IV B.Tech. I Semester Examinations – June 2017

**MOBILE COMPUTING**

Time: **3** hours (CSE) Max. Marks: **60**

## Instructions: 1. Answer ONE question from each unit

## 2. All Questions carry equal marks

**3. Assume missing data, if any**

**UNIT – I**

1. a) What are different basic differences between the DSSS and FHSS systems? [6M]

b) What are the frequencies for radio transmission? [6M]

### (OR)

2. a) Explain the types of multiplexing techniques.[6M]

b) Explain different types of antennas and its properties in terms of performance. [6M]

**UNIT – II**

1. a) What is the role of GPRS in enhancing 2G GSM systems? Explain in-detail [6M]

b) Explain GSM architecture. [6M]

**(OR)**

4. a) Write a short note on Handover in mobile communications [6M]

b) Provide specific differences between the 3G and 4G with respect to QoS [6M]

**UNIT – III**

5. a) How hidden terminal and exposed terminals create problems in WLAN? And how to prevent from that? Explain with proper example [6M]

b) Give detailed properties of IEEE 802.11b. [6M]

**(OR)**

1. a) Explain the detailed architecture of IEEE 802.11. [6M]

b) Find out six differences between the pico net and scatter net and explain. [6M]

**UNIT – IV**

7. Provide detailed services of DHCP and mobile IP. [12M]

### (OR)

1. a) What is on-demand routing? Explain with any on-demand routing protocol, [6M]

b) Write a short note on applications of WSN. [6M]

**UNIT – V**

1. a) Explain working procedure of WAP, in-detail. [6M]

b) What are the basic features of WML? [6M]

### (OR)

10. Provide SIX important points on the following wireless technologies

a) Wireless Transport Layer Protocol [6M]

b) Wireless Security Protocol [6M]