Roll No. ...... Total No. of Pages: 02

Total No. of Questions: 07

## BCA (Sem.-4) COMPUTER NETWORKS

Subject Code: BC-401 Paper ID: [B0215]

Time: 3 Hrs. Max. Marks: 60

## **INSTRUCTION TO CANDIDATES:**

- 1. SECTION-A is COMPULSORY.
- 2. Attempt any FOUR questions from SECTION-B.

**SECTION-A**  $(10 \times 2 = 20 \text{ Marks})$ 

l. Write short notes on:

g communications.

- (b) Differentiate between half duplex and full duplex.
- (c) List the features of coaxial cable.
- (d) What is meant by radio transmission?
- (e) Differentiate between circuit switching and packet switching.
- (f) List the layers of OSI model.
- (g) What is the role of CSMA/CD?
- (h) Discuss the features of MAC sub layer.
- (j) What is meant by optimal routing?

**SECTION-B**  $(4 \times 10 = 40 \text{ Marks})$ 

- 2. Discuss the following data communication techniques:-
  - (a) simplex
  - (b) half duplex
  - (c) full duplex

- 3. Discuss the working mechanism of fibre optic and twisted pair transmission media.
- 4. Explain the following types of wireless transmission:
  - (a) Infrared transmission
  - (b) Satellite transmission
- 5. Differentiate the major switching techniques used for communication.
- 6. Describe the features of following topologies:
  - (a) Ring topology
  - (b) Star topology
- 7. Discuss the role of following layers of OSI model:
  - (a) Data link layer