

Roll No. 

Total No. of Pages : 02

Total No. of Questions : 07

B.Sc.(IT) (2013 &amp; 2014) (Sem.-5)

**COMPUTER NETWORKS**

Subject Code : BS-305

Paper ID : [B0419]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and a student has to attempt any FOUR questions.

**SECTION-A****1. Answer briefly :**

- a) Discuss the role of signaling in data communication.
- b) Compare switches and routers.
- c) What is meant by token bus?
- d) List the role of packets.
- e) Discuss the use of circuit switching.
- f) How Virtual LAN is useful?
- g) Why RARP is required?
- h) Briefly list the benefits of CSMA/CD.
- i) What is the concept of ISDN?
- j) Write a short note on Slotted ALOHA.

**SECTION-B**

Q2. Discuss the features of following topologies :

- a) Bus topology
- b) Tree topology

Q3. What is the role of OSI model? Discuss the role of data link and network layer.

Q4. Discuss the following :

- a) Addressing techniques
- b) Network components

Q5. Compare the following :

- a) Wired and wireless networks.
- b) ARP and RARP.

Q6. Discuss the use of protocols employed by session and transport layer.

Q7. Write short notes on the following :

- a) PPP
- b) IPv4