

USN

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

13MCA555

**Fifth Semester MCA Degree Examination, Jun/July 2016**  
**Storage Area Networks**

Time: 3 hrs.

Max. Marks:100

**Note: Answer any FIVE full questions.**

- 1 a. Explain the evolution of storage technology and architecture. (06 Marks)  
b. With a neat diagram explain the components of a disc drive. (08 Marks)  
c. With a neat diagram explain the key characteristics of data centres. (06 Marks)
- 2 a. Explain the different types of RAID implementations. Discuss their merits and demerits. (05 Marks)  
b. Explain the components of an intelligent storage system. (09 Marks)  
c. Explain RAID 3 and RAID 5. (06 Marks)
- 3 a. Explain the different HDD controller protocols. (06 Marks)  
b. With a neat diagram explain SCSI – 3 client – server model. (07 Marks)  
c. With a neat diagram explain the categories of zoning. (07 Marks)
- 4 a. Explain different file sharing protocols used in NAS. (08 Marks)  
b. Explain FCIP topology. (04 Marks)  
c. Discuss different types of NAS implementations. (08 Marks)
- 5 a. What is an archive? Explain the types of archives. (06 Marks)  
b. Explain the process of storing and retrieving objects in CAS. (10 Marks)  
c. Briefly discuss the challenges in storage virtualization. (04 Marks)
- 6 a. Explain the different topologies used in a backup environment. (10 Marks)  
b. With a neat diagram explain the BC planning life cycle. (10 Marks)
- 7 a. Explain the major technologies adopted for local replication. (08 Marks)  
b. Explain the purpose of creating replicas. (05 Marks)  
c. Explain the basic modes of remote replication. (07 Marks)
- 8 Write short notes on :  
a. Server virtualization  
b. Storage security frame work  
c. Disc drive performance  
d. Benefits of NAS. (20 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.