



CBCS SCHEME

18CS822

Eighth Semester B.E. Degree Examination, July/August 2022 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. Explain the core elements of data centre along with its key characteristics. (10 Marks)
- b. Discuss the process of host access to storage. (06 Marks)
- c. Write a short note on evolution of storage architecture. (04 Marks)

OR

- 2 a. Explain in detail disk drive components with suitable diagram. (10 Marks)
- b. Discuss the concept of DAS with advantages and disadvantages. (06 Marks)
- c. Explain disk partitioning and concatenation. (04 Marks)

Module-2

- 3 a. What is RAID? List different RAID levels where parity technique has been adopted. Explain nested RAID, RAID 3, RAID 5 with diagram. (10 Marks)
- b. Write a short note on : i) Node ports ii) Cable and connectors. (06 Marks)
- c. Discuss RAID impact on disk performance. (04 Marks)

OR

- 4 a. Explain structure of cache with operations. (10 Marks)
- b. List and explain RAID techniques. (06 Marks)
- c. List types of intelligent storage systems and explain any one in detail. (04 Marks)

Module-3

- 5 a. Write a note on iSCSI and its topologies. (08 Marks)
- b. Explain the advantages of NAS. (08 Marks)
- c. Compare CIFS and NFS protocols. (04 Marks)

OR

- 6 a. Explain fibre channel protocol stack with neat diagram and write a short note on its performance and security. (08 Marks)
- b. Explain NAS components with diagram. (06 Marks)
- c. With a neat diagram explain Gateway network attached storage connectivity. (06 Marks)

Module-4

- 7 a. Discuss the life cycle of BC Planning. (10 Marks)
- b. List some important BC technology solutions. Explain the failure analysis in BC. (10 Marks)

OR

- 8 a. Describe backup and restore operation. (10 Marks)
- b. Write a short note on : i) Backup architecture ii) Backup purpose. (10 Marks)

Module-5

- 9 a. Mention major local replication technologies. Explain network based local replication. (10 Marks)
- b. Discuss flushing the file system buffer. (05 Marks)
- c. Explain the uses of local Replicas. (05 Marks)

OR

- 10 a. Write a short note on array based synchronous remote replication. (06 Marks)
- b. Explain security threats in backup, replication and archive environment. (06 Marks)
- c. Write a note on : i) Assets ii) Vulnerability. (08 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

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