

(2 ½ Hours)

[Total marks: 60

- 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 meanings unless stated otherwise.

- Q.1 Attempt any two of the following (12)
- a) Explain the role of Operating System in protecting objects and implementing computer security. Also list various protected objects. 6
 - b) Explain how segmentation helps in implementing security. State the advantages of using segmentation. What are its security benefits? 6
 - c) What are non-malicious programs? How do they sometime pose security threat? List such non-malicious programs. 6
 - d) List and explain various security requirements of a typical databases system. 6
- Q.2 Attempt any two of the following (12)
- a) Write a note on IP-spoofing based attacks. 6
 - b) Write note on DMZ. How are they used in implementing security? 6
 - c) List and explain various types of intrusion detection Systems. 6
 - d) What is SSL? How they work? Explain. 6
- Q.3 Attempt any two of the following (12)
- a) List various threats are associated with cloud data services. 6
 - b) Write a note on ESX and ESXi security features. 6
 - c) Briefly outline the importance of cloud security management and standards. 6
 - d) Explain why security is important in cloud based applications. Give suitable example. 6
- Q.4 Attempt any two of the following (12)
- a) Write a note on Zigbee security attack. 6
 - b) List and briefly explain various security threats to mobile applications and devices. 6
 - c) Compare between GSM and UMTS security features. 6
 - d) Explain with suitable example the eavesdropping on Bluetooth devices. 6
- Q.5 Attempt any two of the following (12)
- a) What is meant by Data Sensitivity in databases? List various types of data sensitivities. Explain any one. 6
 - b) Write a note on Security Strategies in firewall. 6
 - c) Write a note on importance of backup and recovery in in cloud security. 6
 - d) What is VoIP? State and explain various VoIP issues. 6
