

Roll No

IT-6001 (CBGS)

B.E. VI Semester

Examination, May 2019

Choice Based Grading System (CBGS)

Internet Technology and Network Management

Time : Three Hours

Maximum Marks : 70

- Note: i) Attempt any five questions.
- ii) All questions carry equal marks.

1. a) What is address resolution? Describe ARP and RARP with illustration. 7
- b) What is datagram fragmentation? Why is datagram fragmentation not an issue in IPv6? How is this achieved? 7
2. a) Discuss the issues and solutions related to the interworking of IPv6 and IPv4. 7
- b) TCP transmission has three phases. Explain each in detail. 7
3. Describe the components, functionality and operation of the following with illustrations. 14
 - i) DNS
 - ii) R login
4. a) How does TCP handle the flow control? Explain it with the help of diagram showing the status of sliding window at the different stages. 7

- b) What is subnet mask? Also discuss Role of loop back address. 7
5. a) Discuss functions of Router. 7
- b) Explain range of TCP/IP classes. What are the range of private IP addresses? 7
6. An organization has a class network 200.1.1 and wants to form subnets for four departments A, B, C, D will host as follows. 14

A: 72 Hosts B: 35 Hosts C:22 Hosts D:18 Hosts

 - i) Give a possible arrangement of subnet masks to make this possible.
 - ii) Suggest what the organization might do if department D grows to 34 hosts.
7. Explain in detail about the functionalities of SMTP specify the flow of SMTP commands between the client and the server. 14
8. Write notes on: 14
 - i) HTTP
 - ii) SNMP

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