



BHARATI VIDYAPEETH'S

INSTITUTE OF COMPUTER APPLICATIONS & MANAGEMENT (BVICAM)

(Affiliated to Guru Gobind Singh Indraprastha University, Approved by AICTE, New Delhi)

A-4, Paschim Vihar, Rohtak Road, New Delhi-110063, Visit us at: <http://www.bvicam.in/>

Course Code: MCA-103

Course Name: Computer Networks

Class Test 1

Time: 1 Hour

Max Marks: 50

Attempt all questions. Each question carries One Mark.

Q.1 What is the minimum number of wires needed to send data over its serial communication link layer?

- (A) 1
- (B) 2
- (C) 3
- (D) 4

Q.2 Which data communication method is used to send data over a serial communication link?

- (A) simplex
- (B) half duplex
- (C) full duplex
- (D) all of these

Q.3 Which of the following statements is incorrect?

- (A) teleprocessing combining telecommunication and DP techniques in online activities.
- (B) Multiplexers are designed to accept data from several I/O devices and transmit a unified stream of data on one communication line.
- (C) a half-duplex line is a communication line in which data can move in two directions, but not the same time.
- (D) batch processing is the preferred processing mode for telecommunication operations.

Q.4 The interactive transmission of data within a time sharing system may be best suited to.....

- (A) simplex line
- (B) half duplex lines
- (C) full duplex line
- (D) bi-flex lines

Q.5 Teleprinters....

- (A) are used for printing at remote locations, not for input.
- (B) offer both high-speed operation and a variety of formatting controls.
- (C) have a printer for output and a keyboard for input
- (D) are same as teletypes.

Q.6 Which of the following is an example of a bounded medium?

- (A) coaxial cable
- (B) wave guide
- (C) fiber optic cable
- (D) all of these

Q.7 Coaxial cable has conductors with....

- (A) a common axis
- (B) equal resistance
- (C) the same diameter
- (D) none of these

Q.8 The area of coverage of a satellite radio beam is called its....

- (A) beam width
- (B) circular polarization
- (C) footprint
- (D) identity

Q.9 The amount of uncertainty in a system of the symbol is called.

- (A) bandwidth
- (B) entropy
- (C) loss
- (D) quantum

Q.10 Buffering is....

- (A) the process of temporarily storing the data to allow for small variation in device speeds.
- (B) a method to reduce cross-talks
- (C) storage of data within the transmitting medium until the receiver is ready to receive
- (D) a method to reduce the routing overhead

Q.11 What is the main difference between synchronous and asynchronous transmission?

- (A) band width required is different.
- (B) pulse height is different.
- (C) clocking is derived from the data in synchronous transmission.

(D) clocking is mixed with data in asynchronous transmission.

Q.12 The transmission signal coding method for T, the carrier is called.....

- (A) NRZ
- (B) Bipolar
- (C) Manchester
- (D) Binary

Q.13 In a synchronous modem, the digital-to-analog converter sends a signal to the.....

- (A) transmission line
- (B) modulator
- (C) terminal
- (D) equalizer

Q.14 Which section of a synchronous modem contains the scrambler?

- (A) Terminal section
- (B) Receiver section
- (C) Control section
- (D) Transmission section

Q.15 The synchronous modems are more expensive than the asynchronous modems because....

- (A) they must contain clock recovery circuits
- (B) production volume is larger
- (C) they must operate on a larger bandwidth
- (D) They are larger

Q.16 The receive equalizer reduces delay distortions using a.....

- (A) difference engine
- (B) tapped delay lines
- (C) descrambler
- (D) gear shift

Q.17 How much power (approximately) a light-emitting diode can couple into an optical fiber?

- (A) 1 picowatt
- (B) 100 microwatts
- (C) 10 milliwatts
- (D) 10 watts

Q.18 Avalanche photodiode receiver can detect bits of transmitted data by receiving.

- (A) 1 Photon
- (B) 100 photons

- (C) 10 photons
- (D) 200 photons

Q.19 The loss in signal power as light travels down the fiber is called.

- (A) propagation
- (B) attenuation
- (C) scattering
- (D) absorption

Q.20 Multiple repeaters in communication satellites are called.

- (A) detector
- (B) modulator
- (C) transponders
- (D) stations

Q.21 how many bits per symbol are used in the Baudot code?

- (A) 5
- (B) 7
- (C) 8
- (D) 9

Q.22 While transmitting odd-parity coded symbols, the number of zeros in each symbol is....

- (A) odd
- (B) even
- (C) unknown
- (D) none of these

Q.23 Which of the following transmission systems provides the highest data rate to an individual device?

- (A) Digital PBX
- (B) Computer Bus
- (C) LAN
- (D) Voiceband modem

Q.24 One important characteristic of LAN is...

- (A) parallel transmission
- (B) low cost access for low bandwidth channel
- (C) unlimited expansion
- (D) application independent interfaces

Q.25 Which of the following is possible in a token passing bus network?

- (A) Unlimited number of stations

- (B) Unlimited distance
- (C) In-service expansion
- (D) Multiple time-division channels

Q.26 Which of the following is not a characteristic of the hub architecture of Arc net?

- (A) Directionalized transmission
- (B) Alternative routing
- (C) Zero insertion loss amplifier
- (D) RIM port isolation

Q.27 A group of packets from a source through an X.25 packet system to sink.

- (A) arrive in the same order sent for VC, but not for PVC
- (B) arrive in the same order sent for PVC, but not for VC
- (C) arrive in the same order sent for both VC and PVC
- (D) None of these

Q.28 How many OSI layers are covered in the X.25 standard?

- (A) three
- (B) four
- (C) two
- (D) seven

Q.29 A protocol is a rule governing a time sequence of events that must take place.

- (A) between peers
- (B) across an interface
- (C) between non-peers
- (D) none of these

Q.30 What is the number of separate protocol layers at the serial interface gateway specified by the X.25 standard?

- (A) 2
- (B) 3
- (C) 4
- (D) 7

Q.31 Layer one of the OSI model is.....

- (A) physical layer
- (B) link layer
- (C) transport layer
- (D) network layer

Q.32 Establishing a virtual connection is functionally equivalent to

- (A) physically connecting a DTE and DCE

- (B) connecting a virtual memory
- (C) placing a telephone call prior to a conversation
- (D) none of these

Q.33 What is the main purpose of a data link content monitor?

- (A) measurement of bit error rate.
- (B) Determine the type of switching used in a data link.
- (C) Determine the type of transmission used in a data link.
- (D) Detect problems in protocols.

Q.34 Protocol converters are

- (A) same as multiplexers
- (B) same as TDMs
- (C) usually not operated in pairs
- (D) usually operated in pairs

Q.35 Satellite transponders contain

- (A) a receiver and transmitter designed to relay microwave transmission from one point on earth to another
- (B) a device that echoes the radiation without change from one point on earth to another
- (C) devices that transform the message sent from one location on earth to a different code for transmission to another location
- (D) all of these

Q.36 Satellite transponders.

- (A) use a higher frequency for reception of radiation from earth stations and lower frequency for transmission to earth stations.
- (B) use lower frequency reception of radiation from earth stations and higher frequency for transmission to earth stations.
- (C) use a single frequency for reception and transmission from one point on earth to another
- (D) are devices that echo the radiation without change from one point on earth to another

Q. 37 Satellite in geosynchronous orbit...

- (A) remains in a fixed position relative to points on earth
- (B) can cover about 80
- (C) moves faster than the earth's rotation so that it can cover a larger portion of the earth
- (D) remains in a fixed position so as the earth rotates it can fully cover the earth.

Q.38 A spin stabilized satellite.

- (A) solar cells mounted on a cylinder body that continuously rotate so that about 40a time.
- (B) gyroscopic action of a spinning satellite to maintain its orientation towards the earth and the sun
- (C) solar panels whose cells are continually oriented towards the sun
- (D) both (A) and (B)

Q.39 What frequency range is most affected by fog and precipitation?

- (A) 4GHz to 6GHz
- (B) 6GHz to 10GHz
- (C) above 10GHz
- (D) 2GHz to 4GHz

Q.40 In OSI network architecture, the routing is performed by

- (A) a data link layer
- (B) network layer
- (C) transport layer
- (D) session layer

Q.41 In OSI network architecture, the dialogue control, and token management are responsibilities of

- (A) data link layer
- (B) network layer
- (C) transport layer
- (D) session layer

Q.42 Which of the following is not an example of data communication?

- (A) A teletype printing news bulletins.
- (B) A computer transmitting files to another computer
- (C) An automatic teller machine checking account balance with the bank's computer
- (D) A salesman telephoning orders to the office

Q.43 The standard ASCII

- (A) is version II of the ASC standard
- (B) has 128 characters, including 32 control characters
- (C) is a subset of the 8-bit EBCDIC code
- (D) is used only in the United States and Canada

Q.44 Escape sequences

- (A) use ESC character to indicate the start of a special control sequence
- (B) are used to switch (escape) between ASCII and EBCDI codes
- (C) are a popular daydream for inmates
- (D) none of these

Q.45 Fibre-optic cables operate at frequencies near.....

- (A) 20 MHz
- (B) 200 MHz
- (C) 2 GHz
- (D) 800 THz

Q.46 HF radio waves follow how many basic paths on leaving the transmitter?

- (A) Two
- (B) Four
- (C) One
- (D) Many

Q.47 Digital cellular radio systems.....

- (A) expand the number of cells.
- (B) allow multiple subscribers to share the use of cells.
- (C) allow multiple subscribers to share the use of a common channel within a cell
- (D) extend transmission distance of subscribers within a cell.

Q.48 Transmission of binary signals require.....

- (A) less bandwidth than analog
- (B) more bandwidth than analog
- (C) same bandwidth as analog
- (D) a Licence from the FAA

Q.49 The standard first-level digital multiplex system in the United States operates at.....

- (A) 2.048 Mbps
- (B) 44.736 Mbps
- (C) 1.544 Mbps
- (D) 9600 Mbps

Q.50 The use of Dataphone Digital Services.

- (A) can be expected to increase
- (B) provides a higher operating rate than FTI service.
- (C) can be expected to be replaced by FTI service due to the lower cost of that service.
- (D) provides a higher operating rate than T