

**UNIVERSITY OF MUMBAI**

**No. UG/67 of 2015-16**

**CIRCULAR:-**

The Head, University Department of Law and the Principals of the affiliated Colleges in Law are hereby informed that the recommendation made by the Board of Studies in Law at its meeting held on 08<sup>th</sup> May, 2015 has been accepted by the Academic Council at its meeting held on 29<sup>th</sup> May, 2015 vide item No. 4.34 and subsequently approved by the Management Council at its meeting held on 27<sup>th</sup> June, 2015 vide item No. 05 and that in accordance therewith, in exercise of the powers conferred upon the Management Council under Section 54 (1) and 55 (1) of the Maharashtra Universities Act, 1994 and the Ordinances 6199 and 6200 and Regulations 8913 & 8914 and the syllabus for the Post Graduate Diploma in Cyber Law and Information Technology program has been introduced, which is available on the University's web site ([www.mu.ac.in](http://www.mu.ac.in)) and that the same has been brought into force with effect from the academic year 2015-16.

MUMBAI - 400 032  
31<sup>st</sup> August, 2015

REGISTRAR

To,

The Head, University Department of Law and the Principals of the affiliated Colleges in Law.

A.C/4.34/29.05.2015

M.C/05/27.06.2015

No. UG/67 -A of 2015-16

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MUMBAI-400 032

31<sup>st</sup> August, 2015

Copy forwarded with compliments for information to:-

- 1) The Dean, Faculty of Law,
- 2) The Chairperson, Board of Studies in Law,
- 3) The Director, Board of College and University Development,
- 4) The Controller of Examinations,
- 5) The Co-Ordinator, University Computerization Centre,

  
REGISTRAR

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# **UNIVERSITY OF MUMBAI**



## **Post Graduate Diploma in Cyber Law and Information Technology**

### **Ordinances, Regulations and Syllabus for the Post Graduate Diploma in Cyber Law and Information Technology**

**Introduced from the academic year 2015-16**

**P.G. Diploma in  
Cyber Law and Information Technology**

**O. 6199 Title of the Course :** Post Graduate Diploma in Cyber Law and Information Technology

**O. 6200 Eligibility :** Graduate from any faculty from a recognized University

**R. 8913 Duration :** One Academic Year

**R.8914 Fee Structure :** Rs. 8000/-

**Examination :** To be held at the end of every Academic Year

**Syllabus for**  
**P.G. Diploma in**  
**Cyber Law and Information Technology**

- Paper- I : Basic of computer and Cyber Security**  
**Paper- II : Information Technology law (Cyber Law)**  
**Paper – III : Cyber crimes and investigation procedures**  
**Paper IV : Practical training / Field work**

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**Paper I**  
**Basic of Computer & Cyber Security**

**Total Marks : 100**

1. History of Computers, Areas of Application
2. Computers and its components, Application Software and System Software
3. Introduction to Operating System
4. Basics of Networks and internet, Types of Networks, Definition of Cyber Security
5. Search Engines, E-mails and WWW', Internetworking Devices, Internet Service Provider, IP Address, Working of Email System, Domain Name System, Blogs, Peer to Peer sharing
6. Cryptography, type, goals, PKI
7. Digital signatures and electronic signatures, Electronic Payment system and Taxation.
8. Computer & Cyber Security:
  - a. Types of Attacks,
  - b. Network Security
  - c. Overview of Security threats,
  - d. Hacking Techniques,
  - e. Password cracking
  - f. Insecure Network connections,

- g. g. Malicious Code
- h. h. Concept of Fire Wall Security
- 9. Email security: Web Security: web authentication, SSL and SET
- 10. Database Security
- 11. Operating System Security
- 12. E-commerce & M-commerce Security
- 13. Advance Computers, Network & Mobile Security Techniques

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**PAPER II**  
**Information Technology Law**  
**(Cyber Law)**

**Total Marks : 100**

1. Evolution of the IT Act, Genesis and Necessity
2. Salient features of the IT Act, 2000; various authorities under IT Act and their powers. ; Penalties & Offences, amendments
3. Impact on other related Acts (Amendments) :
  - a) Amendments to Indian Penal Code.
  - B) Amendments to Indian Evidence Act.
  - c) Amendments to Bankers Book Evidence Act.
  - d) Amendments to Reserve Bank of India Act.
4. Cyber Space Jurisdiction
  - a. Jurisdiction issues under IT Act, 2000,
  - b. Traditional Principals of Jurisdiction
  - c. Extra terrestrial Jurisdiction
  - d. Case Laws on Cyber Space Jurisdiction
5. E-commerce and Laws in India
  - a. Digital/ Electronic Signature in Indian Laws
  - b. E-Commerce; Issues and provisions in Indian Law
  - c. E-Governance; concept and practicality in India
  - d. E-Taxation issues in Cyberspace

- e. E-Contracts and its validity in India
- f. Cyber Tribunal & Appellate Tribunal
- h. Cyber Regulations

## 6 Intellectual Property Rights, Domain Names and Trademark Disputes

- a) Concept of Trademark/ in Internet Era
- b) Cyber squatting
- c) Reverse Hijacking
- d) Jurisdiction in Trademark Disputes
- e) Copyright in the Digital Medium
- f) Copyright in Computer Programmes
- g) Copyright and WIPO Treaties
- h) Concept of Patent Right
- i) Relevant Provisions of Patent Act 1970

## 7. Sensitive Personal Data or Information (SPDI) in Cyber Law

- a. SPDI Definition and Reasonable Security Practices in India
- b. Reasonable Security Practices – International perspective

## 8. Cloud Computing & Law

## 9 . Cyber Law : International Perspective

- a) EDI : Concept and legal Issues.
- b) UNCITRAL Model Law.
- c) Electronic Signature Law's of Major Countries
- d) Cryptography Laws
- e) Cyber Law's of Major Countries
- f) EU Convention on Cyber Crime

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## PAPER III

### Cyber Crimes & Investigation Procedures

**Total Marks : 100**

1. Cyber Forensic and Computer Crimes and types, Crimes targeting Computers: Definition of Cyber Crime & Computer related crimes, Classification & Differentiation between traditional crime and cyber crimes.
  - a. Data Theft
  - b. Hacking
  - c. Spreading Virus & Worms
  - d. Phishing
  - e. Cyber Stalking/Bullying
  - f. Identity Theft & Impersonation
  - g. Credit card & Online Banking Frauds
  - h. Obscenity, Pornography & Child Pornography
  - i. Cyber Defamation, Defacement,
  - j. Illegal online selling & Gambling
  - k. Denial of Service Attacks
  - l. Cyber terrorism
  - m. Software Piracy & illegal downloading
2. Reasons for Cyber Crimes.
3. Cyber Criminal Mode and Manner of Committing Cyber Crime.
4. Prevention of Cyber Crimes & Frauds Critical analysis & loop holes of The IT Act,2000
5. Cyber Crimes : freedom of speech in cyber space & human right issues
6. Investigation of Cyber Crimes:
7. Investigation of malicious applications
8. Agencies for investigation in India, their powers and their constitution as per Indian Laws
9. Procedures followed by First Responders;

10. search and Seizure Procedures of Digital Evidence

11. Securing the Scene, Documenting the Scene, Evidence Collection and Transportation

- a. Data Acquisition
- b. Data Analysis
- c. Reporting

12. Digital Forensics

- a. Computer Forensics
- b. Mobile Forensics
- c. Forensic Tools
- d. Anti-Forensics

13. Electronic/Digital Evidence laws & case Laws

14. International Organizations and Their Roles

- a) ICANN
- b) URDP
- c) WTO and TRIPS
- d) Interpol & Europol
- e) Impact of Cyber warfare on Privacy Identity
- f) Net Neutrality and EU Electronic communication Regulatory framework
- g) WCAG
- h) Social Networking sites Vis-a-vis Human Right

15. Case Laws : Indian & International Cases

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**Paper IV**  
**Practical Training/ Project Work**

**Total Marks : 100**

The project report submitted by the student will be evaluated jointly by the internal and external examiners during the practical examination. The distribution of marks will be as follows :

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|--|------------|
| a) Dissertation                        | - 40 marks |
| b) Report of field work & Presentation | - 40 marks |
| c) Viva-voice                          | - 10 marks |
| d) Attendance                          | - 10 marks |

**RECOMMENDED BOOKS:**

1. Cyber Law & Cyber Crimes By Advocate Prashant Mali; Snow White Publications, Mumbai
2. Cyber Law in India by Farooq Ahmad; Pioneer Books
3. Information Technology Law and Practice by Vakul Sharma; Universal Law Publishing Co. Pvt. Ltd.
4. The Indian Cyber Law by Suresh T. Vishwanathan; Bharat Law House New Delhi
5. Guide to Cyber and E- Commerce Laws by P.M. Bukshi and R.K. Suri; Bharat Law House, New Delhi
6. Guide to Cyber Laws by Rodney D. Ryder; Wadhwa and Company, Nagpur
7. The Information technology Act, 2000; Bare Act- Professional Book Publishers, New Delhi.
8. Computer Forensics: Principles and Practices by Linda Volonino, Reynaldo Anzaldua and Jana Godwin; Pearson Prentice-Hall 2007.
9. First Responder's Guide to Computer Forensics by Richard Nolan et al; Carnegi Mellon, 2005.

10. Digital Evidence and Computer Crime, 2<sup>nd</sup> Ed. By Eoghan Casey; Academic Press, 2004.
11. The Regulation of Cyberspace by Andrew Murray, 2006; Rutledge –Cavendish.
12. Scene of the Cybercrime: Computer Forensics Handbook by Syngress.
13. Security and Incident Response by Keith J. Jones, Richard Bejtlich and Curtis W. Rose
14. List of Websites for more information is available on :  
[Http://www.garykessler.net/library/forensicsurl.html](http://www.garykessler.net/library/forensicsurl.html)
15. Introduction to Forensic Science in Crime Investigation By Dr.(Smt) Rukmani Krishnamurthy

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