USN ☐☐☐☐☐☐☐☐☐☐   **18CS822**

Eighth Semester B.E. Degree Examination, June/July 2025
Storage Area Networks

Time: 3 hrs.   Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

1   a.   Define Data Center. List and explain key characteristics of center with neat diagram.   **(10 Marks)**
    b.   Discuss core elements of data center.   **(10 Marks)**

OR

2   a.   Explain the logical components of host in detail with a neat diagram.   **(10 Marks)**
    b.   Define the file system and explain the process of mapping user files to the storage.   **(10 Marks)**

Module-2

3   a.   With diagram explain RAID techniques in detail.   **(10 Marks)**
    b.   Explain DISK drive Components with a neat diagram.   **(10 Marks)**

OR

4   a.   Describe the components of Intelligent Storage System with a neat diagram.   **(10 Marks)**
    b.   Explain the structure of read and write operations with the cache.   **(10 Marks)**

Module-3

5   a.   Explain with neat diagram the components of Fiber Channel Storage Area Network (FCSAN)   **(10 Marks)**
    b.   What is Protocol? Explain the popular interface protocol used for host to storage communication.   **(10 Marks)**

OR

6   a.   Explain different iSCSI topologies.   **(10 Marks)**
    b.   What is NAS? Explain the components with neat sketch.   **(10 Marks)**

Module-4

7   a.   What is Business Continuity? Explain the BC terminology in detail.   **(10 Marks)**
    b.   Explain BC planning life cycle a neat diagram.   **(10 Marks)**

OR

8   a.   Explain Backup and Restore Operations with neat diagram.   **(10 Marks)**
    b.   Discuss different Backup Topologies.   **(10 Marks)**

Module-5

9   a.   List local Replication Technologies and explain in brief.   **(10 Marks)**
    b.   List and explain uses of Local Replicas.   **(10 Marks)**

OR

10   a.   Write a short notes on :
       i) Network based remote replication   ii) Three site replication   **(10 Marks)**
    b.   Explain key elements of Risk Triad.   **(10 Marks)**

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