

18023

B.C.A. Examination, Dec.-2024

Computer Networks

(BCA-503)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt questions from **all** sections
as per instructions.

Section-A

(Very Short Answer Type Questions)

Note : Attempt **all** questions. $3 \times 5 = 15$

1. What is the need of Computer Network? 3
2. Define HDLC. 3
3. Explain the concept of Piggybacking. 3

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4. Compare datagram approach & virtual circuit approach. 3
5. Describe how SMTP protocol is used in E-Mail applications. 3

Section-B

(Short Answer Type Questions)

Note : Attempt any **two** questions.

$7.5 \times 2 = 15$

6. Discuss the functions of transport, Presentation & Application layer. 7.5
7. Explain the switching methods in Computer Network. 7.5
8. Explain in brief. 7.5
 - (a) Guided media
 - (b) Transmission mode

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Section-C

(Long Answer Type Questions)

Note : Attempt any **three** questions.

15×3=45

9. What are the layers of the ISO/OSI protocol stack? Briefly list out their functions. 15
10. Explain in detail about the error & Flow control mechanisms employed at data link layer. <https://www.validcollege.com> 15
11. (a) Explain the Shannon capacity with Examples. 7
- (b) What is CSMA? List the protocols used with CSMA. 8
12. (a) Explain ISDN Architecture and its Services. 5
- (b) Describe the congestion control Algorithms. 10

13. Describe any **three** :

15

- (a) Line configuration
- (b) Modems
- (c) Internet working
- (d) SSL
- (e) Distortion vs Noise

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P.T.O.

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