

Roll No

IT-603

B.E. VI Semester

Examination, December 2016

Internet Technology and Network Management

Time : Three Hours

Maximum Marks : 70

Note: i) Answer any five questions.

ii) Each questions carries equal marks.

iii) Assume suitable data if missing.

1. a) Describe the packet format of ARP protocol? Also, give its functions? 7
b) Explain intra and inter domain distance vector routing. 7
2. a) An organization is granted the block 217.16.170.22/16. The organization wants to create 64 subnets? 7
i) Find the subnet mask
ii) Find the number of addresses in each subnet
iii) Find the first and the last address in first subnet
iv) Find the first and the last address in last subnet
b) Explain the header format and different field s of IPv4 Protocol. 7
3. a) What are the limitations of IPv4 protocol? How these can be overcome in IPv6? Also, make a comparison between IPv4 and IP v6. 7
b) Describe the various types of ICMP messages? 7

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4. a) Explain address allocation and configuration with packet format of DHCP Protocol. 7
b) Describe FTP in brief? Also, explain how it is different from HTTP? 7
5. a) Describe the working of OSPF with suitable example. 7
b) Describe the working of RIP with suitable example. 7
6. a) Explain TCP connection establishment and termination process with the help of state transition diagram? 7
b) Explain UDP along with its and Header? How UDP checksum is calculated, explain with example? 7
7. a) Explain address resolution mechanism in DNS? Also, define Resolver? 7
b) Describe two major management components of SNMP? 7
8. a) Explain BOOTP along with its packet format? How it is different from DHCP? 7
b) Make a comparison between POP and IMAP protocols? 7
