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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) What is NIC?
- b) What is DHCP?
- c) What is a private IP address?
- d) What are proxy servers and how do they protect computer networks?
- e) What is subnet mask?
- f) What are routers?
- g) What are the layers of the OSI reference model?
- h) Write two disadvantages of twisted pair cables.
- i) What is a MAC address?
- j) What is the role of a transport layer?

## SECTION-B

2. Define the following :

- a) Hub
- b) Switch

3. What is the job of the Network Layer under the OSI reference model?

4. What factors need to be considered before making a choice for the topology?

5. Write to advantages of a computer network.

6. What is a communication channel? Name the type of basic communication channels available.

## SECTION-C

- 7.
  - a) Manisha wants a broadband connection for accessing her mails and staying informed about the latest happenings at her home. Can you suggest two Internet Service Providers of India to be approached for the same?
  - b) If a campus LAN has a wifi connectivity, how can wifi access points be secured?
- 8. Describe the following terms :
  - a) Wifi vs. Bluetooth Technology.
  - b) Congestion Control Algorithms and Policies.
- 9.
  - a) If an Internet Connection of an organization is not found to be working, how will you troubleshoot the fault?
  - b) In a campus LAN, where ideally will be following communication media used:  
Ethernet cable, Fibre Optic, Wifi Connectivity.

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.