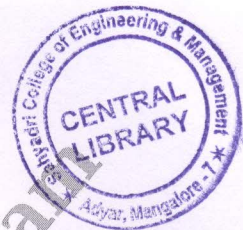


# CBCS SCHEME



USN

--	--	--	--	--	--	--	--	--	--

15CS754

Seventh Semester B.E. Degree Examination, Dec.2019/Jan.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 with neat diagram the Evolution of storage Architecture. (06 Marks)  
b. Discuss core Elements of Data center and key characteristics of Data center. (10 Marks)

OR

- 2 a. Describe with neat block diagram the components of Intelligent storage system. (08 Marks)  
b. With diagram explain different RAID Techniques. (08 Marks)

### Module-2

- 3 a. Explain with neat diagram the components of Fiber Channels (FC) storage Area Networks. (08 Marks)  
b. What is zoning? Explain its types. (08 Marks)

OR

- 4 a. Discuss different iSCSI Topologies with neat diagrams. (08 Marks)  
b. Write short notes on Fiber Channel Over Ethernet (FCOE). (08 Marks)

### Module-3

- 5 a. Discuss different back up Topologies. (08 Marks)  
b. What is data deduplication? Explain its implementation methods. (08 Marks)

OR

- 6 a. Explain local Replication technology using Host based methods. (06 Marks)  
b. Write a short notes on the following ; (10 Marks)  
i) Three site Replications ii) Network based Remote Replication.

### Module-4

- 7 a. Explain the characteristics of clouds computing. (04 Marks)  
b. Discuss cloud Deployment models. (06 Marks)  
c. Explain Cloud computing Infrastructure. (06 Marks)

OR

- 8 a. Discuss the steps involved in transitioning from classic data center to cloud computing Environment service. (08 Marks)  
b. Write a short notes on the following ; (08 Marks)  
i) Business drives for cloud computing  
ii) Cloud migration considerations.

### Module-5

- 9 a. Explain the different types of security threats. (06 Marks)  
b. Discuss security solutions for FC – SAN and IP-SAN. (10 Marks)

OR

- 10 a. Explain the various information infrastructure components in classic and virtual Environments. (08 Marks)  
b. Write a short notes on the following : (08 Marks)  
i) Information Life Cycle Management (ILM). ii) Storage Tiering.

\*\*\*\*\*

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.