(FOR THE CANDIDATES ADMITTED

DURING THE ACADEMIC YEAR 2023   ONLY)   REG.NO.

23PCS2E1

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : MAY 2024

MSC.COMPUTER SCIENCE(SF)   MAXIMUM MARKS: 75

SEMESTER-II   TIME : 3 HOURS

23PCS2E1-ADVANCED NETWORKS

SECTION – A   (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

(K1)

1. _____ spans the largest distance among the category of computer networks.
   a) LAN
   b)MAN
   c)WAN
   d)Ethernet

2. The size of an IP address in IPv6 is _____
   a) 4bytes
   b) 128bits
   c) 8bytes
   d) 100bits

3. During error reporting, ICMP always reports error messages to _____
   a) Destination
   b) Source
   c) Next router
   d) Previous router

4. _____is the Internet's postal service.
   a) TCP/IP
   b) SMTP
   c) Border Gateway Protocol
   d) Telnet

5. Which of the following TCP port is used by SMPT.
   a) 22
   b) 23
   c) 21
   d) 25

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES   (K2)

6. Define Protocol Layer.

7. What is ARP?

8. What is UDP.

9. Define MPLS.

10. What is NDP?

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SECTION – B   (5 X 5 = 25 MARKS)
ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.(K3)

11.   a) Distinguish between WAN and LAN.
                 (OR)
           b) Describe the Ethernet.

12.   a) Examine the ARP Protocol Format.
              (OR)
           b) Summarize the Internet Architecture And Philosophy.

13.   a) Describe the IP Routing Algorithm.
                         (OR)
           b) Explain the User Datagram Protocol.

14.   a) Describe the TCP Layering.
                 (OR)
           b) Summarize the Sliding Window paradigm.

15.   a) Explain the Network Visualization.
                 (OR)
           b) Describe the Simple Mail Transfer Protocol.

<u>SECTION – C</u>   (5 X 8 = 40 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.(K4 OR K5)

16.   a) Discuss the TCP/IP 5-Layer Reference Model.
                 (OR)
           b) Examine the Internetworking Concept and Architectural Model**.**

17.   a) Summarize the weaknesses in Internet Addressing.
                 (OR)
           b) Compare the IPV4 and   IPV6.

18.   a) Discuss the ICMP Message Delivery and Format .
               (**OR**)
           b) Summarize the UDP Encapsulation And Protocol Layering.

19.   a) Examine the TCP segment format and checksum**.**
                 (OR)
           b) Discuss the Characteristics of BGP.

20.   a) Justify the DHCP Message Format.
              (OR)
           b) Summarize the POP and IMAP.

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