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

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**End Semester Examination – Nov/Dec – 2018**

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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. | Detail the evolution of storage technology and architecture. | CO1 | 10 |
| b. | Disk drives are the most popular storage medium used in modern computers for storing and accessing data. Write a note on disk drive components. | CO4 | 10 |
| (OR) | | | | |
| 2. |  | Describe the RAID technology, RAID levels and different types of RAID implementations and their benefits. | CO4 | 20 |
|  |  |  |  |  |
| 3. |  | The intelligent storage systems are the feature-rich RAID arrays that provide highly optimized I/O processing capabilities. Describe the components of an intelligent storage system. | CO1 | 20 |
| (OR) | | | | |
| 4. | a. | Connections in a SAN are accommplished using a fibre channel. Give reasons highlighting the fibre channel architecture. | CO3 | 10 |
| b. | Fabric design follows standard topologies to connect devices. Review the various FC topologies. | CO3 | 10 |
|  |  |  |  |  |
| 5. |  | Describe the components, file sharing protocols and I/O operations of NAS. | CO1 | 20 |
| (OR) | | | | |
| 6. |  | With neat diagrams, explain the process of storing and retrieving objects in CAS. | CO1 | 20 |
|  |  |  |  |  |
| 7. | a. | Business Continuity (BC) is an integrated and enterprisewide process that includes all activities. Outline the BC planning lifecycle. | CO5 | 10 |
| b. | Failure analysis involves analyzing the data center to identify systems that are susceptible. Highlight on single point of failure and fault tolerance. | CO5 | 10 |
| (OR) | | | | |
| 8. | a. | Write down the significance of backup in NAS environments. | CO5 | 10 |
| b. | Describe any two storage array based local replication. | CO5 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Point out in detail the security implementations in NAS and IP SAN. | CO2 | 12 |
| b. | Brief on the storage management activities. | CO6 | 8 |