TED (10)–3067 Reg. No. .....

(REVISION—2010) Signature .....

THIRD SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/ TECHNOLOGY—OCTOBER, 2014

DATA COMMUNICATION

(Common for IF, CM and CT)

[*Time* : 3 hours

(Maximum marks : 100)

Marks

PART—A

(Maximum marks : 10)

I Answer the following questions in one or two sentences. Each question carries 2 marks.

1. Define crosstalk.
2. Explain the function of transmitter.
3. List the different transmission media.
4. Define TDM.
5. Define cryptography. (5×2=10)

PART—B

(Maximum marks : 30)

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

1. Explain the different topologies.
2. Explain the advantages of satellite communication.
3. Explain about PCM.
4. Explain about multiplexing.
5. Explain the advantages of wireless communication system.
6. Explain circuit switching.
7. Explain AM and FM. (5×6=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 reference model with the help of a diagram. 15

OR

Marks

IV (a) Explain different categories of networks - LAN, WAN, MAN. 9

(b) Explain attenuation and delay distortion. 6

UNIT—II

V Explain the different guided transmission media in detail. 15

OR

VI Explain NRZ-L, NRZ-I, Manchester and differential manchester encoding formats. 15

UNIT—III

VII Explain flow control – stop and wait, sliding window. 15

OR

VIII Explain error controls – stop and wait ARQ, Go back ARQ, sliding window ARQ. 15

UNIT—IV

IX Explain Circuit, packet and message switching. 15

OR

X (a) Explain about data encryption standards. 9

(b) Explain about RSA. 6