

## Computer Network MCQs

1. What does PoP stand for?

- ☐ Pre Office Protocol
- ☒ Post Office Protocol
- ☐ Protocol of Post
- ☐ None

2. What is the port number of PoP?

- ☐ 35
- ☐ 43
- ☒ 110
- ☐ 25

Hide

3. What is the number of layers in the OSI model?

- ☐ 2 layers
- ☐ 4 layers
- ☒ 7 layers
- ☐ 9 layers

Hide

4. The full form of OSI is?

- ☐ Operating System interface
- ☐ Optical System interconnection
- ☐ Operating System Internet
- ☒ Open system interconnection

Hide

5. Identify the layer which provides service to the user.

- ☐ Session layer
- ☒ Application layer
- ☐ Presentation error
- ☐ Physical layer

Hide

6. What is a HUB?

- ☐ Software

- ☐ Computing device
- ☒ Network device
- ☐ Calculating device

Hide

7. What does a set of rules define?

- ☐ SMTP
- ☐ FTP
- ☐ IMAP
- ☒ Protocol

Hide

8. Identify among the following which is mainly used to host web site.

- ☐ Mail server
- ☒ Webserver
- ☐ Database server
- ☐ None

Hide

9. Identify the full form of HTTP?

- ☒ HyperText Transfer Protocol
- ☐ HyperText Transfer Package
- ☐ Hyper Transfer Text Package
- ☐ Hyper Transfer Text Practice

Hide

10. Identify the protocol primarily used for browsing data.

- ☐ FTP
- ☐ TCP
- ☐ TFTP
- ☒ HTTP

Hide

11. Identify the total versions of IP.

- ☐ 1
- ☒ 2
- ☐ 3
- ☐ 4

Hide

12. Identify the first network which was based on TCP/IP protocol.

- ☐ ARPANET
- ☐ HUB
- ☐ Ethernet Card
- ☐ Router

Hide

13. Choose among the following, which is the most common internet protocol.

- ☐ PPP
- ☐ FTP
- ☐ TCP/IP
- ☐ SMTP

Hide

14. What does TCP/IP stand for?

- ☐ Telephone control protocol / Internet Protocol
- ☐ Transmission control protocol/Internet protocol
- ☐ Transmission control protocol/International protocol
- ☐ None

Hide

15. Which of the following layer isn't present in the TCP/IP model but is included in the OSI model?

- ☐ Network layer
- ☐ Session layer
- ☐ Application layer
- ☐ Transport layer

Hide

16. What is the collection of the hyperlinked document on the internet known as?

- ☐ HTML
- ☐ Email
- ☐ WWW
- ☐ Internet

Hide

17. What is the location of a resource on the internet given by?

- ☐ Email
- ☐ IP
- ☐ Protocol
- ☐ URL

Hide

18. Identify the incorrect network topology,

- ☐ Bus
- ☐ Star
- ☒ P2P
- ☐ Ring

Hide

19. Choose the port number of FTP.

- ☐ 23
- ☒ 21
- ☐ 110
- ☐ 143

Hide

20. What is the length of the IPv4 address?

- ☐ 8 bits
- ☐ 16 bits
- ☒ 32 bits
- ☐ 128 bits

Hide

21. What is the length of the IPv6 address?

- ☐ 8 bits
- ☐ 16 bits
- ☐ 32 bits
- ☒ 128 bits

Hide

22. What is the term used when the main server sends mail to another mail server?

- ☐ FTP
- ☒ SMTP
- ☐ TCP/IP
- ☐ MIME

Hide

23. What is the port number of SMTP?

- ☐ 110
- ☐ 143

☐ 25

☐ 99

Hide

24. What does MIME stand for?

☐ Multipurpose Internet Mail Extra

☐ Multi Internet Mail End

☐ Multipurpose Internet Mail Email

☒ Multipurpose Internet Mail Extension

Hide

25. What does port number 143 refer to?

☐ SMTP

☐ FTP

☒ IMAP

☐ POP

Hide

26. Identify among the following the network device used to connect two dis-similar types of networks.

☐ Switch

☐ Hub

☐ Bridge

☒ Gateway

Hide

27. Identify the device used to boost up a weak signal.

☐ Modem

☒ Repeater

☐ Switch

☐ Router

Hide

28. What does MAC stand for?

☒ Media Access Control

☐ Mass Access Control

☐ Media Access Carriage

☐ None

Hide

29. What is the length of the MAC address?

- ☐ 8 bits
- ☐ 16 bits
- ☐ 32 bits
- ☒ 48 bits

Hide

30. Which of the following is used to allocate and manage resources for a network?

- ☐ Bluetooth
- ☒ Server
- ☐ Node
- ☐ None of the above

Hide

31. The arrangement where all data pass through a central computer is known as

- ☐ Ring topology
- ☐ Mesh topology
- ☒ Star topology
- ☐ Bus topology

Hide

32. What of the following device is used in the network layer?

- ☐ Application gateway
- ☐ Switch
- ☒ Router
- ☐ Repeaters

Hide

33. Identify if the following statement is True or False: Network Interface Card(NIC) is an I/O device.

- ☒ True
- ☐ False
- ☐ Depends on usage
- ☐ None

Hide

34. What is required to use a Simple Network Management System?

- ☐ Servers
- ☐ Protocols
- ☒ Rules
- ☐ IP

Hide

35. Identify the major difference between SNMPv3 and SNMPv2.

- ☐ Classification
- ☐ Integration
- ☐ Management
- ☒ Enhanced security

Hide

36. Identify the network which extends a private network across a public network.

- ☐ Storage Area network
- ☒ Virtual private network
- ☐ Enterprise Private network
- ☐ Local area network

Hide

37. Identify the layer which is responsible for data translating.

- ☐ Network
- ☐ Datalink
- ☒ Presentation
- ☐ Application

Hide

38. Identify the layer which determines the interface of the system with the user.

- ☐ Network
- ☐ Datalink
- ☐ Presentation
- ☒ Application

Hide

39. Which of the following topology arrangements is a point-to-point line configuration?

- ☐ Ring
- ☐ Mesh
- ☐ Star
- ☒ All of the above

Hide

40. Identify the device which links two homogeneous packed broadcast local networks.

- ☐ Hub
- ☐ Router

☐ Bridge

☐ Gateway

Hide

41. Why are parity bits used?

☐ To encrypt data

☒ To detect error

☐ To identify user

☐ None

Hide

42. Identify among the following which belongs to class A.

☒ 121.12.12.248

☐ 128.12.12.248

☐ 129.12.12.248

☐ 130.12.12.248

Hide

43. What does LAN stand for?

☐ Local Array Network

☒ Local Area Network

☐ Local Area Net

☐ None

Hide

44. Who keeps the private key in asymmetric key cryptography?

☐ Sender

☒ Receiver

☐ Both Sender and Receiver

☐ None

Hide

45. Calculate the maximum efficiency of pure ALOHA at  $G = 0.5$ ?

☐ 16%

☐ 1.89%

☐ 18.4%

☒ 18.999%

Hide

46. Identify the switching method in which the message is divided into small packets.

☐ Virtual switching



- ☒ Packet switching
- ☐ Message switching
- ☐ None

Hide

47. What is a proxy server also known as?

- ☒ Application-level gateway
- ☐ Proxy tools
- ☐ Application proxy
- ☐ None

Hide

48. Identify among the following servers which allow LAN users to share data.

- ☐ Communication server
- ☐ Point server
- ☐ Data server
- ☒ File server

Hide

49. Choose the correct formula for the total vulnerable time value of pure ALOHA.

- ☐  $\frac{1}{2} T_{fr}$
- ☐  $T_{fr}$
- ☒  $2 * T_{fr}$
- ☐  $4 * T_{fr}$

Hide

50. Choose among the following which is a bit-oriented protocol.

- ☐ SSL
- ☒ HDLC
- ☐ HTTP
- ☐ All of the above

# Computer Network MCQ

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1) Which of these is a standard interface for serial data transmission?

- a. ASCII
- b. RS232C
- c. 2
- d. Centronics

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**Answer:** (b) RS232C

**Explanation:** The RS232C is a standard interface for serial data transmission that defines the protocol and physical interface for transmitting serial data fairly easily between associated appliances and computers.

2) Which type of topology is best suited for large businesses which must carefully control and coordinate the operation of distributed branch outlets?

- a. Ring
- b. Local area
- c. Hierarchical
- d. Star


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**Answer:** (d) Star

**Explanation:** The star topology is the best network topology for large businesses because it is simple to control and coordinate from the central computer.

3) Which of the following transmission directions listed is not a legitimate channel?

- a. Simplex
- b. Half Duplex
- c. Full Duplex
- d. Double Duplex

 Hide Answer


 Workspace


**Answer:** (d) Double Duplex

**Explanation:** Double duplex is not a legitimate channel for transmission in computer network.

4) "Parity bits" are used for which of the following purposes?

- a. Encryption of data
- b. To transmit faster
- c. To detect errors
- d. To identify the user

 Hide Answer


 Workspace


**Answer:** (c) To detect errors

**Explanation:** The parity bit is also known as the check bit, and has a value of 0 or 1. It is used for error detection for blocks of data.

5) What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interferences?

- a. Unshielded twisted pair
- b. Optical fiber
- c. Coaxial cable
- d. Microwave

 Hide Answer


 Workspace


**Answer:** (b) Optical fiber

**Explanation:** The optical fiber is made of glass or plastic. In this cable, the transmission of data occurs in the form of light rather than the electric current, so this cable provides higher data transfer speed than other cables.

6) A collection of hyperlinked documents on the internet forms the ??

- a. World Wide Web (WWW)
- b. E-mail system
- c. Mailing list
- d. Hypertext markup language

 Hide Answer


 Workspace


**Answer:** (a) World Wide Web (WWW)

**Explanation:** World Wide Web (WWW) creates a collection of hyperlinked documents on the Internet.

7) The location of a resource on the internet is given by its?

- a. Protocol
- b. URL
- c. E-mail address
- d. ICQ

 Hide Answer

 Workspace


**Answer:** (b) URL


**Explanation:** A URL (Uniform Resource Locator) is a database connection that describes the database's location on a computer network and the retrieval process. A URL is a different form of

URI (Uniform Resource Identifier) although the two words are used interchangeably by many people.

8) The term HTTP stands for?

- a. Hyper terminal tracing program
- b. Hypertext tracing protocol
- c. Hypertext transfer protocol
- d. Hypertext transfer program

 Hide Answer


 Workspace


**Answer:** (c) Hypertext transfer protocol

**Explanation:** The term HTTP stands for Hypertext transfer protocol.

9) A proxy server is used as the computer?

- a. with external access
- b. acting as a backup
- c. performing file handling
- d. accessing user permissions

 Hide Answer

 Workspace


**Answer:** (a) with external access


**Explanation:** A proxy server is a computer that acts as a gateway between a user's computer and the Internet. The proxy server is also called application level gateway. By this the client computer can establish indirect network connection to another network.

10) Which one of the following would breach the integrity of a system?

- a. Looking the room to prevent theft

- b. Full access rights for all users
- c. Fitting the system with an anti-theft device
- d. Protecting the device against willful or accidental damage

 Hide Answer


 Workspace


**Answer:** (b) Full access rights for all users

**Explanation:** None

11) Which software prevents the external access to a system?

- a. Firewall
- b. Gateway
- c. Router
- d. Virus checker

 Hide Answer


 Workspace


**Answer:** (a) Firewall

**Explanation:** A firewall is a network securing software that prevents unauthorized users and dangerous elements from accessing the network. Software firewall acts as a filter for our network which prevents harmful information.

12) Which one of the following is a valid email address?

- a. javat@point.com
- b. gmail.com
- c. tpoint@.com
- d. javatpoint@books

 Hide Answer

 Workspace


**Answer:** (a) javat@point.com


**Explanation:** A proper email address is a combination of the email prefix and email domain, both in appropriate formats. The domain appears to the right side of the @ symbol and the prefix appears to the left side of the @ symbol.

For example, in this email address javat@point.com, "javat" is the prefix, and "point.com" is the domain.

13) Which of the following best describes uploading information?

- a. Sorting data on a disk drive
- b. Sending information to a host computer
- c. Receiving information from a host computer
- d. Sorting data on a hard drive

 Hide Answer


 Workspace


**Answer:** (b) Sending information to a host computer

**Explanation:** None

14) Which one of the following is the most common internet protocol?

- a. HTML
- b. NetBEUI
- c. TCP/IP
- d. IPX/SPX

 Hide Answer


 Workspace


**Answer:** (c) TCP/IP

**Explanation:** TCP/IP is the most common internet protocol because it is the most widely used network protocol.

15) Software programs that allow you to legally copy files and give them away at no cost are called which of the following?

- a. Probe ware
- b. Timeshare
- c. Shareware
- d. Public domain

 Hide Answer


 Workspace


**Answer:** (d) Public domain

**Explanation:** Public domain software can be modified, distributed or sold by anyone without any attention, but no one can ever own it.

16) The term FTP stands for?

- a. File transfer program
- b. File transmission protocol
- c. File transfer protocol
- d. File transfer protection

 Hide Answer

 Workspace

**Answer:** (c) File transfer protocol


**Explanation:** The term FTP stands for File transfer protocol.


17) At what speed does tele-computed refer?

- a. Interface speed
- b. Cycles per second



- c. Baud rate
- d. Megabyte load

 Hide Answer


 Workspace


**Answer:** (c) Baud rate

**Explanation:** In telecommunication, baud rate is a specific unit of the speed rate. It is one of the significant functions that determine the speed of the communication over the data channel.

18) Which one of the following is not a network topology?

- a. Star
- b. Ring
- c. Bus
- d. Peer to Peer

 Hide Answer


 Workspace


**Answer:** (d) Peer to Peer

**Explanation:** Peer to Peer network is a network to which all computers are used the same resources and rights as other computers. Its network designed primarily for the small local area.

19) The maximum length (in bytes) of an IPv4 datagram is?

- a. 32
- b. 1024
- c. 65535
- d. 512

 Hide Answer


 Workspace


**Answer:** (c) 65535

**Explanation:** None

20) Which of the following statements could be valid with respect to the ICMP (Internet Control Message Protocol)?

- a. It reports all errors which occur during transmission.
- b. A redirect message is used when a router notices that a packet seems to have been routed wrongly.
- c. It informs routers when an incorrect path has been taken.
- d. The "destination unreachable" type message is used when a router cannot locate the destination.

 Hide Answer


 Workspace


**Answer:** (b) A redirect message is used when a router notices that a packet seems to have been routed wrongly.

**Explanation:** None

21) The IP network 192.168.50.0 is to be divided into 10 equal sized subnets. Which of the following subnet masks can be used for the above requirement?

- a. 255.243.240
- b. 255.255.0.0
- c. 255.255.0
- d. 255.255.255

 Hide Answer

 Workspace

**Answer:** (c) 255.255.255.0

**Explanation:** This address belongs to class C, so 8 bits are reserved for the host ID. 24 bits are reserved for network ID.

22) When the mail server sends mail to other mail servers it becomes \_\_\_ ?


AD




Alibaba.com

Product	Price
Motorcycle	\$0.99
Laptop	\$75
Laptop	\$99
Smartphone	\$6
Sports Car	\$10
Portable Power Station	\$5.30

- a. SMTP client
- b. SMTP server
- c. Peer
- d. Master

 Hide Answer


 Workspace


**Answer:** (a) SMTP client

**Explanation:** The SMTP client is an organization that allows sending emails using the SMTP server. SMTP servers can't send emails to other SMTP servers separately. It is based on client-server architecture.

23) The length of an IPv6 address is?

- a. 32 bits
- b. 64 bits
- c. 128 bits
- d. 256 bits

 Hide Answer

 Workspace

**Answer:** (c) 128 bits

**Explanation:** An IPv6 address is 128 bits long, which has  $2^{128}$  address space.


24) Consider the following:


1. Twisted pair cables
2. Microwaves and Satellite Signals

- 3. Repeaters
- 4. Analog Transmissions
- 5. Fiber optics

Which of the above is consider as (a) signal transmission medium is data communications?

- a. (1) and (5)
- b. (1) and (2)
- c. (1) (2) and (5)
- d. (1) (2) (3) and (5)

 Hide Answer


 Workspace


**Answer:** (c) (1) (2) and (5)

**Explanation:** None

25) Which of the following address belongs class A?

- a. 121.12.12.248
- b. 130.12.12.248
- c. 128.12.12.248
- d. 129.12.12.248

 Hide Answer

 Workspace


**Answer:** (a) 121.12.12.248


**Explanation:** 121.12.12.248 address belongs the class A because the first octet value of this address lies between 0 and 127.

26) Which of the following is correct IPv4 address?

- a. 124.201.3.1.52

- b. 01.200.128.123
- c. 300.142.210.64
- d. 10110011.32.16.8
- e. 128.64.0.0

 Hide Answer


 Workspace


**Answer:** (e) 128.64.0.0

**Explanation:** 128.64.0.0 is correct IPv4 address because IPv4 is a standard numbering system that uses four integers from 0 to 255. The IP address is a group of numbers that identify user system on the network.

27) Which of the following IP addresses can be used as (a) loop-back addresses?

- a. 0.0.0.0
- b. 127.0.0.1
- c. 255.255.255.255
- d. 0.255.255.255

 Hide Answer


 Workspace


**Answer:** (b) 127.0.0.1

**Explanation:** A loopback address is a special IP address whose IP address is between 127.0.0.1 to 127.255.255.255. It is reserved for loopback. It doesn't require a physical connection to a network.

28) The term WAN stands for?

- a. Wide Area Net
- b. Wide Access Network
- c. Wide Area Network
- d. Wide Access Net

 Hide Answer


 Workspace


**Answer:** (c) Wide Area Network

**Explanation:** The term WAN stands for Wide Area Network.

29) Which of the following cannot be used as a medium for 802.3 ethernet?

- a. A thin coaxial cable
- b. A twisted pair cable
- c. A microwave link
- d. A fiber optical cable

 Hide Answer


 Workspace


**Answer:** (c) A microwave link

**Explanation:** A microwave link cannot be used as a medium for 802.3 ethernet, because a microwave link is a transmission network that utilizes a beam of radio waves in the microwave frequency spectrum to relay video, audio, or data between two places.

30) What IP address class allocates 8 bits for the host identification part?

- a. Class A
- b. Class B
- c. Class C
- d. Class D

 Hide Answer


 Workspace


**Answer:** (c) Class C

**Explanation:** In class C only, 8 bits are reserved for the host ID, and 24 bits are reserved for network ID.

31) The term IANA stands for?

- a. Internet Assigned Numbers Authority
- b. Internal Assigned Numbers Authority
- c. Internet Associative Numbers Authoritative
- d. Internal Associative Numbers Authority

 Hide Answer


 Workspace


**Answer:** (a) Internet Assigned Numbers Authority

**Explanation:** The term IANA stands for Internet Assigned Numbers Authority.

32) How many versions available of IP?

- a. 6 version
- b. 4 version
- c. 2 version
- d. 1 version

 Hide Answer

 Workspace


**Answer:** (c) 2 version


**Explanation:** There are only two IP versions are available in the present: IP version 4 (IPv4) and IP version 6 (IPv6).

33) Which layer of the TCP / IP stack corresponds to the OSI model transport layer?

- a. Host to host
- b. Application
- c. Internet

d. Network Access

 Hide Answer


 Workspace


**Answer:** (a) Host to Host

**Explanation:** The host to host layer conforms the transport layer of the OSI model. This layer is responsible for the final correspondence and error-free distribution of data.

34) An Aloha network uses an 18.2 kbps channel for sending message packets of 100 bits long size. Calculate the maximum throughput.

- a. 5999
- b. 6900
- c. 6027
- d. 5027

 Hide Answer

 Workspace

**Answer:** (c) 0.6027

**Explanation:** In Pure Aloha, Efficiency = 18.4%

Usable bandwidth for 18.2 kbps =  $18.2 * 0.18 = 3.276$  kbps

Therefore, the maximum throughput of Pure Aloha

$$= 1/2 * 3.276$$

$$= (18.4 * 3.276) / 100$$


$$= \mathbf{0.6027}$$


35) On a simplex data link, which of the following is a possible error recovery technique?

- a. Backward error correction (BEC)
- b. The use of hamming codes



- c. Automatic Repeat Request (ARQ)
- d. Downward error correction (DEC)

 Hide Answer


 Workspace


**Answer:** (b) The use of hamming codes

**Explanation:** The hamming codes is an error recovery technique that can be used to detect and correct the errors. It was developed by R.W. Hamming.

36) Which of the statement is correct with regard to Time Division Multiplexing (TDM) and its variants?

- a. Statistical TDM makes efficient use of the bandwidth only if the arrival pattern of the data stream is probabilistic.
- b. TDM requires the transmitter and receiver to be synchronized periodically.
- c. TDM performs efficiently if the arrival pattern of the data stream is probabilistic.
- d. Statistical TDM is efficient if the data stream is deterministic.

 Hide Answer


 Workspace


**Answer:** (a) and (b)

**Explanation:** None

37) The term IPv4 stands for?

- a. Internet Protocol Version 4
- b. Internet Programming Version 4
- c. International Programming Version 4
- d. None of these

 Hide Answer


 Workspace


**Answer:** (a) Internet Protocol Version 4

**Explanation:** The term IPv4 stands for Internet Protocol Version 4.

38) The term LAN stands for?

- a. Local Area Net
- b. Local Aera Network
- c. Local Array Network
- d. Local Array Net

 Hide Answer


 Workspace


**Answer:** (b) Local Area Network

**Explanation:** The term LAN stands for Local Area Network.

39) Which of the through is share the data of two computer?

- a. Library
- b. Network
- c. Grouping
- d. Integrated system

 Hide Answer

 Workspace


**Answer:** (b) Network


**Explanation:** There are many ways to share data between two computers, but a network connection is established before data sharing.

40) In specific, if the systems use separate protocols, which one of the following devices is used to link two systems?

- a. Repeater

- b. Gateway
- c. Bridge
- d. Hub

 Hide Answer


 Workspace


**Answer:** (b) Gateway

**Explanation:** If the system used separate protocols, gateway device is used to link two systems.

41) How many digits of the Data Network Identification Code (DNIC) identify the country?

- a. first three
- b. first four
- c. first five
- d. first six
- e. None of the above

 Hide Answer


 Workspace


**Answer:** (a) first three

**Explanation:** The first three digits of the Data Network Identification Code (DNIC) is identify the country (first digit to identify a zone and other two digits to identify the country within the zone).

42) Which of the following methods is used to broadcast two packets on the medium at a time?

- a. Collision
- b. Synchronous
- c. Asynchronous
- d. None of the above

 Hide Answer


 Workspace


**Answer:** (a) Collision

**Explanation:** A collision occurs when two or more computers are attempting to transfer data across a network at a time.

43) Which of the following is true with regard to the ping command?

- a. Ping stands for Packet Internet Generator.
- b. The ping command checks the port level connectivity between source destinations end points.
- c. Ping summarizes the packet loss and round-trip delay between two IP end points.
- d. The ping command activates the RARP protocol of the IP layer.

 Hide Answer


 Workspace


**Answer:** (c) Ping summarizes the packet loss and round-trip delay between two IP end points.

**Explanation:** None

44) The private key in asymmetric key cryptography is kept by?

- a. Sender
- b. Receiver
- c. Sender and Receiver
- d. None of the these

 Hide Answer


 Workspace


**Answer:** (b) Receiver

**Explanation:** Only the receiver keeps the private key. Its purpose is to ensure that the message can only be decrypted by the intended receiver.

45) Which of the following algorithms is not used in asymmetric-key cryptography?

- a. RSA algorithm
- b. Diffie-Hellman algorithm
- c. Electronic code book algorithm
- d. None of the mentioned

 Hide Answer


 Workspace


**Answer:** (c) Electronic code book algorithm

**Explanation:** An electronic code book algorithm is a mode of operation for a block cipher, where each frame of text in an encrypted document refers to a data field. In other terms, the same plaintext value would also give the same value for ciphertext.

46) In the cryptography, the sequence of the letters is rearranged by?

- a. Transposition ciphers
- b. Substitution ciphers
- c. Both a and b
- d. None of these

 Hide Answer


 Workspace


**Answer:** (a) Transposition ciphers

**Explanation:** A predefined technique shuffles the sequence of letters in a plaintext message in the transposition ciphers.

47) What is the maximum efficiency of pure aloha at  $G = 1/2$ ?

- a. 1.89
- b. 17.99
- c. 18.999
- d. 18.4

 Hide Answer

 Workspace

**Answer:** (d) 18.4

**Explanation:** The maximum efficiency of pure aloha formula is  $G * e^{-2G}$ .

Given,  $G = 1/2$

$$= 1/2 \times e^{-2 \times 1/2}$$

$$= 1 / 2e$$

$$= 0.184$$

$$= 18.4\%$$


48) What is the maximum efficiency of slotted aloha at  $G = 1$ ?


a. 36.8

b. 35.8

c. 35.5

d. 37.8

 Hide Answer

 Workspace

**Answer:** (a) 36.8

**Explanation:** The maximum efficiency of slotted aloha formula is  $G * e^{-G}$ .

Given,  $G = 1$

$$= 1 \times e^{-1}$$


$$= 1 / e$$


$$= 0.368$$

$$= 36.8\%$$

49) Which of the following statement is true about error detection techniques used on communications link?

- a. Cyclic Redundancy Check (CRC) sequence can detect as well as correct errors.
- b. Error detection cannot be used on simplex links.
- c. Hamming code can detect up to 3-bit errors.
- d. All of the these

 Hide Answer


 Workspace


**Answer:** (d) All of the these

**Explanation:** None

50) The correct order of corresponding OSI layers for having functionalities of routing and reconciling machine representation differences with shared access resolution and ASCII test protocol is?

- a. Network, Physical, Transport, Data link
- b. Network, Physical, Data link, Application
- c. Network, Presentation, Data link, Application
- d. Network, Presentation, Physical, Transport

 Hide Answer

 Workspace

**Answer:** (c) Network, Presentation, Data link, Application

**Explanation:** None