Roll No. | | | | | | | | | | |

B.E. (Full-Time) DEGREE END SEMESTER EXAMINATION, APRIL / MAY 2012
PRINTING TECHNOLOGY BRANCH
VIII SEMESTER – (REGULATIONS 2008)

EC 9051 – ELECTRONIC COMMUNICATION

Duration: 3 hours **Max. Marks: 100**

Answer ALL Questions

PART A
(10 X 2 = 20 marks)

1. What is signal to noise ratio? Why it is important?
2. Define channel capacity.
3. Explain the need for modulation.
4. Explain modulation index?
5. Explain the term propagation velocity.
6. Mention the frequency range of commercial FM transmission.
7. Explain the term Antenna Gain.
8. What is line of sight propagation?
9. Explain polarization.
10. What is FDM?

PART B
(5 X 16 = 80 marks)

11. Explain the various noises that affects the signal in a communication system.

12. (a) Define amplitude modulation. Explain the amplitude modulation and frequency modulation of the AM wave with neat sketch. Discuss the representation of the AM wave with a diagram.

(or)

(b) Explain the DSB-FC, DSB-SC, SSB and vestigial side band.

13. (a) Explain in detail about the ground wave and sky wave propagation.

(or)

(b) Explain in detail about spacewave and troposcatter.

14. (a) Explain the data transmission rate, cross-talk, echo suppressor and equliser.

(or)

(b) Explain the features of microwaves and the advantages of fiber optical cable.

15. (a) Explain with the block diagrams an amplitude modulated transmitter and receiver

(or)

(b) Explain with the block diagrams a microwave transmitter and receiver