

Roll No .....

**MCSE/MSE-105**  
**M.E./M.Tech. I Semester**  
Examination, December 2016  
**Advanced Computer Networking**

*Time : Three Hours*

*Maximum Marks : 70*

*Note : Attempt any five questions. All questions carry equal marks.*

1. a) Explain the concept of subnet addressing. Illustrate your answer with the help of an example. 7  
b) Explain briefly the functions of each layer of ISO-OSI model with the help of diagram. 7
2. a) What is socket? How socket interface perform data transfer in TCP and UDP? 7  
b) Explain why token bus is suited for real time application in comparison to CSMA/CD with the help of suitable examples. 7
3. a) Explain the following: 7  
i) VOIP  
ii) SNMP  
b) Differentiate between OSPF and BGP. 7

4. a) Why fragmentation is necessary? Explain different fields related to fragmentation in IPv4. 7  
b) Differentiate between classless addressing and classful addressing in internet. 7
5. a) How flow control and error control issues are handled in TCP protocol? 7  
b) Write short notes: 7  
i) Router components and its operations.  
ii) Distance vector routing versus path vector routing.
6. a) How does link state routing take care of the problem of wrapping of sequence number, crashing of routers and corruption of sequence number. 7  
b) Explain VPN addressing. 7
7. a) Draw and explain the SNMP network management architecture? 7  
b) Give a brief note on Hiper LAN. 7
8. Write short notes: 14  
a) ATM Architecture  
b) GSM  
c) DNS  
d) TELNET

\*\*\*\*\*