

SEVENTH SEMESTER B.TECH. (ENGINEERING) DECRI [09 SCHEME] EXAMINATION, NOVEMBER 2015

AI 09 703 - ELECTRONIC COMMUNICAITON SYSTEMS

Time: Three Hours

Maximum: 70 Marks

Part A

Answer all questions.

- 1. Define Standing Wave ratio as applied to a transmission line.
- 2. Define Characteristic impedance.
- 3. What is super heterodyne receiver?
- 4. Compare PCM and DPCM.
- 5. What is mean by Polar orbit and Inclined orbit?

 $(5 \times 2 = 10 \text{ marks})$

Part B

Answer any four questions.

- 6. Write short notes on Medium wave antenna.
- 7. Explain antenna arrays.
- 8. Describe Automatic Voltage control in IF Transmitter.
- 9. Describe Image Frequency and its rejection.
- 10. Explain the Spectrum of ASK and its significance.
- 11. Explain the Different methods of tracking a satellite.

 $(4 \times 5 = 20 \text{ marks})$

Part C

Answer Section (a) or Section (b) of each question.

12. (a) Discuss about Amplitude Modulation.

Or

- (b) Explain Reactance tube Modulator using relevant circuit diagram.
- 13. (a) Describe Dual channel SSB receiver.

Or

(b) Explain the working of Intermediate frequency Amplifier and choc of IF.

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14. (a) Explain basic digital communication systems. What are most commonly used digital modulation techniques?

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Or

- (b) Describe the process of Time Division Multiplexing.
- 15. (a) Describe the Functional elements of Telemetry.

Or

(b) Explain with a neat block diagram a satellite communication link.

 $(4 \times 10 = 40 \text{ marks})$

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