"प्रश्न–पत्र पर क्रमांक (रोल नम्बर) के अतिरिक्त कुछ भी न लिखे, अन्यथा इसे अनुचित साधनों का प्रयोग माना जायेगा तथा नियमों के अनुसार कार्यवाही की जायेगी।"

"Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules."

Roll No. .....

B.C.A. (III)

1733 **Compt. Netw.**

B.C.A. (PART - III) EXAMINATION - 2020

Paper - III

BCA-303 : COMPUTER NETWORKS

Time - Three Hours

Maximum Marks - 80

Note:- (1) Question No.1is compulsory. Attempt any FOUR questions from the remaining questions .

(2) All questions carry equal marks .

नोटः– (1) प्रश्न संख्या एक अनिवार्य है। शेष प्रश्नों में से किन्हीं चार को हल कीजिये।

(2) सभी प्रश्नों के अंक समान हैं।

1. (a) Define half duplex & duplex communication.

(b) What is baud rate ?

(c) Explain CDMA.

(d) Differentiate between Broadcast, Multicast & Unicast.

(e) Write the TCP/IP protocol stack.

(f) What is Network ? Define types of network.

(g) What is CRC?

(h) Differentiate between FDM & TDM.

2. (a) Compare OSI & TCP/IP model? Discuss different layer's & protocol briefly.

(b) Discuss 4 diff Topologies in details.

3. (a) What is Network ? Explain it's type and advantages & disadvantages.

(b) Differentiate between circuit switching & packet switching with example.

4. (a) Explain distance vector & link state routing explain with example.

(b) Are the flow control & error control mechanism handled at the data layer? If yes define the techniques which it can be handled explain with proper reason.

5. (a) Define repeater's bridge, gateways & routers.

(b) Explain wire & wireless transmission media.

6. What is multiplexing & De-multiplexing ? Explain in detail FDM , TDM & WDM .

7. (a) Explain error in data transmission ? Explain Haming code method with example .

   (b) Different between Broadband & Baseband ?

8. (a) Define LAN Access Techniques ALOHA, Token Ring & CSMA in detail .

   (b) What is sliding window protocol ? For what purpose this protocol is used ?

9. Write short notes :

   (a) IBM SNA Architecture

   (b) Network Security

   (c) IEEE 802.4 & IEEE 802.5

   (d) Synchronous & Asynchronous transmission .