Initiation Réseaux
Written Exam

no documents allowed - no calculators allowed

Attention: Pour chaque question, une ou plusieurs affirmations sont valides. Une réponse correcte (1 point) doit obligatoirement comporter TOUTES les affirmations valides. Toute autre réponse est incorrecte (0 point).

- point si toutes les réponses sont BONNE: +0.8

- point s'il y a au moins une réponse FAUSSE: 0

- point s'il n'y a pas de réponse: 0

1. Which of the following protocols are examples of TCP/IP transport layer protocols? (two correct answers)

   A Ethernet

   B IP

   C UDP

   D TCP

2. Which pairs of devices in the followings would require a crossover UTP cable? (two correct answers)

   A PC and router

   B PC and switch

   C Hub and switch

   D Router and switch

3. Which of the followings are network reference models? (two correct answers)

   A TCP/IP

   B DIX

   C OSI

   D ALOHAnet

4. Which of the followings is the most implemented network reference model?

   A TCP/IP

   B DIX

   C OSI

   D ALOHAnet

5. How many layers does the OSI network reference model have?

   A 8

   B 7

   C 6

   D 5

6. How many layers does the updated TCP/IP network reference model have?

   A 3

   B 4

   C 5

   D 6

7. Which of the following is true about half-duplex communication?

   A No collisions happen.

   B Collisions can happen and are resolved by CSMA/CD algorithm

   C The communication can only happen in one direction.

   D None of the other answers is correct.

8. Which of the following protocols are TCP/IP Data Link layer protocols?

   A Ethernet

   B IP

   C UDP

   D TCP

9. An application creates a data at the application layer. This data is passed to lower layers and each layer adds a new header to the data. The data link layer (layer 2) adds a header and a trailer. What is this process?

   A Data encapsulation

   B Data process

   C The OSI model

   D All of these answers are correct.

10. Which TCP/IP layer defines the functions of logical network-wide addressing and routing?

   A Data Link

   B Physical

C Internet

D Transport

11. Which of the following is true about the cabling of a typical **modern** Ethernet LAN?

   A Connect each device in series using coaxial cabling

   B Connect each device in series using UTP cabling

   C Connect each device to a centralized LAN hub using UTP cabling

   D Connect each device to a centralized LAN switch using UTP cabling

12. Which of the following is a collision domain?

   A All devices connected to an Ethernet hub

   B All devices connected to an Ethernet switch

   C All devices connected to a router

   D None of the other answers is correct.

13. Which of the following Ethernet addresses can be used to communicate with more than one device? (two correct answers)

   A Burned-in address

   B Unicast address

   C Broadcast address

   D Multicast address

14. Which of the following statements best describes what a switch does with a frame destined for an unknown unicast address? (no VLAN)

   A It forwards the frame out all interfaces in the same network except for the incoming interface.

   B It forwards the frame out the one interface identified by the matching entry in the MAC address table.

   C It compares the destination IP address to the destination MAC address.

   D It compares the frame's incoming interface to the source MAC entry in the MAC address table.

15. Which of the following is one of the functions of OSI Layer 1 protocols?

   A Framing

   B Delivery of bits from one device to another

   C How devices forward packets to their final destination

   D Defining the size and shape of Ethernet cards

16. Which of the following are valid Class C unicast IP address? (two correct answers)

    A 1.1.1.1

    B 200.1.1.1

    C 192.168.5.2

    D 223.223.223.255

17. Which of the following does a switch normally use when making a decision about forwarding packets?

    A Destination MAC address

    B Source MAC address

    C Destination IP address

    D Source IP address

18. What are the main uses of computer networks today? (three correct answers)

    A Word processing

    B Resource sharing

    C Internet access

    D E-commerce

19. What is the characteristics of the multicast transmission technology?

    A There is one reserver

    B There is a subset of receivers

    C Every machine on the network is a reserver

    D None of above is correct

20. Which of the following statements are true about the LAN network? (two correct answers)

    A Communication is over short range (1m)

    B A network operating within a building

    C The transmission rate is typically between 100Mbps to 1Gbps

    D Normally connected by different kinds of networking technology

21. Which of the following protocols allows a client PC to discover the IP address of another computer based on that other computer's name (URL)?

    A ARP

    B ICMP

C DNS

D DHCP

22. Which of the following protocols corresponds to the command **ping**?

A ARP

B ICMP

C DNS

D DHCP

23. PC1, PC2 and PC3 are connected via switches. PC1 and PC2 are in VLAN1, while PC3 is in VLAN2. Which following statement is true?

A PC1 can ping PC2

B PC1 can ping PC3

C PC2 can ping PC3

D PC1, PC2 and PC3 are NOT in the same physical LAN

24. Which following statement is true about TCP and UDP?

A UDP provides a connection-oriented service

B UDP service is always reliable

C TCP provides a connection-oriented service

D TCP service is always reliable

25. Which of the following devices would be in the same broadcast domain as PC1? (three correct answers)

A PC2, which is separated from PC1 by an Ethernet hub

B PC3, which is separated from PC1 by a transparent bridge

C PC4, which is separated from PC1 by an Ethernet switch

D PC5, which is separated from PC1 by a router