

اللهم صل وسلم على سيدنا محمد

(1)=> 1. The stream communication protocol is known. as TCP. Unlike UDP, TCP is a connectionless protocol

True

False

Answer: B

(2)=> 2. A proxy server can prevent programs from running on your computer

True

False

Answer: A

(3)=> 3. In HTTP protocol server can maintain information about past client requests

True

False

Answer: B

(4)=> 4. The transmission delay, is the time it takes to propagate from one router to the next

True

False

Answer: B

(5)=> 5. In routers. the forwarding function determines source destination route mine taken by packets

True

False

Answer: B

(6)=> 6. in p2p architecture, peers are intermittently connected and change ip addresses

True

False

Answer: A

(7)=> 7. FTP uses the UDP transport protocol, or in other words, it never uses TCP for its transport needs

True

False

Answer: B

(8)=> 8. Ethernet is a system for connecting a number of computer systems to from a local area network

True

False

Answer: A

(9)=> 9. Time division multiplexing (TDM) is a technique by which the total bandwidth available in a communication medium is divided into a series of non-overtopping frequency sub-bands. each of which is used to carry a separate signal

True

False

Answer: B

(10)=> 10. The wifi connection speed are between 11 Mbps and 54 Mbps

True

False

Answer: A

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(11)=> 1-..... is the network - layer function, which moves packets from a router's input link to appropriate router output link .

- a. Queuing
- b. Forwarding
- c. Routing
- d. None of them

Answer: b

(12)=> 2. Traditional routing algorithms are implemented in

- a. Desktop PCs
- b. Servers
- c. Switches
- d. None of them

Answer: d

(13)=> 3-Is a memory in Cisco router, where startup configuration takes place

- a. RAM
- b. NVRAM
- c. ROM
- d. None of them

Answer: b

(14)=> 4 -Is a transceiver acting as a switch for computers in the network, possibly connecting them to a / another local area network and / or the Internet.

- a. Mobile telephony
- b. Subnet

c. Wi-Fi Base station

d. None of them

Answer: c

(15)=> 5 - How many networks (subnets) in the following figure?

a. 3

b. 4

c. 5

d. None of them

Answer: d

(16)=> 6- The leading bits in class B is.....

a. 01

b. 10

c. 110

d. None of them

Answer: b

(17)=> 7- The start address in class A is.....

a. 0.0.0.0

b. 1.1.1.1

c. 1.0.0.0

d. None of them

Answer: a

(18)=> 8- Number of networks in class C =.....

a. 2⁸

b. 2²⁴

c. 2²⁴

d. None of them

Answer: b

(19)=> 9- Concerning the IP address, 193.167.5.0 and subnet mask 255.255.255.248/29: This is a classnetwork

- a. A
- b. B
- c. **C**
- d. None of them

Answer: c

(20)=> 10- Concerning the IP address, 193.167.5.0 and Subnet mask 255.255.255.248/29, Number of subnets =.....

- a. 2 7
- b. 2 8
- c. 2 9
- d. **None of them**

Answer: d

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(21)=> 11- Concerning the IP address, 193.167.5.0 and Subnet mask 255.255.255.248/29, Number of valid Hosts =

- a. 5
- b. **6**
- c. 2 8
- d. None of them

Answer: b

(22)=> 12- Concerning the IP address 120.30.10.4 and subnet mask 255.0.0.0. The Broadcast address =

- a. 120.30.255.255

b. 120.30.10.255

c. 120.255.255.255

d. None of them

Answer: c

(23)=> 13- When performing a logical AND between the subnet mask and IP address, it Gives

a. The Host ID

b. The Network ID

c. The number of networks

d. None of them

Answer: b

(24)=> 14- If a device want to share the information in the group, it uses

a. The unicast address

b. The multicast address

c. The broadcast address

d. None of them

Answer: b

(25)=> 15- When a new DHCP Client arrives and needs an address, it rfi st sends message

a. DHCP offer

b. DHCP request

c. DHCP ack

d. None of them

Answer: d

(26)=> 16 - DHCP can return more than just allocated IP address on subnet, for example

a. network mask

- b. Broadcast address
- c. DHCP server address
- d. None of them

Answer: a

(27)=> 17- The HTTP response Status code..... means HTTP Version Not Supported

- a. 400
- b. 404
- c. **505**
- d. None of them

Answer: c

(28)=> 18- Non - persistent HTTP response Time =.....

- a. 2RTT
- b. One RTT + file transmission time
- c. One RTT + file transmission time
- d. **None of them**

Answer: d

(29)=> 19-Adds security , per object Error - and congestion control (more pipelining) Over UDP .

- a. HTTP / 1.0
- b. HTTP / 2
- c. **HTTP / 3**
- d. None of them

Answer: c

(30)=> 20- SMTP uses... ..

- a. Non - persistent Connections
- b. **Persistent connections**

c. Non - persistent and persistent connections

d. None of them

Answer: b

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(31)=> 1. DNS uses centralized database .

True

False

Answer: b

(32)=> 2. Authoritative DNS servers responsible for .com, .org, .net, .edu, aero, jobs, museums, and all top - level country domains.

True

False

Answer: b

(33)=> 3. In MX DNS records type, value is name of SMTP mail server associated with name .

True

False

Answer: a

(34)=> 4. In Streaming multimedia, DASH method divides video file into multiple chunks .

True

False

Answer: a

(35)=> 5. In streaming stored video, packet loss, delay due to congestion will delay playback, or result in poor video quality

True

False

Answer: A

(36)=> 6. The third party persistent cookies (tracking cookies) do not allow common identity (cookie value) to be tracked across multiple web sites .

True

False

Answer: b

(37)=> 7. DHCP REQUEST message encapsulated in UDP, encapsulated in IP, encapsulated in Ethernet

True

False

Answer: a

(38)=> 8. Router's typically have only two interfaces .

True

False

Answer: b

(39)=> 9. Classless addressing is an Ipv4 addressing architecture that uses variable - length subnet masking.

True

False

Answer: a

(40)=> 10. UDP service provides reliability, flow control and congestion control .

True

False

Answer: b

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(41)=> 11. UDP is used by Web documents applications .

True

False

Answer: b

(42)=> 12. TLS provides Encrypted TCP connections .

True

False

Answer: a

(43)=> 13. TCP service does not provide: timing, minimum throughput guarantee, and security.

True

False

Answer: a

(44)=> 14. The time to distribute F to N clients using client-server approach $D \geq \min(NF/U_s, F/D_{\min})$ where D_{\min} is min client download rate and U_s is the server upload rate

True

False

Answer: b

(45)=> 15. Number of networks in class B = 2^{14}

True

False

Answer: a

(46)=> 16. The end address in class C is 239.255.255.255

True

False

Answer: b

(47)=> 17. A broadcast address represents a single device in the network .

True

False

Answer: b

(48)=> 18. In HTTP, server maintains no information about past client requests .

True

False

Answer: a

(49)=> 19. Web page consists of objects, each of which can be stored on different Web servers.

True

False

Answer: a

(50)=> 20. In Non - persistent HTTP, downloading multiple objects required multiple connections .

True

False

Answer: a

mid 14-15

اللهم صل وسلم على سيدنا محمد

(51)=> 1. The wide bandwidth data transmission with an ability to simultaneously transport multiple signals and traffic types is:

Baseband

Broadband

TDM

None

Answer: B

(52)=> 2. The technique in which downloading multiple objects required multiple connections:

Persistent HTTP

Non-persistent HTTP

HTTP/1.1

None

Answer: B

(53)=> 3. The interface between the application layer and the transport layer within a host is called:

IP Address

A port

A socket

None

Answer: C

(54)=> 4. The rate (bits/time unit) at which bits transferred between sender/receiver is called:

packet delay

bandwidth

packet loss

none

Answer: D

(55)=> 5. A self-replicating infection by passively receiving object that gets itself executed Ili does not need human action). is called

Virus

Wrom

Dos Attack

None

Answer: B

(56)=> 6. A system for connecting a number of computer systems to from a local area network is called:

Access Point

Router

Ethernet

None

Answer: C

(57)=> 7. The type of attack that send packet with false source address is called:

packet sniffing

ip spoofing

Denial of service

none

Answer: B

(58)=> 8. The Wi-A connection speeds are between:

1 and 10 Mbps

11 and 54 Mbps

1 and 10 Kbps

11 and 54 Kbps

Answer: B

(59)=> 9. The method which provides encrypted TCP connection is :

SMTP

UDP

Telnet

None

ALL

Answer: D

mid 16-17

(60)=> A dedicated hosting plan means that your website is the only site hosted on the server ?

True

False

Answer: A

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(61)=> Bandwidth is how much data actually does travel through the 'channel' successfully?

True

False

Answer: B

(62)=> A router is a device that allows wireless devices to connect to a wired network ?

True

False

Answer: B

(63)=> Ethernet is a system for connecting a number of computer systems to form a local area network?

True

False

Answer: A

(64)=> Circuit switching allows more users to use network than packet switching ?

True

False

Answer: B

(65)=> Packet switching commonly used in traditional telephone networks ?

True

False

Answer: B

(66)=> In Denial of Service (Dos), attackers make resources (server, bandwidth) unavailable ?

True

False

Answer: A

(67)=> The propagation delay is the amount of time required for the router to push out the packet ?

True

False

Answer: B

(68)=> is a network core function which determines source destination route taken by packets

Routing

Forwarding

Both

None

TDM & FDM

Answer: A

(69)=> ... divides the channel into two or more frequency ranges that do not overlap.

TDM

FDM

ADM

ATM

LM

Answer: B

(70)=> ... is wide bandwidth data transmission with an ability to simulataneously transport multiple signals and traffic types ?

Baseband

Broadband

TDM

None

Answer: B

mid 21-22

اللهم صل وسلم على سيدنا محمد

(71)=> 1. ... is a physical location through which Internet infrastructure companies such as Internet Service Providers and CDNs connect with each other.

ISP

IXP

CPN

none

Answer: B

(72)=> 2. The dedicated downstream transmission in DSL network is

3.4 - 1.6 Mbps

10-40 Mbps

24-52 Mbps

none

Answer: C

(73)=> 3. is a device that forwards data packets along networks.

Repeater

Extender

Router

None

Answer: C

(74)=> 4. is a device used to connect a computer or router to a telephone line which provides the digital subscriber line service for connectivity to the Internet, which is often called DSL broadband.

AP

DSL modem

Switch

None

Answer: B

(75)=> 5. The transmission rate of Wide-area cellular access networks is

11,54,450 Mbps

10's Mbps

100's Mbps

None

Answer: B

(76)=> 6. is the amount of time required for the router to push out the packet.

The transmission delay

The propagation delay

The nodal processing

None

Answer: A

(77)=> 7. is the time waiting at output link for transmission

The transmission delay

The propagation delay

the nodal processing

none

Answer: D

(78)=> 8. Suppose that the packet length is $l = 12000$ bits, and that the link transmission rate along the link to router on the right is $R = 1000$ Mbps. the trasmission delay =

$1000000000 \text{ bps} / 12000 \text{ bits}$

$12 \text{ bits} * 1000 \text{ bps}$

$12000 \text{ bits} / 1000000000 \text{ bps}$

none

Answer: C

(79)=> 9. Suppose that the packet length is $l = 12000$ bits, and that the link transmission rate along the link to router on the right is $R = 1000$ Mbps, The number of packets that can be transmitted in a second into the link =

$1000000000 \text{ bps} / 12000 \text{ bits}$

$12 \text{ bits} * 1000 \text{ bps}$

$12000 \text{ bits} / 1000000000 \text{ bps}$

none

Answer: A

(80)=> 10. If arrival rate in bits to link exceeds transmission rate of link for a

period of time and memory (buffer) fills up,.....

Packets will queue

Packets can be dropped

Packets will be forwarded

None

Answer: B

اللهم صل وسلم على سيدنا محمد

(81)=> 11. Consider the scenario shown below, with four different servers connected to four different clients. The maximum achievable end-end throughput =

40 Mbps

50 Mbps

100 Mbps

none

Answer: B

(82)=> 12. Consider the scenario shown above in point 11. The server's utilization =

90/90

90/50

50/90

none

Answer: C

(83)=> 1. In frequency division multiplexing (FDM), different channels transmitted in different frequency bands

True

False

Answer: A

(84)=> 2. In telecommunications generally, a transmission from an information server toward an end user is referred to as upstream and a transmission toward the server is referred to as downstream.

True

False

Answer: B

(85)=> 3. 5G can support about 4,000 devices per square kilometre.

True

False

Answer: B

(86)=> 4. Forwarding is a local action which moves arriving packets from router's input link to appropriate router output link.

True

False

Answer: A

(87)=> 5. Packet switching has resource sharing.

True

False

Answer: A

(88)=> 6. Circuit switching is simpler than packet switching.

True

False

Answer: B

(89)=> 7. There is no call setup in circuit switching

True

False

Answer: B

(90)=> 8. The nodal processing delay is the time waiting at output link for transmission.

True

False

Answer: B

mid 22-23

اللهم صل وسلم على سيدنا محمد

(91)=> 1. In ... optical and electromagnetic frequencies divided into (narrow) frequency bands.

FDM

TDM

Ethernet

None

Answer: A

(92)=> 2. Process sends/receives messages to/from its ...

socket

Ip

Mac Address

None

Answer: A

(93)=> 5G can support about devices per square kilometer

4000

5000

10000

None

Answer: D

(94)=> 4. is the type of attack that send packet with false source address

packet sniffing

ip spoofing

DoS

None

Answer: B

(95)=> 4. The wifi connection speed are between ...

1 and 10 Mbps

10, 50, 100 Mbps

11, 54, 450 Mbps

None

Answer: C

(96)=> 6. If the link bandwidth between two end systems is 1000bps, packet length 20 bits and average rate at which packets are arriving to be serviced 50 packets/sec, then the traffic intensity will be

infinite

small

large

none

Answer: C

(97)=> 7. Suppose that the packet length is $L = 12000$ bits, and that the link transmission rate along the link to router on the right is $R = 100$ Mbps. The maximum number of packets per second that can be transmitted by this link will be ...

800 packets

8333 packets

120000 packets

none

Answer: B

(98)=> 8. is a physical location through which Internet infrastructure companies such as Internet Service Providers (ISPs) and CDNs connect with each other.

ARM

CDN

IXP

none

Answer: C

(99)=> consider the scenario shown below, with four different servers connected to four different clients. The maximum achievable end-end throughput =

40 Mbps

50 Mbps

100 Mbps

none

Answer: B

(100)=> 10. Consider the scenario shown above in point 9. Assuming that the servers are sending at the maximum rate possible, what are the link utilizations for the server links (Rs)?

1

1.8

.555

none

Answer: C

اللهم صل وسلم على سيدنا محمد

(101)=> 1. Software-defined networking (SDN) is a control plan approach implemented in routers.

True

False

Answer: B

(102)=> 2. Bottleneck link on end-end path that constrains end-end throughput

True

False

Answer: A

(103)=> 3. Throughput is the rate (bits/time unit) at which bits transferred between sender/receiver.

True

False

Answer: A

(104)=> 4. Instantaneous throughput rate at given point in time.

True

False

Answer: A

(105)=> 5. File transfer/download uses the UDP transport protocol.

True

False

Answer: B

(106)=> 6. Nodal processing delay is the time it takes to propagate from one router to the next.

True

False

Answer: B

(107)=> 7. User responses back to the computer on the upstream path can be smaller since they are usually text-only.

True

False

Answer: A

(108)=> 8. traceroute program can provide delay measurement from source to router along end-end Internet path towards destination.

True

False

Answer: A

(109)=> 9. A digital subscriber line (DSL) modem is a device used to connect a computer or router to a telephone line.

True

False

Answer: A

(110)=> 10. Ethernet networks typically used in companies and universities.

True

False

Answer: A

random

اللهم صل وسلم على سيدنا محمد

(111)=> 10. if the link bandwidth between two end systems is 1000bps, packet length 20 bits and average rate at which packets are arriving to be serviced 50 packets/sec, then the traffic intensity will be

infinite

small

large

none

Answer: C

(112)=> 11. A network with bandwidth of 10 Mbps can pass only an average of 12,000 packets per minute with each packet carrying an average of 5,000 bits. What is the throughput of this network?

10 Mbps

20 Mbps

5 Mbps

None

Answer: D

(113)=> 12. Suppose there are two hosts A and B, and a file of 100 bytes needs to be sent from A to B. The link bandwidth is 400Kbps, the link is a fiber optic link, and the distance between A and B is 35km. The transmission time will be

about 0.002 secode

about 0.003 secode

about 2 secode

none

Answer: A

(114)=> 13. Suppose there are two hosts A and B, and a file of 100 bytes needs to be sent from A to B. The link bandwidth is 400 Kbps, the link is a fiber optic link, and the distance between A and B is 35km. The propagation time will be

about 0.004 secode

about 0.006 secode

about 7 secode

none

Answer: D

(115)=> 14. A HTTP request consists of 5 referenced JPEG objects, each object is of size = 10^4 KB ,RTT = 1 second and transmission rate = 5Mbps. How long it takes to receive the entire page using Non-persistent connection?

about 14

about 24

about 34

none of them

Ø§Ù,,Ù,,Ù‡ Ø§Ø'Ù,,Ù...

Answer: E

(116)=> 15. A HTTP request consists of 5 referenced JPEG objects, each object is of size = 10^4 Kb. RTT = 1 second and transmission rate = 5Mbps. How long it takes to receive the entire page using Persistent connection without pipeline ?

about 3

about 8

about 19

none

Ø§Ù,,Ù,,Ù‡ Ø§Ø'Ù,,Ù...

Answer: E

(117)=> 16. The HTTP response status cod 301 means

Request object moved. new location specified later in the msg (location) (Moted Permanently)

Reqeust succeeded. request object later in this msg (OK)

request msg not understood by server (Not found)

none of them

Answer: A

(118)=> 17. The HTTP response status code 505 means

Request object moved. new location specified later in the msg (location) (Moted Permanently)

Reqeust succeeded. request object later in this msg (OK)

request msg not understood by server (Not found)

none

Answer: D