

TYBSCIT Semester – VI –INTERNET TECHNOLOGY
Question Paper-April-2016(Regular)

1. **Attempt any two of the following.** **10**
- a. Why do you need subnetting in classful addressing? Explain.
 - b. Why do you need to fragment an IP datagram? Explain the fields related to it.
 - c. Explain the concept of IP over ATM.
 - d. Explain the extension headers in IPv6.
2. **Attempt any two of the following.** **10**
- a. Explain packet format of ATMARP.
 - b. List the error reporting message of ICMP. Explain any one of them with the format.
 - c. What is an insufficiency in mobile IP? Explain with a solution.
 - d. How Bellman-Ford algorithm help to find the least cost between two nodes? Explain.
3. **Attempt any two of the following.** **10**
- a. Explain the details of UDP packages.
 - b. What is need of queues in UDP? Explain.
 - c. Explain numbering system use in TCP.
 - d. Explain half-close of TCP.
4. **Attempt any two of the following.** **10**
- a. Explain format of DATA chunk and INIT chunk.
 - b. How do you establish an association in SCTP? Explain.
 - c. Draw and explain DHCP packet format.
 - d. Explain types of records in DNS.
5. **Attempt any two of the following.** **10**
- a. Write a note on NVT.
 - b. Explain in details component of SSH.
 - c. Which are two approaches that FTP client and server uses to communicate with each other?
 - d. Explain persistence and non-persistence connection in HTTP.
6. **Attempt any two of the following.** **10**
- a. Explain the phases of email transfer.
 - b. What are the roles of Message Access Agent? How does POP3 works?
 - c. What are the concepts of MIME? Explain its format.
 - d. How do you compress an audio? Explain.

7. **Attempt *any three* of the following.** 15
- a. Compare IPv4 and IPv6.
 - b. What are types of links in OSPF? Explain each in details.
 - c. What are options available in TCP? Explain each with its packet format.
 - d. Draw and explain DHCP client state transition diagram.
 - e. Describe architectures of WWW.
 - f. How do you download compressed audio/video using a web server and media server? Explain.

