Reg. No. \_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **14EC2039** | **Duration :** | **3hrs** |
| **Sub. Name :** | **MOBILE COMPUTING** | **Max. Marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Sketch and narrate the structure of mobile computing architecture layers using a mobile cellular communication network. | CO1 | 10 |
| b. | Assess the performance of ALOHA and CSMA techniques in wireless networks. | CO1 | 10 |
| **(OR)** | | | | |
| 2. | a. | Using suitable commercial examples, explain the concept of data dissemination in mobile computing. | CO2 | 5 |
| b. | Write the details of wireless multiple access techniques. | CO2 | 15 |
|  |  |  |  |  |
| 3. | a. | Brief the pros and cons of Wi-Fi and wireless sniffing. | CO1 | 5 |
| b. | Assess various mobile computing security threats and solutions. | CO1 | 15 |
| **(OR)** | | | | |
| 4. | a. | Evaluate the working of TDD and FDD in TDMA and CDMA systems. | CO2 | 15 |
| b. | Brief the concept of data synchronization. | CO2 | 5 |
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| 5. | a. | Assess the structure of CdmaOne forward channel and evaluate its modulation methods and data rate. | CO2 | 15 |
| b. | List out the limitations of mobile computing. | CO2 | 5 |
| **(OR)** | | | | |
| 6. | a. | Narrate the working of orthogonal frequency division multiplexing system for super 3G standards. | CO3 | 10 |
| b. | Brief the features of smart phones and digital music players. | CO3 | 10 |
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| 7. | a. | Explain the IEEE 802.16m WiMax network structure in detail. | CO3 | 15 |
| b. | List the ISO-OSI layers of mobile IP network. | CO3 | 5 |
| **(OR)** | | | | |
| 8. | a. | Assess the HSOPA scheme of super 3G networks. | CO3 | 15 |
| b. | Brief the tunneling and encapsulation operations of mobile IP. | CO3 | 5 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Explain the DAB system using neat sketch. | CO3 | 10 |
| b. | With suitable examples, write about mobile application languages XML and JAVA. | CO3 | 10 |