

FACULTY OF INFORMATICS**B.E. 4/4 (I.T.) II – Semester (Make-up) Examination, July 2015****Subject: Information Storage and Management (Elective – IV)****Time: 3 Hours****Max.Marks: 75****Note: Answer all questions from Part A. Answer any five questions from Part B.****PART – A (25 Marks)**

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|----|--|---|
| 1 | List the key characteristics of data center elements | 2 |
| 2 | Data is briefly categorized into two categories. Explain each one of them. | 3 |
| 3 | Explain the terms Stripping and Mirroring | 3 |
| 4 | State the Utilization Law in Disk Performance | 3 |
| 5 | Give the components of NAS | 3 |
| 6 | What is iSCSI qualified name (IQN) and also give an example | 3 |
| 7 | Define Business Continuity | 2 |
| 8 | What is LVM-based Remote Replication? | 2 |
| 9 | List the challenges of Storage Virtualization | 2 |
| 10 | What is a Risk Triad? | 2 |

PART – B (5x10 = 50 Marks)

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|----|---|----|
| 11 | Explain in detail about Information Life Cycle Management, Implementation and benefits in detail. | 10 |
| 12 | a) Explain in detail the logical components of the host. | 7 |
| | b) Explain RAID impact on disk performance. | 3 |
| 13 | a) Explain the file sharing features of the NFS protocol. | 5 |
| | b) Explain CAS architecture with a neat diagram. | 5 |
| 14 | a) Explain how the performance of NAS can be affected if the TCP window size at the sender and the receiver are not synchronized. | 6 |
| | b) Explain zoning in the context of Fiber Channel. | 4 |
| 15 | a) Sketch and explain the process of backup and restore operations. | 6 |
| | b) Explain the backup process in NAS environment. | 4 |
| 16 | Explain storage security domains in detail. | 10 |
| 17 | Write short notes on the following: | |
| | a) Capacity Monitoring | 4 |
| | b) Key metrics to monitor Storage infrastructure | 3 |
| | c) Disaster recovery. | 3 |

FACULTY OF INFORMATICS**B.E. 4/4 (I.T.) II – Semester (Make-up) Examination, July 2015****Subject: Information Retrieval Systems (Elective – IV)****Time: 3 Hours****Max.Marks: 75****Note: Answer all questions from Part A. Answer any five questions from Part B.****PART – A (25 Marks)**

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|----|--|---|
| 1 | Define information retrieval model | 2 |
| 2 | Define vector model | 2 |
| 3 | What are the different query protocols | 3 |
| 4 | Define recall and precision | 2 |
| 5 | Which text compression technique is better? | 2 |
| 6 | How query syntax tree is processed? | 3 |
| 7 | Define inverted file | 2 |
| 8 | Explain pattern matching | 3 |
| 9 | What is logical document partitioning? | 3 |
| 10 | What is the performance measure in parallel computing? | 3 |

PART – B (5x10 = 50 Marks)

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|----|---|----|
| 11 | a) Explain the extended Boolean model. | 6 |
| | b) What is probabilistic model? | 4 |
| 12 | a) What are the different Structured Text Retrieval Models. | 5 |
| | b) How information retrieval can be achieved with pattern matching. | 5 |
| 13 | a) Explain how query is expanded through local clustering. | 4 |
| | b) What are the different mark up languages? | 6 |
| 14 | a) How document preprocessing is done. | 7 |
| | b) What is signature file? | 3 |
| 15 | Explain different algorithms for sequential searching. | 10 |
| 16 | a) Explain the difference between automatic local analysis and automatic global analysis. | 7 |
| | b) Explain various mark up languages. | 3 |
| 17 | Write short notes on: | |
| | a) Distributed IR | 4 |
| | b) TREC | 3 |
| | c) Document clustering. | 3 |
