

BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)

B.C.A. Sem-IV : : SUMMER - 2022

SUBJECT : COMPUTER NETWORKS

Day : Tuesday
Date : 24-05-2022

S-18777-2022

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N. B. :

- 1) **Q. No. 4 is COMPULSORY.**
- 2) Answer ANY **TWO** questions from Q. 1, 2, 3 in Section – I.
- 3) Answer ANY **TWO** questions from Q. 5, 6, 7 in– II.
- 4) Figures to the right indicate **FULL** marks.
- 5) Answers to both the sections should be written in **SAME** answer book.
- 6) Draw neat and labelled diagrams **WHEREVER** necessary.

SECTION – I

Q. 1 Answer the following: (12)

- a) Explain various network topologies with their merits and demerits in brief.
- b) Discuss the concept of FDM in detail.

Q. 2 Answer the following: (12)

- a) Explain the term:
 - i) Static routing
 - ii) Dynamic routing
 - iii) Direct routing
- b) What is wireless sensor networks? Give the application of it.

Q. 3 Answer the following: (12)

- a) Explain in brief about DNS.
- b) With an example, explain the link state routing protocol.

Q. 4 Write short notes on ANY **THREE** of following: (12)

- a) IP v6
- b) Telnet
- c) ISDN
- d) Bandwidth
- e) Extranet

SECTION – II

Q. 5 As network administrator, you are assigned task of designing local area network for small firm having 150 computers. Give the minimum requirement to build this network. Which topology you will prefer? Why? (12)

Q. 6 Describe OSI network architecture model in detail. (12)

Q. 7 Find the class of each IP address given below. Give suitable explanation for each answer. (12)

- i) 114.34.12.8
- ii) 127.126.125.8
- iii) 242.34.54.15
- iv) 232.34.2.1

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