Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov/Dec– 2017**

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| **Code :** | **14CS3023** | **Duration :** | **3hrs** |
| **Sub. Name :** | **INFORMATION STORAGE MANAGEMENT** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Storage technology evolved from non-intelligent internal storage to intelligent networked storage. Illustrate the highlights of the evolution of storage technology and architecture. | CO1 | 5 |
| b. | List the core elements that are essential for the basic functionality of a data center. | CO1 | 5 |
| c. | Explain the different components of the disk drive and the mechanism for organizing and storing data on disks. | CO2 | 10 |
| (OR) | | | | |
| 2. |  | “RAID storage has now grown from an academic concept to an industry standard.” Justify this statement by detailing about RAID technology, RAID levels, different types of its implementations and their benefits. | CO2 | 20 |
|  |  |  |  |  |
| 3. |  | Identify the components of an intelligent storage system and explain. | CO2 | 20 |
| (OR) | | | | |
| 4. | a. | Illustrate the various basic interconnectivity options supported by the FC architecture. | CO2 | 10 |
| b. | NAS is an IP-based file-sharing device attached to a local area network. Point out its components and outline the two types of NAS implementations. | CO2 | 10 |
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| 5. | a. | Review the different topologies for iSCSI Connectivity. | CO2 | 10 |
| b. | Write short notes on: iSCSI Names, iSCSI session and iSCSI PDU. | CO2 | 10 |
| (OR) | | | | |
| 6. |  | The IT department of a departmental store uses a tape to archive data. Point out how you would persuade the IT department to move to a CAS solution. State how object storage and retrieval happens in CAS. | CO2 | 20 |
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| 7. | a. | Failure analysis involves analyzing the data center to identify systems that are susceptible to a single point of failure and implementing fault-tolerance mechanisms such as redundancy. Discuss. | CO2 | 15 |
|  | b. | Outline the purposes for which Backups are performed. | CO3 | 5 |
| (OR) | | | | |
| 8. |  | Discuss in detail about storage array based local replication. | CO3 | 20 |
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|  | | **Compulsory:** |  |  |
| 9. | a. | Summarize the security implementations in storage networking. | CO1 | 10 |
|  | b. | Describe the various modes of storage array based remote replication. | CO3 | 10 |