

C09-EC-604

3760

BOARD DIPLOMA EXAMINATION, (C-09) APRIL/MAY-2015 DECE-SIXTH SEMESTER EXAMINATION

ADVANCED COMMUNICATION SYSTEMS

Time: 3 hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

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. Write the applications of TWT.
- **2.** What is Doppler effect?
- **3.** List the types of indicators used in radar systems.
- 4. List the Indian communication satellite.
- **5.** State the function of microwave link.
- **6.** Draw the block diagram of an earth station.
- **7.** Mention the advantages and disadvantages of APDs over PIN diodes.

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- 8. Write the features of submarine cables.
- 9. Explain soft hand-off in CDMA.
- 10. Draw the block diagram of basic cellular system.

PART—B

 $10 \times 5 = 50$

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 in detail the factors affecting radar range.
- **12.** Explain the various modes of operation in waveguides.
- **13.** (a) Explain communication subsystem.

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(b) Explain attitude control subsystem.

- 5
- **14.** Explain the transponder used in satellites with a block diagram.
- **15.** Explain fibre optic communication system with block diagram.
- 16. Explain the principle of DWDM with block diagram.
- 17. Explain about AMPS.
- **18.** Explain about IRIDIUM system.

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