



CS601-Data Communication
Latest Solved Mcqs from Midterm Papers

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Lectures 1-22

Mc100401285

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Latest Mcqs

MIDTERM EXAMINATION
Spring 2010

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

Effective network mean that the network has fast delivery, timeliness and

- high bandwidth
- duplex transmission
- **accurate transmission (P6)**
- low bandwidth

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

A set of devices connected by communication links is called networking

- **True (P12)**
- 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 (P17)**

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

Line configuration refers to the way two or more devices attach to a _____.

- **Link (P25)**
- Circuit
- Route
- Node

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

_____requires the maximum number of I/O ports.

- Bus
- Star

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- **Mesh (P29)**
- Ring

Question No: 6 (Marks: 1) - Please choose one
_____ is used to define the direction of the signal flow between the linked devices.

- **transmission mode (P34)**
- transmission method
- transmission impairments

Question No: 7 (Marks: 1) - Please choose one
Unidirectional traffic movement is overcome by dual ring technology.

- **True (P33)**
- False

Question No: 8 (Marks: 1) - Please choose one
Trailer is only added at _____ layer of OSI model.

- **Data link (P41)**
- Physical
- Network
- Application

Question No: 9 (Marks: 1) - Please choose one
Data link layer deals with mechanical and electrical specifications of transmission medium and interface

- **True (P44)**
- False

Question No: 10 (Marks: 1) - Please choose one
A signal that repeats a pattern over a regular interval of time is called _____.

- **periodic signal (P58)**
- analog signal
- composite signal

Question No: 11 (Marks: 1) - Please choose one
If there is _____ in voltage then the frequency is infinite.

- instantaneous change
- **continuous change (P61)**
- no change

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

In a time-domain plot, the horizontal axis is measure of _____.

- signal amplitude
- frequency
- phase
- **time (P63)**

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

DC component is also termed as Direct current component or a component with non-zero frequency.

- **False (P72)**
- True

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

Quantization means measuring amplitudes of signal at equal intervals.

- True
- **False (P80)**

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

Amplitude in ASK is more resistive to EMI and Noise.

- **True (P87)**
- False

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

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

- digital-to-digital
- **digital-to-analog (P85)**
- analog-to-analog
- analog-to-digital

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

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

- **FSK (P86)**
- QAM
- 4-PSK
- PSK

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

Asynchronous transmission is _____

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- **Slow (P99)**
- costly
- non-effective
- fast

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

A _____ converts an analog signal into a digital signal.

- **Demodulator (P110)**
- Modulator
- Digital-to-analog converter

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

If a station does not receive its signal up to a specified time that system issues an alarm to _____

- **another node (P188)**
- network manager
- switch
- network analyzer



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

The information to be communicated in a data communications system is the

- ▶ Medium
- ▶ Protocol
- ▶ **Message (P 7)**
- ▶ Transmission

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

Which is not an element of protocol

- ▶ semantics
- ▶ timing
- ▶ **communication service module (P19)**

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

Line configuration refers to the way two or more devices attach to a _____.

- ▶ **Link (P 25)**
- ▶ Circuit
- ▶ Route
- ▶ Node

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

_____ requires the maximum number of I/O ports.

- ▶ Bus
- ▶ Star
- ▶ **Mesh (P29)**
- ▶ Ring



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

Which topology requires a central controller or hub?

- ▶ Mesh
- ▶ **Star (P 30)**
- ▶ Bus
- ▶ Ring

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

Layers 5, 6 and 7 also called as network support layers.

- ▶ True
- ▶ **False (P 42)**

Question No: 7 (Marks: 1) - Please choose one

Internet with small "i" specifies the world wide Network the actual internet.

- ▶ True
- ▶ False (P 39)

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

Data link layer deals with mechanical and electrical specifications of transmission medium and interface

- ▶ True (P 44)
- ▶ False

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

Data synchronization is a function related with _____

- ▶ session layer (P 51)
- ▶ presentation layer
- ▶ transport



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

OSI model was developed prior to TCP/IP model.

- ▶ True (P 54)
- ▶ False

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 (P58)

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

A signal that repeats a pattern over a regular interval of time is called _____.

- ▶ **periodic signal (P58)**
- ▶ analog signal
- ▶ composite signal

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

Frequency band in which 99% of the total power resides is called _____

- ▶ **power bandwidth (P 67)**
- ▶ half power bandwidth
- ▶ 3dB bandwidth
- ▶ F.M.



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

In differential Manchester we require two transition or signal changes to represent binary _____

- ▶ zero
- ▶ **one (P76)**
- ▶ both zero and one

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

In Alternate mark inversion the term mark comes from _____

- ▶ **telegraphy (P77)**
- ▶ telephony
- ▶ digital telephony

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

A 56k modem can download at a rate of _____ Kbps and upload at a rate of _____ Kbps.

- ▶ 33.6: 33.6
- ▶ 33.6: 56.6
- ▶ 56.6: 33.6
- ▶ 56.6: 56.6

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

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

- ▶ FSK (P 86)
- ▶ QAM
- ▶ 4-PSK
- ▶ PSK



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

Asynchronous transmission is _____

- ▶ slow (P 99)
- ▶ costly
- ▶ non-effective
- ▶ fast

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

At the _____ layer, a DCE takes data generated by a DTE.

- ▶ **physical (P 101)**
- ▶ transport
- ▶ data link
- ▶ application

Question No: 20 (Marks: 1) - Please choose one
_____ requires more bandwidth.

- ▶ FSK
- ▶ **ASK (P 112)**
- ▶ PSK
- ▶ QAM



Question No: 1 (Marks: 1) - Please choose one
Which topology requires a central controller or hub?

- ▶ Mesh
- ▶ **Star (P 30)**
- ▶ Bus
- ▶ Ring

Question No: 2 (Marks: 1) - Please choose one
Unidirectional traffic movement is overcome by dual ring technology.

- ▶ **True (P33)**
- ▶ 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 (P17)**

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

Which one is not among standard creation committee.

- ▶ **internet society and IETF (P 24)**
- ▶ ITU-T
- ▶ IEEE

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

Set of rules that govern communication is called

- ▶ OSI model
- ▶ **Protocol (P 8)**
- ▶ TCP/IP model
- ▶ Datagram

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

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

- ▶ **Performance (P 14)**
- ▶ Reliability
- ▶ Security
- ▶ Feasibility

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Question No: 7 (Marks: 1) - Please choose one

3dB is also called as power bandwidth.

- ▶ True
- ▶ **False (P66)**

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

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

- ▶ digital-to-digital
- ▶ **digital-to-analog (P85)**
- ▶ analog-to-analog
- ▶ analog-to-digital

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

Packet switching is a connection oriented service.

- ▶ True
- ▶ **False (P38)**

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

Data synchronization is a function related with _____

- ▶ **session layer (P51)**
- ▶ presentation layer
- ▶ transport

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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 (P 58)**

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

The internet model consists of _____ layers.

- ▶ **three (P239)**
- ▶ 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 (P 77)**

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

PCM is the first process of PAM.

- ▶ True
- ▶ **False (P80)**

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

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

- ▶ FSK: PSK
- ▶ **Digital: analog (P 110)**
- ▶ 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

http://www.ee.surrey.ac.uk/Projects/CAL/networks/Physical_Layer.htm



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

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

- ▶ **fourier transform (P 64)**
- ▶ 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 (P 86)**
- ▶ QAM

▶ 4-PSK

▶ PSK

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

There are _____ possible variations of 16 QAM.

▶ five

▶ two

▶ **three (P93)**

▶ 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 (P 68)**



MIDTERM EXAMINATION
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Please choose one (Marks: 1)

Effective network mean that the network has fast delivery, timeliness and

- high bandwidth
- duplex transmission
- **accurate transmission (P6)**
- low bandwidth

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

A set of devices connected by communication links is called networking

- **True (P12)**
- False

Question No: 3 (Marks: 1) - Please choose one
_____ is a multipoint topology.

- Ring
- Mesh
- Tree
- **Bus**

Question No: 4 (Marks: 1) - Please choose one
_____ requires the maximum number of I/O ports.

- Bus
- Star
- **Mesh (P29)**
- Ring

Question No: 5 (Marks: 1) - Please choose one
Unidirectional traffic movement is overcome by dual ring technology.

- **True (P33)**
- False

Question No: 6 (Marks: 1) - Please choose one
As the data packet moves from the lower to the upper layers, headers are

- added
- **subtracted**
- rearranged
- modified



Question No: 7 (Marks: 1) - Please choose one
Data chunk at data link layer is called _____

- frame
- **packet (P38)**
- datagram

Question No: 8 (Marks: 1) - Please choose one
The _____ layer is the layer closest to the transmission medium.

- **Physical (P45)**
- data link
- network
- transport

Question No: 9 (Marks: 1) - Please choose one
Data synchronization is a function related with _____

- **session layer (P 51)**
- presentation layer
- transport

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

Which layer is responsible for source to destination delivery of entire message?

- transport layer (P59)
- network layer
- session layer
- application layer

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

Encryption and encoding are the same terms.

- True
- False (P52)

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

TCP/IP model Application layer incorporate OSI Application and presentation

- layers
- True
- False

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

A sine wave must be an analog signal.

- True (P58)
- False

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

A periodic signal can always be decomposed into _____

- exactly an odd number of sine waves
- a set of sine waves
- set of sine waves, one of the which must have a phase of 0.
- none of the given (P58)

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

Manchester is a type of _____ encoding.

- Biphase (P75)
- polar
- biphase & polar
- none of the given

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

The powerful carrier signal is called as the _____

- carrier frequency (P86)
- base signal
- carrier frequency and base signal
- none of given

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

Modulation of an analog signal can be accomplished through changing the _____ of the carrier signal.

- amplitude
- frequency
- phase
- **all of the given (P58)**

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

In _____ transmission, bits are transmitted over a single wire, one at a time.

- Asynchronous serial
- Synchronous serial
- **Parallel (P99)**
- Asynchronous & Synchronous serial

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

In RS 422 Balanced mode two lines carry _____ signals which are not identical to each other.

- **Same (P109)**
- different
- digital
- analog

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

A _____ converts an analog signal into a digital signal.

- **Demodulator (P110)**
- Modulator
- Digital-to-analog converter



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