



CIT Updates

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FTK-Centre for Information Technology

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Editorial

The "CIT Updates" is now completing two years and it is a matter of great satisfaction that it is being published regularly since its inception.

The year 2009 has been very significant in the history of the Internet following approval of the ICANN (Internet Corporation for Assigned Names and Numbers) board in October 2009 to introduce non-Latin characters for domain names, thus bringing billions of people online in regions where they do not understand English. This is bound to bring an amazing change in the use of Internet throughout the globe, making it a more valuable tool for the International community.

Some of the new initiatives taken by the centre in the last quarter of 2009 are worth mentioning, which include development of "File Tracking System" and "Annual Reporting System". These are under the scheme of e-governance being adopted by the university. In addition to this, the centre organised training programmes on "ePrints" and "E-Content Management System". Brief reports about these activities are given in this newsletter. It also includes the highlights of the Parallel Computing Cluster Facility developed by the Department of Physics, JMI.

The contribution from various sections of FTK-CIT during the fourth quarter are duly presented, which include MIS updates, Internet Info, Web Services, Admissions Report 2008-2009, and Academic activities of the CIT staff.

Your feedback on this issue of the newsletter is welcome.

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International IT News

ICANN approves non-Latin domain names

Since its inception, the Internet has been limited to the Latin character set used by the U.S. and many other nations. However, the ICANN (Internet Corporation for Assigned Names and Numbers) board, in its meeting held on 30 October 2009 at Seoul, Korea, approved to bringing the Languages of the World to the Global Internet. This can be called as one of the greatest International IT News of the year.

According to the ICANN chairman Peter Dengate Thrush, "The coming introduction of non-Latin characters represents the biggest technical change to the Internet since it was created four decades ago. Right now Internet address endings are limited to Latin characters – A to Z. But the Fast Track Process is the first step in bringing the 100,000 characters of the languages of the world online for domain names."

"This is only the first step, but it is an incredibly big one and an historic move toward the internationalization of the Internet," said Rod Beckstrom, ICANN's President and CEO. "The first countries that participate will not only be providing valuable information of the operation of IDNs (Internationalized Domain Names) in the domain name system, they are also going to help

to bring the first of billions more people online – people who never use Roman characters in their daily lives."

IDNs have been a topic of discussion since before ICANN's inception. It has taken years of intense technical testing, policy development, and global co-operation to prepare the Fast Track process for its launch. To expedite the new plan, ICANN launched a Fast Track process on November 16.

Since then the organization has begun accepting applications from countries for new top level domains, or Internet extensions, based on each nation's character set. IDNs will allow domain names to be written in native character sets, such as Chinese, Arabic, and Greek. In charge of managing domain names, ICANN has argued that IDNs are necessary to expand use of the Web in regions where people don't understand English.



Source:

- <http://www.icann.org/en/announcements/announcement-30oct09-en.htm>,
- <http://www.icann.org/en/topics/idn/fast-track/>

First non-Latin domain name goes online

The Internet Corporation for Assigned Names and Numbers (ICANN) had recently approved of domain names in Arabic for Egypt, Saudi Arabia and the United Arab Emirates. Egypt's country code top-level domain (ccTLD) in Arabic is "مصر" (.masr) in addition to the existing ".eg".

Major internet applications are also yet to come to terms the new non-Latin URLs. Google Translate treats the domain name "<http://موقع.وزارة-الاتصالات.مصر>" as a piece of text, rather than an URL and spews out a literal translation "[http:// site. Ministry - Communications. Egypt](http://site.Ministry-Communications.Egypt)"

The popular URL shortening service bit.ly goes into error mode and displays the message "Server Error. Sorry, bit.ly encountered a temporary error and could not complete your request."

Until now, websites had to end their addresses with ".com" or another string using Latin characters. That meant businesses and government agencies still had to use Latin characters on billboards and advertisements, even if they were targeting populations with no familiarity with English or other languages that use the Latin script.

Non-Latin characters were sometimes permitted for the portions of the Internet address before the suffix. But Arabic websites generally haven't had that option because Arabic characters are written right to left, conflicting with Latin suffixes written left to right.

It is expected that by 2011 domain names in as many as seven Indian languages - Hindi, Bangla, Punjabi, Urdu, Tamil, Telugu and Gujarati - would also be available.

Source: <http://ibnlive.in.com/news/first-nonlatin-domain-name-goes-online/114994-11.html?from=trending>



IT News from the University Departments

Department of Physics sets up a Parallel Computing Cluster

What is a Computer Cluster?

A *computer cluster* is a group of linked computers, working together closely so that in many respects they form a single computer. The components of a cluster are commonly, but not always, connected to each other through fast local area networks. Clusters are usually deployed to improve performance and/or availability over that of a single computer, while typically being much more cost-effective than single computers of comparable speed or availability [Ref.: [http://en.wikipedia.org/wiki/Cluster_\(computing\)](http://en.wikipedia.org/wiki/Cluster_(computing))]. The parallel computing environment is provided by Message Passing Interface (MPI), which is a specification for an API that allows many computers to communicate with one another. It is used in computer clusters and supercomputers.

Technical Details

The Department of Physics has recently setup a state of the art Parallel Computing Cluster with 16GB RAM to meet the Department's computational requirement in research. The Cluster consists of a Sun Fire X4200 M2 x64 Master node and six Sun Fire X2200 M2 x64 Computer nodes, rack-mounted and connected via a Gigabit switch. Each node has AMD Opteron 2222 dual core processor with CPU speed of 3.0 GHz/1MB. The Cluster runs on Red Hat Enterprise Linux with LAM/MPI providing the parallel computing platform. Both C and Fortran 90 parallel compilers are available on the Cluster. The present facility was established under Departmental Research Support (DRS) grant to Physics Department from the University Grants Commission (UGC).

In view of increasing use of parallel computing in Science & Engineering and Biotechnology research, there is a need to establish Parallel Computing Cluster as a Central facility to be used by researchers from various Departments and research centers in the University.

The Department of Physics Cluster is up and working. The following user logins have already



been created. The temporary password is the same as the login name. Those who want to use the Cluster and login to be created, may contact the Department of Physics Jamia Millia Islamia, New Delhi Research Scholars' requests for login need to be endorsed by their supervisors. Computer Committee

The IP addresses of the machines on the Cluster are:

Master 10.45.10.2
Node1 10.45.10.3
Node2 10.45.10.4
Node3 10.45.10.5
Node4 10.45.10.6
Node5 10.45.10.7
Node6 10.45.10.8

Steps for remote login

Steps for remote login on Cluster machines from within the Physics Department network are as follows:

1. Boot your system in Linux.
2. Open the terminal and type the following command to check if Cluster is up
`< ping 10.45.10.2 >`. Hit enter.
If you get messages like
`64 bytes from 10.45.10.2: icmp_seq=1 ttl=64 time=1001 ms,`
this means that the Master is up and you can login to it. Similarly you can do for other nodes.
3. If you wish to login on node1, type
`ssh 10.45.10.3 -l "user id"` and hit enter.
You will be asked for password.
Type the password and hit enter.
You will be logged in on node1.
Now, you can compile and run your serial as well as parallel codes etc.

Training Workshop on “E-Content Management”



Participants in the E-Content Management Training Programme

The FTK-Centre for Information Technology conducted a training workshop on “E-Content Management” from 12-21 October 2009 for the faculty members of the University. The purpose of the training was to enhancing IT skills among the faculty and introducing them with the use of technology in teaching and learning.

The details of the topics covered and the resource persons from FTK-CIT who conducted the training are given in the following table.

Topic	Resource Person
Computer Fundamentals	Mr. Muzaffar Azim
Operating System	Mr. Muzaffar Azim
Power Point	Mr. Azizullah Khan
Power Point Practical	Mr. Nurul Islam
Adobe Connect – a CMS Tool	Mr. Muzaffar Azim
Adobe Connect Practical	Mr. Md. Hamid
Moodle – a CMS Tool	Dr. S. Kazim Naqvi
Moodle Practical	Mr. Md. Hamid

The following faculty members participated in the training:

Name of Participant	Faculty/ Centre/ Department
Prof. Saranjit Singh Bhasin	Faculty of Dentistry
Prof. M. M. Hasan	Deptt. of Mech. Engg.
Mr. S. M. Muzakkir	Deptt. of Mech. Engg.
Dr. Savitri Kadloor	Deptt. of Political Science
Dr. Amirul H. Ansari	Centre for Management Studies
Dr. Rahela Farooqi	Centre for Management Studies
Mr. Saiyed Wajid Ali	Centre for Management Studies
Ms. Shimi Moni Doley	Deptt. of English
Mr. M. Husain Quasmi	Deptt. of Teachers Trg. & Non Formal Education
Mr. Manmohan Singh	Centre for European & Latin American Studies
Mr. Iqbal Ali	Deptt. of Electrical Engg.
Mr. Faiyaz Ahmad	Deptt. of Computer Engg.
Mr. Mohd. Saleem	University Polytechnic
Dr. Shabina Sachdeva	Faculty of Dentistry
Dr. Saif Siddiqui	Centre for Management Studies

The participants were very much satisfied with the rich contents of the training programme.

Training on Setting up and Using ePrints

Faculty members, students and researchers in Jamia Millia Islamia annually contribute to a large number of research papers, theses, articles, teaching material and other reports which are published in national/ international journals, proceedings of conferences, workshops etc. However, the scholarly contributions of Jamia's own resources do not become readily visible within and outside the University. The access to such published material requires subscription to Journals and databases, which may not always be feasible. A mechanism that can enable the authors to put their research publications on a central server and its dissemination within and outside the University will be very helpful. Some of the benefits that can be derived with such arrangement are:



- ▶ A single digital repository of all University publications will be setup. This will help in long-term archiving of the knowledge base produced by Jamia.
- ▶ Access to the published material will be available to much larger section of users (In accordance with the copyright provisions of the respective publishers)

- ▶ Due to open access to the published material, citation for the published work will also go up.
- ▶ If Jamia enforces "On-line" publication of Ph.D. theses, it will enhance the quality of research and also help in minimizing plagiarism.

With the above objectives, the FTK-Centre For Information Technology conducted a two-day training programme from October 26-27 2009 on "Setting up and Using ePrints". The ePrints is an open source and flexible platform for building high quality, high value repositories. It is recognised as the easiest and fastest way to set up repositories of research literature, scientific data, student theses, project reports, multimedia artifacts, teaching materials, scholarly collections, digitised records, exhibitions and performances. Dr. Madhan Muthu from Information Division, NIT, Rourkela, Orissa conducted the training. The programme was inaugurated by Prof. Zahid H. Khan, Offg Registrar, Jamia Millia Islamia. The CIT staff as well as participants from Dr. Zakir Husain Library were exposed to the concepts of "ePrints" and its usefulness for the university community.



MIS Updates

New Initiatives

Two important new systems, viz. File Tracking System and Annual Reporting System were developed by FTK-CIT as part of the Jamia MIS.

File Tracking System

The FTK-Centre For Information Technology undertook development of a new facility – “File Tracking System” within the “Administration” module of Jamia-MIS. The objective of the system is to track documents as they move from one desk to another in the University. It is envisaged that the utility once implemented can bring efficiency in the University by eliminating/reducing the chances of document loss in the work flow. Moreover, the utility can quantify important efficiency parameters such as workload, file hold time etc. These parameters are capable of providing good insight to Administrators for monitoring workflow bottlenecks and take remedial action.

The system was demonstrated in the Office of the Registrar. A number of officials were present in the demonstration and provided feedback to the MIS development team for further improvement.

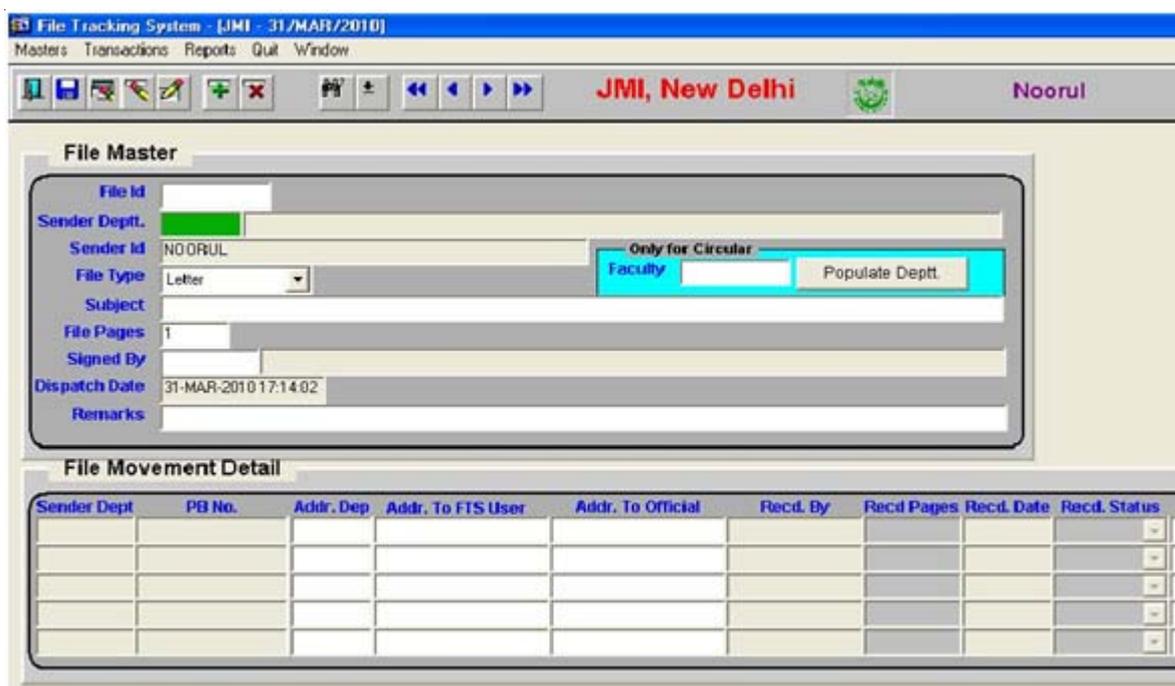
Annual Reporting System

This system has been developed using ASP.Net technology and shares the database with Jamia MIS. It is essentially a web-based system which allows identified system users to define templates for data collection from targeted group(s) of employees. The utility allows the targeted employees fill in the data or upload existing document in response. The data thus collected are consolidated into a single report. The software can be effectively used for expediting data acquisition and consolidation for Annual Report preparation.

Corrective MIS Maintenance

In addition to above activities, a large number of existing forms and reports were modified to suite the changed/new requirements of users. An important activity which lead to extensive changes in Payroll was Provisioning of Grade Pay as per the VI Pay Commission in the Payroll Package. A summary of such MIS modification activities is given below:

Description	Number
New Forms Created	2
New Reports Created	13
Forms Modified	23
Reports modified	20



A screen of the File Tracking System



Internet Info

Enhancement of Internet Bandwidth

On 28th December 2009, an additional 6 Mbps (1:1) bandwidth through Radio Link from STPI Noida was acquired, thus enhancing it to 14 Mbps. Now both the lines of STPI Noida Radio links are of 5+5 Mbps, whereas from ERNET India we have 2 Mbps (1:1) leased line and 2 Mbps (1:1) radio link connectivity.



Inter Service Provider	Internet Bandwidth
ERNET India	2 Mbps (Leased Line)
ERNET India	2 Mbps (Radio Link)
STPI Noida	5 Mbps (Radio Link -I)
STPI Noida	5 Mbps (Radio Link -II)

Internet Browsing

The top twenty seven categories that have been visited by the users in the university during year 2009 on the Internet are given below. Among the top ten categories, 'Information Technology' comes at the second position, whereas the 'Web-based Email' stands at the fourth rank and 'Education and Reference Materials' appear at the seventh position.

AllowSpecificwebsites (226891.25)
InformationTechnology (203005.27)
Advertisements (124797.56)
WebBasedEmail (123066.42)
SearchEngines (122378.421)
Portals (90869.12)
EducationAndReterenceMaterial (59832.75)
ImageGanks (53386.59)
IPAddress (51733.68)
NewsAndMedla (49861.88)
None (32307.81)
EducationalInstelutions (30639.29)
Blogs (25274.36)
Cricket (24556.47)
Communication (23273.54)
DownloadFreewareAndShareware (20959.14)
ComputerSecurity (19004.59)
BusinessAndEconomy (16190.64)
Entertainment (14984.51)
Government (13653.46)
JobsSearch (11368.86)
InstantMessaging (10839.681)
HealthAndMedicines (10124.88)
TravelFoodAndImmigration (10056.37)
Shopping (9070.14)
SharesAndStockMarket (8709.63)
DenySpecificWebSite (8077.12)

Internet Security in Jamia Hostels

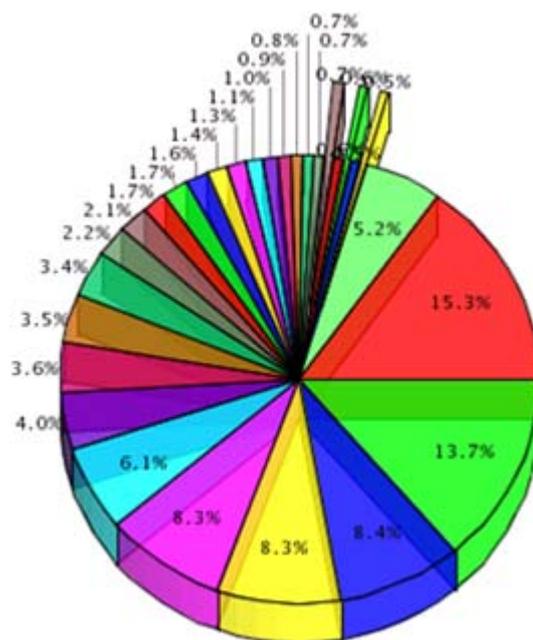
Due to security reasons the Internet access in the University hostels has been made more restrictive, which is now possible only through User Ids and Passwords.

To enhance the security, the user accounts have been bound with the respective PC IP Addresses and Mac Addresses.

Hostel residents who wants to access the net in the hostel, may apply for internet access by filling up a form which is available at:

<http://10.2.0.14/eGov/Proforma.php>

To promote judicious utilization of the Internet bandwidth and reducing Internet misuse, a specified amount of downloading of data has been set per user. A total of 189 accounts have been created for this purpose so far.



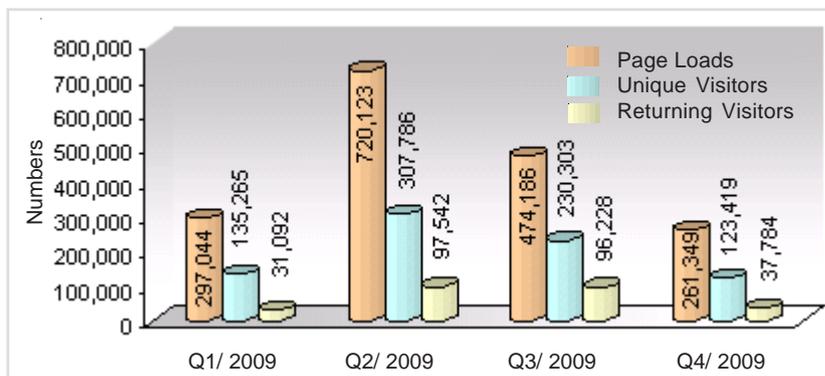
Annual Hits Category wise Year 2009



Web Services

Web Statistics

The following graph is based on the information about the web hits during 2009 on the Jamia website. The quarterly break-up about page load, unique visitors and returning visitors is given below:

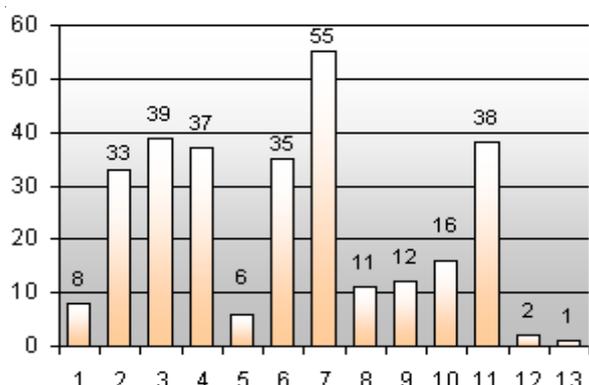


- Page Loads : The webpages on the website that have been visited.
- Unique Visitors : Visitors of a website who visited it for the first time.
- Returning Visitors : Visitors returning to the website for another visit an hour or more later.

Website Updates

During October-December 2009, a number of features were uploaded on the website, whose details are given in the following:

No.	Uploaded documents	No. of Uploads
1	Notices and Office Orders	8
2	Tender Notices	33
3	Events and Conferences	39
4	Press Release	37
5	Outreach programmes	6
6	Admission-related Documents	35
7	CVs of Faculty Members	55
8	Departments/Centres Profile	11
9	Job Vacancies in Jamia	12
10	Examination-related Document	16
11	Abstracts of Ph.D. Theses	38
12	Financial Reports on Annual Accounts 2008-2009 and Balance Sheet under RTI	2
13	Minutes of A.C. Meetings (dated 27.10.2009)	1



Various updated features uploaded on the Jamia website - during Q4/2009.

Admission-related Documents

During the fourth quarter of 2009, Entrance Test Syllabi of MBA(E), B.E. and Diploma Engineering (Eve.) were uploaded. General Guidelines and

Application Form for Private Candidates were also put on the website.

For the Annual Convocation of the University all relevant information about students, such as the List of Ph.D. awardees, toppers and other position holders in the respective Faculties/Centres, and List of students who were to be awarded degrees, were also uploaded on the website.

Abstracts of Ph.D. Theses

Thirty eight new Abstracts of Ph.D. Theses received from the Office of Controller of Examinations were uploaded on the website. The department-wise break-up of the Abstracts is given in the following and the details may be seen at the URL: <http://jmi.nic.in/Research.htm>

S.No.	Departments	No. of Theses
1	Arabic	2
2	Biosciences	7
3	Chemistry	6
4	Civil Engineering	1
5	Commerce	1
6	Computer Science	3
7	Economics	2
8	Education	3
9	Electronics Engineering	1
10	Hindi	1
11	History	1
12	Law	3
13	Mathematics	3
14	Persian	1
15	Physics	1
16	Psychology	1
17	Social Work	1
	Total	38

UGC NET

Some 404 pages of information related to the list of candidates registered, list of centres and instructions for admit cards for UGC NET of December 2009 were posted on the website.



Academic Activities of the CIT Staff

Participation in Conference

Prof. Zahid H. Khan

On the invitation of the High Tech Group of The Indian Express, Mumbai, Prof. Zahid H. Khan, Director, FTK-CIT participated in the conference, "Technology Big 3 - IT in Education" during November 16-18, 2009, held at Taj Vivanta, Panjim, Goa.

Lectures delivered / Programmes conducted

The following academic and technical staff of FTK-CIT delivered lectures and/or conducted various programmes in ICT during the fourth quarter of 2009.

Resource Persons	Topic of Lecture	Date	Programme/Institute/Place
Dr. S. Kazim Naqvi	Moodle – a CMS Tool	20 Oct. 2009	E-Content Management Training Programme (FTK-CIT)
Azizullah Khan	Power Point	13 Oct. 2009	E-Content Management Training Programme (FTK-CIT)
Muzaffar Azim	Computer Fundamentals, Operating System	12 Oct. 2009	E-Content Management Training Programme (FTK-CIT)
	Adobe Connect – a CMS Tool	15 Oct. 2009	
Wasiful Hasan Ansari	Using MS-Excel for Data Management	5 Nov. 2009	90 th Orientation Programme for University and College Teachers organized by Academic Staff College, JMI, New Delhi.
Mohammad Nurul Islam	Basic Introduction of Networks/Internet	7 Nov. 2009	Academic Staff College, JMI
	Power Point (Practical)	14 Oct. 2009	E-Content Management Training Programme (FTK-CIT)
Mohammad Hamid	Adobe Connect (Practical)	19 & 21 Oct. 2009	E-Content Management Training Programme (FTK-CIT)



CIT Reports

Jamia Admissions Report 2009-2010

Each year, after the admissions are over, the FTK-Centre for Information Technology brings out a report on admissions during the concerned academic session. Such report not only provides information on admissions in individual courses, but also helps the university administration in decision making.

In October 2009, a report on "Jamia Admissions 2009-2010 based on the JMI Information System" was brought out. A glimpse of the cover page and the table of contents of the report are given in the following:

Jamia Admissions Report 2009-2010 based on <i>The JMI Information System</i> FTK-Centre for Information Technology Jamia Millia Islamia New Delhi October 2009	Table of Contents Observations and Remarks ii-ix 1. Admissions 2009-2010 at a Glance 1 1.1 New Admissions and Total Enrollments 1 1.2 Summary of New Admissions - A Graphical Presentation 2 2. Details of new Admissions 2009-2010 3 2.1 New Admissions in Faculties & Centres 3-4 2.2 Category-wise Admissions in Faculties & Centres 5-8 2.3 Course-wise Admissions in Faculties 9-25 2.4 Course-wise Admissions in Centres 26-30 2.5 Enrollment of Students in Jamia Schools 31-32 3. Admissions-related Information on the Jamia Website 33 3.1 Status Report on Admissions Results 2009-2010 33-39 3.2 Display of Prospectus and Admissions Forms 40-42 3.3 Syllabi for Entrance Tests on the Website 43-45
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For Online Feedback
please click here 

http://jmi.ac.in/feedback/citupdates8_feedback.php