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Roll No. .....

5th Sem / Branch : Eltx.
Sub.: Digital Communication

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Sampling theorem is used for converting____ (CO2)
a) Continuous time signal to discrete
b) Discrete to continuous signal
c) Continuous time signal to discrete & vice versa
d) None of these

Q.2 _____ is a type of digital modulation. (CO3)
a) AM b) FM
c) FSK d) PM

Q.3 Which pulse modulation technique is least expensive? (CO2)
a) PAM b) PPM
c) PWM d) PCM

Q.4 In flat top sampling_____ is kept constant. (CO2)
a) Phase b) Amplitude
c) Frequency d) Time period

Q.5 A modem is connected to ____. (CO5)
a) Key board b) Printer
c) Monitor d) Telephone lines

Q.6 What is DSL in Modem? (CO5)
a) Dual signal line b) Digital subscriber line
c) Digital signal layer d) Dual signal layer

Q.7 RS-232 is an example of ____ transmission. (CO5)
a) Synchronous
b) Asynchronous
c) Both synchronous & Asynchronous
d) None of these

Q.8 Crosstalk is expressed in (CO4)
a) dBm b) dBfs
c) dB d) Watts

Q.9 A PCM frame contains a group of ____ bits. (CO2)
a) 16 b) 24
c) 28 d) 32

Q.10 The time switch has a memory cycle at _____ MHz. (CO6)
a) 833 b) 842
c) 853 d) 862

SECTION-B

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

Q.11 Write any two advantages of digital communication. (CO1)

Q.12 Define synchronization. (CO1)

Q.13 Draw a PAM wave. (CO2)

Q.14 Define aperture effect. (CO2)

Q.15 Expand DPCM. (CO2)

Q.16 DPSK stands for _____. (CO3)

Q.17 Draw a simplex circuit. (CO4)

Q.18 Define propagation delay in data transmission. (CO4)

Q.19 Define cross talk. (CO4)

Q.20 Define Modem interfacing. (CO5)

SECTION-C

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

Q.21 In which way, digital transmission is better than analog transmission? (CO1)

Q.22 With the help of block diagram, explain in brief the data communication. (CO1)

Q.23 State & explain sampling theorem, write it's importance. (CO2)

Q.24 Differentiate between asynchronous & synchronous TDM. (CO2)

Q.25 Write main features of Frequency hopping spectrum. (CO2)

Q.26 What is slope overload error? How it is determined? (CO2)

Q.27 Show how PSK is detected? (CO3)

Q.28 Explain FSK in brief. (CO4)

Q.29 Draw & explain full duplex circuit. (CO4)

Q.30 Differentiate between asynchronous & synchronous transmission. (CO4)

Q.31 Write the concept of delay distortion. (CO4)

Q.32 What do you mean by data storage technology? (CO4)

Q.33 What is need of Modem in communication system? (CO5)

Q.34 Explain RS-232 C interface in brief. (CO5)

Q.35 Differentiate between circuit & packet switching. (CO6)

SECTION-D

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

Q.36 Explain in detail the Delta Modulation. Draw all diagrams. (CO2)

Q.37 With the help of block diagram, explain ASK system. (CO3)

Q.38 i) Write short note on equalizers. (5) (CO4)

ii) Draw block diagram of TST switch (5) (CO6)

Note: Course Outcome (CO) mentioned in the question paper is for official purpose only.