

Roll No.

Total No. of Pages : 02

Total No. of Questions : 07

B.Sc.(IT) (2015 & Onwards) (Sem.-4)

COMPUTER NETWORKS

Subject Code : BSIT-404

M.Code : 74086

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 **SIX** questions carrying **TEN** marks each and students have to attempt any **FOUR** questions.

SECTION-A

Q1. Answer briefly :

- Compare digital and analog transmission.
- What is meant by De-multiplexing in networking?
- Differentiate MAN and WAN.
- Write the working of TDM.
- What is Frequency spectrum?
- Define PPP protocol.
- What is the purpose of MAC sub Layer?
- Write a short note on congestion control policies.
- Write the function of Blue Tooth.
- Define concept of Internetworking.

SECTION-B

- Q2. What are the different topologies in networks? Write their advantages and disadvantages.
- Q3. a. Discuss in brief Synchronous and Asynchronous modulation in Digital communication.
b. What are communication channels? Write advantages of optical fibre transmission.
- Q4. What do you mean by wireless transmission? Explain the use of Infrared and Bluetooth transmission.
- Q5. a. Compare OSI and TCP/IP model.
b. Compare and contrast message switching and packet switching.
- Q6. a. What are the responsibilities of the data link layer?
b. Explain the process of error detection and recovery in data communication.
- Q7. a. Name different Routing algorithms and write a note on any of one.
b. Explain the IEEE Token Bus and Ring standards used in computer networks.

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.