

B.Tech IV Year II Semester (R13) Advanced Supplementary Examinations July 2017

**MOBILE COMPUTING**

(Common to CSE & IT)

Time: 3 hours

Max. Marks: 70

**PART - A**

(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) What are the uses of WLANS?
  - (b) State the challenges in wireless communication.
  - (c) List the issues in designing a MAC protocol for Ad hoc networks.
  - (d) Give the classification of contention based protocol.
  - (e) Mobility of nodes in a sparsely populated mobile Ad hoc network is less. What is the choice between proactive routing protocol and reactive routing protocol?
  - (f) Write any two advantages and disadvantages of application controlled transport protocol.
  - (g) Write about domain classification in QOS?
  - (h) What is the need for energy management in Ad hoc wireless networks?
  - (i) What are the components of WSN?
  - (j) Write short note on different operational states of transceiver in WSN.

**PART - B**

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

**UNIT - I**

- 2 Write in detail about the functionalities provided by MAC layer in IEEE 802.11 WLANs.

**OR**

- 3 Explain indirect TCP and mobile TCP in wireless domain.

**UNIT - II**

- 4 Explain MACAW protocol in detail.

**OR**

- 5 Write the design goals of a MAC protocol for Ad hoc wireless networks.

**UNIT - III**

- 6 Explain any one of table-driven routing protocols in detail.

**OR**

- 7 Write in detail about key management approaches.

**UNIT - IV**

- 8 Write in detail about QOS framework for Ad hoc wireless networks (any one).

**OR**

- 9 Explain system power management schemes.

**UNIT - V**

- 10 Write in detail about data dissemination in WSN.

**OR**

- 11 Explain self-organizing MAC for sensor networks and eavesdrop and register.