

No. of Printed Pages : 03

Roll No.

E-213

B.C.A. EXAMINATION, Dec. 2018

(Fifth Semester)

(B. Scheme) (Main & Re-appear)

(BCA)

BCA305B

DATA COMMUNICATION AND NETWORKS

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

(3-12/6) M-E-213

P.T.O.

Unit I

1. Differentiate between : $7\frac{1}{2} \times 2 = 15$
 - (a) Simple, Half duplex and Full Duplex
 - (b) Guided and Wireless media.
2. Name and explain the following used in telephone networks : $7\frac{1}{2} \times 2 = 15$
 - (a) Type of multiplexing
 - (b) Type of Switching.

Unit II

3. Explain X.25 networks. What are PADs and why are they needed in X.25 ? **15**
4. (a) Name and explain the layer of OSI reference model which deals with routing. $7\frac{1}{2}$
 - (b) List and explain the service categories of the ATM protocol layer. $7\frac{1}{2}$

M-E-213

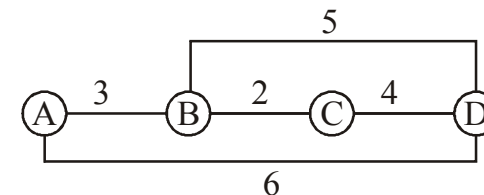
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Unit III

5. (a) Compare and contrast Flow Control and Error Control. $7\frac{1}{2}$
 - (b) Define CRC. Where and how is it used ? Also explain why there is no need for CRC in the simplex protocol. $7\frac{1}{2}$
6. Explain CSMA/CD medium access sublayer protocol in detail. **15**

Unit IV

7. (a) Draw comparison between Unicast, Multicast and Broadcast routing. $7\frac{1}{2}$
 - (b) How does load shedding helps in congestion control ? $7\frac{1}{2}$
8. Define routing and explain the working of Distance Vector Routing algorithm with the help of an example given below : **15**



A : Source Node D : Destination Node

(3-12/7) M-E-213

3

250