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B.E. (Full-Time) DEGREE END SEMESTER EXAMINATION, NOV / DEC 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. Explain the term signal to noise ratio.
2. Explain channel capacity.
3. Explain the need for modulation.
4. What is antenna gain?
5. Explain the term propagation velocity.
6. Mention the frequency range of commercial FM transmission.
7. Explain audio digitization.
8. What is line of sight propagation?
9. Explain polarization.
10. What is TDM?

PART B

(5 X 16 = 80 marks)

11. Explain the various noises that affects the signal in a communication system.
12. (a) Explain amplitude modulation with suitable diagrams also explain DSB-SC and Vestigial side band.
(or)
(b) Compare analogue and digital communication.
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 equaliser.
(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) What is frequency division multiplexing? Draw and explain the voice frequency channel FDM hierarchy.