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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May – 2017**

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| **Code :** | **14CS2065** | **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 hospital with 5 office location and 700 employees needs a reliable, fast performance access to large block of their patients’ health record stored as large objects. As a storage engineer suggest a suitable storage infrastructure and explain the architecture. Justify and differentiate it with other architectures. | CO1 | 20 |
| (OR) | | | | |
| 2. |  | Explain the paradigm shift changes that enables universal data access even across widely distributed enterprises. | CO2 | 20 |
| 3. |  | Data replication technology can be used to enable recovery from site disasters, for publication or consolidation of data in distributed enterprise. Explain. | CO2 | 20 |
| (OR) | | | | |
| 4. |  | Discuss about the component faults that can result in data availability loss and how RAID subsystem engineers have designed the online storage to protect against them. | CO2 | 20 |
| 5. |  | Explain the different topologies that compose Fibre Channel SANs, their properties and infrastructure components required for implementation. | CO2 | 20 |
| (OR) | | | | |
| 6. |  | Justify how a file system can contribute substantially to application performance, as well as its flexibility and manageability, in a highly connected SAN environment. | CO2 | 20 |
| 7. |  | Illustrate with neat diagrams why and how data is replicated across long distances and infer how replication is different from mirroring. | CO3 | 20 |
| (OR) | | | | |
| 8. |  | Elaborate the different forms of backup and illustrate how full and incremental backup can reduce the time required to back up online data. | C03 | 20 |
|  | | **Compulsory:** |  |  |
| 9. | a. | Summarize the prefered approach in planning and implementing an enterprise information processing strategy towards successful SAN deployment. | CO4 | 10 |
|  | b. | Discuss about the SAN management and quality of online storage service required by users and developers for enterprise data storage. | CO4 | 10 |

ALL THE BEST