(Time :1 Hours)   **[Total Marks: 25]**

N.B: (1)   <u>**All questions are compulsory.**</u>
       (2)   Figures to the **right** indicate full marks.
       (3)   **Assume additional data if necessary** but state the same clearly.
       (4)   Symbols have their usual meanings and tables have their usual standard design unless stated otherwise.

Q.1	Attempt <u>**any two**</u> of the following		**(10)**
a)	Define NoSQL. Explain any four characteristic of NoSQL.		**05**
b)	What are key value stores? List out some popular key value databases. Explain how all the data is stored in a single bucket of key value store.		**05**
c)	What is architectural framework of HBase distributed storage system?		**05**
d)	How to create records in document centric databases? Explain with examples.		**05**

Q.2	Attempt <u>**any two**</u> of the following		**(10)**
a)	How to create and use indexes in MongoDB?		**05**
b)	Explain distributed ACID system.		**05**
c)	How to access data from Column-Oriented Databases like HBase?		**05**
d)	What are the similarities between SQL and MongoDB Query features?		**05**

Q.3	Attempt <u>**any one**</u> of the following		**(05)**
a)	How to Access documents from Mongodb? Explain with examples?		**05**
b)	Explain indexing in Apache Cassandra.		**05**

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