

I.M.C.A. SEM-IV (2014 COURSE) CBCS : SUMMER - 2018

SUBJECT : COMPUTER NETWORKS - I

Day : **Friday** Time : **10.00 AM TO 01.00 PM**
Date : **27/04/2018** **S-2018-1760** Max. Marks : 100

N. B. :

- 1) Attempt **ANY FOUR** questions from Section – **I** and attempt **ANY TWO** questions from Section – **II**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION - I

- Q. 1** Explain different switching techniques in detail. (15)
- Q. 2** Explain different modes of communication in detail. (15)
- Q. 3** Differentiate between the following: (15)
- a) Packet Switching v/s Circuit Switching
 - b) Switches v/s Bridge
- Q. 4** Explain Bluetooth architecture in detail with its applications. (15)
- Q. 5** a) Explain IEEE 802.4 (Token Bus) standard in detail. (07)
b) Explain IEEE 802.5 (Token Ring) standard in detail. (08)
- Q. 6** What are different types of transmission media? Explain twisted pair cable and coaxial cable in detail. (15)
- Q. 7** Write short notes on **ANY THREE** of the following: (15)
- a) Network Interface Card (NIC)
 - b) Internet Service Provider (ISP)
 - c) E-mail
 - d) Satellite Communication

SECTION - II

- Q. 8** Explain TCP/IP model in detail with appropriate diagram. (20)
- Q. 9** Explain Ethernet types, Ethernet cables and Ethernet topologies in detail. (20)
- Q.10** Design a network layout of a University for different departments. Suggest which topologies and network devices you will prefer for this network. Justify your answer. (20)

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