

No. of Printed Pages : 4                      180835/170835/120835  
Roll No. .... /030835

**3rd Sem / Comp, IT**  
**Subject:- Data Communication**

Time : 3Hrs.

M.M. : 100

**SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 \_\_\_\_\_ is a network that covers geographic areas that are larger, such as districts or cities  
a) LAN                      b) MAN  
c) WAN                      d) None of these
- Q.2 Both stations can transmit and receive data simultaneously in  
a) Simplex Mode              b) Half Duplex Mode  
c) Full Duplex Mode      d) Unicode
- Q.3 An Analog Signal is continuous in both \_\_\_\_\_ and \_\_\_\_\_.  
a) Frequency & power  
b) Time, amplitude  
c) Modulation, Waveform  
d) Segments, Packets
- Q.4 In \_\_\_\_\_ encoding, we use three levels: positive, zero and negative.  
a) Unipolar                      b) Polar  
c) Bipolar                      d) None of above

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- Q.5 Which of the following is not a digital-to-analog conversion?  
a) ASK                      b) PSK  
c) FSK                      d) AM
- Q.6 The number of bits transmitted or received per second is defined as  
a) Transmission rate      b) Reception rate  
c) Transceiver rate      d) Baud rate
- Q.7 Multiplexing is used in \_\_\_\_\_.  
a) Packet switching  
b) Circuit switching  
c) Data switching  
d) Packet & circuit switching
- Q.8 In TDM, slots are further divided into \_\_\_\_\_.  
a) Seconds                      b) Frames  
c) Packets                      d) Bits
- Q.9 Guided media is also known as \_\_\_\_\_.  
a) Bound media              b) Guided media  
c) Unguided media      d) None of the above
- Q.10 Which of the following is /are the popular techniques for error detection?  
a) Cyclic Redundancy Check  
b) Checksum  
c) Simple Parity check  
d) All of the options

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### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Lists the various types of flow of data?
- Q.12 What is a Network?
- Q.13 Define Analog Data?
- Q.14 Write the name of various types of signals?
- Q.15 Define Analog transmission?
- Q.16 What are the types of conversion during transmission?
- Q.17 What do you mean by serial transmission?
- Q.18 What is multiplexing?
- Q.19 What are the types of TDM?
- Q.20 What is Guided Media?

### SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 What are the various transmission modes in the network?
- Q.22 Write down the advantages of distributed processing?
- Q.23 Differentiate between Star & Bus Topology?
- Q.24 Write the various difference between Analog and Digital Signals?
- Q.25 How Bandwidth is different from throughput?

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- Q.26 What is the function of ADC and DAC?
- Q.27 List the characteristics of ASK?
- Q.28 Write a note on Parallel Processing?
- Q.29 Explain the working of sampler in PCM?
- Q.30 List down the various Polar schemes?
- Q.31 What is Coaxial cable?
- Q.32 Differentiate between Guided and Unguided media?
- Q.33 Write a note on twisted pair cable?
- Q.34 Explain the process of error detection?
- Q.35 How Parity is generated?

### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 What is Network? Differentiate between LAN, WAN & MAN?
- Q.37 Explain analog & digital data & signals. Write the difference between analog & digital signals?
- Q.38 Define Modulation. Explain AM, PM, and FM with the help of diagram?

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