Roll No ....

IT-6001-CBGS

B.E. VI Semester

Examination, December 2020

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)   Explain the need and importance of Fragmentation and Reassembling process in IPv4 routing in detail along with diagram.

   b)   What is the need of subnetting. Explain the situation where subnetting justifies. Take a suitable example to explain subnetting find out the probable address also.

2. a)   Discuss the issues and solutions related to the interworking of IPv6 and IPv4.

   b)   TCP transmission has three phases. Explain each in detail.

3. Describe the components, functionality and operation of the following with illustrations.

   i)   DNS

   ii)   R login

4. a)   Explain internet control message protocol with message types, message format and error reporting.

   b)   What is Socket? List down the advantage of using socket interface and explain TCP socket.

5. a) Explain connectionless transport protocol UDP with popular internet applications.
   b) What is the role of DNS in internet? Explain the hierarchy of various domain names.

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.
   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.

8. Write short notes on:
   a) DHCP
   b) SNMP
   c) Policy based management

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