USN ☐☐☐☐☐☐☐☐☐☐

10SCS322

Third Semester M.Tech. Degree Examination, December 2012
Advances in Storage Area Networks

Time: 3 hrs.

Max. Marks:100

Note: *Answer any FIVE full questions.*

1   a. Mention the two types of It architectures. Bring out its limitations and advantages. Briefly explain each of them. **(08 Marks)**
    b. Explain the case study of "Replacing a server with storage networks". **(08 Marks)**
    c. Why storage networking makes sense? Mention the two benefits of storage networks on business applications. **(04 Marks)**

2   Compare and explain the different RAID levels. **(20 Marks)**

3   a. Mention the design goals of fibre channel that are correct by the requirements of transmission technology for storage networks? Explain the fibre channel protocol stack. **(14 Marks)**
    b. Explain the "Arbitrated loop topology" of fibre channel SAN, in detail. **(06 Marks)**

4   a. Explain the NAS architecture. **(10 Marks)**
    b. Compare sanprhots and instant copy. Explain the volume manger, in detail. **(10 Marks)**

5   a. Define the term "storage virtualization". Explain the two models of storage virtualization in the network. **(10 Marks)**
    b. List the three levels at which a virtualization entity can be positioned in the storage network explain them. **(10 Marks)**

6   Mention the SAN components. Explain them in detail. **(20 Marks)**

7   a. Explain the switch operating system of SAN. **(08 Marks)**
    b. List the supporting components of switch operating system explain any two, in detail. **(12 Marks)**

8   a. Define "Intrusion detection system". List and explain the different security elements that must be addressed by any secure solution. **(14 Marks)**
    b. Discuss the role of storage networking in business continuity. **(06 Marks)**

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