

M.Sc. (Informatics), Semester-III Examination, 2015
Network Architecture – IT31

Time: 3 hrs.

MM: 75

Answer any five questions.

(Write your Roll No. on the top immediately on receipt of this question paper)

- Q.1. What is TCP/IP protocol stack? How it is different from the OSI reference model? Discuss the role of each layer in this stack. 15
- Q.2. What are networking Protocols? What are the key elements of a protocol? Discuss the criteria necessary for an effective and efficient network? 15
- Q.3 a. What are the key design issues of a computer Network? Define Bandwidth and Latency? 10
- b. What are the different type of networking / internetworking devices? 5
- Q.4 What are the types of Transmission media used in a network? What are the different link types used to build a computer network? Discuss the important topologies for networks with suitable illustrations. 15
- Q.5 Discuss ISO-OSI reference model of communication. Explain, role and functionalities of each layer with suitable diagrams. What are network level layers and what are user level layers? 15
- Q.6 Explain the following. 15
- What is a Link?
 - What is a node?
 - What is a gateway or Router?
 - What is point-point link?
 - What is Multiple Access?