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Roll No. ....

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**3rd Sem / Branch : Computer ,IT**

**Subject:- Data communication.**

Time : 3Hrs.

M.M. : 100

**SECTION-A**

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

- Q.1 Full form of WAN is \_\_\_\_\_. (CO1)  
a) Wide Area Network  
b) Wide Around Network  
c) Wide area normal  
d) Wide Aperiodic Network
- Q.2 What is the name of topology ? (CO1)  
a) Frequency                      b) Mesh  
c) Attenuation                      d) phase
- Q.3 Full form of FDM is \_\_\_\_\_ (CO4)  
a) frequency division Multiplexing  
b) frequency Dual Multiplexing  
c) frequency division Microware  
d) frequency division Multiplication
- Q.4 Multiplexing is used in \_\_\_\_\_ (CO4)  
a) Packet switching  
b) circuit switching  
c) Data switching  
d) Packet and circuit switching

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- Q.5 Types of digital to analog conversion. (CO3)  
a) ASK                                      b) PSK  
c) FSK                                      d) All of the above
- Q.6 \_\_\_\_\_ parameter is not related with the characteristics of analog signals. (CO2)  
a) Amplitude                                      b) Modem  
c) frequency                                      d) Phase
- Q.7 Which of the following parameter is not related with network performance? (CO2)  
a) Jitter                                      b) Throughput  
c) Latency                                      d) Analog
- Q.8 Full form of ASK is \_\_\_\_\_. (CO3)  
a) Attenuation shift keying.  
b) Amplitude secondary keying.  
c) Asymmetric shift keying  
d) Amplitude shift keying
- Q.9 The following technique is not the part of error detection? (CO6)  
a) Parity checking                      b) Bitcode  
c) CRC                                      d) Checksum
- Q.10 Which is not the guided media? (CO5)  
a) Twisted pair cable  
b) coaxial cable  
c) Optical fibre  
d) Microwave

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### SECTION-B

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

- Q.11 CRC stands for \_\_\_\_\_. (CO6)  
Q.12 List any two types of unguided media. (CO5)  
Q.13 Radio waves support frequency range of \_\_\_\_\_. (CO5)  
Q.14 What is redundant bit? (CO6)  
Q.15 Define topology. (CO1)  
Q.16 Define analog signal. (CO2)  
Q.17 Define bandwidth. (CO2)  
Q.18 Phase shift keying is a type of digital to analog conversion. (True/False). (CO3)  
Q.19 TDM stands for \_\_\_\_\_. (CO4)  
Q.20 In \_\_\_\_\_ mode the data can flow in both the direction at a time. (CO1)

### SECTION-C

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

- Q.21 Difference between analog and digital signal. (CO2)  
Q.22 Explain digital to analog conversion. (CO3)  
Q.23 What are characteristics of composite signal? (CO2)  
Q.24 Explain the components of data communication. (CO1)  
Q.25 Explain twisted pair cable with its types. (CO5)  
Q.26 Explain pulse code modulation. (CO3)  
Q.27 Explain ASK, FSK, and PSK. (CO3)  
Q.28 Explain parity bit method with example. (CO1)

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- Q.29 Explain LAN along with its diagram and advantages. (CO1)  
Q.30 Explain the network criteria. (CO1)  
Q.31 Redundancy increase the message size, but still used explain why? (CO6)  
Q.32 Differentiate between serial and parallel transmission. (CO3)  
Q.33 Explain the term multiplexing in context with data communication. (CO4)  
Q.34 Differentiate between fiber optics coaxial cables. (CO5)  
Q.35 Explain terms amplitude, frequency and phase in context to analog signals. (CO2)

### SECTION-D

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

- Q.36 What is analog to digital conversion, explain delta modulation with diagram. (CO3)  
Q.37 Explain guided and unguided media along with their types. (CO5)  
Q.38 What is error detection through parity bit. Discuss how block parity is used to detect double errors and correct single errors. (CO6)

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