

Total No. of Questions : 8]

SEAT No. :

P-7625

[Total No. of Pages : 2

[6180]-145

T.E. (Information Technology)

COMPUTER NETWORKS AND SECURITY

(2019 Pattern) (Semester - II) (314451)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer the questions - Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Figures to the right indicate full marks.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Use of electronic calculator is allowed
- 5) Assume suitable data, if necessary.

Q1) a) Explain Adhoc Network MAC Layer with Design Issues, Design Goal & Classification. [9]

b) Classify protocols used in Sensor Network. [9]

OR

Q2) a) Explain AODV and DSR protocol in detail. [9]

b) Explain the issues in designing a Routing Protocol for Ad-hoc Wireless Networks. [9]

Q3) a) Explain the need & importance of security and types of attack. [8]

b) What are different security principles and security services? [9]

OR

Q4) a) Explain Block cipher modes in detail. [8]

b) Explain network security threats with example attacks. [9]

Q5) a) Define symmetric key encryption? Explain DES in detail. [9]

b) Elaborate Digital signatures, Digital Certificates. [9]

OR

P.T.O.

- Q6)** a) Write a note on RSA algorithm. [9]
b) What is private key? Explain Diffie-Hellman key exchange algorithm. [9]

- Q7)** a) What is cyber terrorism? How to identify and detect cyber stalking? [8]
b) Explain various cyber crimes and Computer criminals. [9]

OR

- Q8)** a) Define & explain Vulnerability, Threat, Malware & Phishing. [8]
b) Explain DoS Attack and SQL injection attack. [9]

