

18MCA554

Semester MCA Degree Examination, Feb./Mar. 2022 Storage Area Networks

Time: 3 hrs.

Max. Marks: 100

(10 Marks)

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

Module-1 Define data. Explain the different types of data. (05 Marks) 1 Describe the ILM implementation in detail. (05 Marks) List and explain the essential core elements for the basic functionality of data center. (10 Marks) OR Briefly explain the evolution of storage technology. (10 Marks) 2 Explain disk drive components, with suitable diagram. (10 Marks) What is RAID? Explain the RAID levels with reference to nested RAID, RAID3, RAID5 3 with neat diagram. (10 Marks) Describe the components of intelligent storage system. (10 Marks) b. Explain the different types of Intelligent Storage Array System. (10 Marks) (10 Marks) Mention and explain types of DAS. Module-3 Briefly explain Disk Drive interface with example. (10 Marks) Explain connectivity options of FC architecture with relevant diagram. (10 Marks) b. OR Discuss different types of FC ports. (10 Marks) (10 Marks) With neat diagram, explain SCSI - 3 Architecture. b. Module-4 a. Explain the benefits of NAS. (10 Marks) Discuss the NAS file sharing protocols. (10 Marks) Briefly explain iSCSI protocol stack. (10 Marks) Describe storage virtualization in detail and discuss its challenges. (10 Marks) Module-5 What is Business continuity? Explain its Terminology. (10 Marks) a. Explain Back up and restore operations in detail. (10 Marks) Explain with neat diagram BC planning life cycle. (10 Marks) 10 a. Write short notes on:

> Synchronous Replication Mode Asynchronous Replication Mode

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