

Code: EC7T5A

**IV B.Tech - I Semester – Regular/Supplementary Examinations
October - 2019**

**WIRELESS COMMUNICATIONS AND NETWORKS
(ELECTRONICS & COMMUNICATION ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks

11 x 2 = 22 M

1.

- a) What are the factors influencing small scale fading?
- b) Why is routing in multi-hop network is complicated?
- c) What is functionality of L2CAP?
- d) List the different types of logical Channels.
- e) What are the functions of MAC layer in IEEE 802.11?
- f) List the entities of mobile IP.
- g) Explain the functionality of SS7.
- h) Define frequency reuse.
- i) List the advantages of Wireless Networks.
- j) Give the principle behind infrared technology.
- k) Give the functionality of X.25.

PART – B

Answer any **THREE** questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) In brief, explain about CSMA, CSMA-CD and CSMA-CA medium access techniques. 10 M

b) What is PRMA? Explain how it works? 6 M
3. a) Explain about the Public Switched Telephone Network. 8 M

b) Compare and Contrast circuit switching and packet switching. 8 M
4. a) Explain How tunneling works in general and especially for mobile IP using IP, minimal and generic routing encapsulation respectively. Discuss the advantages and disadvantages of these methods. 8 M

b) Write short notes on network services part in SS7 protocol. 8 M
5. a) Explain in detail about the IEEE 802.11 protocol and bridging the other with other networks. 8 M

b) Write note on Bluetooth and IEEE 802.15 standard. 8 M

6. a) Explain about data oriented CDPD network. 8 M

b) Write short note on GSM and GPRS. 8 M