



R20 Regulation

Subject code: 3E8FB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VIII Semester Supplementary Examinations, November 2025

STORAGE AREA NETWORKS

(IT)

Maximum Marks: 70

Date: 27.11.2025

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.
 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)

		Marks	CO	BTL
1	Define unstructured data?	2M	1	L1
2	What is information storage?	2M	1	L1
3	Name some storage protocols used in SANs.	2M	2	L1
4	List FC SAN Topologies.	2M	2	L1
5	What are the backup and restore operations?	2M	3	L1
6	Which is the protocol client-server application?	2M	3	L1
7	Define reliability and accessibility as components of information availability.	2M	4	L1
8	What factors should be considered when planning a backup strategy for a SAN?	2M	4	L1
9	What does the risk triad consist of?	2M	5	L1
10	What are the key components of storage security domains?	2M	5	L1

Part-B

Answer All the following questions.

(5X10M=50Marks)

		Marks	CO	BTL
11	With a neat diagram, explain the structure of read and write operations in cache. With a neat diagram, explain ISS, explain in detail the cache component of ISS.	10M	1	L2
OR				
12	With a neat diagram, explain the structure of read and write operations in cache. With a neat diagram, explain ISS, explain in detail the cache component of ISS.	10M	1	L2
13	Describe block, file, and object SAN architectures, including their advantages and limitations.	10M	2	L2
OR				
14	Explore techniques such as RAID, snapshots, replication, and failover in SAN environments.	10M	2	L2
15	Illustrates the NAS I/O operation.	10M	3	L2
OR				

16	Discuss content-addressed storage (CAS), use cases, and the concept of unified storage that combines file and block storage.	10M	3	L2
17	What is protocol? Explain the popular interface protocols used for host to storage communications.	10M	4	L2
	OR			
18	Mention backup topologies. List various backup forget solution and explain anyone with a neat diagram.	10M	4	L2
19	Describe the importance of defining and segregating storage security domains within a SAN environment.	10M	5	L2
	OR			
20	Explain FCSCAN security architecture with a neat diagram.	10M	5	L2