BCA–15

June – Examination 2024

BCA (Part III) Examination

FUNDAMENTALS OF COMPUTER NETWORKS

Paper : BCA–15

Time : 3 Hours]   [*Maximum Marks : 70*

Note :– The question paper is divided into three Sections A, B and C. Write answers as per the given instructions.

Section–A   **7×2=14**

(Very Short Answer Type Questions)

Note :– Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to **30** words. Each question carries 2 marks.

1. (i) What do you mean by duplex communication ?

(ii) Unit for bandwidth capacity is ....

(iii) .... model suggests .... layers in a network protocol suite.

(iv) Name various network topologies.

(v) .... is a network layer protocol.

(vi) Name any *three* routing algorithms.

(vii) What do we call the physical address of a network device ?

Section–B   4×7=28

(Short Answer Type Questions)

Note :– Answer any *four* questions. Each answer should not exceed **200** words. Each question carries 7 marks.

2. Discuss the differences between LAN and WAN.

3. What do you mean by channel utilization ?

4. Discuss the responsibilities of data link layer.

5. Compare a router, a switch and a gateway.

6. Write a short note on 'History of Internet'.

7. What do you mean by flow control ?

8. Describe the responsibilities of session layer and presentation layer.

9. What do you mean by network security ?

Section–C   2×14=28

(Long Answer Type Questions)

Note :– Answer any *two* questions. You have to delimit your each answer maximum up to **500** words. Each question carries 14 marks.

10. Discuss the transport control protocol. What are its responsibilities ? What is a TCP header ?

11. What do you mean by IP classes ?

12. Explain the following :

    (a) Transmission impairments

    (b) Transmission media

13. Differentiate between the following :

    (a) Firewall and DNS server

    (b) HTTP and SSH