Annual Report of FTK-Centre for Information Technology for the year 2020-2021

(i) Officiating Director: Dr. S. Kazim Naqvi

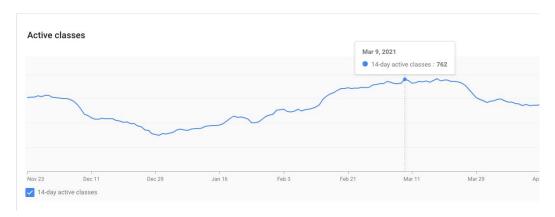
(ii) Number of Technical Staff:

| S.No. | Designation of Post | No. of Post | Remarks |
|-------|------------------------|-------------|----------|
| 1 | Additional Director | 1 | |
| 2 | Sr. System Analyst | 1 | 1-Vacant |
| 3 | Programmer | 1 | |
| 4 | System Analyst | 2 | |
| 5 | Database Administrator | 1 | |
| 6 | Network Engineer | 1 | |
| 7 | Technical Assistant | 4 | 1-Vacant |
| 8 | Computer Operator | 1 | |

(iii) ICT Facilities created at the Centre during the Year 2020-21:

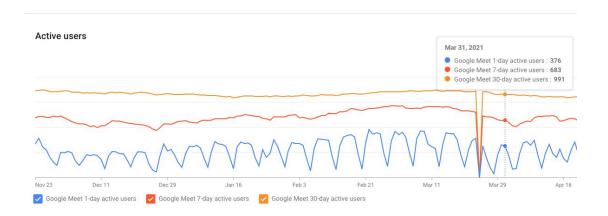
The FTK-Centre for Information Technology setup the following Google Applications to enable online teaching/learning in the University:

- Google Meet
- Google Classroom
- Google Jamboard
- YouTube Live Streaming



Average Classes per day using Google Classroom: 547 (Based on 14-day active classes data)

The graph below shows Google Meet usage in the university. The tools was used by majority of the faculty members to interact with the students. The usage shows 683 active users on 31-March, 2021 based on weekly:



The significant impact made by intervention of these applications may be accessed from the following metrics:

| Application | April 01, 2020 | March 31, 2021 | Increase | %age increase |
|-----------------------|-------------------|-------------------|----------|---------------|
| Drive Storage (TB) | 2.63 TB | 05.19 TB | 2.56 TB | 97.34% |
| No of E-Mail accounts | 2582 | 3620 | 1038 | 40.20% |
| GMail Storage (TB) | 13.96 TB | 16.81 TB | 2.85 TB | 20.41% |

Increase in EMail account and storage space during the period April 2020 - March 2021

Cisco WebEx for supporting big Online Events

In addition, the Cisco WebEx Meetings & Events licenses were also procured to enable conduct of large online events (up to 1000 participants).

Setting up of new Infrastructure at FTK-CIT

- (a) In order to facilitate conduct of Online events, the following facilities was also setup:
 - 21.5" WaCom IPS
 - FHD PTZ Camera with 10x Optical Zoom
 - Speakerphone
 - LED Video Light

The above setup was used by the university in conduct of online selection committee meetings under CAS as well several online events and meetings.

(b) New PCs in the Training Lab & FTK-CIT's technical staff

36-old PCs in the FTK-CIT ICT Training Lab were replaced with new i-5 PCs

(c) New Software Licenses

The Centre also procured licenses for the following software:

• Stellar Toolkit Data Recovery (1-Year)

- BitRaser FileEraser (1-Year)
- Adobe Creative Cloud (1-Year/2-licences)
- Windows 7 to Windows 10 License (WinPro 10 SNGL UPGRD OLP NL ACDMC) 100 licenses

(d) CCTV & Fire Alarm System at FTK-Centre for Information Technology

A 10-sensor based Fire Alarm System was procured and installed in FTK-Centre for Information Technology.

A CCTV system to allow surveillance of important location in FTK-CIT was setup. The system comprises 12-mini Dome & 3-bullet IR cameras with 32-channel NVR.

(iv) Support in conduct of Online Ph.D. Viva-Voce Examinations, CAS Selection Committees & Online Events

Consequent upon the approval of the university's academic council for conducting the Ph.D. examination/viva-voce online, the FTK-Centre for Information Technology arranged for the recording facility of the online examination. During June 11, March 31, 2021, a total of 224 Ph.D. examinations were conducted and recorded online.

The Center also provided active support to other faculties/departments/centres of the university in conduct of numerous online events including Webinars, Online public lectures, statutory bodies & other meetings. The Recruitment & Promotion Section of the Registrar's office also arranged several CAS Selection committees with the support from FTK-CIT.

(v) Workshops/Training Sessions/Seminars Organised by the Centre

- (a) To prepare the faculty members to effectively use the Internet tools for conducting the classes in online mode, the FTK-Centre for Information Technology on the initiative of the hon'ble Vice Chancellor, Jamia Millia Islamia, Prof. Najma Akhtar organised a series of webinars. The initial four webinars trained 750 faculty members on use of online platforms for effective teaching. The webinars were delivered through following sessions:
- (1) Experience Sharing & Best Practices
- (2) Using Google Hangout and Google Meet for Online Education
- (3) Using Google Classroom for Online Education
- (4) Accessing JMI Library resources from remote and Using Open Education Resources
- (5) Practice Sessions (02)

Webinar Dates

| I | Webinar | April 06-07, 2020 |
|----|---------|-------------------|
| П | Webinar | April 11-12, 2020 |
| Ш | Webinar | April 15-16, 2020 |
| IV | Webinar | April 18-19, 2020 |

Prof. Najma Akhtar, Vice Chancellor, JMI inaugurated all the webinars and also delivered the valedictory addresses. Prof. Furqan Qamar, Centre for Management Studies moderated all the sessions and shared his rich experiences with the participants.

(b) An online FDP on use of Online tools for teaching was also organized by FTK-Centre for Information Technology in collaboration with Faculty Induction & Development Centre (FIDC). The FDP was organized during Sep. 14-15, 2020 and was attended by about 400 JRFs/SRFs/Post Doctoral fellows of Jamia Millia Islamia. The Keynote session on "Improving Research Visibility in current scenario" was given by Prof. Abid Haleem, Chairman, FIDC, JMI. A talk on Teaching, Learning & Research - Access to Library Resources was given by Dr. Tariq Ashraf, University Librarian, JMI. The other sessions of the program on Google Apps for Education, Google Classroom LMS & Google Meet were delivered by Dr. S. Kazim Naqvi.

(vi) Participation in Courera Global Initiative

In addition, FTK-Centre for Information Technology registered Jamia Millia Islamia in the global effort of the Coursera Community to help minimize the impact of Corona Virus (COVID-19) outbreak on JMI's students. The Coursera platform provides access to MOOCs from diverse subjects including Technology, Physical Sciences & Engineering, Arts & Humanities, Healthcare etc. Under the initiative more than 3800 courses and 400 specializations from leading universities and companies such as Yale, University of Michigan, University of Chicago, University of Virginia, University of London, Columbia University, IBM, Google etc. have been made available. As per the statistics shown on Coursera portal, more than 21,655 enrollments were made by JMI students and faculty spending 20,465 hours of learning. About 500 of them have earned certificates from respective providers after completing the courses.

(vii) Outreach/Extension activity

The FTK-Centre for Information Technology organized a 2-day ICT Training program each for the three Schools under Delhi Education Society viz. Shafique Memorial Senior Secondary School, Anglo Arabic Senior Secondary School and Anglo Arabic Model School. The 2-day program was conducted in three batches during Dec. 17-18, 21-22 & 23-24, 2020. A total of 86-teachers attended the programs. The training sessions were conducted by Dr. S. Kazim Naqvi, Dr. SNA Rizvi & Mr. Azizullah Khan.

(viii) Conferences/Webinars attended:

| S.No. | Name of the person | Name of the Progam | Organized By | Date |
|-------|--------------------|------------------------|-----------------|----------|
| 1. | Mr. Azizullah Khan | Machine Leaning and | D/o Mathematics | 7 August |
| | | Mathematical Modelling | and Statistics, | 2020 |
| | | | School of Basic | |
| | | | Sciences, | |
| | | | Manipal | |

| | | | | University, Jaipur | |
|----|--------------------|------------------|--------|--------------------|--------------|
| 2. | Mr. Azizullah Khan | Mathematics | behind | Department of | 20th August, |
| | | Machine Learning | | Applied Sciences | 2020 |
| | | | | and Humanities, | |
| | | | | MEC | |
| | | | | | |

Online Courses Attended by FTK-CIT staff

| Name | Name of the certificate | Provided by | |
|------------------------|---|------------------------|--|
| Dr. S. Kazim Naqvi | Introduction to Cybersecurity Tools & Cyber | IBM through Coursera | |
| | Attacks | | |
| Dr. S. Kazim Naqvi | Coursera Administrator Training | IBM through Coursera | |
| Mr. Mohamad Hamid Khan | Cybersecurity Roles, Processes & Operating | IBM through Coursera | |
| | System Security | | |
| Mr. Mohamad Hamid Khan | Introduction to Cybersecurity Tools & Cyber | IBM through Coursera | |
| | Attacks | | |
| Mr. Junaid Akhtar | Programming for Everybody (Getting | University of Michigan | |
| | started with | through Coursera | |
| | Python) | | |
| Mr. Junaid Akhtar | Google Cloud Platform Fundamentals: Core | Google Cloud through | |
| | Infrastructure | Coursera | |
| Mr. Junaid Akhtar | Google Cloud Product Fundamentals | Google Cloud through | |
| | | Coursera | |
| Mr. Junaid Akhtar | Exploring and Preparing your Data with | Google Cloud through | |
| | BigQuery | Coursera | |
| Mr. Junaid Akhtar | Google Cloud Platform Big Data and | Google Cloud through | |
| | Machine | Coursera | |
| | Learning Fundamentals | | |

Form B - Contribution of the Centre to the cooperate life of the University

Network Section

(i) LAN and WiFi network Infrastructure in the university

| S.No. | Equipment | Total No | Total No | %age increase |
|-------|-------------------------|---------------|---------------|---------------|
| | | (March, 2020) | (March, 2021) | |
| 1 | Switches* | 447 | 460 | 2.9% |
| 2 | Wireless Access Points* | 1004 | 1079 | 7.4% |
| 3 | Servers | 14 | 14 | |
| 4 | Wireless Controller | 05 | 05 | |
| 5 | NKN | 1 Gbps | 1 Gbps | |
| 6 | STPI | 172 Mbps | 172 Mbps | |
| 7 | Cyberoam Firewall | 02 | 02 | |
| 8 | Cisco Router | 01 | 01 | |
| 9 | NMS Software | 01 | 01 | |

^{*} Switches and Wireless Access Points are located at different departments.

(ii) Expansion of network within the campus during the period 2020-2021.

- The Optical Fiber connectivity (OFC) of the university was extended to the newly constructed building of School of Education. The building has been provided with thirty (30) network points.
- A segment of passive network in Department of Social Work which was badly damaged by rodents during past several years was relaid. Forty eight (48) network points have now been provided through the newly laid UTP cables.
- The Optical Fiber connectivity (OFC) of the university was extended to the newly constructed New Pink Boys Hostel. The building has been provided with twenty (20) network points.
- Network Point (LAN) and Optical Fiber Cable connectivity has been provided in .
- Twenty nodes were added to the network in FTK-CIT to provided for newly procured CCTV
- Optical Fiber Connectivity has been provided in Department of Education Studies.
- Forty five (45) network points (LAN) have been provided in the Computer Lab (Shukla Block) in the Department of Educational Studies.
- Optical Fiber Cable connectivity has been provided in Department of Adult & Continuing Education (Old Examination Building).

Web Section

The Web Section FTK-CIT continued to carryout the following activities for maintaining of the University Website/online services:

a) Maintaining the English and Hindi versions of the university portal viz. https://jmi.ac.in & https://jmi.ac.in/hn.

- b) Updating of the various online Assignments, Time Tables, Faculty/Departmental and Centre's Profile, Updating of various profile of the faculty members Updating of Entrances Test Syllabi for various courses, Uploading / updating of Course Syllabus, Fellowships and Scholarships, University Placement related info / brochures, Jobs Notices and Tenders, Notices/Office orders/Circulars, Managing GIAN Portal etc.
- c) Creation of a new webpages for StartupJMI
- d) Updating of the Centre for Distance and Online Education (CDOE) webpage including Term-end Examination.
- e) A total of 132 events related info was uploaded during the period April 2020 to March 2021.
- f) Creation of Email user accounts including reset of passwords on need basis.
- g) Update of various EMail Groups based on changing user roles.
- h) Taking regular backup of the English and Hindi versions of the webportal on the local server
- i) Managing Software Library of the Centre
- j) Arranging Google Meet recording for Ph.D./M.Phil. Examination & other events.

MIS Section

1. MyJamia Portal

In order to reduce paper flow & staff movement during the ongoing COVID period and also afterwards to achieve better efficiency in JMI's system, it was felt that a Web based Information System which could enable Jamia employees & students to work from their respective places is much needed.

With this objective an initiative of developing a self-service portal named "MyJamia" was undertaken by FTK-CIT. The objective of this portal is to be provide web based access to some of JMI-MIS services which could help individuals access data/reports by providing data pertaining to them. The portal was developed by Mr. Raquib (Software Engineer - Contractual) under supervision of Dr. S. Kazim Naqvi. To start with the following reports have been provided for the employees of the university:

Reports for Employees

- (i) Individual's Salary Report (of any month)
- (ii) Salary Slips Archive
- (iii) Earned Leave Balance
- (iv) GPF / CPF Balance

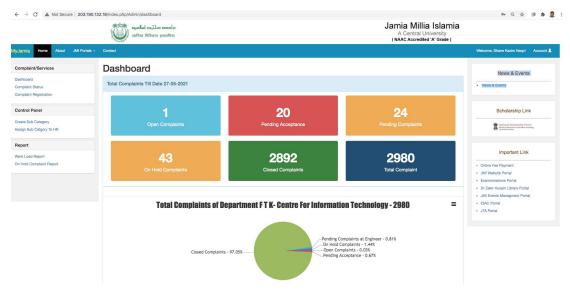
Reports for Students

- (i) Fee Payment
- (ii) Fee Receipts of past transactions
- (iii) ICT related complaints for hostel residents

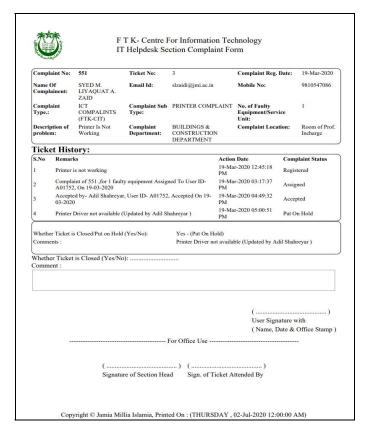
A generic "Service Management" module has also been developed as part of the portal. The module can be configured for any other department of Jamia to effectively & efficiently deal with users related services. To start with, the module will be used by FTK-Centre for Information Technology to enable all JMI users including hostel residents to log their ICT related

complaints/service requests into the system from their respective places. The module has following salient features:

- (i) It would eliminate the need to send service/complaint letter to the concerned department.
- (ii) An electronic service ticket would be created by the system and an acknowledgment would be given to the user through email.
- (iii) For each service type, the system has provision for a "Service Manager" (Person who would assign task to the service team) & "Service Team" (Persons who would attend to the service request) which will be at the disposal of the "Service Manager" for assigning of tickets.
- (iv) A dashboard to let the "Service Manager" or "Administrator" see the status of Service requests made by users has also been provided. The dashboard provides following information:
 - (a) No of Open Service Tickets
 - (b) No of Service Tickets pending acceptance from the Service Team
 - (c) No of Pending Service Tickets
 - (d) No of tickets on hold due to requirement of resources/spares or other dependencies
 - (e) No of Service Tickets closed
 - (f) Total no of Service Tickets
- (v) For each service ticket attended by the service team, an email would be auto send to the user informing him/her about the status of the case.
- (vi) An email notifying ticket closure would also be sent to the user immediately after closure of Ticket.
- (vii) Provision of obtaining user feedback on quality of service delivered has also been made.



Admin Dashboard



Sample Call Report

(ii) E-Registration Module for Academic Events

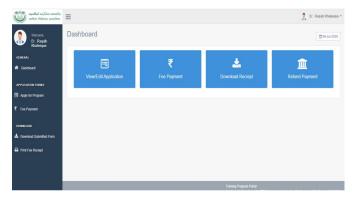
Another portal has been developed to facilitate Online registration of participants for the academic events. The portal was developed by Mr. Raquib (Software Engineer - Contractual) under supervision of Dr. S. Kazim Naqvi. The portal has been developed with following features:

- (i) To allow an interested user register on the portal.
- (ii) To allow registered user view all academic events/refresher courses/orientation/training programs etc.



- (iii) To allow registered user register for any academic event.
- (iv) To allow the registered user to pay registration fee online.
- (v) To allow the concerned department/centre to download list of registered applicants for the program.

User Registration Screens for Academic Event Registration Module



Screen showing Academic Event Registration Functions

IT Helpdesk Services

