SEAT No. :

PA-1507

[5926]-127

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. orQ4, 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

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Q6) a) Explain following terms: **[9]**

      i)   Groups

      ii)   Rings

      iii)   Prime Numbers

   b) Explain diffic 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]**

<div align="center">OR</div>

Q8) a) Explain the term phishing & SQL Injection with suitable example. **[8]**

   b) Explain the term cyber stalking & cyber espionage with suitable example. **[9]**

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