

08/05/13

B.E (IT) VIII Rev

Info. Storage mgmt & Disaster Recovery

GS-3025

**(REVISED COURSE)**

(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 necessary.

1. (a) Consider a disk I/o system in which an I/o request arrives at the rate of 60 IOPS. 10  
The disk service time is 4ms.
  - (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.
- (b) Explain information Lifecycle. What are the key challenges in managing information? 10
2. (a) Explain the logical components of the Host in detail. 10
- (b) Explain the factors affecting NAS performance and availability in detail. 10
3. (a) Explain CAS Architecture with Examples. 10
- (b) Explain Remote replication technologies in brief. 10
4. (a) Explain various forms of virtualization and storage virtualization challenges. 10
- (b) Explain failure Analysis with respect to Business continuity. 10
5. (a) Explain fibre channel architecture. 10
- (b) Explain SCSI command model in detail. 10
6. (a) Explain following :-
  - (i) Storage security domains 5
  - (ii) Risk Triad. 5
- (b) Explain components of an Intelligent storage system in detail. 10
7. Write short notes on the following (any four) :- 20
  - (a) Zoning
  - (b) Backup in NAS environment
  - (c) Object Storage and Retrieval in CAS
  - (d) LUN and LUN masking
  - (e) Raid levels.

-----