

Question Bank (G scheme)

Name of subject: COMMUNICATION TECHNOLOGY

Unit Test :II

Subject code: 17519

Course : IF

Semester: IV

CHAPTER 3- Digital Modulation Techniques (22 Marks)

3 Marks

1. Explain baseband and passband transmission.
2. State and explain working principle of ASK.
3. What is FSK? Explain its block diagram and waveform.
4. Draw block diagram of BPSK transmitter. State two advantages of it.

4 Marks

5. Draw and explain the working of DPSK generator.
6. Describe the generation of QPSK with the help of waveforms.
7. Define data rate, baud rate, bit rate, channel bandwidth and channel capacity.

CHAPTER 4- Data Encoding and Transmission (12 Marks)

3 Marks

8. How does digital encoding differ from modulation? State two techniques.
9. Write the types of digital-to-digital encoding. How do they differ from modulation?
10. Define data rate, baud rate, bit rate, channel bandwidth and channel capacity.

4 Marks

11. What is digital-to-digital conversion? State different types of polar encoding.
12. Explain the types of bipolar encoding.
13. Explain B8ZS and HDB3 encoding techniques with waveforms.

CHAPTER 5- WIRED & WIRELESS COMMUNICATION SYSTEMS (26 Marks)

3 Marks

14. What is multiplexing? State different types of multiplexing used.
15. Draw the block diagram and explain the working of FDM.
16. Describe the concept of WDM in brief.
17. Compare FDM and TDM.
18. Define orbits of satellite with sketch.
19. Define the elevation angle and angle of azimuth in satellite communication.
20. Describe telemetry and control sub-system of satellite.
21. What are uplink and downlink frequencies in a satellite system?
22. List the functions of satellite.

4 Marks

23. Explain frequency reuse concept used in cellular mobile communication.
24. Draw uplink and downlink model of satellite communication system.
25. Name and describe antenna used in satellite communication.
26. Describe the working principle of CDMA with diagram. Write its advantages and disadvantages.
27. Explain mobile communication with number of subscribers using MTSO and cell sets.
28. Draw and explain the block diagram of cellular mobile phone system.
29. Explain how cell splitting takes place in mobile communication with neat diagram.
30. Define hand off mechanism. List different types of hand-off and explain any one.