

3469
BOARD DIPLOMA EXAMINATION, (C-09)
JUNE - 2019
DIPLOMA IN ELECTRONICS & COMMUNICATION ENGINEERING
COMMUNICATION SYSTEMS
FOURTH SEMESTER EXAMINATION

Time: 3 Hours**Total Marks: 80**

PART - A (10 x 3 = 30 Marks)

Note 1: Answer all questions and each question carries 3 marks

2: Answers should be brief and straight to the point and shall not exceed 5 simple sentences

1. Define information capacity of a channel and write the expression.
2. Compare the performance of ASK and FSK
3. State the need for data compression and list any two compression methods
4. List any Three differences between Multiplexing and Multiple access.
5. Define multiplexing.
6. What are the advantages of electronic telephony over manual telephony?
7. Classify switched telephone systems
8. Draw the radiation pattern of log periodic antenna and turnstile antenna.
9. Mention the applications of helical antenna and loop antenna.
10. Define beam width of antenna.

PART - B (5 x 10 = 50 Marks)

Note 1: Answer any five questions and each question carries 10 marks

2: The answers should be comprehensive and the criteria for valuation is the content but not the length of the answer

11. a) Explain Error detection and correction.
b) Explain Redundancy check method for error detection.
12. Explain Synchronous communication. Mention the advantages.
- * 13. a) Describe the principle of spread - spectrum communication
b) Explain direct sequence system.
14. a) Explain the difference between fax modem and data modem. 4 Marks
b) Explain the functioning of cable modem. 6 Marks
15. Explain the operation of Fax machine with block diagram.
16. a) Explain the features of ISDN.
b) Explain the operation of EP ABX .
17. a) Explain the terms isotropic radiator & half wave dipole. Draw their Radiation pattern. 5 marks
b) Explain the terms Radiation Resistance, Decibel and Neper. 5 marks
18. a) Explain the principle of parabolic reflector. 3 Marks
b) Explain the constructional features and operation of Dish antenna system. 7 Marks