CS/IT–703(N)

B. E. (Seventh Semester)
EXAMINATION, Dec., 2011

(New Scheme)

(Common for CS & IT Engg. Branch)

INFORMATION STORAGE AND MANAGEMENT

Time : Three Hours

Maximum Marks : 100

Minimum Pass Marks : 35

Note :   Attempt all questions. All questions carry equal marks.

Unit – I

1. (a) Discuss various phases of information life cycle model.   10

 (b) Discuss various storage technologies in detail.   10

Or

2. Explain briefly the following :   5 each
 (i) Data categorization
 (ii) Evolution of storage management
 (iii) Storage devices
 (iv) Data proliferation

Unit – II

3. (a) Differentiate between the following :   10
 (i) Integrated *vs* modular arrays
 (ii) Volume manager *vs* file system

(b) Discuss various different levels of RAID and also compare between them. 10

Or

4. 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. 10

(a) Compute the following :

    (i) Utilization of I/O controller

    (ii) Total response time

    (iii) Average queue size

    (iv) Total time spent by a request in a queue

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

Unit – III

5. (a) What is zoning ? Discuss a scenario : 10

    (i) where soft zoning is preferred over hard zoning

    (ii) where hard zoning is preferred over soft zoning

(b) Discuss various security criticism in networked storage technologies. 10

Or

6. (a) What is Direct Attached Storage (DAS) ? Write down its advantages and disadvantages. 10

(b) Discuss the various factors that affect NAS performance and availability. 10

Unit – IV

7. (a) What is Data Centre ? What are the requirements for the design of a secure data center ? 10

(b) What do VLANs virtualize ? Discuss VLAN implementation as a virtualization technology. 10

Or

8. (a) What is key program management metrics ? Explain the characteristics of metrix. 10

(b) Discuss the scanty concern in backup environment. 10

Unit—V

9. (a) Write down the essential characteristics of cloud computing. 10

(b) Give a brief note on cloud architecture. 10

Or

10. Write short notes on the following : 5 each

(i) Cloud security

(ii) Cloud vocabulary

(iii) Risks of cloud computing

(iv) Cloud application and services

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