

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(CSE)(Sem-7,8)
ADHOC AND WIRELESS SENSOR NETWORKS

Subject Code : BTCS-716-18

M.Code : 90507

Date of Examination : 24-11-2025

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) Give applications of wireless sensor networks in Military and emergency areas.
- b) Explain quality of service requirement in wireless sensor networks.
- c) Enlist the various components of wireless sensor network.
- d) Define noise figure.
- e) Draw the Super frame structure of IEEE 802.15.4.
- f) What do you mean by hybrid routing?
- g) How do you define the term TCP?
- h) Explain the term tampering black hole attack.
- i) What are the various tools used for network security?
- j) Define LEACH.

SECTION - B

2. With the help of an example, explain Dynamic Source Routing Protocol.
3. Draw and explain PAMAS schedule based protocols.
4. What are the design goals of transport layer protocol for Ad Hoc wireless Networks?
5. Explain sensor network scenarios.
6. Describe the possible solutions for Jamming in network security.

SECTION - C

7. Explain the various layer wise attacks in wireless sensor networks.
8. Describe low duty cycle protocols and wakeup concepts in detail?
9. Give the classifications of routing protocols.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.