

CS-704

B.E. VII Semester

Examination, December 2016

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 question 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 numericals, Derivation, Design and Drawing etc.

Unit - I

1. a) What policies are required by business for effective Information management?
b) What are benefits of Information lifecycle management?
c) Explain the Virtuous cycle of information.
d) Define the term data center. What are the requirements necessary to be effective data center?

OR

How information lifecycle support changes in the value of information over time? What is procedure to implement information life management?

Unit - II

2. a) What is the need of nested RAID?
b) Define the term file. What is the file system?
c) Explain the working of Zoned Bit Recoding.
d) An application has 1,000 heavy users at a peak of 2 IOPS each and 2,000 typical users at a peak of 1 IOPS each, with a read/write ratio of 2:1. It is estimated that the application also experiences an overhead of 20 percent for other workloads. Calculate the IOPS requirement for RAID 1, RAID 3, RAID 5, and RAID 6.

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PTO

OR

Discuss the different core components and working of Hard Disk Drive (HDD).

Unit - III

3. a) What is the significance of gateway NAS?
b) What is the significance of SCSI-3 Architecture?
c) How is the priority sequence established in a wide SCSI environment?
d) Explain how the performance of NAS can be affected if the TCP window size at the sender and the receiver are not synchronized.

OR

What would you consider while choosing serial or parallel data transfer in a DAS implementation? Explain your answer and justify your choice.

Unit - IV

4. a) Write the limitation of physical tape.
b) Write the challenges phasing during the storage virtualization.
c) Define the term Virtual Tape Library. How is it work?
d) Briefly explain the different activities related to the storage management.

OR

What is the purpose of performing operation backup, disaster recovery, and archiving? Explain in detail.

Unit - V

5. a) Write the characteristics of Cloud.
b) Define the term cloud vocabulary.
c) Write the major difference and attribute cloud computing versus cloud services.
d) What is the need of virtualization? Define Server virtualization, Application virtualization, Presentation Virtualization.

OR

What is SaaS in Cloud computing? Explain different categories of SaaS.

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