

QUESTION BANK (G scheme)

Sub :- Analog communication (17440)

Semester:- IV

Course:- EJ

Test:- II

Chapter :- 3 Radio receiver. (6M)

3 Marks :-

1. Give the effect on FM receiver if AFC stag is not used.
2. Draw the block diag of phase discriminator.
3. Why intermediate freq has constant value.

4 Marks :-

4. Draw and explain the block diag of FM receiver.
5. Draw and explain ratio detector.
6. Draw and explain balanced detector.

Chapter 4 :- Transmission line (18M)

3 Marks :-

7. Define VSWR and CSWR.
8. Draw and explain equivalent ckt of transmission line and also draw radio equivalent ckt for the same.
9. Define characteristic impedance and propagation constant.

4 Marks:-

10. Explain standing wave pattern for transmission line.
11. Define stub with its types and also explain any one type with diag.
12. Explain with neat sketch the term balun.
13. A loss-less transmission line of 100 ohm characteristic impedance connects a 100 khz generator to 140 ohm load. Calculate reflection coefficient and VSWR.
14. If R is reflection coefficient , what will be its value
 - (i) If there is no reflected vtg.
 - (ii) If reflected vtg is same as incident vtg.
 - (iii) If reflected vtg= 10v and incident =20v.
 - (iv) If reflected vtg =2v and incident vtg =4v.

Chapter 5:- wave propagation (12M)

3 Marks :-

15. Define transvers electromagnetic wave and propagation.
16. Why electromagnetic waves are said to be transvers wave.
17. Define skip distance and critical freq.

18. Define fading and max usable freq.

4 Marks :-

19. Explain with neat sketch sky wave propagation.

20. Describe duct propagation.

21. Describe space wave propagation.

22. Comparison between ground wave and space wave propagation.

Chapter 6 :- Antennas(16M)

3 Marks :-

23. Draw the cktdiag of resonant and non-resonant antenna with radiation pattern.

24. Define bandwidth, beamwidth and antenna gain.

25. Define directive gain, radiation pattern and polarization.

4 Marks :-

26. Compare resonant and non-resonant antenna.

27. Explain folded dipole antenna with its radiation pattern.

28. Describe loop antenna.

29. Describe yagi-uda.

30. What is Horn antenna and draw its radiation pattern.