



# CBCS SCHEME

15CS754

## Seventh Semester B.E. Degree Examination, Aug./Sept.2020 Storage Area Networks

Time: 3 hrs.

Max. Marks: 80

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

### Module-1

- 1 a. Explain the key characteristics of a data center, with a neat diagram. (08 Marks)
- b. With a neat diagram, explain the structure of read and write operations in cache. (08 Marks)

OR

- 2 a. List the different RAID levels where parity technique has been adopted. Explain any three. (10 Marks)
- b. Compare virtual and traditional storage provisioning. (06 Marks)

### Module-2

- 3 a. What is zoning? What are the advantages of zoning? Explain the various types of zoning. (08 Marks)
- b. Write a note on iSCSI. (08 Marks)

OR

- 4 a. Explain the fibre channel Protocol stack with neat figure. (08 Marks)
- b. Explain I/O consolidation using FCoE. (08 Marks)

### Module-3

- 5 a. Define the following terminologies:  
i) MTBF ii) RPO iii) MTTR iv) RTO. (08 Marks)
- b. Describe the failure analysis in BC. Mention some important BC technology solutions. (08 Marks)

OR

- 6 a. Explain backup and restore operations with neat diagram. (08 Marks)
- b. Explain Backup in virtualized environments. (08 Marks)

### Module-4

- 7 a. Define cloud computing. List and explain the essential characteristics of cloud computing. (06 Marks)
- b. Classify the deployment models in cloud computing. Explain any two. (10 Marks)

OR

- 8 a. List and explain the challenges facing in cloud-computing. (06 Marks)
- b. Explain cloud infrastructure layers, with diagram. (10 Marks)

### Module-5

- 9 a. Write a note on: i) Risk triad ii) Threats (08 Marks)
- b. Explain the concept of Kerberos with neat diagram. (08 Marks)

OR

- 10 a. Discuss the IPSAN security implementation in storage networking. (06 Marks)
- b. Explain the storage infrastructure management activities in detail with example. (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.