

**CDOE**  
**MASTER OF COMPUTER APPLICATIONS (CBCS - 2020 COURSE)**  
**M.C.A. Sem-I : WINTER :- 2021**  
**SUBJECT: COMPUTER NETWORKS**

**Day : Tuesday**  
**Date 8/2/2022**

**W-23049-2021**

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

**N.B.**

- 1) Q.No. 4 from Section I 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 Section – II.
- 4) All questions carry **EQUAL** marks.
- 5) Answer to both the sections should be written in **SAME** answer book.
- 6) draw a labeled diagram **WHEREVER** necessary.

**SECTION – I**

**Q.1** Answer the following : **(6 marks x 2 = 12 marks )**

- a) Explain different Network Topologies with the help of diagrams.
- b) Describe in detail different Network protocols.

**Q.2** Answer the following : **(6 marks x 2 = 12 marks )**

- a) Explain in detail TCP / IP reference model.
- b) Explain Unguided Media and its types in detail.

**Q.3** Answer the following : **(6 marks x 2 = 12 marks )**

- a) Explain in brief different Switching techniques.
- b) What are the benefits of Link State Routing?

**Q.4** Write short notes on **ANY THREE** of the following : **(4 marks x 3 = 12 marks )**

- a) TCP / UDP
- b) Ethernet
- c) POP/IMAP
- d) IPv6
- e) Wireless LANs
- f) Analog and Digital Signal

**SECTION – II**

**Q.5** Answer the following : **(6 marks x 2 = 12 marks )**

- a) What is Encryption? Explain the importance of Encryption in Data Security.
- b) Explain in detail Wireless Sensor Networks.

**Q.6** Answer the following : **(6 marks x 2 = 12 marks )**

- a) Explain the following Application Layer Protocols
  - i) FTP
  - ii) SMTP
  - iii) MIME
- b) Which are different Website Developments formats for Business Applications?

**Q.7** Answer the following : **(6 marks x 2 = 12 marks )**

- a) Explain the concept of Submitting with appropriate example.
- b) Explain the need of Mobile IP.

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