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MASTER OF COMPUTER APPLICATIONS (CBCS – 2022 COURSE)
M.C.A. Sem – I : WINTER- 2022
SUBJECT : COMPUTER NETWORKS

Day : Thursday

Time : 02:00 PM-05:00 PM

Date : 1/12/2022

W-25933-2022

Max. Marks : 100

N. B. :

- 1) Attempt **ANY FIVE** questions from Section – I. Each question carries 12 Marks.
- 2) Attempt **ANY TWO** questions from Section – II. Each question carries 20 Marks.
- 3) Figures to the right indicate **FULL** marks.

SECTION – I

- Q. 1** Define network topologies. Explain different types of network topologies in detail. (12)
- Q. 2** What are wireless sensor networks? Explain its applications. (12)
- Q. 3** What is the functionality of application layer? Explain at least two protocols used in application layer. (12)
- Q. 4** What is switching? Explain message switching and packet switching. (12)
- Q. 5** What is synchronous and asynchronous transmission? Differentiate between synchronous and asynchronous transmission. (12)
- Q. 6** Write short notes on **ANY TWO** of the following: (12)
- a) WWW
 - b) Multiplexing
 - c) IPV6

SECTION – II

- Q. 7** Find the class of each IP address given below; give the suitable explanation for your answer: (20)
- i) 227.12. 14. 87
 - ii) 193. 14. 56. 22
 - iii) 14. 23. 720. 8
 - iv) 252. 5. 15. 111
 - v) 134. 11. 78. 56
 - vi) 224. 220. 24. 6
- Q. 8** What is MANET? What are the applications of MANETs? Explain destination sequenced distance vector protocol for MANET. (20)
- Q. 9** Design network layout for your college. Suggest different topologies for your college network with their advantages and disadvantages. (20)

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