| Roll No | |
|---------|--|
|---------|--|

Total No. of Questions: 13] [Total No. of Pages: 02

Paper ID [A0216]

(Please fill this Paper ID in OMR Sheet)

BCA (401) (S05) (O) (Sem. - 4th) COMPUTER NETWORKS

Time: 03 Hours Maximum Marks: 75

Instruction to Candidates:

- 1) Section A is Compulsory.
- 2) Attempt any Nine questions from Section B.

Section -A

 $(15 \times 2 = 30)$

Q1)

- a) What are the important features of a computer network?
- b) What do you mean by half-duplex transmission mode?
- c) What is cladding.
- d) What are the types of Transmission media?
- e) What do you mean by leased line?
- f) What are the important topologies for networks?
- g) Why is coaxial cable superior to twisted-pair cable?
- h) What are the important functions of Data Link Layer?
- i) Briefly explain the CSMA/CD protocol.
- j) Write short notes on: Repeaters and Hubs.
- k) Differentiate between digital and analog communication.
- l) What do you mean by PPP?
- m) What are standards?
- n) What do you mean by serial communication?
- o) Discuss the various types of wireless transmission.

Section - B

 $(9 \times 5 = 45)$

- **Q2)** What are the various reasons for having network standards? Explain.
- **Q3)** What is layered architecture? What is the need for layered architecture?
- **Q4)** What are the various layers present in the OSI Model?
- **Q5)** What are switches? How they are different from hubs?
- **Q6)** Explain the concept of multiplexing.
- *Q7)* What do you mean by broadband?
- **Q8)** Differentiate between packet switching and circuit switching.
- **Q9)** Mention the advantages of optical fiber transmission media.
- Q10) Describe the services provided by the session's layer and discuss.
- **Q11)** What is a Bridge? When is it used?
- Q12) Write a short note on IEEE standards.
- **Q13)** Write short notes on HDLC.

