

**B.E. DEGREE END SEMESTER EXAMINATION, APR / MAY 2014**  
PRINTING TECHNOLOGY BRANCH  
VII SEMESTER – (REGULATIONS 2004)

**PT511– ELECTRONIC COMMUNICATION**

**Duration: 3 hours**

**Max. Marks: 100**

Answer ALL Questions

**PART A**

(10 X 2 = 20 marks)

1. Explain the need for modulation
2. Define noise figure.
3. What is channel capacity?
4. Define modulation index for amplitude modulation.
5. What is Tropospheric scatter.
6. Explain line of sight propagation.
7. Explain the term, "Propagation Velocity".
8. Explain audio digitization.
9. Why FM reception is noise free compared to AM reception?
10. Explain time division multiplexing.

**PART B**

(5 X 16 = 80 marks)

11. Explain the various types of noises in a communication system.
12. (a) Compare analog communication and digital communication.  

(or)

(b) Explain the different types of pulse modulation techniques.
13. (a) Explain in detail groundwave and skywave propagation.  

(or)

(b) Explain the various layers of ionosphere with diagram.
14. (a) Explain the various digital codes used in digital communication.  

(or)

(b) Explain the data transmission rate, cross talk, echo suppressor and equaliser.
15. (a) Explain with block diagrams a amplitude modulated transmitter and receiver.  

(or)

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