

B.Tech IV Year II Semester (R15) Regular Examinations April 2019

MOBILE COMPUTING

(Common to CSE & IT)

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

1 Answer the following: (10 X 02 = 20 Marks)

- (a) List some uses of computer networks.
- (b) What is Inter-Frame spacing?
- (c) What is multi-hop relaying?
- (d) What is the primary responsibility of a medium access control (MAC) protocol in ad hoc wireless networks?
- (e) List the network security requirements.
- (f) Mention the objectives of a transport layer protocol.
- (g) What is the goal of QoS?
- (h) Mention any three reasons for energy management in ad hoc wireless networks.
- (i) What are the different types of sensors present in sensor networks?
- (j) What are the applications of sensor networks?

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 What goals have to be achieved while designing WLANs?

OR

3 Explain about Routing in Mobile IP with a neat diagram.

UNIT – II

4 What are the differences between cellular networks and ad hoc wireless networks?

OR

5 What important goals have to be met while designing a medium access control (MAC) protocol for ad hoc wireless networks?

UNIT – III

6 What are the advantages of hierarchical topology-based protocols over protocols that use flat topologies?

OR

7 Explain about the classification of the different types of attacks in ad hoc wireless networks.

UNIT – IV

8 What are the issues and challenges in providing QoS in ad hoc wireless networks?

OR

9 Which battery is being commonly used for portable mobile nodes such as laptops? Give a few reasons to support your answer.

UNIT – V

10 Explain about the issues and challenges in designing a sensor network.

OR

11 Give a note on MAC protocols for sensor networks.
