



GURU NANAK INSTITUTE OF TECHNOLOGY
An Autonomous Institute under MAKAUT
2022
INTERNET TECHNOLOGY
IT703C

TIME ALLOTTED: 3Hours

FULL MARKS:70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

Answer any **ten** from the following, choosing the correct alternative of each question: **10×1=10**

- | | Marks | CO No. |
|---|-------|--------|
| 1. (i) Which of the following server is used by TCP | 1 | CO2 |
| a) SMTP | | |
| b) TFTP | | |
| c) DHCP | | |
| d) All of these | | |
| (ii) Which of the following private IP address | 1 | CO2 |
| a) 12.0.0.1 | | |
| b) 168.10.23.56 | | |
| c) 172.23.20.10 | | |
| d) 192.68.24.43 | | |
| (iii) The size of an IP address in IPv6 is _____ | 1 | CO2 |
| a) 4 bytes | | |
| b) 128 bytes | | |
| c) 8 bytes | | |
| d) 16 bytes | | |
| (iv) What is the default subnet mask for a class C network? | 1 | CO5 |
| a) 127.0.0.1 | | |
| b) 255.0.0.0 | | |
| c) 255.255.0.0 | | |
| d) 255.255.255.0 | | |
| (v) A program that is used to view websites is called a | 1 | CO3 |
| a) Browser | | |
| b) Web viewer | | |
| c) Spreadsheet | | |
| d) Word processor | | |

- | | | |
|---|---|-----|
| (vi) Which of the following is intra domain routing protocol? | 1 | CO1 |
| a) RIP | | |
| b) OSPF | | |
| c) BGP | | |
| d) None of these | | |
| (vii) The length of IP address is | 1 | CO3 |
| a) 16 bits | | |
| b) 32 bits | | |
| c) 8 bits | | |
| d) None of these | | |
| (viii) Which of the following is not IPv6 address? | 1 | CO4 |
| a) Any cast | | |
| b) Multicast | | |
| c) Unicast | | |
| d) Broadcast | | |
| (ix) What is the term for unsolicited Email? | 1 | CO5 |
| a) Spam | | |
| b) Backbone | | |
| c) Usenet | | |
| d) News group | | |
| (x) An XML Parser is used to The contents of an XML document | 1 | CO3 |
| a) display | | |
| b) read & interpret | | |
| c) read but not interpret | | |
| d) none of these | | |
| (xi) Loop back address | 1 | CO5 |
| a) 127.0.0.1 | | |
| b) 128.0.0.1 | | |
| c) 127.1.1.0 | | |
| d) 255.255.255.255 | | |
| (xii) In 1990s, the internetworking of which three networks resulted into Internet? | 1 | CO4 |
| a) WWW, GPS and other private networks | | |
| b) ARPANET, NSFnet and other public networks | | |
| c) ARPANET, NSFnet and other private networks | | |
| d) ARPANET, GPS and NSFnet | | |

GROUP – B

Answer any three questions

(Answer any *three* of the following) 3 x 5 = 15

- | | Marks | CO No |
|---|--------------|--------------|
| 2. a) Explain the internet Domain and Domain Name System. | 3 | CO3 |
| b) What do you mean by proxy servers? | 2 | CO2 |

3.	What is Firewalls & SSL	5	CO4
4.	What is Table driven IP routing?	5	CO2
5.	Define Mail Server. What are the roles of Mail Transfer Agent (MTA), Mail Delivery Agent (MDA), and Mail User Agent (MUA) in email System?	5	CO3
6.a)	What are the Routing Information Protocol (RIP)	2	CO1
b)	Explain Bootstrap protocol (BOOTP).	3	CO2

GROUP – C

Answer any three questions

Answer any *three* from the following: 3×15=45

		Marks	CO No
7.a)	Discuss an effective communication between a server and a client. OSI vs TCP/IP?	8	CO2
b)	Why NAT is Required?	3	CO3
c)	Difference between Internet, Intranet and Extranet.	4	CO1
8.a)	What are differences between UDP and TCP? Describe different types of nags (control hits) that appear in TCP header.	6	CO2
b)	Difference between BOOTP and DHCP.	5	CO3
c)	What are the main services provided by PGP protocol? How those consume in mail application?	4	CO4
9.a)	What is Web Form Handling?	2	CO2
b)	What is SSL implementation	4	CO4
c)	What is Transport Gateways and subnet addressing?	9	CO3
10.a)	Describe briefly characteristics of the ASP.Net framework.	4	CO4
b)	What are the advantages and disadvantages of Exterior Gateway Protocol (EGP)?	4	CO3
c)	Define Mail Server. What are the roles of Mail Transfer Agent (MTA), Mail Delivery Agent (MDA), and Mail User Agent (MUA) in email System?	5	CO4
d)	What are the features of IPv6	2	CO2
11.	Write down short notes on any three of the followings:	3x5=15	
a)	TELNET	5	CO2
b)	PGP	5	CO3
c)	IMAP4	5	CO2
d)	Switch	5	CO3
e)	Router	5	CO2