

## 25100198 – RA8

Q1.

Delta consistency defines the bound on a stale data item. Specifically, it says that a stale data item can be seen **up to *delta* virtual time units from the last update**. A small delta value will mean better consistency but slower response time. On the other hand, a large delta value will mean worse consistency but better response time.

Q2.

It partitions the data into segments and distributes them among query nodes, acting as a cache. When these nodes are queried next for these data items, they can directly direct them to the responsible nodes.

Q3.

Manu records data definition requests such as creating/deleting collections, data manipulation requests such as inserting/deleting vectors, and system coordination messages such as loading/dumping to/from memory. They use logical logs as they are more concerned with event-ordering rather than the physical changes being made to memory.

Q4.

```
myCollection = Collection("myCollection", anime)
myCollection.insert(frieren)
```