

Shivaji University , Kolhapur
Question Bank for Mar 2022 (Summer) Examination

Subject Code: 79140 Subject Name: Computer Networks-II

MCQ type Questions unitwise

Sr. No	Question	Option A	Option B	Option C	Option D
1.	Socket address is formed using _____.	IP +Port No.	IP address of client	IP address of server	None of these
2.	In Socket data structure , IF_INET field used to indicate _____?	IPv6	Ipv4	dotted decimal notation	None of these
3	Purpose of Bind () function is _____.	To create new socket	To assign IP address & Local port	To receive data	To send data
4	At server side, sendto() function is used to _____.	Send request	Send response	Send acknowledge	None of these
5	Purpose of Listen() function at server side_____.	To show ready to receive status	To show ready to send response	To send acknowledge	None of these
6	Which classes are used for connection-less socket programming?	Datagram Socket	Datagram Packet	Both Datagram Socket & Datagram Packet	Server Socket
7	In Inet Address class, which method returns the host name of the IP Address?	Public String get Hostname()	Public String getHostAddress()	Public static InetAddress get Localhost()	Public getByName()

Ch 2.8	An Ipv6 address is _____bits long.	128bits	32 bits	8 bits	None of these
9	Ipv6 does not use _____ type of address.	Broadcast	multicast	anycast	Unicast
10	The header length of an Ipv6 datagram is _____.	10-bytes	25-bytes	30-bytes	40-bytes
11	HOP limit in Ipv6 base header used to indicate_____.	Time to Live packet form in network	Time to send packet from client to server	Time to receiver response from client to server	None of these
12	In Ipv6,Traffic class is also called as_____.	Set class	Management class	priority class	None of these
13	ICMPv6 includes _____	IGMP	ARP	RARP	A and b
14	Header size of the ICMP message is _____	8-bytes	8-bits	16-bytes	16-bits
15	Which of these is not a type of error-reporting message?	Destination unreachable	Source quench	Router error	Time exceeded
16	In case of time exceeded error, when the datagram visits a router, the value of time to live field is _____	Remains constant	Decrement by 2	Incremented by 1	Decrement by 1
17	The source-quench message in ICMP was designed to add a kind of _____ to the IP.	error control	flow control	router control	switch control

Ch. 18	A DNS client is called _____	DNS updater	DNS resolver	DNS handler	none of the mentioned
19	Servers handle requests for other domains _____	directly	by contacting remote DNS server	it is not possible	none of the mentioned
20	Which one of the following allows client to update their DNS entry as their IP address change?	dynamic DNS	mail transfer agent	authoritative name server	none of the mentioned
21	If a label is terminated by a null string, it is called a _____.	PQDN	FQDN	SQDN	None of these
22	The _____ domain is used to map an address to a name.	Generic	country	Sub-domains	inverse
23	Mapping a name to an address or an address to a name is called	Name-address generation	Name-address abbreviations	Name-address resolution	None of these
24	The _____ domain section uses two-character country abbreviations.	generic	country	inverse	Country domain section
25	DHCP (dynamic host configuration protocol) provides _____ to the client.	IP address	MAC address	Url	None of the mentioned
26	IP assigned for a client by DHCP server is	for a limited period	for an unlimited period	not time dependent	none of the mentioned

27	he DHCP server can provide the _____ of the IP addresses.	dynamic allocation	automatic allocation	static allocation	all of the mentioned
28	A_____ server loads all information from the disk file.	Primary	Secondary	Zone	None of the above
29	_____ allows you to connect and login to a remote computer	Telnet	FTP	HTTP	SMTP
30	Telnet is used for _____	Television on net	Network of Telephones	Remote Login	Teleshopping site
31	Which one of the following is not correct?	telnet is a general purpose client-server program	telnet lets user access an application on a remote computer	telnet can also be used for file transfer	telnet can be used for remote login
32	Which operating mode of telnet is full duplex?	default mode	server mode	line mode	character mode

33	If we want that a character be interpreted by the client instead of server _____	interpret as command (IAC) escape character has to be used	control functions has to be disabled	it is not possible	cli character has to be used
34	FTP uses ____ parallel TCP connections to transfer a file.	1	2	3	4
35	Identify the incorrect statement regarding FTP.	FTP stand for File Transfer Protocol.	FTP uses two parallel TCP connections.	FTP sends its control information in-band.	FTP sends exactly one file over the data connection
36	The password is sent to the server using _____ command	PASSWD	PASS	PASSWORD	PWORD
37	FTP uses port number ____ for data connection.	20	21	22	23
38	FTP server	Maintains state information	Is stateless	Has single TCP connection for a file transfer	Has UDP connection for file transfer
39	What is the full form of TFTP?	Transmission File Transport Protocol	Trivial File Transfer Protocol	Transport File Transfer Protocol	None of the above

40	What is the port number for TFTP?	65	67	63	69
41	HTTP uses the services of _____ on well- known port 80.	UDP	IP	TCP	None of the above
42	The default connection type used by HTTP is _____.	Persistent	Non- persistent	Can be either persistent or non- persistent depending on connection Request.	None of the mentioned
43	HTTP message is similar in the form to an	C++	SMTP	TCP	Perl
44	In WWW and HTTP a technology used to create, handle dynamic documents is called as-----	Common gateway interface	Common gateway integrate	Common gateway ip	Common gateway internet
45	A program or script to be run at client side is called as-----	Web documents	Hyperlink documents	Static documents	Active documents
46	Status line is present in which message format?	Request message	Response message	Both request and response	Neither request nor response

47	Request field is present in which message format?	Request message	Response message	Both request and response	Neither request nor response
48	Response is made up of a _____ status code.	two-digit	three-digit	five-digit	six-digit
49	When the mail server sends mail to other mail servers it becomes _____	SMTP server	SMTP client	Peer	Master
50	Expansion of SMTP is _____	Simple Mail Transfer Protocol	Simple Message Transfer Protocol	Simple Mail Transmission Protocol	Simple Message Transmission Protocol
51	Simple mail transfer protocol (SMTP) utilizes _____ as the transport layer protocol for electronic mail transfer.	TCP	UDP	DHCP	SCTP
52	SMTP uses which of the following TCP port?	22	23	21	25
53	SMTP is not used to deliver messages to _____	user's terminal	user's mailbox	user's word processor	user's email client

54	SMTP defines _____	message transport	message encryption	message content	message password
55	The delay that occur during the playback of a stream is called	Stream delay	Playback delay	jitter	Event delay
56	Real time streaming protocol is used	To control streaming media servers	For establishing and controlling media sessions between endpoints	To provide real time control of playback of media files from the server	All of the mentioned
57	Real time transport protocol mostly used in---	Streaming media	Video teleconference	Television services	All of the mentioned
58	Which protocol provides the synchronization between media streams	RTP	RTCP	RPC	RTCT
59	RTP header has a minimum size of	12 bytes	16 bytes	24 bytes	32 bytes
60	RTP can use-----	Unprivileged UDP port	Stream control transmission protocol	Datagram congestion control protocol	All of the mentioned

Subjective Questions unitwise

Unit 1. Client server model & socket interface

1. Explain in detail about Concurrent and Iterative server in detail.
2. Write the port numbers for the following protocols for TCP/UDP.
 - i) ECHO 7
 - ii) DAYTIME 13
 - iii) FTP-DATA 20
 - iv) FTP-CONTROL 21
 - v) TELNET 23
 - vi) HTTP 80
 - vii) POP-3 110
3. Explain in detail multiprotocol server and multiprocess server.
4. Explain create(), sendto(), recvfrom(), listen() socket system call
5. List and explain socket system calls in detail
6. Compare the TCP header and the UDP header. List and Explain the fields in the TCP header that are not part of the UDP header.
7. What do you mean by concurrency control? Explain how concurrency managed in client-server architecture
8. Discuss the peer-to-peer paradigm and its application in detail.

Unit 2. Next Generation IPv6 and ICMPv6

1. Explain Embedding of IPv4 addresses in IPv6 addresses.
2. Write a short note on ICMPv6
3. Explain in detail about Transition from IPv4 to IPv6.
4. Write a note on IPv6
5. Do as directed:
 - A. Show abbreviations for the following addresses:
 - (1) 0000:0001:0000:0000:0000:0000:1200:1000
 - (2) 1234:2346:0000:0000:0000:0000:0000:1111

- (3) An address with 128 0s
- (4) An address with 128 1s.
- B. Decompress the following addresses and show the complete unabbreviated IPv6 address
 - (1) 1111::2222
 - (2) 0:1::
 - (3) AAAA:A:AA::1234
- 6. Draw and explain IPV6 datagram format. Also explain Fragmentation in IPv6
- 7. Describe advantages of IPv6 over IPv4. Explain Embedding of IPv4 addresses in IPv6 addresses.
- 8. Which ICMP messages contain part of the IP datagram? Why is this needed? Discuss group membership messages of ICMPv6
- 9. What is Unicast & Multicast communication? Also Mention the applications of it.

Unit -3 :BOOTP, DHCP and Domain name system

- 1. What is DNS? What is the need of it? Explain the types of records in DNS.
- 2. Discuss the DNS Message in detail.
- 3. Explain BOOTP protocol in detail.
- 4. Explain DHCP operation with neat state transition diagram
- 5. Explain DNS name address resolution process in detail
- 6. Explain DHCP operation in the same network and different Network.
- 7. Explain DHCP Packet format.
- 8. What are the components of DNS? Explain

Unit 4: Remote Login: TELNET and File Transfer FTP, TFTP

- 1. What is RRQ or WRQ message? Why do we need an RRQ or WRQ message in TFTP but not in FTP?
- 2. Discuss six classes of commands sent by the client to establish communication with the server
- 3. Discuss how file transfer can be done using FTP? Explain three types of file transfer in it.
- 4. Define different modes of operations in TELNET and their efficiency

5. Explain flow control and error control mechanism of TFTP. Also explain out-of-band signaling in TELNET.
6. Define TELNET protocol and show how it implements local and remote login using the concept of network virtual terminal
7. Explain FTP command processing. List and describe at least two commands from each group of FTP commands.
8. Explain different options used in TELNET and TELNET option negotiation in detail.

Unit 5: Web Applications Service Protocols

1. Explain role of MUA, MTA and MAA in Electronic Mailing System.
2. Draw and Explain HTTP Query and response message in detail.
3. What are the types of web Documents explain in detail. Also explain how web server serves active document?
4. With neat diagram explain architecture of E-mail system
5. With neat and labeled diagram Explain HTTP architecture
6. Write note on MIME.
7. Explain POP3 and IMAP4 protocols in detail
8. Draw and Explain browser Architecture.

Unit 6: Multimedia In Internet

1. **Draw and Explain architecture of H.323**
2. Explain all the methods of streaming stored audio and video using media server and RTSP.
3. Discuss in detail about RTP and RTCP.
4. Explain Session Initiation Protocol in detail .Also Explain mechanism of SIP to track the callee.
5. Answer the following questions:
 - a) Discuss how audio and video files are compressed for transmission through the Internet.
 - b) Discuss the phenomenon called Jitter that can be created on a packet-switched network when transmitting real-time data.
6. Explain is RTP and RTCP? Why does RTP need the service of another protocol, RTCP?

