

D
(20221)
BCA.-V Sem.

(Printed Pages 4)
Roll No.

18023

B.C.A. Examination, Dec.-2020

Computer Networks

(BCA-503)

Time : Three Hours *[Maximum Marks : 75]*

Note : Attempt questions from all Sections
as per instructions.

Section-A

(Very Short Answer Questions)

Note : Answer all the **five** questions. Each
question carries **3** marks. Very short
answer is required. $3 \times 5 = 15$

1. Enlist the components of data communication.
2. Explain attenuation in a signal.

3. Four channels, each with a 100-KHz bandwidth, are to be multiplexed together, what is the minimum bandwidth of the link if there is a need for a guard band of 10 KHz between the channels to prevent interference?
4. Differentiate gateways & routers.
5. What is connection-less service provided by the transport layer?

Section-B

(Short Answer Questions)

Note : Attempt any **two** questions out of
the following **three** questions. Each
question carries **7½** marks. Short
answer is required. $7\frac{1}{2} \times 2 = 15$

6. Explain any **one** of the following:-
 - (a) Ring & star topology.
 - (b) Transmission modes.

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7. Discuss point-to-point protocol (PPP).
8. Explain the functions of presentation layer.

13. How DTE-DCE interface works? Also discuss the essence of modems. 10+5

Section-C

(Detailed Answer Questions)

Note : Attempt any **three** questions out of the following **five** questions. Each question carries **15** marks. Answer is required in detail. $15 \times 3 = 45$

9. Explain the distance vector routing algorithm with an example.
10. Discuss the different guided medias with the uses.
11. How circuit switching works in a network, explain in detail.
12. Discuss different protocols at application layers.