

Code: IT5T2

III B.Tech - I Semester – Regular Examinations - November 2015

**COMPUTER NETWORKS
(INFORMATION TECHNOLOGY)**

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

- 1 a) List down the advantages and disadvantages of OSI reference model. Compare them with TCP/IP model. 10 M
- b) Explain the need of layering in network architectures. 4 M
- 2 a) What is e-mail? Discuss about the user agent. 6 M
- b) Write short notes on the following 8 M
 - i) FTP
 - ii) Secure shell
- 3 a) Explain the following with reference to Transport layer. 6 M
 - i) Flow control
 - ii) Buffering
- b) Explain the services provided by the transport layer to the upper layers. 8 M

- 4 a) Explain the following terms. 6 M
i)unicast ii) multicast iii) Broadcast
- b) Explain Distance vector routing protocol and mention its drawbacks. 8 M
- 5 a) Explain in detail the operation of slotted aloha. 6 M
- b) Write short notes on point coordination function (PCF) and distributed coordination function (DCF). 8 M
- 6 a) Explain the causes of transmission impairment 6 M
- b) What is line coding? Explain any 2 polar schemes. 8 M
- 7 a) Explain in detail about loss and lossless compression. 7 M
- b) Explain in detail about security goals. 7 M
- 8 a) Briefly explain about client server paradigm. 4 M
- b) Write a program and explain concurrent approach with TCP. 10 M