Ans 5 b)

To ensure that messages and broker definitions survive restarts, we need to ensure that they are on disk. The AMQP standard has a concept of durability for exchanges, queues and of persistent messages, requiring that a durable object or persistent message will survive a restart.

**Ans 3**

In order to make the query fast, I will create the clustered index on the primary key column and the non-clustered index can also be created on the columns basesd on which the search needs to be done.

Ans 6

There are a number of libraries and blog posts describing how to implement a DLM (Distributed Lock Manager) with Redis. We can use an algorithm, called Redlock, which implements a DLM which we believe to be safer than the vanilla single instance approach.

Ans 2

The version1 is better.

Ans