

**Krantiguru Shyamji Krishna Verma Kachchh University**  
**Post Graduate Diploma in Computer Applications**  
**Semester: II**

<b>Paper Code:</b> CECS206	<b>Total Credit : 4</b> <b>Total Marks : 70</b> <b>Time : 3 Hrs</b>
<b>Title of Paper:</b> Cyber Security	

<b>Unit</b>	<b>Description</b>	<b>Weighting</b>
I	Introduction, Cybercrime: Definition and Origins of the Word, Cybercrime and Information Security, Who are Cybercriminals? Classifications of Cybercrimes: E-Mail Spoofing, Spamming, Cyber defamation, Internet Time Theft, Salami Attack/Salami Technique, Data Diddling, Forgery, Web Jacking, Newsgroup Spam/Crimes Emanating from Usenet Newsgroup, Industrial Spying/Industrial Espionage, Hacking, Online Frauds, Pornographic Offenses , Software Piracy, Computer Sabotage, E-Mail Bombing/Mail Bombs, Usenet Newsgroup as the Source of Cybercrimes , Computer Network Intrusions, Password Sniffing, Credit Card Frauds, Identity Theft	20%
II	Introduction, Categories of Cybercrime, How Criminals Plan the Attacks: Reconnaissance, Passive Attack, Active Attacks, Scanning/Scrutinizing gathered Information, Attack (Gaining and Maintaining the System Access), Social Engineering, and Classification of Social Engineering, Cyberstalking: Types of Stalkers, Cases Reported on Cyberstalking, How Stalking Works? Real-Life Incident of Cyberstalking, Cybercafe and Cybercrimes, Botnets: The Fuel for Cybercrime, Botnet, Attack Vector Cloud Computing: Why Cloud Computing? , Types of Services, Cybercrime and Cloud Computing.	20%
III	Introduction, Proliferation of Mobile and Wireless Devices, Trends in Mobility, Credit Card Frauds in Mobile and Wireless Computing Era: Types and Techniques of Credit Card Frauds, Security Challenges Posed by Mobile Devices, Registry Settings for Mobile Devices Authentication Service Security: Cryptographic Security for Mobile Devices, LDAP Security for Hand-Held Mobile Computing Devices, RAS Security for Mobile Devices, Media Player Control Security, Networking API Security for Mobile Computing Applications, Attacks on Mobile/Cell Phones: Mobile Phone Theft, Mobile Viruses, Mishing, Vishing, Smishing, Hacking Bluetooth, Mobile Devices: Security Implications for Organizations: Managing Diversity and Proliferation of Hand-Held Devices, Unconventional/Stealth Storage Devices Threats through Lost and Stolen Devices, Protecting Data on Lost Devices, Educating the Laptop Users	20%
IV	Introduction, Proxy Servers and Anonymizers, Phishing: How Phishing Works? Password Cracking: Online Attacks, Offline Attacks, Strong, Weak and Random Passwords, Random Passwords, Keyloggers and Spywares: Software Keyloggers, Hardware Keyloggers, Antikeylogger, Spywares, Virus and Worms: Types of Viruses, Trojan Horses and Backdoors: Backdoor, How to Protect from Trojan Horses and Backdoors, Steganography: Steganalysis, DoS and DDoS Attacks: DoS Attacks, Classification of DoS Attacks, Types or Levels of DoS Attacks, Tools Used to Launch DoS Attack, DDoS Attacks, How to Protect from DoS/DDoS Attacks, SQL Injection: Steps for SQL Injection Attack, How to Avoid SQL Injection Attacks	20%
V	Introduction, Why Do We Need Cyberlaws: The Indian Context, The Indian IT Act: Admissibility of Electronic	20%

	Records: Amendments made in the Indian ITA 2000, Positive Aspects of the ITA 2000, The Weak Areas of the ITA 2000, Challenges to Indian Law and Cybercrime Scenario in India, Consequences of Not Addressing the Weakness in Information Technology Act Amendments to the Indian ITA 2008: Overview of Changes Made to the Indian IT Act, Cybercafe-Related Matters Addressed in the Amendment to the Indian IT Act, State Government Powers Impacted by the Amendments to the Indian IT Act, Impact of IT Act Amendments Impact Information Technology Organizations, Cybercrime and Punishment, Cyberlaw, Technology and Students: Indian Scenario	
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<b>Basic Text &amp; Reference Books :-</b>	
1.	"Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives", Nina Godbole, Sunit Belapur, Wiley India Publications, April, 2011
2.	"Cyberlaw: The Indian Perspective" by Pavan Duggal, Saakshar Law Publications, Delhi.
3.	Indian Legislation On Cyber Crime, S.R. Sharma, Anmol Publications
4.	Cyber Laws, Yatindra Singh, Universal Law Publishing Co
5.	The Information Technology Act, 200 – Universal Law Publishing Co

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<b>Unit</b>	<b>Description</b>		<b>Total Marks</b>
I	Q.1(A) Short / Medium Questions (With Internal Option)	06	14
	Q.1(B) Short / Medium Questions (With Internal Option)	08	
II	Q.2(A) Short / Medium Questions (With Internal Option)	06	14
	Q.2(B) Short / Medium Questions (With Internal Option)	08	
III	Q.3(A) Short / Medium Questions (With Internal Option)	06	14
	Q.3(B) Short / Medium Questions (With Internal Option)	08	
IV	Q.4(A) Short / Medium Questions (With Internal Option)	06	14
	Q.4(B) Short / Medium Questions (With Internal Option)	08	
V	Q.5(A) Short / Medium Questions (With Internal Option)	06	14
	Q.5(B) Short / Medium Questions (With Internal Option)	08	