BHARATI VIDYAPEETH INSTITUTE OF TECHNOLOGY

QUESTION BANK

Unit Test-II (Shift:-I & II)

Program: - EJ

Semester: - III   **Course: PEC(22334)**

Unit 3   Transmitters and Receivers (16 M)

2   Marks Questions

1. Draw the block diagram of Armstrong Method FM generation.
2. Explain why intermediate frequency has constant value.
3. Explain the term Pre-emphasis and De-emphasis.

4 Marks Questions

4. Draw and explain the block diagram of FM Super heterodyne receiver.
5. Draw and explain PLL as a FM Detector.

6. Draw and explain the Ratio Detector

Unit 4 Wave Propagation (10 M)

2 Marks Questions

7. Explain why electromagnetic waves are said to be transvers wave.
8. Explain the term virtual height and actual height with neat sketch.

9. Define –i) Critical Frequency ii) Maximum Usable Frequency.

10. Define –i) Polarization   ii) Fading

11. Define –i) Skip Distance   ii) Optical Horizon

4 Marks Questions

12. Explain with neat sketch sky wave propagation
13. Describe duct propagation with neat sketch.
14. Describe space wave propagation with neat sketch.
15. Describe Tropospheric wave propagation with neat sketch.

16. Comparison between ground wave and space wave propagation.

Unit 5   Antennas (14 M)

2 Marks Questions

17. Define bandwidth, beam width and antenna gain.
18. Define directive gain, radiation pattern and polarization.
19. Define Directivity, Power gain and Antenna Resistance

4 Marks Questions.

20. Compare resonant and non-resonant antenna.
21. Explain folded dipole antenna with its radiation pattern.
22. Describe Yagi-Uda Antenna with neat sketch.
23. Describe loop antenna with neat sketch.
24. Explain Horn antenna and draw its radiation pattern.
25. Explain Ferrite Core Antenna.