

**[Time: 2 ½ Hours]**

**[ Marks:60]**

Please check whether you have got the right question paper.

**N.B:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Assume additional data if necessary but state the same clearly.
4. Symbols have their usual meaning and tables have their usual standard design unless stated otherwise.
5. Use of calculators and statistical tables are allowed.

- Q.1** Attempt any two of the following **12**
- a What are the different kinds of threats to system security? Explain. **06**
  - b Explain the following giving proper examples: Hardware Vulnerabilities, Software Vulnerabilities, Data Vulnerabilities. **06**
  - c What is the need of protecting memory? Explain variable fence register memory protection. **06**
  - d Discuss the various Security issues of multilevel database. **06**
- Q.2** Attempt any two of the following **12**
- a State the goals of Intrusion Detection System. **06**
  - b What are the various service offered by PKI. **06**
  - c Explain the concept of SSL Encryption. **06**
  - d Write a short note of Kerberos. **06**
- Q.3** Attempt any two of the following **12**
- a Explain the different cloud security services. **06**
  - b Write a short note on Virtualization Security Management. **06**
  - c With suitable diagram explain ITIL Life Cycle in an enterprise. **06**
  - d Explain Access control in IaaS. **06**
- Q.4** Attempt any two of the following **12**
- a Write a short note on Cellular Jamming Attacks. **06**
  - b Explain the two operational security modes defined to satisfy the varying security needs of Zigbee devices. **06**
  - c Discuss the security issues of VoIP Security. **06**
  - d What are the GSM Security Mechanisms? Explain. **06**
- Q.5** Attempt any two of the following **12**
- a Explain concept of Access Control list **06**
  - b Explain different ways by which attackers can break security of packet filter. **06**
  - c Explain the need of cloud security. **06**
  - d Write a note on vulnerabilities in cellular services. **06**