



**TED(15)-4132  
(REVISION-2015)**

**Reg. No .....**

**Signature .....**

**MODEL QUESTION PAPER (REV-15)**  
**FOURTH SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY**  
**DATA COMMUNICATION**  
**(Maximum Marks: 100)**

**TIME : 3HRS**

**PART -A**

Answer **all** Questions in one or two sentences. Each question carries **2marks**

**I**

1. What is internet?
2. List any two network attributes
3. What is multiplexing?
4. What are the different types of transmission media?
5. What is bit stuffing?

5x2=10

**PART-B**

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

**II**

1. Discuss the Layered approach
2. Discuss different data representation forms
3. Differentiate analog and digital signals
4. Explain Amplitude shift keying
5. Explain the advantages and disadvantages of twisted pair cable
6. What are the different requirements for error control mechanism
7. Explain the framing concept

5x6=30

**PART-C**

Answer **One** full question from each Unit. Each question carries **15 marks**.

**UNIT I**

**III**

1. Explain ISO-OSI architecture with diagram 15

**OR**

**IV**

1. Explain Bus and Ring topologies with their advantages and disadvantages 10
2. Explain different characteristics of LAN 5

**UNIT II**

**V**

- a. Explain different types of multiplexing techniques 15

**OR**

**VI**

- a. Illustrate the need of modulation of analog signals and explain different



modulation methods 15

### **UNIT III**

VII

a.Explain circuit switching with its different phases 15

**OR**

VIII

a. Explain different unguided medias 15

### **UNIT IV**

IX

a.What are the different types of errors 6

b. Explain stop and wait protocol 9

**OR**

X

a.List the functions of datalink layer 6

b.Explain different datalink protocols 9