1.        A (  D) protocol is used to move a packet over an individual 独立link.

A.      application-layer                       B. transport-layer

C. network-layer                           D. link-layer

2.        Which of the following services can not offered by a link-layer protocol? (  )

A.      congestion control                    B. Link Access

C. Error control                            D. Framing

Hint：framing, link access，reliable delivery，flow control，error detection，error correction，half-duplex and full-duplex

3.        ( B ) protocol serves to 为……服务 coordinate 协调the frame transmissions of the many nodes when multiple nodes share a single broadcast link.

A.      ARP                    B. MAC                      C. ICMP                    D. DNS

4.        Consider CRC error checking approach, the four bit generator G is 1011, and suppose that the data D is 10101010, then the value of R is    (  A).

A. 010                 B. 100                 C. 011                         D. 110

5.        In the following four descriptions说明 about random access protocol, which one is not correct? ( A )

A. In slotted ALOHA, nodes can transmit at random time.

B. CSMA/CD cannot be implemented on a wireless channel.

C. The maximum efficiency of a slotted ALOHA is higher than a pure ALOHA.

D. In CSMA/CD, one node listens to the channel before transmitting.

6.        In the following descriptions about MAC address, which one is not correct? ( D )

A. The MAC address is the address of one node’s adapter.

B. No two adapters have the same MAC address.

C. The MAC address doesn’t change no matter where the adapter goes.

D. MAC address has a hierarchical structure分层结构.

MAC：flat structure

IP：hierarchical structure

7.        The ARP protocol can translate (   ) into (    ). ( C )

A. host name, IP address           B. host name, MAC address

C. IP address, MAC address        D. broadcast address, IP address

8.        The value of Preamble field in Ethernet frame structure is (  C)

A. 10101010 10101010……10101010 11111111

B. 10101011 10101011……10101011 10101011

C. 10101010 10101010……10101010 10101011

D. 10101010 10101010……10101010 10101010

9.        In CSMA/CD, the adapter waits some time and then returns to sensing the channel. In the following four times, which one is impossible? (  D)

A. 0 bit times                                    B. 512 bit times

C. 1024 bit times                                  D. 1028 bit times

10.    The principal components of PPP include but not( D ).

A. framing                                 B. physical-control protocol

C. link-layer protocol                         D. network-layer protocol

11.    Consider the data D is 01110010001, if use even parity checking approach, the parity bit is( ① ), if use odd parity checking approach, the parity bit is( ② ). ( D )

A. ①  0  ②  1                                               B. ①  0  ②  0

C. ①  1  ②  1                                               D. ①  1  ②  0

12.    In the following four descriptions, which one is not correct? (B  )

A. Switches can interconnect different LAN technologies.

B. Hubs can interconnect different LAN technologies.

C. There is no limit to how large a LAN can be when switches are used to interconnect LAN segments.

D. There is restriction on the maximum allowable number of nodes in a collision domain when hubs are used to interconnect LAN segments.

13.    Which of the following devices is not a plug and play device? ( B )

A. hub         B. router              C. switch             D. repeater

14.    Which device has the same collision domain? ( A )

A. Hub    B. Switch             C. Route              D. Bridge

15.    In data link-layer, which protocol is used to share bandwidth? (  D)

A. SMTP            B. ICMP             C. ARP         D. CSMA/CD

16.    When two or more nodes on the LAN segments transmit at the same time, there will be a collision and all of the transmitting nodes well enter exponential back-off, that is all of the LAN segments belong to the same( A ).

A. collision domain           B. switch             C. bridge      D. hub

17.    In the following four descriptions about PPP, which one is not correct? ( D )

A. PPP is required to detect and correct errors.

B. PPP is not required to deliver frames to the link receiver in the same order in which they were sent by the link sender.

C. PPP need only operate over links that have a single sender and a single receiver.

D. PPP is not required to provide flow control.

18.    For ( A ) links that have a single sender at one end of the link and a single receiver at the other end of the link.

A. point-to-point                                           B. broadcast

C. multicast                                                   D. all of the above

19.    With(B )transmission, the nodes at both ends of a link may transmit packets at the same time.

A. half-duplex            B. full-duplex             C. simplex(单工)               D. synchronous

20.    Which of the following is wrong? ( A )

A. ARP table is configured by a system administrator

B. ARP table is built automatically

C. ARP table is dynamic

D. ARP table maps IP addresses to MAC addresses

21.    In LAN, if UTP is used, the common connector is (C  ).

A. AUI                B. BNC               C. RJ-45              D. NNI

22.    Which of the following four descriptions about MAC addresses is wrong? ( C )

A. a MAC address is burned into the adapter’s ROM

B. No two adapters have the same address

C. An adapter’s MAC address is dynamic

D. A MAC address is a link-layer address

23.    In the CSMA/CD protocol, what condition on the transmission delay http://ccftp.scu.edu.cn:8090/Download/20161212215311001.png and the propagation delay http://ccftp.scu.edu.cn:8090/Download/20161212215311002.pnghas to be satisfied to guarantee that a node always detects a collision? B

A. http://ccftp.scu.edu.cn:8090/Download/20161212215311003.png                                                                           B. http://ccftp.scu.edu.cn:8090/Download/20161212215311004.png

C. http://ccftp.scu.edu.cn:8090/Download/20161212215311005.png                                                                          D.http://ccftp.scu.edu.cn:8090/Download/20161212215311006.png