

Code No: RT41053

R13

Set No. 1

IV B.Tech I Semester Supplementary Examinations, March - 2017

MOBILE COMPUTING

(Common to Computer Science & Engineering and Information Technology)

Time: 3 hours

Max. Marks: 70

Question paper consists of Part-A and Part-B

Answer ALL sub questions from Part-A

Answer any THREE questions from Part-B

PART-A (22 Marks)

1. a) Outline the limitations of mobile devices. [3]
- b) Write any two advantages and disadvantages of WLAN? [3]
- c) Explain how DHCP used for mobility and also how it supports mobile IP. [4]
- d) Describe slow start of congestion control. How can fast recovery takes place in the congestion avoidance phase? [4]
- e) Explain the hashing based scheme in detail. [4]
- f) Explain the session establishment in WSP/B. [4]

PART-B (3x16 = 48 Marks)

2. With the help of a diagram, explain system architecture of GSM. [16]
3. Explain in detail the various multiple access techniques with neat diagram. [16]
4. a) Describe the process of IP Packet delivery with neat sketch. [10]
- b) Define care of address (COA) and what are the two different possibilities for the location of COA? [6]
5. a) Explain how selective retransmission is a useful extension of TCP. Are there any disadvantages of this approach? [8]
- b) Describe briefly on congestion control in traditional TCP. [8]
6. a) Describe synchronization usage models in mobile applications. [8]
- b) Explain the functions of Hybrid mechanisms with a neat sketch. [8]
7. a) Explain in detail AODV routing algorithm for MANETS. [8]
- b) Draw and discuss the protocol architecture of WAP. [8]