

(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR
2018 ONLY)

(NO.OF PAGES: 2)

18 PMC 425

REG.No.

NGM COLLEGE (AUTONOMOUS) : POLLACHI

END – OF – SEMESTER EXAMINATIONS : JUNE - 2021

M.C.A.

MAXIMUM MARKS: 75

IV - SEMESTER

TIME: 3 HOURS

COMPUTER NETWORKS

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

MULTIPLE CHOICE QUESTIONS.

1. The physical layer translates logical communication requests from the _____ into hardware specific operations? K1
a) Data link layer b) network layer c) transport layer d) application layer
2. Which sub layer of the data link layer performs data link functions that depend upon the type of medium? K1
a) logical link control sub layer b) media access control sub layer
c) network interface control sub layer d) none of the mentioned
3. The network layer protocol of internet is _____. K1
a) Ethernet b) Internet protocol c) Hypertext transfer protocol
d) None of the mentioned
4. Transport layer protocols deals with _____. K1
a) application to application communication b) process to process communication
c) node to node communication d) none of the mentioned
5. The packet of information at the application layer is called _____. K1
a) Packet b) Message c) Segment d) Frame

SHORT ANSWERS.

6. List the Layers of OSI . K1
7. What is protocol? K1
8. Define Routing . K1
9. .What are the two types of protocols used in transport layer? K1
10. What is DNS? K1

SECTION-B

(5X5=25Marks)

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

11. a) Explain TCP/IP Model. K3

(OR)

b) Explain the importance of fibre Optic Networks. K3

12. a) Write a note on Data link layer design issues. K3

(OR)

b) Write a brief on finite state machine models for protocol verification with example. K3

13. a) Explain Routing Algorithm with an example. K3

(OR)

b) Explain a working of the Network layer protocols with a Diagram. K3

14. a) Discuss TCP and UDP protocol. K3

(OR)

b) What are the different Transport Layer Protocols? K3

15. a) Write a short note on the Following Protocols: K3

DNS and SMTP

(OR)

b) What is Audio Compression? Why is it required? Explain. K3

SECTION-C

(4X10=40Marks)

ANSWER THE FOUR OUT OF SIX QUESTIONS

(16th QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS FROM Qn. No :17 to 21)

16. With a neat sketch and explain the architecture of an OSI seven layer model. K4

17. Write a detailed note on the role of Computer Networks in the context of internet. K4

18. Explain the various methods of Error detection and Correction methods. K4

19. Explain the Following K4

i) Optimality principle with respect to shortest path algorithm?

ii) Distance vector machine.

20. Explain the following protocols in detail K4

i) TCP protocol

ii) UDP protocol

21. What is Video Compression? Explain its importance with examples.

K4

M7/-
