Course: Big Data Storage   Semester: III
Programme: B.Tech. CSE Big Data   Course Code: CSBD2004
Time: 03 hrs.   Max. Marks: 100

SECTION A

Q. No.		Marks	CO
Q 1	Differentiate Hard disk drive and Solid State Drive.	5	CO1
Q 2	In HBase, assume table 'test' with column family "col_family1". Write HBase shell command for: a) creating table b) storing a column 'col' with value 'val' and key as 'k1' c) get all the values from the table d) update value of row where key is 'k1' and column is 'col' to 'new_val' e) dropping table 'test'	5	CO4
Q 3	Define superblock and journaling associated with file system.	5	CO1
Q 4	Which type of NoSQL database is more appropriate for : a) Social networks b) Analytics platforms c) Systems that maintain counters d) Services that have expiring usage e) Storing user preferences	5	CO2
Q 5	List out any five limitations of traditional file system.	5	CO1
Q 6	Define shard, logical shard and physical shard with example.	5	CO3

SECTION B

Q 7	Explain any five distributed file systems.	10	CO4
Q 8	List out any five common file systems with its characteristics. Explain key differences between windows and linux based file systems.	5+5	CO1
Q 9	Explain HDFS architecture and its daemons.	10	CO4
Q 10	Explain benefits of NoSQL approach with help of real world examples.	10	CO2
	OR		
	Differentiate NoSQL and RDBMS.	10	CO2
Q 11	Explain different types of NoSQL databases.	10	CO2

Section C

Q 12	a) Discuss approaches for achieving scalability in NoSQL databases using sharding. b) Discuss major strategies for sharding.	10+10	CO3