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



**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **17CS3014** | **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. | Organizations maintain data centers to provide centralized data processing capabilities across the enterprise. Outline the key requirements of data center elements. | CO1 | 10 |
| b. | Illustrate the components of an intelligent storage system and explain. | CO2 | 10 |
| **(OR)** | | | | |
| 2. |  | Write a note on RAID implementation and categorize the various RAID levels. | CO4 | 20 |
|  |  |  |  |  |
| 3. | a. | 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. | CO1 | 10 |
| b. | Write short notes on: fibre channel ports and fibre channel addressing. | CO3 | 10 |
| **(OR)** | | | | |
| 4. | a. | Fabric design follows standard topologies to connect devices. Review the various FC topologies. | CO3 | 10 |
| b. | Explain in detail the SCSI-3 architecture. | CO1 | 10 |
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| 5. | a. | 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. | CO1 | 10 |
| b. | Review the different topologies for iSCSI Connectivity. | CO1 | 10 |
| **(OR)** | | | | |
| 6. | a. | Virtualization can be implemented in both SAN and NAS storage environments. Summarize the various types of storage virtualization. | CO2 | 10 |
| b. | Connections in a SAN are acommplished using a fibre channel. Give reasons highlighting the fibre channel architecture. | CO3 | 10 |
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| 7. | a. | Organizations today dedicate specialized resources to develop and maintain BC plans. From the conceptualization to the realization of the BC plan, a life cycle of activities can be defined for the BC process. Enumerate the five stages of a business continuity planning life cycle. | CO5 | 10 |
| b. | |  | | --- | | Explain the Host based local replication technology. | | CO4 | 10 |
| **(OR)** | | | | |
| 8. |  | Interpret the storage array based local replication technology. | CO5 | 20 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Write in detail the security implementations in NAS and IP SAN. | CO2 | 10 |
| b. | Monitoring helps to analyze the status and utilization of various storage infrastructure components. Present the components that needs to be monitored in a storage infrastructure. | CO6 | 10 |