TED (15/19) 4132
(Revision-2015/19)

A24 - 03268

Reg.No.....
Signature.....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, APRIL - 2024

DATA COMMUNICATION

[Maximum marks: 100] [Time: 3 Hours]

PART – A
Maximum marks: 10

I. (Answer ***all*** the questions in one or two sentences. Each question carries **2** marks)

1. What is data communication?
2. Define Protocol.
3. Define Band Width.
4. List any two propagation methods for wireless transmission.
5. What is HDLC? (5 x 2 = 10)

PART – B
Maximum marks: 30

II. (Answer any ***five*** of the following questions. Each question carries **6** marks)

1. Explain briefly about star topology.
2. Explain different transmission impairments.
3. What is Frequency Shift Keying?
4. Describe microwave transmission.
5. Explain the structure of a multistage switch.
6. State how parity check can be used to detect errors.
7. Write a note on Framing. (5 x 6= 30)

PART – C
Maximum marks: 60

(Answer ***one full*** question from each unit**.** Each full question carries **15** marks)

UNIT – I

III. Explain ISO-OSI Architecture with a diagram. (15)

OR

IV. (a) Explain categories of network. (9)

(b) Explain different data flow methods. (6)

UNIT - II

V. (a) Explain PCM. (8)

(b) Write a note on different transmission modes. (7)

OR

VI. Explain different types of multiplexing techniques. (15)

UNIT - III

VII. Explain any three guided transmission medias. (15)

OR

VIII. (a) Write a note on Radio Transmission. (5)

(b) Differentiate circuit switching and packet switching. (10)

UNIT – IV

IX. (a) What are the different types of errors? (6)

(b) What is CRC? Explain the working of CRC with example. (9)

OR

X. (a) Write a note on point to point protocol. (6)

(b) Explain different Random access protocols. (9)
