

FINALTERM EXAMINATION

Fall 2009

CS601- Data Communication

Time: 120 min

Marks: 85

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

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

- ▶ Medium
- ▶ Protocol
- ▶ Message
- ▶ Transmission

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

A set of devices connected by communication links is called networking

- ▶ True
- ▶ False

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

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

- ▶ True
- ▶ False

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

Data chunk at data link layer is called _____

- ▶ frame
- ▶ packet
- ▶ datagram

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

Data synchronization is a function related with _____

- ▶ session layer
- ▶ presentation layer
- ▶ transport

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

When data are transmitted from device A to device B, the header from A's layer 4 is read by B's _____ layer.

- ▶ physical
- ▶ transport
- ▶ application
- ▶ none of the given

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

Data must be converted into _____ before transmission.

- ▶ signal
- ▶ wave
- ▶ electric pulse

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

PCM is the first process of PAM.

- ▶ True
- ▶ False

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

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

- ▶ Asynchronous serial
- ▶ Synchronous serial
- ▶ Parallel
- ▶ Asynchronous & Synchronous serial

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

EIA 232 allows for a maximum bit rate of _____ Kbps.

- ▶ 40
- ▶ 30

► 20

► 10

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

When a beam of light travels through media of two different densities, if the angle of incidence is greater than the critical angle, _____ occurs.

- Reflection
- Refraction
- Incidence
- Criticism

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

A parabolic dish antenna is a(n) _____ antenna.

- Omnidirectional
- Bidirectional
- Unidirectional
- Horn

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

Ultra high-frequency waves always use _____ propagation.

- Ground
- Sky

- ▶ Line of Sight
- ▶ Space

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

Middle frequency waves having range 300 KHz-3 MHz always use _____ propagation.

- ▶ Ground
- ▶ Sky
- ▶ Line of Sight
- ▶ Space

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

dB is _____ if a signal is attenuated.

- ▶ Negative
- ▶ Positive
- ▶ Null
- ▶ Zero

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

Which multiplexing technique involves signals composed of light beams?

- ▶ FDM

- ▶ TDM
- ▶ WDM
- ▶ none of the given

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

Multiplexing has long been used as an essential tool in the _____.

- ▶ Electronic industry
- ▶ Telephone industry
- ▶ Space science
- ▶ VLAN

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

A telephone network is an example of a _____ network.

- ▶ Packet-switched
- ▶ Circuit-switched
- ▶ Message-switched
- ▶ none of the given

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

The local loop has _____ cable that connects the subscriber telephone to the nearest end office.

- ▶ Twisted-pair

- ▶ Coaxial
- ▶ Fiber-optic
- ▶ None of the given

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

Which error detection method involves polynomials?

- ▶ Checksum
- ▶ Two-dimensional parity check
- ▶ CRC
- ▶ Simple parity check

Question No: 21 (Marks: 1) - Please choose one

In CRC there is no error if the remainder at the receiver is _____

- ▶ Equal to the remainder at the sender
- ▶ Zero
- ▶ Nonzero
- ▶ The quotient at the sender

Question No: 22 (Marks: 1) - Please choose one

In CRC the quotient at the sender _____

- ▶ Becomes the dividend at the receiver

- ▶ Becomes the divisor at the receiver
- ▶ is discarded
- ▶ is the remainder

Question No: 23 (Marks: 1) - Please choose one

Which error detection method can detect a bust error?

- ▶ The parity check
- ▶ Two-dimensional parity check
- ▶ CRC
- ▶ Two-dimensional parity check and CRC

Question No: 24 (Marks: 1) - Please choose one

At the CRC checker, _____ means that the data unit is damaged

- ▶ A string of 0s
- ▶ A string of 1s
- ▶ A string of alternating 1s and 0s
- ▶ A nonzero remainder

Question No: 25 (Marks: 1) - Please choose one

Error control is both error _____ and error _____

- ▶ detection; correction
- ▶ detection; deletion

- ▶ detection; avoidance
- ▶ detection; forwarding

Question No: 26 (Marks: 1) - Please choose one

In line discipline the initiator first transmits a frame called an _____

- ▶ Enquiry
- ▶ Acknowledgment
- ▶ NAK
- ▶ Request

Question No: 27 (Marks: 1) - Please choose one

In line discipline after the data transmission, the sending system finishes with an _____ frame

- ▶ EOT
- ▶ EKT
- ▶ ENT
- ▶ ESP

Question No: 28 (Marks: 1) - Please choose one

In primary-secondary communication _____ is always the initiator of a session

- ▶ Primary

- ▶ Secondary
- ▶ Sender
- ▶ Receiver

Question No: 29 (Marks: 1) - Please choose one

Primary device uses _____ to receive transmission from the secondary devices.

- ▶ ACK
- ▶ ENQ
- ▶ POLL

Question No: 30 (Marks: 1) - Please choose one

In a Go-Back-N ARQ, if the window size is 63, what is the range of sequence number?

- ▶ 0 to 63
- ▶ 0 to 64
- ▶ 1 to 63
- ▶ 1 to 64

Question No: 31 (Marks: 1) - Please choose one

Sliding window requires that data frames be transmitted _____

- ▶ Sequentially
- ▶ Frequently

- ▶ Synchronously
- ▶ Asynchronously

Question No: 32 (Marks: 1) - Please choose one

Data link protocols can be divided into _____ sub-groups.

- ▶ two
- ▶ three
- ▶ four
- ▶ five

Question No: 33 (Marks: 1) - Please choose one

XMODEM is a _____ protocol designed for telephone-line communication b/w PCs.

- ▶ file transfer
- ▶ hardware
- ▶ software
- ▶ application exchange

Question No: 34 (Marks: 1) - Please choose one

In Y-MODEM Multiple files can be sent simultaneously

- ▶ True
- ▶ False

Question No: 35 (Marks: 1) - Please choose one

Which of the following combines features of the other two.

- ▶ ZMODEM
- ▶ YMODEM
- ▶ XMODEM
- ▶ None of given

Question No: 36 (Marks: 1) - Please choose one

BLAST stands for :

- ▶ Blocked asynchronous transmission
- ▶ Blocked synchronous transmission
- ▶ Barrel asynchronous transmission
- ▶ Below asynchronous transmission

Question No: 37 (Marks: 1) - Please choose one

Which one of the following uses full duplex operation with sliding window flow control.

- ▶ BLAST
- ▶ XMODEM
- ▶ YMODEM
- ▶ ZMODEM

Question No: 38 (Marks: 1) - Please choose one

HDLC is an acronym for _____.

- ▶ High-duplex line communication
- ▶ High-level data link control
- ▶ Half-duplex digital link combination
- ▶ Host double-level circuit

Question No: 39 (Marks: 1) - Please choose one

The DSAP and SSAP are addresses used by _____ to identify the protocol stacks.

- ▶ LLC
- ▶ MAC
- ▶ Network

Question No: 40 (Marks: 1) - Please choose one

The PDU has no flag fields, no CRC, and no station address

- ▶ TRUE
- ▶ FALSE

Question No: 41 (Marks: 1) - Please choose one

Which of the following is a bus topology LAN that uses base band signaling and

has a max. segment length of 500 meters

- ▶ 10 Base5
- ▶ 10 Base2
- ▶ 100 Base2
- ▶ 100 Base5

Question No: 42 (Marks: 1) - Please choose one

Token Bus has no commercial application in data communications

- ▶ True
- ▶ False

Question No: 43 (Marks: 1) - Please choose one

The BNC-T connector is a T-shaped device with _____ ports

- ▶ Three
- ▶ Two
- ▶ Four
- ▶ Five

Question No: 44 (Marks: 1) - Please choose one

_____ is the access protocol used by traditional Ethernet.

- ▶ CSMA/CD
- ▶ CSMA/CA

- ▶ Token Ring
- ▶ CSMA

Question No: 45 (Marks: 1) - Please choose one

When a collision is detected in a network using CSMA/CD. _____

- ▶ The frame is immediately resent
- ▶ A jam signal is sent by the station
- ▶ The backoff value is set to 0
- ▶ The backoff value is decremented by 1

Question No: 46 (Marks: 1) - Please choose one

Like VRC, LRC and CRC, Checksum is also based on _____.

- ▶ Redundency
- ▶ Decimal Division
- ▶ Encryption
- ▶ Encoding

Question No: 47 (Marks: 1) - Please choose one

Check sum method is used for _____ layers.

- ▶ Physical
- ▶ Application

- ▶ Transport
- ▶ Datalink

Question No: 48 (Marks: 1) - Please choose one

Repeater works on _____ layer.

- ▶ Data Link
- ▶ Physical
- ▶ Network
- ▶ Application

Question No: 49 (Marks: 1) - Please choose one

When systems share a point to point link, then protocols used are called _____ protocols.

- ▶ Direct
- ▶ Indirect
- ▶ Monolithic
- ▶ structured

Question No: 50 (Marks: 1) - Please choose one

_____ requires more bandwidth.

- ▶ FSK
- ▶ ASK

► PSK

► QAM

Question No: 51 (Marks: 2)

Whether Hamming code is the technique used for error detection or error correction?

Question No: 52 (Marks: 2)

What are Guard Bands in Multiplexing?

Question No: 53 (Marks: 2)

Which type of frames are present in BSC frames?

Question No: 54 (Marks: 3)

What are the fractional T Lines?

Question No: 55 (Marks: 3)

What are the light sources used for optic fiber?

Question No: 56 (Marks: 3)

Write names of Link Access Protocols developed by ITU-T?

Question No: 57 (Marks: 5)

Question No: 58 (Marks: 5)

What is Troposphere and Ionosphere?

Question No: 59 (Marks: 10)

What is CSMA/CD. Why it is needed?

VUSR