IT - 502
B.E. V Semester
Examination, December 2014
Information Storage and Management
Time : Three Hours
Maximum Marks : 70

Note : i) Answer five questions, In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each questions are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numerical, Derivation, Design and Drawing etc.

UNIT - I

1. a) What problems arise due to data proliferation.

b) What is the significance of Data Center in storage technology.

c) Enlist the stages of Business continuity (BC) planning life cycle.

d) The average I/O size of an application is 64 KB. The following specification are available from Disk manufacture average seek time = 5 ms, 7200 rpm, transfer rate = 40 MB/ S. Determine maximum IOPS that could be performed with the disk for this application.

OR

Which skills are required for storage management? What kind of activities are performed in storage management.

UNIT - II

2.   a) What is meant by zoned bit recording.

b) Define SAN (Storage Area Network)

c) How RAID4 is different from RAID3?

d) Explain the components of Intelligent storage system

OR

What is Information Lifecycle Management (ILM)?

Explain characteristics and benefit of ILM.

UNIT - III

3. a) What are the benefits of DAS (Direct Attached Storage)?

b) What is clustering in storage?

c) Explain the feature of Content Addressable Storage (CAS)?

d) Explain storage security domain with reference to threats, availability control and examples.

OR

Explain RAID levels in detail with neat diagram.

UNIT - IV

4. a) What is Fiber channel Arbitrated loop?

b) How to measure the Disk Derive Performance.

c) Write a note on virtual tape library.

d) What kind of storage management standards like Storage Management Initiative-Specification (SMIS) and Common Information Model (CIM) is initiative taken by industry Management.

OR

What is Backup? Which are three main purpose to do Backup? Explain methods and process of doing Backup.

UNIT-V

5. a) How does cloud computing provides on demand functionality?

b) What does software as a service provide?

c) What is difference between scalability and elasticity for cloud computing?

d) What is secure execution environment and communication in cloud? Explain different threats and vulnerabilities specific to virtual machine.

OR

Explain how Big tables are stored on distributed File system such as GFs or HDFS.