



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belgaum)

Fifth Semester - Master of Computer Applications (MCA)

Semester End Examination; Dec. - 2015

Information Storage and Management

Time: 3 hrs

Max. Marks: 100

Note: Answer any *FIVE* full questions.

- | | | |
|------|---|----|
| 1 a. | List and explain the key requirements of Data center. | 10 |
| | b. Define the core elements that are essential for the basic functionality of a Data center. | 5 |
| | c. Explain any two key components of a disk drive. | 5 |
| 2 a. | Discuss the techniques used to define the RAID Levels. | 8 |
| | b. With a neat diagram, explain front End of Intelligent storage system. | 8 |
| | c. Describe the structure of Cache with a neat diagram. | 4 |
| 3 a. | List the benefits and limitations of Direct Attached Storage (DAS). | 6 |
| | b. With a neat diagram, explain SCSI-3 Client-Server model. | 6 |
| | c. Explain the components of storage Area Networks. | 8 |
| 4 a. | Define Zoning. Explain its types. | 7 |
| | b. Write a note on <i>iSCSI</i> Names. | 5 |
| | c. Explain the benefits of NAS. | 8 |
| 5 a. | Explain NAS file sharing protocols. | 6 |
| | b. What is fixed content and Archives? Discuss the types of archives. | 6 |
| | c. Explain the features and benefits of CAS. | 8 |
| 6 a. | Explain the types of storage virtualization. | 10 |
| | b. With a neat diagram of BC planning lifecycle, list the activities performed at each stage. | 10 |
| 7 a. | Discuss the needs of Backup. | 8 |
| | b. Explain the uses of Local Replicas. | 5 |
| | c. Explain LVM-based replication with its advantages and limitations. | 7 |
| 8 a. | Explain the modes of Remote Replication. | 10 |
| | b. Explain the primary services of storage security framework. | 6 |
| | c. Mention the parameters to be monitored in a storage infrastructure. | 4 |

* * * *