



C09-EC-604

**3760**

**BOARD DIPLOMA EXAMINATION, (C-09)**  
**OCT/NOV—2014**  
**DECE—SIXTH SEMESTER EXAMINATION**  
**ADVANCED COMMUNICATION SYSTEMS**

Time : 3 hours ]

[ Total Marks : 80

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**PART—A**

3×10=30

**Instructions** : (1) Answer **all** questions.  
(2) Each question carries **three** marks.  
(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. State the basic principle of radar beacons.
2. Write the applications of magnetron.
3. State the basic principle of radar.
4. State the function of microwave link.
5. List the applications of satellite.
6. Draw the block diagram of a communication satellite.
7. Name various light sources used in fibre-optic communication.

- \* 8. List the advantages of optical fibres in communication.
9. Mention the advantages of digital cellular system.
10. List the radio characteristics of GSM.

**PART—B**

10×5=50

**Instructions** : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain the operation of magic tee.
12. Explain A scope, B scope and PPI displays.
13. Explain the transponder used in satellite with a block diagram.
14. Explain antenna, receiver and transmitter section of earth station.
15. Explain the application of optical fibre in cable TV applications.
16. Explain about repeaters and optical amplifiers with a diagram.
17. Explain CDMA system used in mobile communication.
- \* 18. Explain the functional architecture of intelligent network.

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