

Roll No .....

**MSE-301(A)/MCSE/MCTA-301(B)/  
MCIT-301(C)**

**M.E./M.Tech., III Semester**

Examination, December 2017

**Web Engineering**

Time : Three Hours

Maximum Marks : 70

- Note : i) Attempt any five questions.  
ii) All questions carry equal marks.

1. a) A class B network on the internet has a subnet mask of 255.255.240.0. What is the maximum number of host per subnet?  
b) What is loop back address? Must the loop back address be 127.0.0.1?
2. a) What is ARP? How is it different from RARP? Which one will be used in case of diskless environment, also explain ARP cache.  
b) What is MTU? How do IP routers handle the problem of networks with heterogeneous MTUs?
3. a) A company is granted the site address 190.56.0.0. The company needs 1000 subnets. Design the subnets.  
b) Describe the situations in which ARP should be used.

4. a) What do you understand by IP routing? Explain any two dynamic routing protocols.  
b) What is RIP? Discuss its operation and problem associated with it.
5. Give the format of UDP datagram and explain the semantics of every field. How is the checksum in the header computed explain with example.
6. a) What are the services provided by TCP?  
b) Which ports are used by BOOTP? Explain.
7. a) What is silly window syndrome? Explain flow control for TCP.  
b) Explain TELNET, FTP protocol.
8. Write a short notes (any three):  
i) TCP/IP applications  
ii) TFTP  
iii) ICMP  
iv) OSPF

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