Question Bank

UNIT-1

1. Define server centric IT architecture and storage centric IT architecture with advantages and limitations. (June/July 2011)

2.Explain the benefits of storage networks on business applications.(June/July 2011)

3) Explain the basic requirement of storage systems (May/June 2010)

4) Differentiate storage centric IT architecture from server centric IT architecture May/June 2010

5) Why storage networking makes sense? Explain? May/June 209

6)Describe the attributes that characterizes enterprise business applications? May/June 2009

7)Differentiate between maintenance and support applications? (Dec/Jan 2010)

8)With a neat sketch, explain the application development life cycle? (Dec/Jan 2010)

Unit-2

1) Describe different cases where I/O channels can be designed with built in redundancy. Which cable is best? (June/July 2011)

2) Explain briefly how parity blocks are calculated in RAID4 and RAID5. How RAID5 overcomes limitations of RAID4? (June/July 2011)

3) With a neat diagram, explain the architecture of intelligent disk storage system[dss]. (May/June 2010)

4) How are the disk storage systems classified based on its complexity? Explain just a bunch of disks[JBOD] (May/June 2010)

5)Define the two main goals of RAID. What is a RAID level and explain the use of hot spare disks for all RAID levels? (May/June 2010)

6) Explain RAID 0 level or Block-by-Block striping? (June/July 2011)

7) Explain RAID 1 level or Block-by-Block mirroring? (May/June 2010)

8)Compare the principle of operation in RAID 0+1 and RAID 10 level? (May/June 2010)

9)Describe the two types of caches are designed to accelerate write and read accesses to physical hard disks? (June/July 2011)

Unit-3

1)Explain briefly the acceleration of hard disk access. (June/July 2011)

2) Explain SCSI. (June/July 2011)

3) What are the two major goals of RAID system? Explain the three major techniques used in RAID configurations (May/June 2010)

4) Explain fiber channel, with reference to protocol stack, addressing modes and login techniques. (May/June 2010)

5)What is zoning? What are the advantages of zoning? Explain the various types of zoning? (May/June 2010)

6)With a neat sketch, explain the types of arbitrated loops? (Dec/Jan 2010)

7) Show how the communication of a public loop device with a device in the fibre can be accomplished? (May/June 2009)

8)Explain the various hardware components used in Fibre channel SAN? (Dec/Jan 2010)

9) Write a short note on Interoperability of Fibre Channel SAN (Dec/Jan 2009)

10) What are the different protocols available for transmitting storage data traffic over TCP/IP? Explain the use of these protocols? (May/June 2010)

11) What are the advantages and disadvantages of IP-storage in relation to the FC? (Dec/Jan 2010)

Unit-4

1)Explain briefly layers of FC protocol stack. (June/July 2011)

2) Explain briefly fiber channel port types. (June/July 2011)

3) Compare NAS and fiber channel SAN. (May/June 2010)

4) Write an explanatory note on shared disk file system (May/June 2010)

5)Summarize the issues that are important to know and understand to facilitate a long term productive NAS configuration? (Dec/Jan 2010)

6)Explain the NAS hardware architecture? (June/July 2010)

7)Explain the NAS software architecture? (Dec/Jan 2010)

8)Explain the significance of NAS as a storage system? (June/July 2010)

Unit-5

1) Explain performance bottleneck in file servers. (June/July 2011)

2) Explain volume manager. (June/July 2011)

3) Define NAS. (June/July 2011)

4) **What is virtualization? Discuss the four forms of virtualization. Describe the implementation consideration for virtualization (May/June 2010)**

5) Explain storage virtualization at block level, with a necessary diagram. May/June 2010

6)With a neat diagram, explain NAS and mention its advantages and disadvantages? (June/july 2010)

7)What is performance bottleneck in file servers? Explain? (Dec/jan 2010)

8)Write a short note on the following;

(a) The Direct Access File System (DAFS)

(b) The General Parallel File system (GPFS) (Dec/jan 2009)

9)Describe the working principle of shared disk file systems? (June/july 2010)

10)Compare NAS, Fibre Channel SAN and iSCSI SAN? (Dec/jan 2010)

Unit-6

1) Explain storage virtualization. List out its objectives. (June/July 2011)

2) Explain briefly general requirements and considerations for implementation of Virtualization. (June/July 2011)

3)What is meant by storage virtualization on block level or file level? (Dec/jan 2010)

4)Write the advantages and disadvantages of storage virtualization on the server? (Dec/jan 2011)

5)Write the advantages and disadvantages of storage virtualization on the storage device levels? (June/July 2010)

6)Write the advantages and disadvantages of storage virtualization on the storage network? (June/July 2009)

7)What is symmetric storage virtualization? Write its advantages and disadvantages? (Dec/jan 2011)

8)What is asymmetric storage virtualization? Write its advantages and disadvantages? (June/July 2010)

Unit-7

1) Define storage area network and its components. (June/July 2011)

2)Discuss the following major components of a SAN.

(a) Network Part (b) Hardware Part (c) Software Part

(d) Connectivity Part (June/July 2011)

3)What is the need of a Fibre Channel Switch? Explain the different types of ports defined by a FC-Switch? (June/July 2011)

4)What is HBA? Explain the HBA's basic functions with a neat sketch? (June/July 2009)

5)Write a short note on JBOD, RAID and Bridges & Routers? (June/July 2010)

6)Define Frame, Sequence and Exchange. Explain the classes of operation defined by the FC standard useful to data storage operations? (Dec/Jan 2010)

Unit-8

1) acceleration of hard disk access (June/July 2011)

2)Briefly explain the external service level for storage networks? (June/July 2010)

3)Describe the physical configuration management for SANs? (Dec/Jan 2009)

4)Describe the logical/software configuration management for SANs? (June/July 2009)

5)Describe the physical configuration management for NAS? (Dec/Jan 2010)

6)Describe the logical/software configuration management for NAS? (June/July 2011)

7)Describe the guidelines which are considered in establishing a reasonable plan to support SAN or NAS configurations? (Dec/Jan 2011)

8)List and define the basic security elements, can be applied to different aspects of storage networks? (June/July 2011)