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Roll No ....

IT-6001 (CBGS)

B.E. VI Semester

Examination, May 2018

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.

     iii)   Assume suitable data if missing.

1. a) Explain address resolution protocol packet format? What is ARP cache and why it is used?   7

   b) Describe the address of subnet addressing with suitable example.   7

2. a) What is the purpose of time-to-live in IP datagram header?   7

   b) Consider an IP address in a block is 110.23.120.14/20. Find the number of address the first address and the last address in the block?   7

3. a) Describe the Query messages (echo request and replay and timestamp request and replay) of ICMP protocol? 7

   b) Contrast and compare distance vector routing with link state routing.   7

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4. a) An ICMP message has arrived with the header (in hexadecimal)   7

     05 00 11 12 11 0B 03 02

     What is the type of message? What is code? What is the purpose of message? What is the value of last four bytes? What do the last four bytes signify?

   b) A router using RIP has the routing table as following:

Destination	Cost	Next Router
Net 1	4	B
Net 2	2	C
Net 3	1	F
Net 4	5	G

     Show the RIP response message sent by the router?   7

5. a) What are the properties of reliable delivery system? How these properties are achieved by TCP?   7

   b) Write the various features of UDP protocol.   7

6. a) What is UDP checksum? Explain with example how checksum is calculated at sender and receiver ends?   7

   b) How connection termination is achieved in TCP? Explain.   7

7. a) Explain the use of Domain Name System(DNS) in the internet? Also describe categories of domain.   7

   b) Compare and contrast BOOTP and DHCP.   7

8. Write short notes on: 14

   a) Security management

   b) Fault management

   c) SMTP Vs POP

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