Roll No. ☐☐☐☐☐☐☐☐☐☐☐   **Total No. of Pages : 02**

Total No. of Questions : 09

BMCI (2014 & Onwards)   (Sem.–3)
COMPUTER NETWORKS
Subject Code : BSBC-603
M.Code : 72586

Time : 3 Hrs.   **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. **Answer briefly :**

   a) Differentiate LAN and WAN.

   b) What is leased line? What is its use?

   c) Write various merits and demerits of computer network.

   d) What is digital and analog transmission?

   e) What are various switching techniques?

   f) How Bluetooth works?

   g) List various functions of physical layer.

   h) What is use of transport layer in OSI model?

   i) What is routing algorithm? What is its need?

   j) Write short note on CSMA/CD.

SECTION-B

2.   What are various modes of data communication? Explain.

3.   Write note on microwave and infrared transmission.

4.   What is OSI model? Explain the role of data link and networking layer.

5.   Write note on IEEE 802.3 and IEEE 802.4.

6.   Differentiate coaxial and optical fibre transmission medias.

SECTION-C

7.   Define network topology. Draw and explain the working of various network topologies.

8.   What is multiplexing? What is its need? Differentiate FDM, TDM and CDMA.

9.   Explain the following :

    a) Congestion control policies

    b) Internetworking.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.