



COLLEGE OF ENGINEERING, PUNE
(An Autonomous Institute of Govt. of Maharashtra)

End Semester Examination

(CT(DE)-22017) Cyber Security

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| Programme : Final Year B. Tech. | Semester : VII |
| Branch : Computer Engineering | Academic Year : 2024-25 |
| Duration : 3 Hrs | Max Marks : 60 |

Instructions:

1. Figures to the right indicate the full marks.
2. Mobile phones and programmable calculators are strictly prohibited.
3. Writing anything on question paper is not allowed.
4. Exchange/Sharing of stationery, calculator etc. not allowed.
5. Write your MIS Number on Question Paper

- | | | Marks | CO | PO |
|------------|--|-------------|------------|------------|
| Q.1 | A) Illustrate the following sections of the IT Act, 2000 with its punishment a) Sections 43A b) Section 67 | [04] | 2,3 | 1,4 |
| | B) List the security services are provided by digital signature. Which steps are followed in creating a digital signature? | [06] | | |
| Q.2 | A) Explain the use of malware analysis through the following use cases with an example 1. Incident Response 2. Threat Hunting | [04] | 1,2 | 2,3 |
| | B) How is hybrid malware analysis more potent than static and dynamic analysis? Explain with an example. | [06] | | |

- Q.3 A)** Why is server security important in web applications? [05] 1,3 1,2
Explain any two measures to strengthen the security of servers in web applications.
- B)** What are the most common client-side security risks in Web Applications? [05]
- Q.4 A)** Illustrate the steps followed by Pretty Good Privacy (PGP) at sender and receiver site in the sending of email with neat sketch diagram. [08] 2,3 3,4
- B)** Compare between PGP and S/MIME. [02]
- Q.5 A)** Explain the detection methods used in IDS. Enlist the benefits of IDS. [05] 1,3 2,4
- B)** How hackers can collect the following information using Footprinting in reconnaissance of the victim? [05]
1. Domain Name Information
 2. IP Address
 3. Finding Hosting Company
 4. IP Address Ranges
 5. History of the Website
- Q.6 A)** What are some of the main aspects of IoT device security? How are IoT devices used in DDoS attacks? [05] 3,4 3,5
- B)** Explain the most common ways hackers target e-commerce platforms. [05]