

FACULTY OF ENGINEERING**B.E. IV/IV Year (CSE) II Semester (Main) Examination, May/June, 2011****INFORMATION STORAGE AND MANAGEMENT**

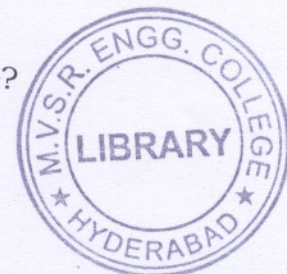
(Elective-II)

Time : 3 Hours]

[Max. Marks : 75

*Answer all questions from Part A.**Answer any five questions from Part B.***Part A – (Marks : 25)**

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|---|---|
| 1. What are the key requirements of data center infrastructure? | 3 |
| 2. Differentiate between RAID 3 and RAID 5. | 3 |
| 3. What are the different logical components of a host? | 3 |
| 4. Compare write Back Cache and Write through Cache. | 2 |
| 5. What are the types of storage virtualization ? | 2 |
| 6. Define the following a HUB, a SWITCH and a DIRECTOR in a SAN environment. | 3 |
| 7. What are the different factors effecting NAS performance and availability? | 3 |
| 8. What do you mean by RTO of 2 hours? | 2 |
| 9. Brief out copy on first access write to target. | 2 |
| 10. What are the types of Archives? | 2 |

**Part B – (Marks : 5 × 10 = 50)**

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| 11. What are the different disc drive components and explain logical block addressing in detail. | 10 |
| 12. Which version of RAID causes increased and unnecessary I/O load RAID 10 or RAID 01. Justify with the help of a neat diagram? | 10 |
| 13. What is the role of a CACHE in a ISS ? Explain in detail. | 10 |
| 14. Explain the Fibre channel Ports with the help of a fabric diagram. | 10 |
| 15. Illustrate the process of “Storage” data objects on a CAS with a neat diagram. | 10 |
| 16. How is LVM based replication done. | 10 |
| 17. Write a short notes on the following : | |
| (a) Fibre channel protocol stack | 3 |
| (b) Single Point of Failure | 3 |
| (c) Storage Security Domains. | 4 |