

Time: 3 Hours

Total marks:80

N.B.

1) Question No. 1 is compulsory

2) Attempt any **three** from the remaining **five** questions

- Q1. Write Short notes on the following: (**Any four**)
- a. Transmission Impairments (5)
 - b. FTP (5)
 - c. Types of Networks. (5)
 - d. Bridges (5)
 - e. Intranet and Extranet (5)
 - f. POP3 (5)
- Q2. a. Explain the working of SMTP in detail. (10)
- b. Discuss TCP/IP architecture in detail. Compare and contrast it with OSI model. (10)
- Q3. a. Explain how the DNS works and list the services provided by DNS. (10)
- b. What is hierarchical routing? Explain the working of OSPF in detail. (10)
- Q4. a. Discuss the classful and classless IP addresses used in the network with suitable example. (10)
- b. Explain the TCP congestion control algorithms in detail. (10)
- Q5. a. What is Error Detection? With example show how CRC is used (10)
- b. Discuss the various wired media used in networks for communication with its advantages and disadvantages. (10)
- Q6. a. Discuss the different layers of ATM Network. (10)
- b. Discuss PPP in detail. (10)
