Internet Control Message Protocol

1. (Single Choice) Which of the following protocols provides error report and send information about the IP datagram processing status back to the source?

A.TCP

B.UDP

C.ICMP

D.IGMP

2. (Single Choice) Which of the following protocols is a management protocol used at Network Layer to provide IP information service by embedding the protocol information in IP packets?

A.ARP

B.IP

C.ICMP

D.802.2

3. (Single Choice) Which of the following is the abbreviation for ICMP?

A.Internal Control Mail Protocol

B.Intranet Control Message Protocol

C.internet connection Message Protocol

D.Internet Control Message Protocol

4. (Multiple Choice) The protocol number of ICMP is ( )

A.1

B.6

C.17

D.22

5. (Single Choice) Which of the following operations can be used to verify the failure of installation or running of TCP/IP protocol?

A.Ping 10.1.1.1

B.Ping 127.0.0.1

C.Ping 169.254.1.1

D.Ping 192.168.1.1

6. (Single Choice) Which of the following applications can be used to detect the path along which the data packets are transmitted from the source to the destination?

A.Route

B.Nestat

C.Tracert

D.Send

7. (Single Choice) The ICMP protocol (RFC792) is not applied to Application Layer but Network Layer.

T.True

F.Flase

8. (Single Choice) Which bytes in an ICMP packet use a unified format and consist of the Type, Code, and Checksum fields?

A.First 3 bytes

B.First 4 bytes

C.First 5 bytes

D.First 8 bytes

9. (Single Choice) Which of the following statements about the ICMP protocol is true?

A.The ICMP protocol searches for IP addresses based on MAC addresses.

B.The ICMP protocol translates the IP address of a public network into the IP address of a private network.

C.The ICMP protocol monitors errors generated in datagram transmission.

D.The ICMP protocol allocates and manages IP addresses in a network in a uniform manner.

10. (Single Choice) In which type of packet is an ICMP packet generally advertised during IP packet processing?

A.Delay

B.Error

C.Jitter

D.Source IP address

11. (Single Choice) Which of the following fields is used to check an ICMP packet?

A.Checksum field in the ICMP packet

B.Header checksum field in an IP datagram

C.Code field in the ICMP packet

D.Type field in the ICMP packet

12. (Single Choice) The IP protocol is a kind of unreliable protocol and offers no error detection. To provide error detection, which of the following must the IP protocol work with?

A.ARP

B.ICMP

C.TCP

D.UDP

13. (Multiple Choice) Which of the following applications use ICMP protocol? (Select 3 Answers)

A.Ping

B.Tracert

C.Igmp

D.Arp

14. (Single Choice) When certain fields in the header of a received datagram have incorrect values, this datagram is discarded and a certain ICMP packet is sent to the source. Which type of ICMP packet is sent to the source?

A.Destination Unreachable packet

B.Source Quench packet

C.Parameter Problem packet

D.Redirect packet

15. (Single Choice) When a router or host discards data because of data congestion, which type of ICMP packet does the router or host send to the source?

A.Destination Unreachable packet

B.Source Quench packet

C.Parameter Problem packet

D.Redirect packet

16. (Single Choice) Which of the following is the most common method used to check the connectivity between an IP network and a host, for example, the connectivity between routers and the connectivity between a router and a host?

A.DNS

B.FTP

C.PING

D.TFTP

17. (Single Choice) A series of packets are used in a Ping test to determine whether delay and packet loss occur in communication. Which of the following represents the packet used in a Ping test?

A.FTP

B.Tracert

C.ICMP

D.Telnet

18. (Multiple Choice) Which of the following protocols are not used in a Tracert process? (Select 2 Answers)

A.TCP

B.UDP

C.ICMP

D.ARP

19. (Multiple Choice) Which of the following statements about Ping and Tracert are true? (Select 3 Answers)

A.Both Ping and Tracert can be used to test network connectivity.

B.Ping can be used to specify the source IP address of a packet.

C.Ping is often used to obtain the path for forwarding a datagram.

D.Tracert can be used to determine a faulty point.

20. (Single Choice) Which type of packet does a Ping application send?

A.TCP Request packet

B.TCP Reply packet

C.ICMP Request packet

D.ICMP Reply packet

21. (Single Choice) The Tracert application is usually used in data network commissioning. In this case, how many types of ICMP packets are involved in a Tracert application?

A.2

B.3

C.4

D.6

Address Resolution Protocol

1. (Single Choice) The Advanced Research Projects Agency Network (ARPANET) network is created by United States Department of Defense and is the predecessor of the contemporary global. Which of the following is the basis of an ARPANET network?

A.Low-speed serial connection

B.Circuit switching

C.Packet switching

D.MPLS forwarding

2. (Single Choice) What is the function of ARP?

A.Map port number to IP address

B.Map MAC address to IP address

C.Broadcast IP address

D.Map IP address to Mac address

3. (Single Choice) What is the function of RARP?

A.Map source IP address to MAC address

B.Map destination IP address to MAC address

C.Map destination MAC address to IP address

D.Map source MAC address to IP address

4. (Single Choice) Which category does the ARP protocol belong to?

A.Unicast

B.Multicast

C.Anycast

D.Broadcast

5. (Single Choice) An RARP request packet is sent by means of broadcast. How is an RARP Reply packet sent to save network resources?

A.Unicast

B.Multicast

C.Anycast

D.Broadcast

Transport Layer Protocols

1. (Single Choice) Which of the following protocols provides connection oriented transmission service?

A.IP

B.IPv6

C.TCP

D.UDP

2. (Multiple Choice) Which of the following protocols reside at transport layer? (Select 2 Answers)

A.IP

B.TCP

C.UDP

D.SNMP

3 (Single Choice) What is the port number of DNS?

A.21

B.23

C.53

D.80

4. (Single Choice) Which of the following is the correct sequence about the data encapsulation process?

A.Segment->Packet->Frame->Bit->Data

B.Bit ->Segment ->Packet->Frame->Data

C.Data->Packet->Segment ->Frame->Bit

D.Data->Segment->Packet->Frame->Bit

5. (Single Choice) Which of the following is the function of session layer?

A.Provide encryption and decryption

B.Provide data transformation and data format

C.Establish connection between hosts

D.Establish maintain and terminate session

6. (Single Choice) Compared with OSI reference model, which of the following is not defined in TCP/IP protocol stack?

A.Data link layer and network layer

B.Network layer and transport layer

C.Session layer and presentation layer

D.Transport layer and session layer

7. (Single Choice) RPC, NFS and SQL protocols reside at the ( ) of the OSI reference model.

A.Network layer

B.Transport layer

C.Session layer

D.Presentation layer

8. (Multiple Choice) According to OSI reference model, which of the following functions belong to presentation layer? (Select 3 Answers)

A.Data encryption

B.Data compression

C.Session control

D.Data format transformation

9. (Single Choice) In the OSI reference model, one layer processes requests and responses initiated by applications of different devices. Which of the following layers stands for this layer?

A.Data Link Layer

B.Session Layer

C.Network Layer

D.Application Layer

10. (Single Choice) In the OSI reference model, one layer provides network services through applications in addition to

communications between different applications. Which of the following layers

A.Data Link Layer

B.Session Layer

C.Network Layer

D.Application Layer

11. (Single Choice) Similar to the OSI reference model, the TCP/IP model also contains several layers. How many layers does the TCP/IP model contain?

A.Four

B.Five

C.Six

D.Seven

12. (Multiple Choice) Which of the following are the functions of transport layer? (Select 4 Answers)

A.Segment upper layer data

B.Establish end to end connection

C.Transmit data from one host to another host

D.Ensure ordered, reliable, and correct transmission

E.addressing

13. (Single Choice) According to OSI reference model, when receiver can not process more data, which layer is responsible for sending stop message to the transmitter?

A.Physical layer

B.Transport layer

C.Session layer

D.Presentation layer

14. (Single Choice) Which protocol does an application (such as SNMP or RADIUS) that focuses on transmission efficiency use at Transport Layer?

A.TCP

B.UDP

C.ICMP

D.HDLC

15. (Single Choice) Which of the following protocols provides a reliability mechanism and can be used as a transport-level protocol?

A.TCP

B.UDP

C.ICMP

D.HDLC

16. (Single Choice) Which of the following protocols is a transport-level protocol based on TCP, translates a domain name into an IP address, and manages domain names in a distributed manner?

A.TCP

B.UDP

C.DNS

D.HTTP

17. (Single Choice) Which of the following protocols is used to transfer Web pages in the Internet?

A.TCP

B.UDP

C.DNS

D.HTTP

18. (Multiple Choice) Which protocols are defined by the TCP/IP model to transmit and receive mails? (Select 2 Answers)

A.SMTP

B.POP3

C.DNS

D.HTTP

19. (Single Choice) Which of the following protocols authenticates a user remotely, authorizes the user access, and performs charging?

A.SMTP

B.RADIUS

C.DNS

D.HTTP

20. (Multiple Choice) TCP is a connection oriented and reliable transport layer protocol. Which of the following are used to ensure the transmission reliability? (Select 2 Answers)

A.Acknowledgement

B.Buffering

C.Source quench messages

D.Retransmit

21. (Single Choice) A TCP packet consists of a maximum of 60 bytes. How many bytes does a TCP packet header consist of after the Option field is deducted?

A.8

B.20

C.30

D.40

22. (Single Choice) The TCP protocol assigns a source port No. to each application. How many bytes does the source port No. in the TCP packet header consist of?

A.1

B.2

C.4

D.8

23. (Multiple Choice) Which of the following fields are contained in a TCP packet header? (Select 3 Answers)

A.Source Port

B.Destination Port

C.Sequence Number

D.CRC32

24. (Single Choice) Which of the following ranges represents the size of a maximum transfer unit (MTU) packet?

A.64–1518

B.60–1518

C.64–1480

D.60–1480

25. (Single Choice) The TTL field in an IP header specifies the number of routers that a datagram is allowed to traverse. After the datagram traverses a router, the TTL value is deducted by 1. When the TTL reaches a certain value, the datagram is discarded. Which of the following represents this value?

A.Sender

B.Receiver

C.Harddisk

D.Message

E.Protocol

26. (Single Choice) Defragmentation can occur at either the original transmitter or an intermediate router. Where is an IP datagram is reassembled after it is defragmented?

A.In the process in which the packet is looped back

B.On the next router

C.On an intermediate router

D.At the destination of the packet

27. (Multiple Choice) Which of the following statements about TCP connection establishment are true? (Select 2 Answers)

A.A TCP connection is established after three-way handshake is done.

B.Three-way handshake can resolve the delay problem with packet data transmission.

C.The three-way handshake helps guarantee the reliability of data switching.

D.The three-way handshake cannot guarantee the security of data switching.

28. (Single Choice) Tracert is an application based on application layer, which transport layer protocol is used by Tracert?

A.ICMP

B.ARP

C.TCP

D.UDP

29. (Single Choice) What is the main function of DNS?

A.Domain Name Resolution

B.Remote Access

C.File Transfer

D.Mail Transfer

30. (Single Choice) Which of the following is the default TCP port number used by HTTP?

A.80

B.8080

C.110

D.25

31. (Single Choice) Which protocol does FTP use to provide reliable data transmission?

A.RTP

B.SIP

C.UDP

D.TCP

32. (Single Choice) Which of the following protocols is used to send email on the internet?

A.SMTP

B.MSTP

C.FTP

D.TFTP

33. (Single Choice) Which TCP port number is used by SMTP by default to send e-mail message?

A.21

B.23

C.25

D.53

34. (Single Choice) POP (Post Office Protocol) is used for receiving E-mail. Which TCP port numbers does it use by default?

A.110

B.53

C.21

D.23