

Roll No .....

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

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

Examination, June 2016

**Web Engineering (Elective-I)**

*Time : Three Hours*

*Maximum Marks : 70*

**Note:** There are Eight questions in this paper. Solve any five questions. (all parts are to be solved)

1. a) Discuss the idea of a port. What is the difference between a Port and a Socket? 7  
b) Describe : 2+5=7  
i) The three parts of an IP address,  
ii) Various fields in the IP datagram header.
2. a) What is meant by MTU? Explain the concept of fragmentation and reassembly of IP packets. 7  
b) How does the Address Resolution Protocol (ARP) work? What is ARP Cache? 7
3. a) i) What is RARP? How does it work? 4  
ii) What are the characteristics of BOOTP? 3  
b) Write notes on the following routing protocols. 7  
i) OSPF  
ii) BGP

4. a) How does the 'three-way handshake' for creating a TCP connection work? What factors make TCP reliable? 7  
b) Which of the two protocols TCP and UDP, can be used for transfer of critical data? Why? 7
5. a) Which is the underlying protocol of 'ping' command? What is the purpose of 'ping'? How does ping work? 7  
b) Which protocol is used to transfer files between two computers? How does it work? 7
6. a) Define the terms : 7  
i) Web site ii) Web page  
iii) Web servers iv) URL  
v) Home page vi) Firewall  
vii) Web browser  
b) What is the purpose of HTTP? Discuss any three HTTP commands. Why is HTTP called as a stateless protocol? Why is it so? 7
7. a) Explain the significance of a DNS server. How does it work? 7  
b) What is meant by remote login? Which protocol is used for remote login? Explain its working. 7
8. a) How SMTP and POP protocols are used for transmission and retrieval of email messages? 7  
b) What is a 'Proxy server'? Write its functions. 7

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