Lecture Plan

Subject : Cyber Security Class : FyBVoc (2018-2019)

Teacher : Dikshita V. Aroskar Division : -

Lectures Allotted : 60 Semester : I

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| Lecture | Topic to be covered |
|  | Unit I: Basics of Computer Networking |
| 1 | Discussion on syllabus and modes of CA.  What is Computer Networking snd why it is needed? |
| 2 | Advantages and disadvantages of Computer Networking |
| 3 | **Types of media used in networking:**   1. Coaxial Cable 2. Twisted Pair 3. Fiber Optics |
| 4 | **Network Topology**   1. Ring Topology 2. Star Topology 3. Mesh Topology |
| 5 | **Types of Networks**   1. LAN 2. MAN 3. WAN |
| 6 | **Internet and its role** |
| 7 | IP Addressing need and types : Public, Private, Static, Dynamic |
| 8 | World wide web (www) and related protocols (HTTP) |
| 9 | **Web Protocols**  DNS, HTTPS, SMTP, IMAP, FTP |
| 10 | **Remedial Class on Unit 1** |
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|  | Unit II : Emerging threats in Cyber Space |
| 11 | Session Hijacking and its types and prevention |
| 12 | **Types of attack**  1) Botnet  2) Adware  3)Spyware  4) Scareware |
| 13 | **Types of attack**   1. Email spam 2. Click fraud 3. Worms 4. Zero day attack |
| 14 | **Classification of vulnerabilities**   1. Hardware 2. Software 3. Network |
| 15 | **Classification of vulnerabilities**   1. Personnel 2. Site 3. Organizational |
| 16 | **Social Media**   1. Introduction and its importance 2. Types and its safety |
| 17 | **Remedial Class on Unit II** |
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| 18 | Continuous Assessment I  CA I Mode :Written Test  Marks : 20  Portion :Unit I and II(Till types of attack) |
| 19 | **Feedback on CA I** |
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|  | Unit III : Online Privacy |
| 20 | What is online privacy?  Why privacy is needed? |
| 21 | Prior consent and use limitation of user data |
| 22 | Privacy Policy and Privacy Law |
| 23 | Intellectual Property Rights and domain names |
| 24 | Software Patents and Copyright issues on Software |
| 25 | Ethics & Safe Practices |
| 26 | Protecting personal and work related data. |
| 27 | **Remedial Class on Unit III** |
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|  | Unit IV : Cyber Crimes |
| 28 | What are cyber crimes?  Classification of cyber crimes |
| 29 | Offenses against the confidentiality, integrity and availability |
| 30 | Computer-related Offenses |
| 31 | Phishing and its Types |
| 32 | Phishing detection and prevention |
| 33 | Social Engineering and Denial-of-Service Attack |
| 34 | Cyber stalking and **What to do if you are being stalked?** |
| 35 | E-mail related crimes |
| 36 | Pharming |
| 37 | Computer Vandalism |
| 38 | **Remedial Class on Unit IV** |
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|  | Continuous Assessment II  CA II Mode :Poster Presentation  Marks : 20 |
| 39 | CA II |
| 40 | CA II |
| 41 | CA II |
| 42 | CA II |
| 43 | CA II |
| 44 | CA II |
| 45 | **Feedback on CA II** |
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|  | Unit V : Cyber Laws |
| 46 | Email bombing, Data diddling, Salami attacks |
| 47 | Denial of Service attack, Logic Bomb, Internet time theft |
| 48 | Cyber crimes offenses and defenses |
| 49 | Cyber Crimes against a Person and Persons Property |
| 50 | Cyber Crimes against Government and Society |
| 51 | CERT and its types , **Remedial Class on Unit V** |
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|  | Unit VI : Cyber Forensic |
| 52 | Introduction and process of cyber forensic |
| 53 | Data recovery |
| 54 | Evidence collection and types of risk |
| 55 | Media Sanitization and its Techniques.**Remedial Class on Unit VI** |
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|  | Continuous Assessment III  CA II Mode :MCQ  Marks : 20 |
| 56 | Revision |
| 57 | Revision |
| 58 | **Feedback on CA III** |
| 59 | Revision |
| 60 | Revision |