R15

Code: 15A05802

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.

*****