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Question Paper Code	13053
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**M.E. / M.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2024**  
 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</i>	<i>K- Level</i>	<i>CO</i>
1. Outline the need for Storage Array.	2	K2	CO1
2. List the components that formulate the data center.	2	K1	CO1
3. Define Seek Time.	2	K1	CO2
4. List the types of storage virtualization.	2	K1	CO2
5. What is zoning? When is soft zoning preferred over hard zoning?	2	K1	CO3
6. Compare the topologies of FC-SAN and IP-SAN.	2	K2	CO3
7. Define MTBF.	2	K1	CO4
8. What do you mean by RPO?	2	K1	CO4
9. State the key management activities of a data center.	2	K1	CO5
10. Infer the purpose of Storage network.	2	K2	CO5

**PART - B (5 × 13 = 65 Marks)**  
 Answer ALL Questions

11. a) Describe in detail about Data Center Infrastructure.	13	K2	CO1
<b>OR</b>			
b) Explain how information is managed using information life cycle. Discuss its characteristics and advantages.	13	K2	CO1
12. a) Illustrate about the various Physical components of disk drive and their function.	13	K2	CO2
<b>OR</b>			
b) Demonstrate the functions of different levels of RAID.	13	K2	CO2
13. a) What is FC-SAN? Explain the components of FC SAN infrastructure.	13	K2	CO3
<b>OR</b>			
b) Summarize the operating principles of NAS file sharing protocols.	13	K2	CO3

14. a) i) Distinguish between business continuity (BC) and disaster recovery. 7 K4 CO4  
ii) Examine the architecture of backup/recovery and the different topologies of a storage system. 6 K4 CO4

**OR**

- b) Analyze the role of local Replication technologies in ensuring information availability and quality of service. 13 K4 CO4
15. a) Apply the critical security attributes for an information system and discuss how it ensures security. 13 K3 CO5
- OR**
- b) Identify the role of Industry standards in monitoring data center. 13 K3 CO5

**PART - C (1 × 15 = 15 Marks)**

16. a) Describe in detail about storage virtualization technologies and also list its challenges. 15 K2 CO6
- OR**
- b) List and Explain the functions of different storage security domains. 15 K2 CO6