

11/12/2011
B.E. (I.T) VIII
Information, Storage, Management
and Disaster Recovery,
(REVISED COURSE) MP-5335

Con. 6121-11.

(3 Hours)

[Total Marks : 100

N.B. : (1) Question No. 1 is **compulsory**.(2) Solve any **four** questions from remaining **six** questions.(3) Assume **suitable** data wherever required.

Q.1 a) Consider a disk I/O system in which an I/O request arrives at the rate of 80 IOPS.
The disk service time is 6 ms.

(I) Compute the following: Utilization of I/O controller, Total response time,
Average queue size, and Total time spent by a request in a queue.

(II) Compute the preceding parameter if the service time is halved. (10)

b) Explain SCSI command model (10)

Q.2 a) Explain following:

(i) Storage security domains (05)

(ii) Risk Triad (05)

b) Explain disk drive performance in brief. (10)

Q.3 a) What are the components of NAS. Explain NAS Implementations. (10)

b) Explain Object Storage and Retrieval in CAS. (10)

Q.4 a) Explain the components of Intelligent Storage System. (10)

b) Explain Various forms of virtualization & Storage virtualization challenges. (10)

Q.5 a) Explain Information Lifecycle. What are the key challenges in managing
Information? (12)

b) Explain logical components of the host. (08)

Q.6 a) Explain Remote replication technologies in brief. (10)

b) Explain fibre channel architecture. (10)

Q.7 Write short notes on the following.(any 4): (20)

a) RAID levels

b) Failure analysis

c) Backup Granularity

d) Storage Management activities

e) LUN and LUN Masking