



R18 Regulation

Subject code: 2E8EF

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech VIII Semester Regular/Supplementary Examinations, April 2023

Storage Area Networks

(Computer Science and Engineering)

Maximum Marks: 70

Date:05.05.2023 Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 What are the major physical components of disk drive?
- 2 What are the logical constructs of a physical disk?
- 3 What is intelligent storage system?
- 4 Write about RAID 6.
- 5 Define Disaster recovery.
- 6 Explain about Impact of downtime?
- 7 What is data backup?
- 8 Why do we need replication technology?
- 9 What are the advantages of Virtualization technology
- 10 What is storage virtualization?

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 What are the Challenges available for data storage? Explain. [10]
OR
- 12 A. Discuss in brief about the role of each element in supporting business activities.
B. Define Data center? What are the Core elements of a data center infrastructure? [5+5]
- 13 A. Explain the concept of RAID.
B. Compare and contrast Integrated and Modular storage systems. [5+5]
OR
- 14 Describe about the components and topologies of FC-SAN. [10]
- 15 A. List the reasons for unplanned outages.
B. Differentiate between RTO and RPO. [5+5]
OR
- 16 Describe single point of failure in a storage infrastructure and list solutions to mitigate these failures. [10]
- 17 A. Draw the architecture of data backup technology.
B. Write about different back up technologies. [5+5]
OR
- 18 Briefly explain about the replication technologies and their role in ensuring information availability and business continuity. [10]

19 What is storage security domain? List and analyzes common threats in each domain? [10]

OR

20 A. What are the limitations of file level virtualization technology.

B. Describe in brief about the Critical security attributes for information systems. [5+5]