

B.C.A. SEM-IV (2014 COURSE) CBCS : WINTER - 2017

SUBJECT : COMPUTER NETWORKS - I

Day : **Friday**
Date : **10/11/2017**

W-2017-1614

Time : **10.00 AM TO 01.00 PM**
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** Define computer network. What are advantages of computer networks? List (15)
any five applications of computer networks.
- Q. 2** What are different classes of transmission media? Explain guided media in (15)
detail.
- Q. 3** Explain architecture of wireless LAN [IEEE 802.11] with neat suitable (15)
diagram.
- Q. 4** Differentiate between the following: (15)
- a) Hub v/s Switch
 - b) LAN v/s WAN
- Q. 5** Explain IEEE (802.3) (Ethernet) standard in detail. (15)
- Q. 6** Explain different network security devices used in connecting networks. (15)
- Q. 7** Write short notes on **ANY THREE** of the following: (15)
- a) Bluetooth
 - b) Network Interface Card (NIC)
 - c) Search Engines
 - d) Internet Information Server (IIS)

SECTION - II

- Q. 8** Explain OSI reference model in detail with appropriate diagram. (20)
- Q. 9** Design a network layout for your college network. Suggest which topologies (20)
and network devices you will prefer for this network. Justify your answer.
- Q.10** a) Explain the concept of Internet and Extranet. (10)
b) Explain various types of Bluetooth. (10)

* * * * *