

ELECTRONIC COMMUNICATION – I

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 2 = 20)

- 1 What is meant by noise?
- 2 Define Modulation Index.
- 3 What do you mean by Power distribution?
- 4 Write the advantages of Sideband transmission.
- 5 What is Pre-emphasis?
- 6 Give the important blocks of phase locked loop.
- 7 What do you mean RF amplifier?
- 8 What is meant by FM Monophonic Receivers?
- 9 Show the Digital Modulation Techniques.
- 10 What is meant by Companding.

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 5 = 25)

- 11 a Define Modulation. And discuss about the function of communication systems.
OR
b Describe the function of Ionospheric layers.
- 12 a Give the operating principle of balanced modulator with necessary diagram.
OR
b What is SSB transmitters? And describe the working principle of Filter method with neat sketch.
- 13 a Write the function of FM analysis.
OR
b Discuss about the operation of pre-emphasis and de-emphasis.
- 14 a Give an account on Tracking and Electronic tuning with necessary diagram.
OR
b Write a note on FM Monophonic and stereo receivers.
- 15 a Describe the working principle of pulse Amplitude modulation with neat diagram.
OR
b Give the operation of Frequency shift keying with neat sketch.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 What is Modulation? Describe the operation of percentage, low, high level modulation.
- 17 Discuss about the types of SSB Transmitters with neat diagram.
- 18 Describe the working of Direct & Indirect FM generation with neat sketch.
- 19 Elucidate the operating principle of upper heterodyne Analysis with neat sketch.
- 20 Explain the operation of companding with necessary diagram.