Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐

## Question Paper Code : 91465

**B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019**

Eighth Semester

Electronics and Communication Engineering

EC 6802 – WIRELESS NETWORKS

(Regulations 2013)

(Common to PTEC 6802 – Wireless Networks for B.E. (Part-Time) – Seventh Semester – Electronics and Communication Engineering – Regulations 2014)

Time : Three Hours                                      Maximum : 100 Marks

Answer ALL questions

**PART – A**                                             **(10×2=20 Marks)**

1. Draw the frequency spectrum for wireless operation.

2. List out the main features of Blue tooth.

3. Compare tunneling and encapsulation.

4. What is meant by Dynamic source routing ?

5. Mention the various implications of mobility.

6. State the need for 3G wireless networks.

7. What are the features of firewall ?

8. Define DHCP.

9. State the challenges of 4G.

10. Give the various smart antenna techniques in wireless networks.

**PART – B**                                             **(5×13=65 Marks)**

11. a) Explain various WLAN technologies and describe them, with their applications.

(OR)

b) Describe the need for Link manager protocol and illustrate with architecture.

12. a) What is Mobile IP ? State the properties and explain in detail.

   (OR)

   b) Explain the features of IPV6. Illustrate the features, for a Mobile IP session initiation protocol.

13. a) Describe the basic concepts of Classical TCP and indirect TCP.

   (OR)

   b) Illustrate the basic principles of selective retransmission. When such situations are warranted ? Discuss.

14. a) Draw the architecture for UMTS core network and explain its working.

   (OR)

   b) Describe the basic concepts of SMS-GMSC and SMS-IWMSC.

15. a) Define OFDM. Describe the basic concepts of OFDM – MIMO systems.

   (OR)

   b) Write detailed notes on :

   i) Cognitive Radio (7)

   ii) Multi Carrier Modulation. (6)

PART – C (1×15=15 Marks)

16. a) Examine the effectiveness of Adaptive Modulation and coding with time schedules. (15)

   (OR)

   b) Depict a treatise on spectrum allocation of WiMax in detail. (15)