# Seventh Semester B.E. Degree Examination, June/July 2019 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. What is a data center? List the core components of data center. Explain the characteristics of data center. (08 Marks)
  - b. Discuss volume manager and compute virtualization in detail.

## (08 Marks)

- 2 a. Differentiate between software and hardware RAID. Illustrate how parity method is used for RAID levels. (08 Marks)
  - b. With a neat diagram explain ISS. Explain in detail the cache component of ISS. (08 Marks)

# Module-2

- 3 a. List and explain different FC connectivity options with a neat diagram.
- (08 Marks) (08 Marks)

b. With diagram explain ISCSI implementation.

## OR

4 a. What is NAS? Explain NAS implementation in detail.

- (08 Marks)
- b. List the key features of Content Addressed Storage (CAS). Illustrate with a neat block diagram the unified storage for CAS system. (08 Marks)

# Module-3

5 a. Explain with a neat diagram BC planning lifecycle.

- (08 Marks)
- b. Mention backup topologies. List various backup forget solution and explain any one with a neat diagram. (08 Marks)

# OR

- 6 a. List various uses of local replication. Explain storage array based local replication with a neat diagram. (08 Marks)
  - b. Differentiate between Synchronous and Asynchronous based remote replication model.

(08 Marks)

# Module-4

- 7 a. List various cloud computing characteristics. Explain the cloud computing infrastructure components with a neat diagram. (08 Marks)
  - b. With diagram explain different cloud deployment models.

(08 Marks)

### OK

8 Explain in detail in band and out of band virtualization appliances with a neat diagram.

(16 Marks)

## Module-5

- 9 a. What are the different rules tried for information security? Explain in detail FCSAN based security implementation. (08 Marks)
  - b. List and explain different storage infrastructure management activities in detail. (08 Marks)

### OR

10 a. Explain different storage management activities.

(08 Marks)

b. What is ILM? List and explain various benefits of ILM.

(08 Marks)