

Roll No .....

**IT-603****B.E. VI Semester**

Examination, June 2015

**Internet Technology & Network Management****Time : Three Hours****Maximum Marks : 70**

- Note:** i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.  
 ii) All parts of each questions are to be attempted at one place.  
 iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.  
 iv) Except numericals, Derivation, Design and Drawing etc.

1. a) Define the term encapsulation.  
 b) What is IP routing? How is it performed.  
 c) Compare the individual fields of IPv4 with IPv6 header.  
 d) What is internet working? Discuss the various global addressing schemes and the issues in forwarding the IP.

OR

What is Address Resolution protocol and how does it work?

2. a) Differentiate between static and dynamic routing.  
 b) How can we calculate the route in link state routing.  
 c) Explain why routing is very important in networking explain any one routing algorithm used in network.  
 d) Explain the OSPF routing protocol in detail with example.

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OR

Briefly describe the architecture of Internet Group Management Protocol (IGMP)? Give the packet structure of IGMP.

3. a) What congestion control strategy is adapted in TCP.  
 b) What is the purpose of the sequence number in a TCP packet?  
 c) Discuss user datagram protocol in brief.  
 d) Discuss connection establishment and connection release in TCP and how TCP provides reliability using error control.

OR

Explain briefly:

- i) UDP operations      ii) SCTP services

4. a) What is BOOTP?  
 b) What is the addressing system used by SMTP?  
 c) Discuss how SNMP works.  
 d) Discuss the three domains of the Domain Name space.

OR

What is DHCP? Discuss its packet format and configuration?

5. a) What is fault management?  
 b) Differentiate between preventive maintenance and predictive maintenance.  
 c) Define Accounting Management? Discuss its role with in a corporation.  
 d) Discuss various types of external and internal security threats in security management.

OR

Write short notes:

- i) Performance management  
 ii) Policy Based management  
 iii) Report management

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