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**MASTER OF BUSINESS ADMINISTRATION
(NETWORK INFRASTRUCTURE
MANAGEMENT)
(MBANIM)**

Term-End Examination

December, 2011

**MCRI-009 : NETWORK DESIGN AND
MANAGEMENT**

Time : 3 hours

Maximum Marks : 100

Note : Attempt any five questions. All questions carry equal marks. Assume data wherever necessary. Draw neat and clean diagram.

1. (a) Explain the advantages of using a switch for computer networks ? How switch is different from Router. **10**
- (b) Explain basic switching concepts and the operation of CISCO switches. **10**
2. (a) What is SSH ? What is the difference between ARP and RARP ? Explain SHOW and DEBUG commands while operating a switch. **10**
- (b) What are the common problems faced due to switch hardware failure ? Explain the procedure for identifying such types of failure. **10**

3. (a) What is routing ? What is VLAN ? Explain the different types of VLAN ? Also explain how it is different from normal LAN. **10**
- (b) Explain how to configure, verify and troubleshoot VLAN ? Explain the method of troubleshooting VLAN. **10**
4. (a) What is the procedure of implementing basic switch security ? Also explain how security of ports can be done and trunk access. **10**
- (b) What is the difference between private and public IP addressing ? Explain the addressing method used by IPv4 ? **10**
5. (a) What do we mean by Routing ? Explain how router is used for the purpose of routing ? Give some commands of configuring a CISCO router. **10**
- (b) Explain some of the differences between static and dynamic IP addressing. Also explain advantages and disadvantages of each. **10**
6. (a) What is meant by DNS ? Discuss the following issues related to DNS : **10**
- (i) Name Address resolution
- (ii) Distribution of Name Space
- (iii) DNS messages
- (b) Give the classification of different IP addresses. Explain the concept of subnetting. **10**

7. (a) What do you understand by classless addressing scheme ? Explain classless addressing scheme using VLSM IP. 10
- (b) Explain the following terms related to router : 10
- (i) Router lookup process
 - (ii) Router bootup process
8. Write short notes on the following : 10x2=20
- (a) DHCP
 - (b) Traceroute command
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