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

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions.*

1   a.   What are the key characteristics of a data centre? Explain key management activities.
(10 Marks)

   b.   Briefly explain the concept of logical block addressing and zoned bit recording with a neat diagram.
(08 Marks)

   c.   Explain the following :
i)   Internal transfer rate   (02 Marks)
ii) External transfer rate.
(06 Marks)

2   a.   Explain RA I D implementation methods.

   b.   Explain the following :
i) Write–back cache   (04 Marks)
ii) Write–through cache.   (06 Marks)

   c.   Explain modes of flushing data in cache management.   (04 Marks)

   d.   With a neat diagram explain RAID1.
(07 Marks)

3   a.   Explain zoning and various types of zoning.   (08 Marks)

   b.   Explain direct attached stooge (DAS). Explain its benefits and limitations.   (05 Marks)

   c.   With the help of diagram explain fiber channel protocol stack.
(06 Marks)

4   a.   What is network attached storage? Explain the benefits of NAS.   (08 Marks)

   b.   Briefly explain NAS file – sharing protocols.   (06 Marks)

   c.   Explain the topologies of iSCSI connectivity.
(08 Marks)

5   a.   What are the key benefits of content addressed storage strategy?   (08 Marks)

   b.   Explain briefly block–level storage and file–level virtualization.   (04 Marks)

   c.   Explain the challenges of storage virtualization.
(06 Marks)

6   a.   With the help of diagram explain business continuity planning life cycle.   (10 Marks)

   b.   With the help of diagram explain back–up and restore operations.   (04 Marks)

   c.   Explain direct-attached backup topology.
(10 Marks)

7   a.   Explain in detail storage array – based local replication technology. (10 Marks)

   b.   Explain host based remote replication technology.

8   Write a short notes on :
   a.   Risk triad
   b.   Storage security domains
   c.   Components monitoring
   d.   Enterprise management platform.   (20 Marks)

* * * * *