

## 4628

## BOARD DIPLOMA EXAMINATION, (C-14) OCT/NOV-2018 DCME—FIFTH SEMESTER EXAMINATION

## DATA COMMUNICATION

[Total Marks: 80 Time: 3 hours]

## 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. List various modes of data transmission.
  - 2. Define handwidth
  - 3. Differentiate modern and adapter.
  - **4.** List the types of data representations.
  - 5. Write the relationship between a signal's apectrum and its bandwidth.
  - **6.** Write about differential encoding.
  - 7. Define a parity bit.
  - **8.** List the disadvantage of asynchronous transmission.
  - **9.** Define Multiplexing.
- 10. List about advantages of packet switching compared to circuit switching.

PART-B  $10 \times 5 = 50$ 

- **Instructions:** (1) Answer any **five** questions.
  - (2) Each questions carries ten marks.
  - (3) Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.
- 11. Discuss about point-point, multipoint and broad casting communication.
- **12.** Explain the working principle of modem.
- **13.** Explain about the transmission impairments.
- 14. Explain different data transmission media in detail.
- **15.** Differentiate between NRZ-L and NRZ-I including the signals.
- 16. Write about any two multilevel binary digital-to-digital encoding techniques.
- **17.** Explain about frequency-division multiplexing(FDM).
- **18.** Explain about switching network techniques.