JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2025

B.Tech-7ᵗʰ Semester (CSE/IT)

COURSE CODE (CREDITS): 18B1WCI736   MAX. MARKS: 15

COURSE NAME: STORAGE NETWORKS

COURSE INSTRUCTORS: Dr Pankaj Dhiman, Mr. Akshay Kumar

MAX. TIME: 1 Hour

Note: (a) *All questions are compulsory.*

(b) *The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems*

Q.No	Question	CO	Marks
Q1	How does data proliferation affect backup and disaster recovery strategies in large-scale systems?	1	3
Q2	How does ILM ensure the balance between data accessibility, security, and cost optimization? Give an example.	1	3
Q3.	Explain the concept of "write penalty" in RAID 5. How does it impact performance in high-write workloads?	2	3
Q4.	What are the limitations of hot sparing in terms of performance degradation during rebuild?	2	3
Q5	Compare and contrast DAS, NAS, and SAN in terms of architecture, scalability, and management complexity.	1	3