

SrNo	question	answer1	answer2	answer3	answer4
1	Computer Network is	Collection of hardware components and computers	Interconnected by communication channels	Sharing of resources and information	All of these
2	What is the use of Bridge in Network?	to connect LANs	to separate LANs	to control Network Speed	All of these
3	Router operates in which layer of OSI Reference Model?	Layer 1 (Physical Layer)	Layer 3 (Network Layer)	Layer 4 (Transport Layer)	Layer 7 (Application Layer)
4	What is the meaning of Bandwidth in Network?	Transmission capacity of a communication channels	Connected Computers in the Network	Class of IP used in Network	None
5	What is a Firewall in Computer Network?	The physical boundary of Network	An operating System of Computer Network	A system designed to prevent unauthorized access	A web browsing Software
6	Bridge works in which layer of the OSI model?	Application layer	Transport layer	Network layer	Datalink layer
7	Each IP packet must contain	Only Source address	Only Destination address	Source and Destination address	Source or Destination address
8	Which protocol provides a connection-oriented reliable service for sending messages	TCP	IP	UDP	All of these
9	Which layers of the OSI model are host-to-host layers?	Transport, Session, Presentation, Application	Network, Transport, Session, Presentation	Datalink, Network, Transport, Session	Physical, Datalink, Network, Transport
10	Which of the following IP address class is Multicast	Class A	Class B	Class C	Class D
11	The last address of IP address represents	Unicast address	Network address	Broadcast address	None
12	How many layers are in the TCP/IP model?	4 layers	5 layers	6 layers	7 layers
13	Which of the following layer of OSI model also called end-to-end layer?	Presentation layer	Network layer	Session layer	Transport layer
14	What does Router do in a network?	Forwards a packet to all outgoing links	Forwards a packet to the next free outgoing link	Determines on which outgoing link a packet is to be forwarded	Forwards a packet to all outgoing links except the originated link

SrNo	question	answer1	answer2	answer3	answer4
15	What does protocol defines?	Protocol defines what data is communicated.	Protocol defines how data is communicated.	Protocol defines when data is communicated	All of these
16	What is the uses of subnetting?	It divides one large network into several smaller ones	It divides network into network classes	It speeds up the speed of network	None
17	Repeater operates in which layer of the OSI model?	Physical layer	Data link layer	Network layer	Transport layer
18	Which of the following is not the Networking	Gateways	Linux	Routers	Firewalls
19	What is the size of MAC Address?	16-bits	32-bits	48-bits	64-bits
20	MAC Address is the example of	Transport Layer	Data Link Layer	Application Layer	Physical Layer
21	Routing tables of a router keeps track of	MAC Address Assignments	Port Assignments to network devices	Distribute IP address to network devices	Routes to use for forwarding data to its destination
22	Define Networking	Collection of hardware components and computers	Interconnected by communication channels	Sharing of resources and information	All of these
23	Which of the following is/are Protocols of	FTP	DNS	Telnet	All of these
24	Which of the following protocol are defined in Transport layer?	FTP	TCP	UDP	TCP and UDP
25	What is the purpose of the PSH flag in the TCP header?	used to indicate end of message	Typically used to indicate beginning of message	Typically used to push the message	Typically used to indicate stop the message
26	What is the natural mask for a class C Network?	255.255.255.1	255.255.255.0	255.255.255.254	255.255.255.255
27	Communication channel is shared by all the machines on the network in	broadcast network	unicast network	multicast network	none
28	A _____ is a device that forwards packets between networks by processing the routing information included in the packet.	bridge	firewall	router	All of these
29	Which of this is not a guided media ?	Fiber optical cable	Coaxial cable	Wireless LAN	Copper wire
30	Coaxial cable consists of _____ concentric copper conductors.	1	2	3	4

SrNo	question	answer1	answer2	answer3	answer4
31	Fiber optics posses following properties	Immune electromagnetic interference	Very less signal attenuation	Very hard to tap	All of these
32	Geostationary satellites	Are placed at a fixed point above the earth	Rotate the earth about a fixed axis	Rotate the earth about a varying axis	All of these
33	Physical or logical arrangement of network is	Topology	Routing	Networking	None
34	In this topology there is a central controller or hub	Star	Mesh	Ring	Bus
35	This topology requires multipoint connection	Star	Mesh	Ring	Bus
36	Data communication system spanning states, countries, or the whole world is	LAN	WAN	MAN	None
37	Which of the following is not applicable for IP?	Error reporting	Handle addressing conventions	Datagram format	Packet handling conventions
38	Which of these is not applicable for IP protocol?	is connectionless	offer reliable service	offer unreliable service	None
39	The network layer concerns with	bits	frames	packets	none
40	Which one of the following is not a function of network layer?	routing	inter-networking	congestion control	none
41	Application layer offers _____ service	End to end	Process to process	Both of the mentioned	None
42	Pick the odd one out	File transfer	File download	E-mail	Interactive games
43	Which of the following is an application layer service ?	Network virtual terminal	File transfer, access, and management	Mail service	All of these
44	Ethernet System use which of the services?	Bus	Ring	Star	Tree
45	Which of the following is the making of secret codes?	Cryptography	Cryptology	Cryptanalysis	Crypto
46	Which of the following is the art and science of making and breaking secret codes?	Cryptology	Cryptography	Cryptanalysis	Crypto
47	Data_____ has become a fundamental issue in information security.	Confidentiality	Integrity	Security	Availability.
48	Which of the following aims to prevent unauthorized reading of information?	Confidentiality.	Integrity.	Security	Availability.
49	_____ is used for hiding the payment information from the merchant	SET	SSL	SHTTP	TSP
50	DES stands for	Default Encryption System.	Default Encryption Standard	Data Encryption Standard	Data Encryption System.

SrNo	question	answer1	answer2	answer3	answer4
51	In which of the following the encryption and decryption key are same?	Symmetric key cryptography.	Asymmetric key cryptography.	Public key cryptography.	Non secret key.
52	Which of the following is based on "trap door one way" function?	Public key cryptosystem	Public key	Symmetric key.	Secret key.
53	CAs stands for	Certificate authorities.	Controlled activities.	Certification authority.	Certificate anomaly.
54	For MD5, MD stands for	Message digest.	Messenger digest.	Message dependent.	Message decryption.
55	In cryptography, what is cipher?	algorithm for performing encryption and decryption	encrypted message	both algorithm for performing encryption and decryption and encrypted message	decrypted message
56	In asymmetric key cryptography, the private key is kept by _____	sender	receiver	sender and receiver	all the connected devices to the network
57	Which one of the following algorithm is not used in asymmetric-key cryptography?	rsa algorithm	diffie-hellman algorithm	electronic code book algorithm	dsa algorithm
58	In cryptography, the order of the letters in a message is rearranged by _____	transpositional ciphers	substitution ciphers	both transpositional ciphers and substitution ciphers	quadratic ciphers
59	What is data encryption standard (DES)?	block cipher	stream cipher	bit cipher	byte cipher
60	Cryptanalysis is used _____	to find some insecurity in a cryptographic scheme	to increase the speed	to encrypt the data	to make new ciphers
61	Symmetric-key cryptography started thousands of years ago when people needed to exchange	Files	Packets	Secrets	Transmission
62	The relationship between a character in the plaintext to a character is	many-to-one relationship	one-to-many relationship	many-to-many relationship	None
63	Cryptography, a word with Greek origins, means	Corrupting Data	Secret Writing	Open Writing	Closed Writing

SrNo	question	answer1	answer2	answer3	answer4
64	A transposition cipher reorders (permutes) symbols in a	block of packets	block of slots	block of signals	block of symbols
65	How long is an IPv6 address?	32 bits	128 byte	64 bits	128 bits
66	What is the frequency range of the IEEE 802.11a standard?	2.4Gbps	5Gbps	2.4GHz	5GHz
67	Communication between a computer and a keyboard involves _____ transmission.	Automatic	Half-duplex	Full-duplex	Simplex
68	A _____ set of rules that governs data communication.	Protocols	Standards	RFCs	Servers
69	Three or more devices share a link in _____ connection.	Unipoint	Multipoint	Point to point	Simplex
70	In computer network nodes are _____	the computer that originates the data	the computer that routes the data	the computer that terminates the data	All of these
71	Communication channel is shared by all the machines on the network in _____	broadcast network	unicast network	multicast network	anycast network
72	Bluetooth is an example of _____	personal area network	local area network	virtual private network	wide area network
73	A _____ is a device that forwards packets between networks by processing the routing information included in the packet.	bridge	firewall	router	hub
74	Network congestion occurs _____	in case of traffic overloading	when a system terminates	when connection between two nodes terminates	in case of transfer failure
75	How many layers are present in the Internet protocol stack (TCP/IP model)?	5	7	6	10
76	The number of layers in ISO OSI reference model is _____	5	7	6	10
77	Which of the following layers is an addition to OSI model when compared with TCP IP model?	Application layer	Presentation layer	Session layer	Session and Presentation layer
78	Application layer is implemented in _____	End system	NIC	Ethernet	Packet transport
79	Transport layer is implemented in _____	End system	NIC	Ethernet	Signal transmission
80	The functionalities of the presentation layer include _____	Data compression	Data encryption	Data description	All of these
81	OSI stands for _____	open system interconnection	operating system interface	optical service implementation	open service Internet

SrNo	question	answer1	answer2	answer3	answer4
82	TCP/IP model does not have _____ layer but OSI model have this layer	session layer	transport layer	application layer	network layer
83	Which layer is used to link the network support layers and user support layers?	session layer	data link layer	transport layer	network layer
84	Which layer is responsible for process to process delivery in a general network model?	network layer	transport layer	session layer	data link layer
85	Which address is used to identify a process on a host by the transport layer?	physical address	logical address	port address	specific address
86	Which layer provides the services to user?	application layer	session layer	presentation layer	physical layer
87	Transmission data rate is decided by _____	network layer	physical layer	data link layer	transport layer
88	The physical layer is concerned with _____	bit-by-bit delivery	process to process delivery	application to application delivery	port to port delivery
89	The data link layer takes the packets from _____ and encapsulates them into frames for transmission.	network layer	physical layer	transport layer	application layer
90	CRC stands for _____	cyclic redundancy check	code repeat check	code redundancy check	cyclic repeat check
91	Which of the following is the multiple access protocol for channel access control?	CSMA/CD	CSMA/CA	Both CSMA/CD & CSMA/CA	HDLC
92	The network layer is concerned with _____ of data.	bits	frames	packets	bytes
93	A 4 byte IP address consists of _____	only network address	only host address	network address & host address	network address & MAC address
94	The network layer protocol for internet is _____	ethernet	internet protocol	hypertext transfer protocol	file transfer protocol
95	Transport layer aggregates data from different applications into a single stream before passing it to _____	network layer	data link layer	application layer	physical layer
96	Which of the following are transport layer protocols used in networking?	TCP and FTP	UDP and HTTP	TCP and UDP	HTTP and FTP
97	Transmission control protocol _____	is a connection-oriented protocol	uses a three way handshake to establish a connection	receives data from application as a single stream	All of these
98	Which one of the following is a version of UDP with congestion control?	datagram congestion control protocol	stream control transmission protocol	structured stream transport	user congestion control protocol

SrNo	question	answer1	answer2	answer3	answer4
99	Physical or logical arrangement of network is _____	Topology	Routing	Networking	Control
100	Which network topology requires a central controller or hub?	Star	Mesh	Ring	Bus
101	_____ topology requires a multipoint connection.	Star	Mesh	Ring	Bus
102	Data communication system spanning states, countries, or the whole world is _____	LAN	WAN	MAN	PAN
103	Data communication system within a building or campus is _____	LAN	WAN	MAN	PAN
104	WAN stands for _____	World area network	Wide area network	Web area network	Web access network
105	In TDM, slots are further divided into _____	Seconds	Frames	Packets	Bits
106	_____ is the multiplexing technique that shifts each signal to a different carrier frequency.	FDM	TDM	Both FDM & TDM	PDM
107	Which of the following is false with respect to TCP?	Connection-oriented	Process-to-process	Transport layer protocol	Unreliable
108	In TCP, sending and receiving data is done as _____	Stream of bytes	Sequence of characters	Lines of data	Packets
109	TCP process may not write and read data at the same speed. So we need _____ for storage.	Packets	Buffers	Segments	Stacks
110	Communication offered by TCP is _____	Full-duplex	Half-duplex	Semi-duplex	Byte by byte
111	To achieve reliable transport in TCP, _____ is used to check the safe and sound arrival of data.	Packet	Buffer	Segment	Acknowledgment
112	In segment header, sequence number and acknowledgement number fields refer to _____	Byte number	Buffer number	Segment number	Acknowledgment
113	The receiver of the data controls the amount of data that are to be sent by the sender is referred to as _____	Flow control	Error control	Congestion control	Error detection
114	Size of TCP segment header ranges between _____	16 and 32 bytes	16 and 32 bits	20 and 60 bytes	20 and 60 bits
115	What allows TCP to detect lost segments and in turn recover from that loss?	Sequence number	Acknowledgment number	Checksum	Both Sequence & Acknowledgment number
116	Which of the following is not applicable for IP?	Error reporting	Handle addressing conventions	Datagram format	Packet handling conventions
117	Mostly _____ is used in wireless LAN.	time division multiplexing	orthogonal frequency division multiplexing	space division multiplexing	channel division multiplexing

SrNo	question	answer1	answer2	answer3	answer4
118	Which one of the following event is not possible in wireless LAN?	collision detection	acknowledgment of data frames	multi-mode data transmission	connection to wired networks
119	What is internet?	a single network	a vast collection of different networks	interconnection of local area networks	interconnection of wide area networks
120	Internet works on _____	packet switching	circuit switching	both packet switching and circuit switching	data switching
121	Which of the following is not applicable for IP?	Error reporting	Handle addressing conventions	Datagram format	Packet handling conventions
122	Which of the following field in IPv4 datagram is not related to fragmentation?	Flags	Offset	TOS	Identifier
123	In brute force attack, on average half of all possible keys must be tried to achieve success.	TRUE	FALSE	Partially	None
124	If the sender and receiver use different keys, the system is referred to as conventional cipher system.	TRUE	FALSE	Partially	None
125	Which systems use a timestamp? i) Public-Key Certificates ii) Public announcements iii) Publicly available directories iv) Public-Key authority	i) and ii)	iii) and iv)	i) and iv)	iv) only
126	Which layer in the IEEE 802.11 protocol stack has the function of flow control and error control?	Physical Layer	Logic Link Control Layer	Medium Access Layer	None of these
127	Wi-Fi stands for-	Wireless Fidelity	Wireless LAN	Wireless FLAN	None of these
128	Wired networks are far more susceptible to eavesdropping and jamming than wireless networks.	TRUE	FALSE	Partially	None
129	Another name for the Wireless Ethernet 802.11a is-	Wi-Fi	Wi-Fi4	Wi-Fi5	Wi-Fi6
130	A device that helps prevent congestion and data collisions –	Switch	Hub	Gateway	Proxy Server
131	Which layer 1 devices can be used to enlarge the area covered by a single LAN segment?	Hub	Repeater	Both 1 & 2	None
132	What is the maximum number of IP addresses that can be assigned to hosts on a local subnet that uses the 255.255.255.224 subnet mask?	14	15	16	30
133	A computer network permits sharing of	Resources	Information	Resources and Information	None
134	ATM stands for	Automatic teller machine	Automated teller machine	Automatic transfer machine	Automated transfer machine

SrNo	question	answer1	answer2	answer3	answer4
135	_____ is the technology that connects the machines and people within a site in a small area	LAN	MAN	WAN	None
136	_____ is a network that covers geographic areas that are larger, such as districts or cities.	LAN	MAN	WAN	None
137	_____ is a network that this technology connects sites that are in diverse locations.	LAN	MAN	WAN	None
138	_____ is a collection of point-to-point links that may form a circle.	LAN	MAN	WAN	Ring Topology
139	ATM networks are	connectionless	Interconnected	connection oriented	None
140	DHCP stands for	Dynamic Host Configuration Protocol	Digital Host Communication Provider	Digital Host Communication Protocol	Dynamic Host Configuration Provider
141	Which type of topology is best suited for large businesses which must carefully control and coordinate the operation of distributed branch outlets?	Ring	local area network	Hierarchical	Star
142	Which of the following transmission directions listed is not a legitimate channel?	Simlex	Half-duplex	Full-duplex	Double duplex
143	"Parity bits" are used for which of the following purposes?	Encryption of data	To transmit faster	To detect errors	To identify the user
144	What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interferences?	Unshielded twisted pair	Optical fiber	Coaxial cable	Microwave
145	A collection of hyperlinked documents on the internet forms the ?.?	World Wide Web (WWW)	E-mail system	Mailing list	Hypertext Markup Language
146	The location of a resource on the internet is given by its?	Protocols	URL	E-mail address	ICQ
147	The term HTTP stands for?	Hyper terminal tracing program	Hypertext tracing protocol	hypertext transfer protocol	Hypertext Markup Program
148	Which software prevents the external access to a system?	Firewall	Gateway	Router	Virus checker
149	A digital signature needs a	Private-key system	Shared-key system	Public-key system	All of these
150	_____ helps in ensuring non-fraudulent transactions on the web	Certificate authority	Digital authority	Dual authority	Digital signature