

MIDTERM EXAMINATION
Spring 2010
CS601- Data Communication

Time: 60 min
Marks: 40

Question No: 1 (Marks: 1) - Please choose one

Which topology requires a central controller or hub?

- ▶ Mesh
- ▶ Star
- ▶ Bus
- ▶ Ring

Question No: 2 (Marks: 1) - Please choose one

Unidirectional traffic movement is overcome by dual ring technology.

- ▶ True
- ▶ False

Question No: 3 (Marks: 1) - Please choose one

Which one best describes the given statement:

"To allow multiple users to share total capacity of a transmission medium"

- ▶ congestion control
- ▶ exchange management
- ▶ multiplexing

Question No: 4 (Marks: 1) - Please choose one

Which one is not among standard creation committee.

- ▶ internet society and IETF
- ▶ ITU-T
- ▶ IEEE

Question No: 5 (Marks: 1) - Please choose one

Set of rules that govern communication is called

- ▶ OSI model
- ▶ Protocol
- ▶ TCP/IP model
- ▶ Datagram

Question No: 6 (Marks: 1) - Please choose one

Frequency of a failure and network recovery time after a failure are measures of the _____ of a network.

- ▶ Performance
- ▶ Reliability
- ▶ Security
- ▶ Feasibility

Question No: 7 (Marks: 1) - Please choose one (www.vuhelp.pk

3dB is also called as power bandwidth.

- ▶ True
- ▶ False

Question No: 8 (Marks: 1) - Please choose one

ASK, PSK, FSK and QAM are examples of _____ modulation.

- ▶ digital-to-digital
- ▶ digital-to-analog
- ▶ analog-to-analog
- ▶ analog-to-digital

Question No: 9 (Marks: 1) - Please choose one

Packet switching is a connection oriented service.

- ▶ True
- ▶ False

Question No: 10 (Marks: 1) - Please choose one

Data synchronization is a function related with _____

- ▶ session layer

▶ presentation layer

▶ transport

Question No: 11 (Marks: 1) - Please choose one

Fourier transform tells us that any digital signal can be decomposed into infinite number of periodic signals

▶ True

▶ False

Question No: 12 (Marks: 1) - Please choose one

The internet model consists of _____ layers.

▶ three

▶ two

▶ five

▶ seven

Question No: 13 (Marks: 1) - Please choose one

Analog to digital conversion is also termed as modulating an analog signal.

▶ True

▶ False

Question No: 14 (Marks: 1) - Please choose one

PCM is the first process of PAM.

- ▶ True
- ▶ False

Question No: 15 (Marks: 1) - Please choose one

A modulator converts a(n) _____ signal to a(n) _____ signal.

- ▶ FSK: PSK
- ▶ Digital: analog
- ▶ Analog: digital
- ▶ PSK: FSK

Question No: 16 (Marks: 1) - Please choose one

The _____ layer changes bits into electromagnetic signals.

- ▶ physical
- ▶ data link
- ▶ transport
- ▶ none of given

Question No: 17 (Marks: 1) - Please choose one

We need _____ to decompose a composite signal into its components.

- ▶ fourier transform

- ▶ nyquist theorem
- ▶ shannon capacity

Question No: 18 (Marks: 1) - Please choose one

The bit rate always equals the baud rate in which type of signal?

- ▶ FSK
- ▶ QAM
- ▶ 4-PSK
- ▶ PSK

Question No: 19 (Marks: 1) - Please choose one

There are _____possible variations of 16 QAM.

- ▶ five
- ▶ two
- ▶ three
- ▶ four

Question No: 20 (Marks: 1) - Please choose one

Number of signal units per second that are required to represent a bit is called bit rate.

- ▶ True
- ▶ False

Question No: 21 (Marks: 2)

Write down three characteristics of Sine Wave.

Question No: 22 (Marks: 2)

A Sine wave has a frequency of 6 Hz. What is its period?

Question No: 23 (Marks: 3)

Give similarities between 4 QAM & 8 QAM.

Question No: 24 (Marks: 3)

What is digital signal? Give an example

Question No: 25 (Marks: 5)

Difference between Phase Modulation(PM) with Frequency Modulation(FM)?

Question No: 26 (Marks: 5)

Write down the criteria or technique that we follow for assigning integral values to sampled signals and also its conversion into binary format. Explain it?

See Lecture No 16 Analogue to digital Conversion