

BHARATI VIDYAPEETH'S INSTITUTE OF TECHNOLOGY, NAVI MUMBAI

Question Bank (K - Scheme)

Unit Test:II

Name of Subject: PRINCIPLES OF ELECTRONIC COMMUNICATION

Unit Test :II

Subject code: 313326

Course: EJ

Semester: III

CHAPTER-3 (Frequency Modulation Communication) -14 Marks

(2 Marks)

- 1) Draw the block diagram of Armstrong Method for FM generation.
- 2) Explain why limiter stage is used before detector.
- 3) Define phase Modulation.
- 4) Draw the waveforms for phase Modulation.
- 5) Explain why limiter stage is not used before ratio detector.

(4 Marks)

- 6) Draw and explain the block diagram of FM Super heterodyne receiver.
- 7) Draw and explain PLL as a FM Detector.
- 8) Draw and explain the Ratio Detector.

CHAPTER-4 (Wave Propagation) -12 Marks

(2-Marks)

- 9) Explain the term virtual height and actual height with neat sketch.
- 10) Define –i) Critical Frequency ii) Maximum Usable Frequency.
- 11) Define –i) Skip Distance ii) Polarization.
- 12) Define –i) Skip zone ii) Fading.

(4-Marks)

- 13) Explain with neat sketch sky wave propagation.
- 14) Describe duct propagation with neat sketch.

- 15) Describe space wave propagation with neat sketch.
- 16) Describe Tropospheric wave propagation with neat sketch.
- 17) Explain with neat sketch Ground wave propagation.
- 18) Comparison between ground wave and space wave propagation.

CHAPTER-5 (Antenna) -14 Marks

(2-Marks)

- 19) Define i) bandwidth ii) beam width.
- 20) Define i) radiation pattern ii) polarization.
- 21) Define i) Directivity ii) Power gain.
- 22) Define i) directive gain ii) antenna gain.

(4-Marks)

- 23) Compare resonant and non-resonant antenna
- 24) Explain folded dipole antenna with its radiation pattern..
- 25) Describe Yagi-Uda Antenna with neat sketch.
- 26) Describe loop antenna with neat sketch.
- 27) Explain any Microwave antenna.
- 28) Describe Printed antenna with neat sketch.
