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| SEMESTER | 3 |
| Paper Number | MCMSG 4303 |
| Paper Title | Information Security and Cyber Law |
| No. of credits | 3 |
| Theory / Composite | Theory |
| No. of periods assigned | Th: 3 |
| Name of faculty member(s) | |
| Course description / objectives | <p>On completion of this course, the students will be able to:</p> <ol style="list-style-type: none"> 1. recognize the needs and attributes of Information Security 2. explore and recognize the vulnerabilities in the cyberspace 3. acquaint themselves with intellectual property matters emerging from cyberspace 4. understand the concept of Data Security and Data Protection 5. understand, explore and acquire a critical understanding of Cyber Law 6. understand the relationship between E-commerce and Cyber Law 7. conceptualize the Information Technology Act and the legal framework of Right to Privacy 8. develop skills for dealing with frauds, deceptions and other cybercrimes |
| Syllabus | <p>Information Security: Introduction, Need of Information Security, Attributes of Information Security, Authentication, Confidentiality, Integrity, Availability, Non Repudiation. Security Services, mechanism and attacks, Access Control, Threats and Vulnerabilities, Security Attacks, Unauthorized Access, Impersonation, Denial of Service, Malicious Software, Viruses, Worms, Trojan Horses. Types of authentication, Password Authentication,</p> <p>Password Vulnerabilities & Attacks: Brute Force & Dictionary Attacks. Password Policy & Discipline, Single Sign-on – Kerberos, Alternate Approaches.</p> <p>Intellectual Property Right: Introduction, Types of Intellectual Property Rights, Advantages of Intellectual Property Rights, Intellectual Property Rights in India, Intellectual Property in Cyber Space, Plagiarism</p> <p>Strategies For Cyber Security: Introduction, Creating a Secure Cyber Ecosystem, Creating an Assurance Framework, Strengthening the Regulatory Framework, Creating Mechanisms for IT Security, Securing E-Governance Services, Protecting Critical Information Infrastructure. Implementing a Cyber security Framework, Types of Network Security Devices, Threat Intelligence, Next Generation Firewall, Secured Protocol and Algorithms, Authentication Techniques, BYOD, Cloud and Mobile Security, Cyber Forensics, Information Sharing</p> <p>Cyber Law: Cyberspace, Cyber security, Cyber security Policy, Cyber Crime, Nature of Threat, Awareness, Information Technology Act, Objectives, Digital Signature, Electronic Signature, Digital Signature to Electronic Signature. Offence & Penalties: Cybercrime, Categories of Cybercrimes, Types of Cybercrimes, Offences, Compounding of Offences.</p> <p>I.T ACT: Salient Features of I.T Act, Scheme of I.T Act, Application of the I.T Act, Amendments Brought in the I.T Act, Intermediary Liability, Highlights of the Amended Act</p> <p>Impact on other related Acts (Amendments): Amendments to Indian Penal Code, Amendments to Indian Evidence Act, Amendments to Bankers Book Evidence Act, Amendments to Reserve Bank of India Act.</p> |

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| Reading/Reference Lists | <ol style="list-style-type: none"> 1. Security in Computing, Fourth Edition, by Charles P. Pfleeger, Pearson Education 2. The Information Technology Act, 200 (Act 21 of 2000), BARE ACT with Comments, Law and Justice Publishing Co, 2021. 3. Fundamentals Of Information Systems Security, David Kim, Michael G. Solomon 4. Cybersecurity and Cyberlaw, Abraham Wagner, Nicholas Rostow |
| Evaluation | <p>Total – 50</p> <p>Theory – CIA – 10 Semester Examination – 40</p> |