

Total No. of Questions : 8]

SEAT No. :

PA-1507

[Total No. of Pages : 2

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T.E. (Information Technology)
COMPUTER NETWORK & SECURITY
(2019 Pattern) (Semester-II) (314451)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3, or Q4, Q5 or Q6, and Q7 or Q8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data if necessary.

Q1) a) Explain DSDV & AODV protocol in detail. **[9]**

b) Write a short note on sensor network with classification of protocols used. **[9]**

OR

Q2) a) Explain design issues and design goal in adhoc network MAC layer. **[6]**

b) Compare sensor network with adhoc wireless network. **[6]**

c) Explain with diagram clustered architecture for sensor network. **[6]**

Q3) a) Explain different block cipher modes. **[8]**

b) Comment on security principles and security services. **[9]**

OR

Q4) a) What is importance and need of security?. **[5]**

b) Explain distributed Denial of service attacks. **[6]**

c) Explain Electronic Code block (ECB) mode **[6]**

Q5) a) Explain difference between symmetric and asymmetric key cryptography. **[9]**

b) Explain Data Encryption Standards with diagram. **[9]**

OR

P.T.O.

- Q6)** a) Explain following terms: [9]
- i) Groups
 - ii) Rings
 - iii) Prime Numbers
- b) Explain diffie Hellman key exchange in detail. [9]

- Q7)** a) What is cyber terrorism? Write in detail example of cyber terrorism. [8]
- b) What is a man-in-the-middle attack (MIM)? Explain in detail. [9]

OR

- Q8)** a) Explain the term phishing & SQL Injection with suitable example. [8]
- b) Explain the term cyber stalking & cyber espionage with suitable example. [9]

