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*
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### PART–A *(22 Marks)*

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|---|---|---|---|
| 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)*

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|---|---|---|---|
| 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] |

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