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Question Paper Code	12264
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**M.E. / M.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2023**

Third Semester

**M.E. - Computer Science and Engineering**

**20PCNEL308 - INFORMATION STORAGE MANAGEMENT**

(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

**PART - A (10 × 2 = 20 Marks)**

Answer ALL Questions

- |   | <i>Marks,<br/>K-Level, CO</i> |
|---|-------------------------------|
| 1. Define scalability.                                      | <i>2,K1,CO1</i>               |
| 2. Outline the need for Storage Array.                      | <i>2,K1,CO1</i>               |
| 3. Summarize the need of zone bit recording.                | <i>2,K2,CO2</i>               |
| 4. Describe the term rotational latency.                    | <i>2,K1,CO2</i>               |
| 5. Compare the topologies of FC-SAN, IP-SAN.                | <i>2,K2,CO3</i>               |
| 6. List the three types of zoning.                          | <i>2,K1,CO3</i>               |
| 7. Interpret the function of clustering in minimizing RTO.  | <i>2,K2,CO4</i>               |
| 8. Define MTTR.   | <i>2,K1,CO4</i>               |
| 9. What are the key management activities of a data center? | <i>2,K1,CO5</i>               |
| 10. State the purpose of Information Security.              | <i>2,K1,CO5</i>               |

**PART - B (5 × 13 = 65 Marks)**

Answer ALL Questions

- |   |                  |
|---|------------------|
| 11. a) Explain about Data Center Infrastructure in detail.  | <i>13,K2,CO1</i> |
| <b>OR</b>   |                  |
| b) (i) Infer the need of Information Storage and also explain how critical they are in day-to-day Operations. | <i>7,K2,CO1</i>  |
| (ii) Discuss the factors which are needed to set a Data Center.   | <i>6,K2,CO1</i>  |
| 12. a) Illustrate the various Technologies involved in the development of Disk Drive Components.              | <i>13,K2,CO2</i> |
| <b>OR</b>   |                  |
| b) Explain in detail about different levels of RAID.  | <i>13,K2,CO2</i> |
| 13. a) What is FC-SAN? Explain the components of FC SAN infrastructure.                                       | <i>13,K2,CO3</i> |

**OR**

b) Explain about CAS architecture with neat diagram. *13,K2,CO3*

14. a) (i) Compare business continuity (BC) and disaster recovery (DR). *7,K2,CO4*  
(ii) Explain the Architecture of backup/recovery and the different topologies of a storage system. *6,K2,CO4*

**OR**

b) List and explain the considerations in using tape as the backup technology. Describe the benefits of using “virtual Tape library” over physical tapes. *13,K2,CO4*

15. a) Discuss in detail about storage Management activities. *13,K2,CO5*

**OR**

b) Identify and examine the need of critical security attributes for information system. *13,K2,CO5*

**PART - C (1 × 15 = 15 Marks)**

16. a) Analyze in detail about Virtualization technologies. *15,K4,CO6*

**OR**

b) Explain in detail about a Remote application framework for a “Banking System” and also State the functional requirements which are Considering for the system. *15,K4,CO6*