Name of Course: **Wireless and Mobile Network (WMN)** Course Code: **22622**

Unit Test: **II** Program: **IF6I**

Semester: **VI**

Chapter No: 3 Wireless Application Protocol and 3G mobile services (20 marks)

2 marks:

1. State the features of 4G. (CO3)
2. State the features of 4G LTE. (CO3)
3. State the features of VoLTE. (CO3)
4. State the features of 5G. (CO3)
5. State applications of 4G. (CO3)

4 marks:

1. Write short note on :Quality of services in third generation(3G) network (CO3)
2. Draw 4G architecture. (CO3)
3. Explain in detail UMTS architecture. (CO3)
4. Compare 1G,2G,3G,4G and 5G.(CO3)

Chapter No: 4 WLL Signal Encoding Techniques and Spread Spectrum Modulation (10 marks)

2 marks:

1. Define bit rate and baud rate. (CO4)
2. What is quantization. (CO4)
3. Compare ASK and FSK. (CO4)
4. Draw the BPSK signal for the following binary signal. (CO4)
   10111010
5. State some applications of SS modulation(CO4)
6. State the applications of WLL. (CO4)

4 marks:

1. Explain pulse code modulation. (CO4)
2. What is line coding? Explain Line coding techniques. (CO4)
3. Explain the delta modulation system. (CO4)
4. Explain types of Digital Carrier modulation(ASK,FSK & PSK). (CO4)
5. Explain the DS-SS system with the help of suitable block diagram. (CO4)
6. Explain the FH-SS system with the help of suitable block diagram. (CO4)
7. Explain WLL architecture. (CO4)
8. Write short note on :a] FWT b] WT (CO4)
9. Explain the concept of LEC networks. (CO4)
10. Explain DPCM transmitter & receiver. (CO4)

Chapter No: 5 Mobile Ad-hoc networks and Wireless Sensor Networks (16 marks)

2 marks:

1. Give applications of MANET. (CO5)
2. List types of MANET. (CO5)
3. State characteristics of IOT. (CO5)
4. State advantages of IOT. (CO5)

5. Explain types of Mobility. (CO5)
6. State applications of IOT (CO5)

4 marks:

1. Explain architecture of MANET. (CO5)
2. Write note on Wireless Sensor Network. (CO5)
3. Explain Sensor node with block diagram. (CO5)
4. Explain protocol layer architecture of WSN. (CO5)
5. Explain clustering wireless sensor network(CO5)
6. Explain PEGASIS. (CO5)
7. Explain LEACH. (CO5)
8. Explain architecture of IOT. (CO5)