

CDCE
BACHELOR OF COMPUTER APPLICATIONS
B.C.A. Sem-IV : WINTER :- 2021
SUBJECT: DATA COMMUNICATION & NETWORK

Day : Wednesday
Date 16-02-2022

W-5334-2021

Time : 02:00 PM-05:00 PM
Max. Marks: 80

N.B.:

- 1) Attempt any **FIVE** questions from Section –I and any **TWO** questions from Section –II.
- 2) Figures to the right indicate **FULL** marks
- 3) Answers to both the sections should be written in **SAME** answer book.

SECTION-I

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|------------|---|-------------|
| Q.1 | What is OSI model? Explain each layer in brief. | (10) |
| Q.2 | Explain route discovery protocol with example. | (10) |
| Q.3 | Describe IEEE 802.2 standards. | (10) |
| Q.4 | What is IP address? Explain structure of IP address in different classes of network with example. | (10) |
| Q.5 | What is Token passing? Explain Token bus with neat diagram. | (10) |
| Q.6 | What is the purpose of polling / selection protocol? Explain HDLC protocol frame format. | (10) |
| Q.7 | Write short notes on any TWO of the following: | (10) |
| | a) Digital Signal | |
| | b) Major features of IP | |
| | c) SDLC | |

SECTION-II

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|-------------|--|-------------|
| Q.8 | What is switching? Explain different switching techniques with neat diagram. | (15) |
| Q.9 | A Global marketing company wants to set up network for 30 computer machines, which type of network topologies will you prefer? Why? Draw a network diagram for the same. | (15) |
| Q.10 | Differentiate between :
i) Connection oriented services and connection less services
ii) Asynchronous transmission and synchronous transmission | (15) |

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