



10CS/IS765

Seventh Semester B.E. Degree Examination, Jan./Feb. 2021
Storage Area Networks

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART - A

- 1 a. What is Data? List the factors that have contributed to the growth of digital data. (04 Marks)
b. Explain the key requirements for Data centre elements. (08 Marks)
c. Explain the various key components of a disk drive. (08 Marks)
- 2 a. What is RAID? Explain the working of RAID0 , RAID1 and nested RAID. (10 Marks)
b. What is Logical unit number and LUN marking? (05 Marks)
c. Discuss briefly intelligent storage array. (05 Marks)
- 3 a. Explain the evolution and interfaces of SCSI I. (08 Marks)
b. Explain SCSI communication model. (06 Marks)
c. With a neat diagram, explain the different fiber channel ports. (06 Marks)
- 4 a. Explain integrated and gateway NAS connectivity. (08 Marks)
b. Explain the NAS I/O Operation process. (06 Marks)
c. With a neat diagram, explain FCIP Topology. (06 Marks)

PART - B

- 5 a. Explain Object storage and Object retrieval in CAS. (10 Marks)
b. Explain SNIA Storage Virtualization Taxonomy. (10 Marks)
- 6 a. With a neat diagram, explain the process of BC planning life cycle. (10 Marks)
b. Explain the different types of SAN backup topologies. (10 Marks)
- 7 a. Explain the uses of Local Replicas. (04 Marks)
b. Explain Copy on First Access (CoFA). (08 Marks)
c. Explain Synchronous and Asynchronous Replication method. (08 Marks)
- 8 a. Explain how Keeberos is used in NAS Authorization. (10 Marks)
b. With a neat diagram, explain Accessibility monitoring and Capacity monitoring. (10 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.