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.

Fifth Semester MCA Degree Examination, Dec.2016/Jan.2017 Storage Area Networks

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

| 1 | a. b. | Explain the core elements of data centre and illustrate their functionality in process. Explain the disk drive components with their working. | a business (10 Marks) (10 Marks) |
|---|----------|--|---|
| 2 | a. b. | Explain the different basis used for defining different RAID levels with neat diagram. Define cache. Explain the structure of cache. Also explain READ and WRITE with cache. | (10 1111111) |
| 3 | a. b. | Define DAS. Specify the benefits and the limitations of DAS. Also classifications of DAS. Explain the different Fibre channel ports. | explain the (10 Marks) (10 Marks) |
| 4 | a. b. | Explain the different NAS file – sharing protocols. Explain the different factors affecting NAS performance and availability. | (10 Marks) (10 Marks) |
| 5 | a. b. | Explain the architecture of CAS. Also explain CAS features and their options. Explain memory and network virtualization concepts. | (10 Marks) (10 Marks) |
| 6 | a. b. | Explain the BC planning life cycle. Explain Back-up process with neat diagram. | (10 Marks) (10 Marks) |
| 7 | a. b. | Explain LVM based local replications with their advantages and disadvantages. Explain DWDM and SONET. | (10 Marks) (10 Marks) |
| 8 | a. b. | List the different security zones and explain their protection strategies. Explain the different storage management activities. | (10 Marks) (10 Marks) |