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



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

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| **Code :** | **17CS2059** | **Duration :** | **3hrs** |
| **Sub. Name :** | **STORAGE AREA NETWORK** | **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. | Explain how SAN technology enables universal data access across distributed enterprises. | CO1 | 10 |
| b. | Write about the primary features of iSCSI. | CO2 | 10 |
| (OR) | | | | |
| 2. | a. | Compare NAS and fiber channel SAN. | CO2 | 10 |
| b. | With a neat sketch explain the components of Network attached storage. | CO3 | 10 |
| 3. | a. | Explain the architectural components that constitute a storage area network-based system. | CO2 | 10 |
| b. | Explain the five different data transformation paths that are commonly found in application systems. | CO3 | 10 |
| (OR) | | | | |
| 4. | a. | Explain data center evolution. | CO1 | 10 |
| b. | How a SAN can complement clustering technology, increasing flexibility, while at the same time potentially reducing the cost of high availability? | CO2 | 10 |
| 5. | a. | Discuss the computer system components which implement the transformations that occur in the movement of data between application and storage media. | CO3 | 10 |
| b. | Explain the component faults that can result in data availability loss. | CO4 | 10 |
| (OR) | | | | |
| 6. | a. | What are frozen images? Describe the creation and usage of frozen  images with examples. | CO3 | 10 |
| b. | Explain the two main techniques for improving disk access speed for I/O intensive applications. | CO5 | 10 |
| 7. | a. | How server-based and RAID subsystem-based volume manager software has been enhanced to provide failure-tolerant storage in the SAN environment? | CO4 | 10 |
| b. | Elucidate the types of data replication with relevant examples. | CO3 | 10 |
| (OR) | | | | |
| 8. | a. | Compare and contrast full and incremental backup. | CO5 | 10 |
| b. | Discuss the need for enterprise backup architecture and its policies with relevant examples and neat sketches. | CO6 | 10 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Describe the three mechanisms offered by contemporary SAN management. | CO6 | 10 |
| b. | Discuss the three dimensions used to measure the Quality of online storage service. | CO6 | 10 |