and CCTV surveillance system in the Institute.

The Centre provides total backup solution for user's data through various backup devices viz., CD/DVD writer external HDD drive. Centralized storage server provides automatic data backup & restore facility of user's data. Desktops/laptops and tablet, enterprise level CISCO switches and routers, firewall for campus wide network and internet connectivity. In addition to several desktop printers in the faculty and staff offices, the printing function also include high-speed network laser printers, in each office block including computer centre. Faculties are also provided with laptop and hi-speed internet connectivity separately. In addition, there are heavy duty printers, scanner and xerox machine facility available in the computer centre. The Institute also has Lamp Free Project Device, Audio-Visual Media Device, LCD Projector Screen have been provided to assist the users in creating and presenting multimedia presentations.

The students have facilities to work and explore multiple Operating Systems viz Ubuntu, Red Hat Linux, Fedora and Microsoft Windows -7,8,10,11.

RDBMS/ODBMS Software: Students can learn intricacies of Database Administration using both RDBMS and Object-Oriented DBMSs such as MySQL, Oracle 11g and IBM DB2. Facilities Available in Database Management: Advanced Diploma in Big-Data Analytics, Certified Data Scientist. Application Software's and Programming Languages. Students can master Web Application Development in all platforms of their choice such as Microsoft DotNet, Java. The Centre has licensed software to learn latest programming languages for development purposes such as SQL, Assembly, Python, Perl, PHP, Java, C/C++, C# and VB.Net. Facilities Available in Application Software's and Programming Languages: Android Apps Developer, Advanced Diploma in Java Enterprise, Certified Course in Web Designing Course, Advance Diploma in .Net Technologies. Mobile Application Development. Students are taught intricacies of professional Mobile Application Development on Android and PhoneGap platforms. Students can use latest tools for this purpose like Android Studio, AVD Manager, and Android Debugging Bridge etc. Facilities Available in Mobile Application Development: Android Apps Developer. Software for Scientific Use. Students can do simulation using MatLab and will do hands-on practical's on Industrial Grade Software such as AutoCAD, PLC & SCADA, LabView, Keras, Jupyter Notebook, Tableau.

Jamia Hamdard
(Deemed to be University)

Department of Science and Technology (DST)
DST

TRAINING PROGRAM ON

RECENT TRENDS AND INNOVATIONS IN COMPUTER SCIENCE AND ENGINEERING

Organized by
Department of Computer Science and Engineering
School of Engineering Sciences and Technology
Jamia Hamdard, New Delhi

Under the scheme of
Synergistic Training Program Utilizing the Scientific
and Technological Infrastructure (STUTI)

An initiative by
Department of Science and Technology,
Government of India

DST-STUTI PMU
Jamia Hamdard, New Delhi

PROGRAM SCHEDULE

NOVEMBER 28 - DECEMBER 5, 2022

Under the patronage of
Prof. (Dr.) M. Afshar Alam
Honourable Vice Chancellor, Jamia Hamdard

Prof. (Dr.) Suhel Parvez
DST STUTI-Coordinator,
Jamia Hamdard

Email :
dststutijh@gmail.com

Dr. Farheen Siddiqui
Head, Dept of CSE
Jamia Hamdard

*4 Dec is declared a holiday due to MCD Elections

Different sessions from Day 1 to Day 7 of the workshop have been summed up in the following report:

Day 7 - 05 December 2022 (Monday)	
10:00 AM - 11:00 AM	"Industry 4.0" by Dr. Md Tabrez Nafis Session Coordinator : Dr. Samar Wazir and Mr. Naved Alam
11:00 AM - 11:15 AM	Tea
11:15 AM - 12:00 PM	"Changing Instructional Paradigm (With Special reference to NEP 2020)" by Prof. M. N. Hoda, Director at Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi. Session Coordinator : Dr. Parul Aggarwal, Dr. Amit Bhooshan Singh and Dr. Naseem Rao
12:00 PM - 01:00 PM	"Paradigms of Parallel Programming " by Dr. Bashir Alam, Head, Department of Computer Engineering, Jamia Millia Islamia, New Delhi. Session Coordinator : Dr. Farheen Siddiqui, Ms. Nida Iftekhar and Dr. Siddharth Sankar Biswas
01:00 PM - 02:00 PM	Lunch
02:00 PM - 03:00 PM	Participant Feedback Session Coordinator : Dr. Amit Bhooshan Singh, Mr. Aqeel Khalique, Mr. Nafisur Rahman and Mr. Tabish Mufti
3:00 PM - 03:15 PM	High Tea
3:15 PM - 05:15 PM	Valedictory Session Coordinator : Dr. Sherin Zafar, Ms.Gautami Tripathi, Dr. Imran Hussain, Dr. Aslam Parvez and Dr. Javed Ahmad

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Day 6 - 03 December 2022 (Saturday)	
10:00 AM - 11:00 AM	"Dialog Understanding in Peer-to-Peer Mental Health Counseling" by Dr. Md Shad Akhtar Session Coordinator : Dr. Md Tabrez Nafis and Dr. Samar Wazir
11:00 AM - 11:15 AM	Tea
11:15 AM - 12:00 PM	"Dialog Understanding in Peer-to-Peer Mental Health Counseling" by Dr. Md Shad Akhtar Session Coordinator : Dr. Md Tabrez Nafis and Dr. Samar Wazir
12:00 PM - 01:00 PM	"Social Network Analytics : Characteristics, Challenges and Research Directions" by Prof. Muhammad Abulaish, Chairperson of the Department of Computer Science, South Asian University (SAU), New Delhi. Session Coordinator : Dr. Farheen Siddiqui, Dr. Uzma Akhtar Khan and Ms. Asfia Aziz
01:00 PM - 02:00 PM	Lunch
02:00 PM - 03:30 PM	"Sales-force Administration Training" by Dr. Bhavya Alankar Session Coordinator : Mr. Zeeshan Ali Haq, Dr. Md. Aslam Parwez and Dr. Akbar Ali
3:30 PM - 03:45 PM	Tea
3:45 PM - 05:15 PM	"Card View in Android App development" by Mr. Tabish Mufti and Mr. Nafisur Rahman Session Coordinator : Dr. Shakeel Ahmad Siddiqui and Mr. Md Omair Ahmad

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Day 5 - 02 December 2022 (Friday)	
10:00 AM - 11:00 AM	"Introduction to Latex Typesetting Software" by Dr. Mohd Abdul Ahad and Mr. Aqeel Khaliq Session Coordinator : Dr. Neha and Mr. Tabish Mufti
11:00 AM - 11:15 AM	Tea
11:15 AM - 01:00 PM	"Emerging Trends in SMART Computing" by Prof. Dr. Syed Afzal Murtaza Rizvi, Department of Computer Science, Jamia Millia Islamia, New Delhi Session Coordinator : Dr. Sherin Zafar, Dr. Richa Gupta and Mr. Mohd. Nazim
01:00 PM - 02:00 PM	Lunch
02:00 PM - 03:30 PM	"Securing Internet of Things and IoT Interoperability" by Prof. Tanya Singh, Dy. Director (Academics), Amity School of Engineering and Technology, Amity University, Noida. Session Coordinator : Dr. Suraiya Parveen, Dr. Sapna Jain and Dr. Javed Ahmed
3:30 PM - 03:45 PM	Tea
3:45 PM - 05:15 PM	"Machine Learning for Healthcare" by Dr. Farheen Siddiqui Session Coordinator : Dr. Imran Hussain and Mr. Aqeel Khaliq

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Day 4 - 01 December 2022 (Thursday)	
10:00 AM - 11:00 AM	"Powering Future Generation Technology : Evolution and Revolution" by Dr. Harleen Kaur Session Coordinator : Ms. Pooja Gupta and Ms. Neha
11:00 AM - 11:15 AM	Tea
11:15 AM - 01:00 PM	"AI Based Big Data Analytics using cloud and IoT Applications in real life" by Prof. Mansaf Alam, Department of Computer Science, Jamia Millia Islamia, New Delhi Session Coordinator : Dr. Parul Agarwal, Dr. Siddhartha Sankar Biswas and Dr. Shah Imran Alam
01:00 PM - 02:00 PM	Lunch
02:00 PM - 03:30 PM	"Role of Ontology in Semantic Web" by Dr. Suraiya Parveen and Dr. Jawed Ahmed Session Coordinator : Dr. Neha and Ms.Ayesha Kamal
3:30 PM - 03:45 PM	Tea
3:45 PM - 05:15 PM	"Internet of Things and its related Research Areas." by Prof. Ajay Vikram Singh, Amity Institute of Information Technology, Amity University, Noida Session Coordinator : Dr. Parul Agarwal, Dr. Shahab Saquib Sohail and Mr. Md. Omair Ahmad

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Day 3 - 30 November 2022 (Wednesday)	
10:00 AM - 11:00 AM	"Federated Learning" by Dr. Ihtiram Raza Khan Session Coordinator : Ms. Anam Saiyeda and Dr. Mohd. Shadab Alam
11:00 AM - 11:15 AM	Tea
11:15 AM - 01:00 PM	"5G and its Applications" by Prof. D. K. Lobiyal, School of Computer & Systems Sciences, JNU, New Delhi. Session Coordinator : Dr. Sherin Zafar , Mr. Piyush Kumar Gupta and Mr. Syed Ali Mehdi
01:00 PM - 02:00 PM	Lunch
02:00 PM - 03:30 PM	"Innovation and Creativity using Critical AI and Tableau Design (Lecture and Hands-on)" by Dr. Sherin Zafar and Dr. Siddhartha Sankar Biswas Session Coordinator : Ms. Taqdees Fatima, Ms. Nida Iftekhar and Ms. Samia Khan
3:30 PM - 03:45 PM	Tea
3:45 PM - 05:15 PM	"Design and Simulation of Nanoelectronic Circuits" by Prof. M. Nizamuddin, Department of Electronics & Communication Engineering, Jamia Millia Islamia, New Delhi Session Coordinator : Dr. Safdar Tanweer and Mr. Tabrej Ahmad Khan

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Day 2 - 29 November 2022 (Tuesday)	
10:00 AM - 11:00 AM	"Innovative Technologies in Smart Agriculture" by Ms. Shabina Gafir and Dr. Parul Agarwal Session Coordinator : Dr. Nazia Tabassum and Dr. Mohd. Shadab Alam
11:00 AM - 11:15 AM	Tea
11:15 AM - 12:00 PM	"Topical and Methodological trends in Biomedical Data Analysis" by Prof. Shandar Ahmad , School of Computational and Integrative Sciences, JNU, New Delhi. Session Coordinator : Dr. Harleen Kaur, Mr. Shabina Ghafir, Mr. Zeeshan Ali Haq and Mr. Aqeel Khalique
12:00 PM - 01:00 PM	"Application of IoT in Agriculture" by Prof Amit Prakash Singh, USICT, GGS IP University, New Delhi Session Coordinator : Dr. Parul Aggarwal, Mr. Faraz Doja and Mr. Syed Sibtain Khalid
01:00 PM - 02:00 PM	Lunch
02:00 PM - 03:30 PM	"Introduction to Image Processing using Matlab" by Dr. SafdarTanweer and Mr.Syed Sibatin Khalid Session Coordinator : Dr. Siddhartha Sankar Biswas, Dr. Naseem Rao and Ms. Neha
3:30 PM - 03:45 PM	Tea
3:45 PM - 05:15 PM	University Facility Visit Session Coordinator : Mr. Naved Alam , Mr. Piyush Kumar Gupta and Dr. Sohrab Ali

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Day 1 - 28 November 2022 (Monday)	
08:30 AM - 09:00 AM	Registration Session Coordinator : Mr. Aqeel Khalique , Dr. Amit Bhooshan Singh, Mr. Nafisur Rahman and Mr. Tabish Mufti
09:00 AM - 10:10 AM	Inaugural Session Session Coordinator : Dr. Sherin Zafar, Ms. Gautami Tripathi, Dr. Imran Hussain, Dr. Aslam Parvez and Dr. Javed Ahmad
10:10 AM - 11: 00 AM	Networking and High Tea
11:00 AM - 01:00 PM	"Data Science in IoT" by Prof M.K. Soni , Retired Professor, NIT Kurushetra and Director General, IIMT Group of Colleges, Greater Noida. Session Coordinator : Dr. Sherin Zafar, Ms. Samia Khan and Mr. Tabish Mufti
01:00 PM - 02:00 PM	Lunch
02:00 PM - 03:30 PM	"Artificial Intelligence redefining Media Landscape" by Prof M Kasim, Professor and Hony. Director, AJK Mass Communication Research Centre and Hony. Director IQAC, Jamia Millia Islamia, New Delhi. Former Advisor TRAI Govt of India Session Coordinator : Dr. SuraiyaParveen, Dr. Jawed Ahmed, Ms. Refia Wiquar and Mr. Md Omair Ahmad
3:30 PM - 03:45 PM	Tea
3:45 PM - 05:15 PM	University Facility Visit Session Coordinator : Mr. Syed Sibtain Khalid, Mr. Aqeel Khalique and Mr. Syed Ali Mehdi

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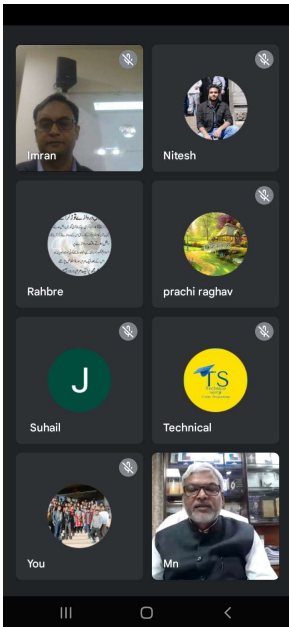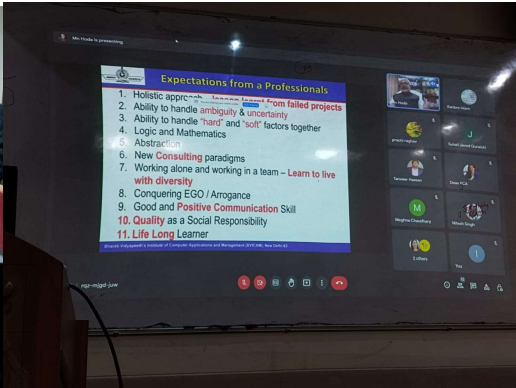
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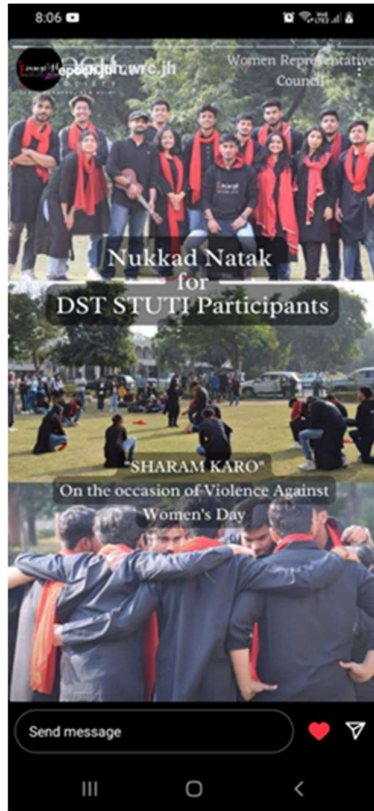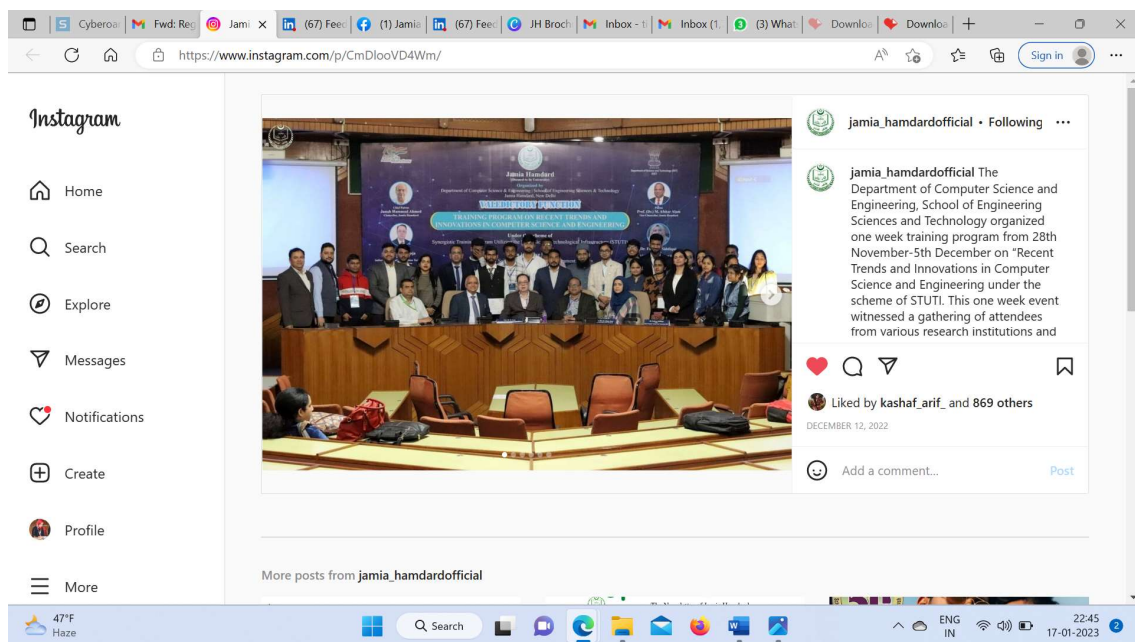
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