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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(IT)(E-I 2012 to 2017) (Sem.-6)

STORAGE MANAGEMENT

Subject Code : BTIT-901

M.Code : 71175

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**1. Answer briefly :**

- a. What are the key attributes of data storage infrastructure?
- b. Outline the properties and operations of Network-Attached Storage (NAS).
- c. Mention two major challenges of data storage and management.
- d. Differentiate local and remote replication technique in disaster recovery.
- e. Enlist the features of Content Addressed Storage (CAS).
- f. What are the major components of an Intelligent Storage System (ISS)?
- g. Name two benefits and two limitations of using FC-SAN over IP-SAN.
- h. Elaborate the concept of multiple replicas and its advantage.
- i. What is data retention? How it helps in data recovery?
- j. Identify logical and physical components of a storage infrastructure.

SECTION-B

2. Discuss Object Storage and Retrieval in Content Addressed Storage (CAS) and outline its major properties.
3. Identify various data centre infrastructure elements and their requirements in storage management.
4. What is hierarchical space management? Also, comment on the concept of database & application protection and bare machine recovery.
5. Illustrate the evolution of storage technology from non-intelligent storage system to intelligent networked storage.
6. Elaborate the purpose of performing backup, disaster recovery and replication in detail.

SECTION-C

7. Describe, in detail, the conceptual framework of RAID. Explain its levels (RAID 0 to RAID 6) and compare their characteristics.
8. Discuss the evolution of networked storage and briefly outline its architecture along with description of FC-SAN.
9. Write short notes on following with respect to security management :
 - a. Identity Management and Single sign-on
 - b. SAN and NAS

NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC case against the Student.