



JBE-003-1151002 Seat No. _____

M. Sc. (Electronics) (Sem. I) (CBCS) Examination

December - 2019

Foundation of Communication

Electronics : Paper - II

Faculty Code : 003

Subject Code : 1151002

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) All questions carry equal marks.
(2) Figures on right hand side indicate marks.

1 Answer the following in brief : (Any Seven) 14

- (1) Define Linear modulation.
- (2) What is the envelope of AM wave?
- (3) What is fading?
- (4) What is QAM?
- (5) What is message? (Define)
- (6) What is SPATTER?
- (7) What is flywheel effect?
- (8) What is pilot carrier?
- (9) What is AGC?
- (10) What is hydrodyning process?

2 Answer any two : 14

- (1) Explain basic communication system with block diagram.
- (2) What is modulation? List and define all types of modulation with waveform.
- (3) Explain major factors affecting modulation.

- 3** Answer the following : **14**
- (1) Discuss BJT mixer.
 - (2) Write a note on limitations of Amplitude modulation.
- OR**
- 3** Answer the following : **14**
- (1) Write a note on Emitter modulator.
 - (2) What are side bands? Explain their types. Why are they important?
- 4** Answer the following : **14**
- (1) Explain major factors affecting modulation. **3**
 - (2) What are the basic methods of analog modulation? **7**
Explain these methods in brief.
 - (3) Compare three methods for SSB. **4**
- 5** Answer the following : (Any Two) **14**
- (1) Explain diode balanced demodulator.
 - (2) Write note on SSB Transmitter.
 - (3) Write note on Classification of Receivers.
 - (4) Explain AM vestigial side band transmission.
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