

3469

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

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. 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.

/3469 1 [Contd...

PΔ	RT.	R
\mathbf{r}	. 1 /1	

 $10 \times 5 = 50$

4

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.
 - (b) Explain ARQ code. 5
- **13.** Explain FDM used in telephony.
- **14.** (a) Mention the salient features of cable modem.
 - (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?
 - (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.

* * *

/**3469** 2 AA15—PDF