Total No. of Questions : 8] [*Total No. of Printed Pages : 2*

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

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   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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