MASTER OF COMPUTER APPLICATIONS (CBCS - 2020 COURSE)
M.C.A. Sem-I : : SUMMER - 2022
SUBJECT : COMPUTER NETWORKS

Day : Thursday
Date : 26-05-2022

S-22722-2022

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 design issues of different layers in Network Architecture.
 b) What is Computer Network? Explain in brief classification of Computer Network.

Q.2 Answer the following : **(6 marks x 2 = 12 marks)**
 a) Compare OSI model with TCP/IP reference model.
 b) Explain Guided Media and its type in detail.

Q.3 Answer the following : **(6 marks x 2 = 12 marks)**
 a) Compare Static and Dynamic Routing algorithm.
 b) Explain the principle of Congestion Control and also explain Prevention Policies.

Q.4 Write short notes on **ANY THREE** of the following : **(4 marks x 3 = 12 marks)**
 a) RPC
 b) Mobile-IP
 c) Data Encryption
 d) IP_v6
 e) Bluetooth
 f) Distance Vector Routing Algorithm

SECTION – II

Q.5 Answer the following : **(6 marks x 2 = 12 marks)**
 a) Suggest Network layout and design for XYZ company whose business is spread across the world.
 b) Compare Mobile Ad hoc Networks with Wireless Sensor Networks.

Q.6 Answer the following : **(6 marks x 2 = 12 marks)**
 a) Explain different Generations of Mobile Telephone System.
 b) A company with IP address 236.15.15.15 expands its Class C network with Subnet Mask 255.255.255.240. Find the different Subnet IDs for given Subnet Mask.

Q.7 Answer the following : **(6 marks x 2 = 12 marks)**
 a) Explain Domain Name Service in detail.
 b) What is Switching? Compare Circuit Switching with Packet Switching.

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