



C09-EC-403

3469

BOARD DIPLOMA EXAMINATION, (C-09)
OCT/NOV—2015
DECE—FOURTH SEMESTER EXAMINATION
COMMUNICATION SYSTEMS

Time : 3 hours]

[Total Marks : 80

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. Define the terms 'error detection' and 'error correction'.
2. Mention the significance of sampling theorem.
3. What are the advantages of delta modulation over PCM?
4. Compare CDMA with FDMA.
5. What is FDMA?
6. Mention the salient features of ISDN.
7. List the functions of Internet telephony.
8. Explain the constructional features of dish antenna system.
9. What is parasitic element? State the functions of reflector and director.
10. Define radiation resistance.

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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.** (a) List and explain pulse modulation types. 6
(b) Define quantization and bit-rate of a PCM system. 4
- 12.** (a) Explain ASCII code. 5
(b) Explain ARQ code. 5
- 13.** Explain FDM used in telephony.
- 14.** (a) Mention the salient features of cable modem. 3
(b) Describe the operation of telephone modem. 7
- 15.** Describe circuit switching and packet switching.
- 16.** Explain the operation of basic telephone equipment.
- 17.** (a) How can we change the electrical length of an antenna without changing its physical length? 4
(b) Explain the grounding of antenna with radiation pattern. 6
- 18.** Explain the constructional features and radiation pattern of end-fire array and turnstile antenna.

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