

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 : 04-12-2024

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) Define wireless sensor networks.
- b) What is sensor network localization?
- c) Compare sensor network with ad-hoc network.
- d) What are the disadvantages of flooding?
- e) Define black hole attack.
- f) What is data aggregation strategy in wireless sensor networks?
- g) What are contention based protocols?
- h) Define jamming.
- i) Define key management.
- j) List basic security requirements.

SECTION-B

2. Explain in detail about IEEE 802.15.4.
3. Explain the requirements of a Secure Routing Protocol for Ad-hoc Wireless Network.
4. Discuss various energy efficient routing challenges and issues in transport layer.
5. What is routing protocol? Outline the issues in designing a routing protocol for ad-hoc wireless networks.
6. List the various characteristics of ideal routing protocol for ad hoc wireless network.

SECTION-C

7. Discuss the different issues in designing a MAC protocol for ad-hoc wireless networks.
8. Discuss network security requirement issues and challenges in security provisioning networks.
9. Discuss the architecture of wireless sensor network with diagrammatic illustration.

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.