

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 : BTCS716-18

M.Code : 90507

Date of Examination : 19-05-2025

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. Answer briefly :

- a) What are routing protocols?
- b) Explain fault tolerance issue in wireless sensor networks.
- c) Define transceivers in wireless sensor networks.
- d) List the type of nodes that distinguish on the MAC layer.
- e) What are the challenges posed by sensor network MAC protocol?
- f) What do you mean by proactive routing?
- g) How do you define the term flooding attack?
- h) Explain SPINS.
- i) What are security attacks in WSN?
- j) Enlist enabling technologies for WSN.

SECTION - B

2. Explain destination sequenced distance-vector routing protocol with the help of an example of 15 nodes in which all nodes maintain global topology information.
3. Draw and explain S-MAC protocol in detail.
4. Give classification of Transport layer solutions- TCP over Ad Hoc wireless.
5. Explain energy consumption of sensor nodes.
6. Describe Key distribution and management in network security.

SECTION - C

7. Explain secure requirements issues and challenges in security provisioning network.
8. Describe MAC protocol for wireless sensor networks in detail.
9. Explain Table driven routing protocol - DSDV with suitable diagrams.

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.