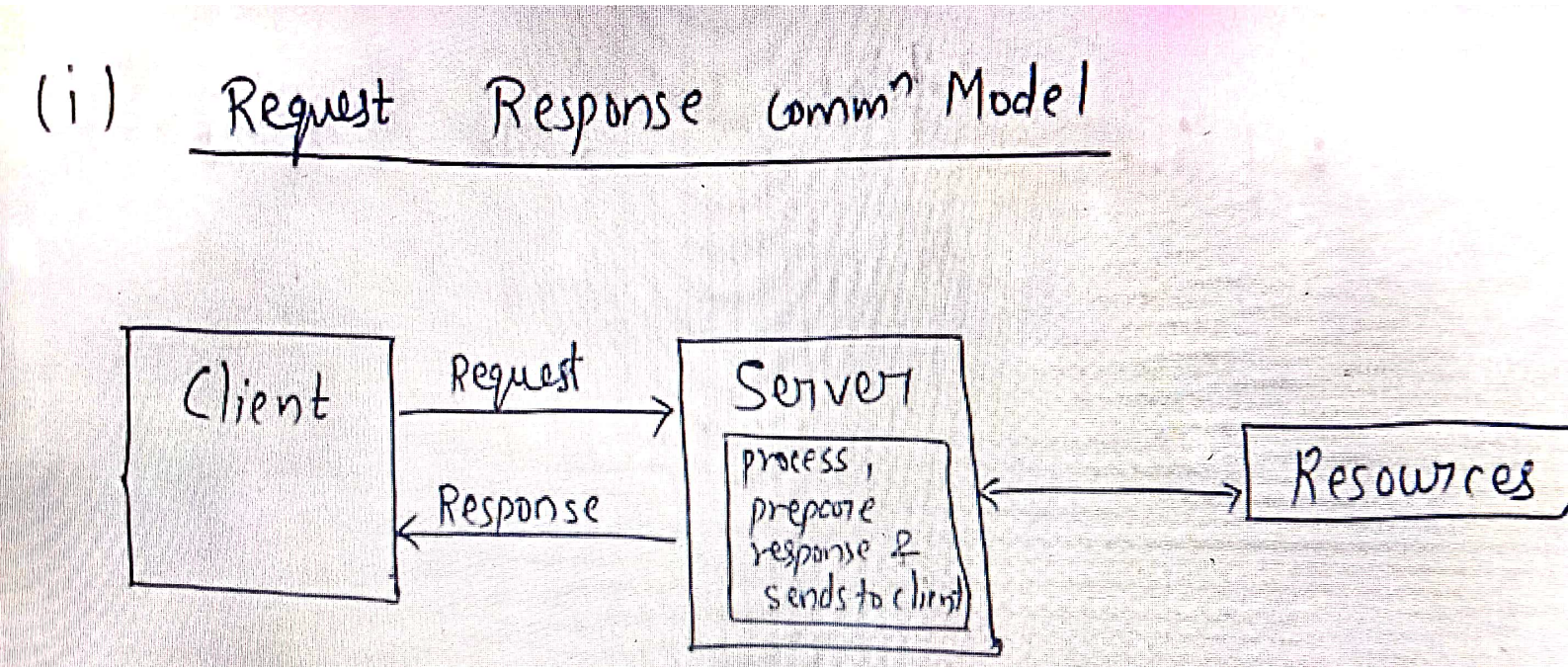
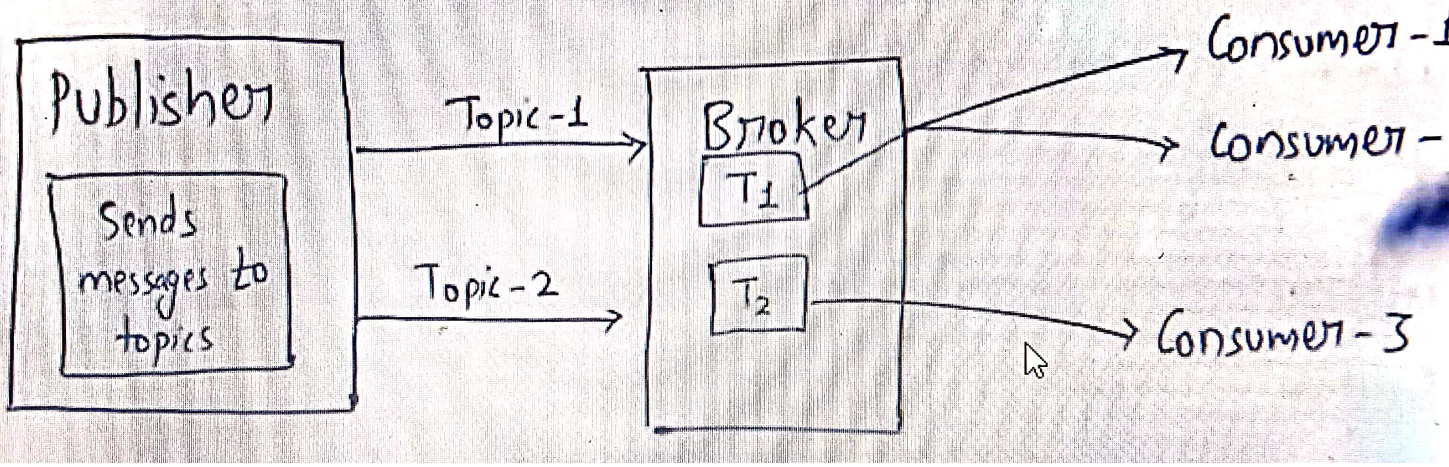
(i) Request Response Comm^n Model



Request-Response

- Request–Response is a communication model in which the client sends requests to the server and the server responds to the requests.
- When the server receives a request, it decides how to respond, fetches the data, retrieves resource representations, prepares the response and then sends the response to the client.
- Stateless communication model

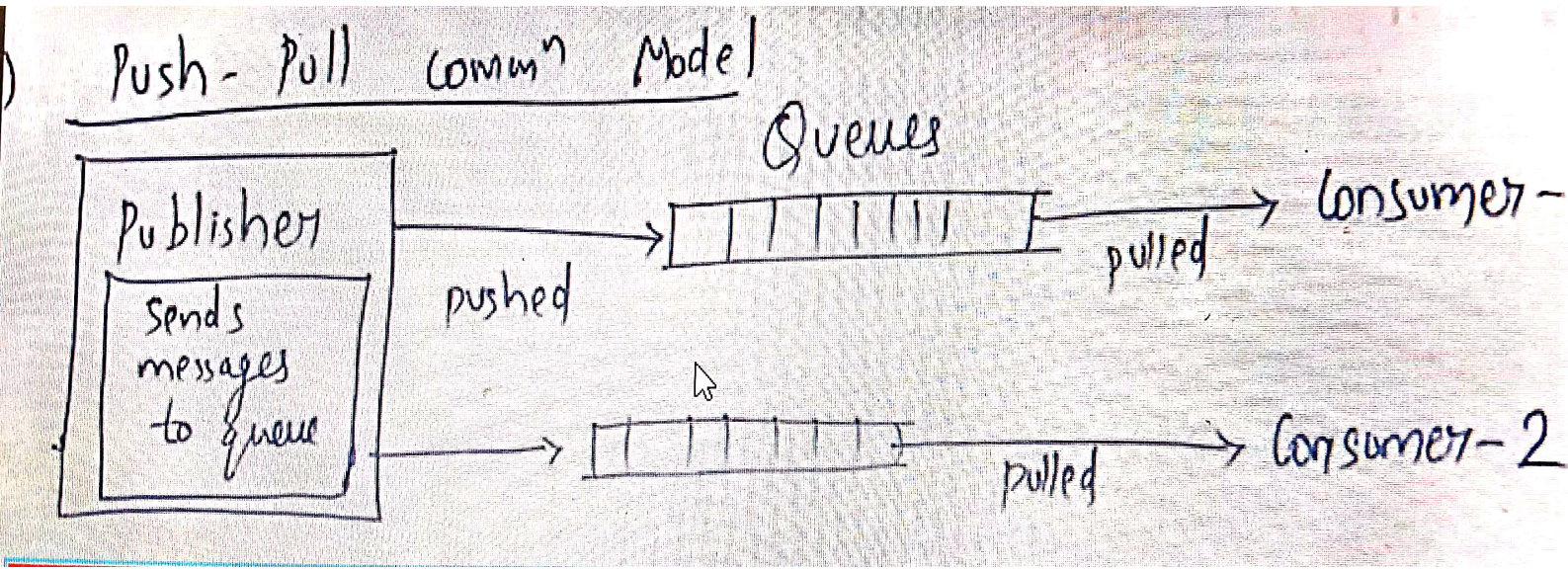
ii) Publish - Subscribe Comm^n Model



Publish–Subscribe

- Publish–Subscribe is a communication model that involves publishers, brokers and consumers.
- Publishers are the source of data.
- Publishers send the data to the topics which are managed by the broker. Publishers are not aware of the consumers.

- Consumers subscribe to the topics which are managed by the broker.
- When the broker receives data for a topic from the publisher, it sends the data to all the subscribed consumers.


Push - Pull Comm^n Model
Queues
Publisher
Sends messages to queue
pushed
pulled
Consumer -
pulled
Consumer - 2

Push-Pull

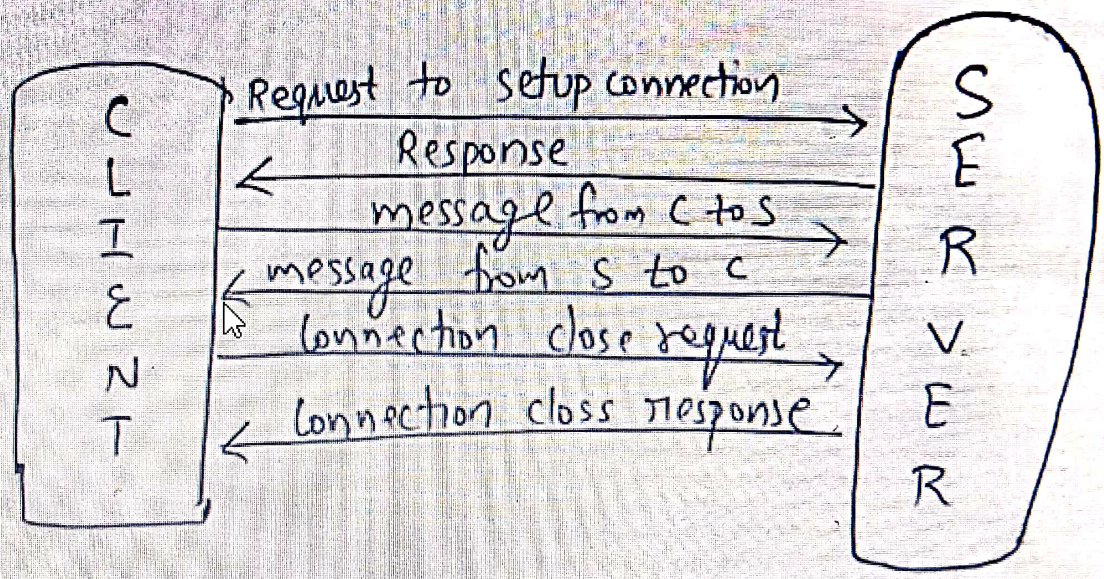
- Push-Pull is a communication model in which the data producers push the data to queues and the consumers pull the data from the queues.
- Producers do not need to be aware of the consumers.

contd

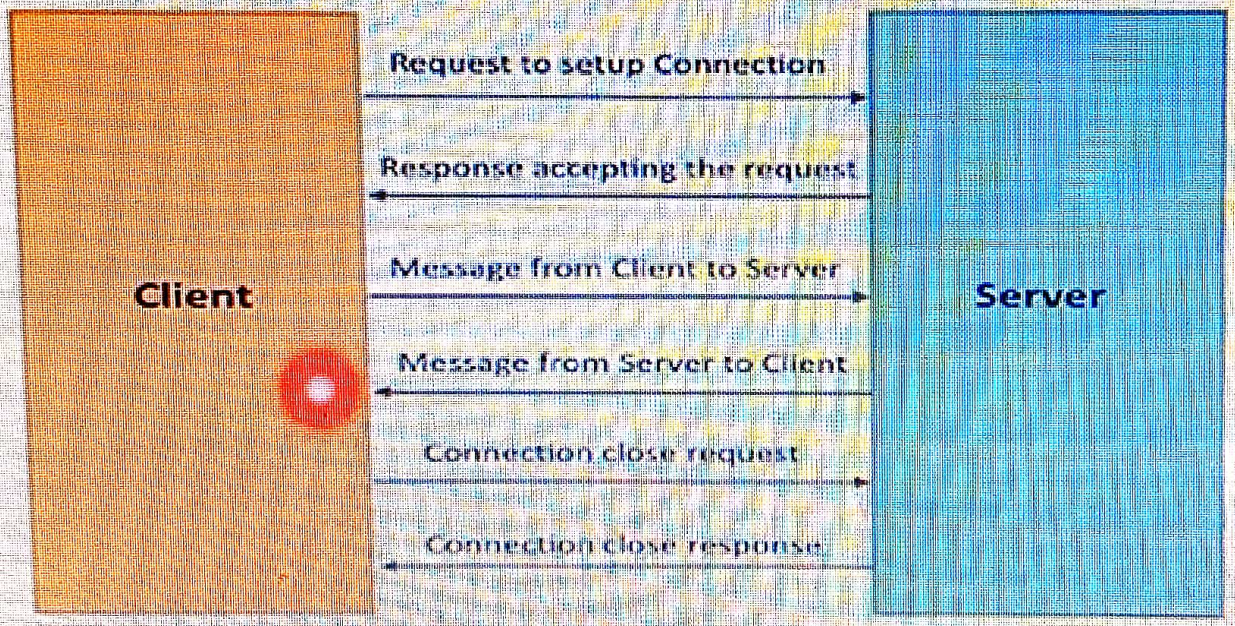
- Queues help in decoupling the messaging between the producers and consumers.
- Queues also act as a buffer which helps in situations when there is a mismatch between the rate at which the producers push data and the rate rate at which the consumers pull data.

1:50

(iv) Exclusive Pair Comm^n Model :- Bidirectional



Block Diagram-Exclusive Pair



Exclusive Pair

- Exclusive Pair is a bidirectional, fully duplex communication model that uses a persistent connection between the client and server.
- Once the connection is setup it remains open until the client sends a request to close the connection.
- Client and server can send messages to each other after connection setup.