

Code: CSCS2T4

**I M.Tech - II Semester - Regular/Supplementary Examinations
JULY 2017**

**COMPUTER NETWORKS
(COMPUTER SCIENCE & ENGINEERING)**

Duration: 3 hours

Max Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) What are the five layers in Internet Protocol Stack?
Specify the principle responsibilities of each Layer. 9 M
- b) Explain the evolution of the Internet. 5 M
2. a) What are the services provided by the Application Layer? 7 M
- b) Specify the general formats of HTTP Request and HTTP Response Messages. 7 M
3. a) Discuss about Connection less Transport Protocol. 9 M
- b) What are the principles of reliable data transfer? 5 M
4. a) Explain Dijkstra's routing Algorithm with an example. 9 M

- b) Write the structure of IP Header format and explain the purpose of each field. 5 M
5. a) Explain CSMA with collision detection and collision avoidance. 9 M
- b) Differentiate between pure ALOHA and slotted ALOHA. 5 M
6. Explain different types of Guided and Unguided media. 14 M
7. a) Write short notes on Lossy compression and Loss less Compression. 7 M
- b) What are different types of real time interactive protocols? Explain in detail. 7 M
8. a) How Security can be achieved in Application Layer, Transport Layer and Network Layer? Explain. 9 M
- b) Discuss about Packet filter firewall and Proxy firewall. 5 M