

# IBM

## Exam C2180-376

### IBM WebSphere MQ V7.0, Solution Design

Version: 5.1

[ Total Questions: 96 ]

**Question No : 1**

Which new feature in WebSphere MQ V7.0 needs to be taken into account when WebSphere MQ solutions are deployed into mixed z/OS and distributed environments?

- A.** Queue sharing groups are now available between z/OS and other platforms; however, at least one queue manager in the group must still be hosted on z/OS.
- B.** The use of WebSphere MQ Explorer for the administration of z/OS based queue managers no longer requires a license for the Client Attachment Feature (CAF) for a limited number of users.
- C.** WebSphere MQ Client applications from distributed environments can now directly connect to z/OS queue managers; the Client Attachment Feature (CAF) is no longer required.
- D.** A WebSphere MQ Client implementation on z/OS is now available, so that full WebSphere MQ no longer needs to be installed on all z/OS systems that want to participate in message queuing.

**Answer: B**

**Question No : 2**

An application queue is triggered for trigger type of DEPTH. Following this, what action should the job or program that was started as a result of the trigger take before it ends, so that the queue will be triggered again the next time that trigger depth (TRIGDPTH) is reached?

- A.** It needs to use MQSET or an ALTER QLOCAL command to reset triggering (TRIGGER) for the queue.
- B.** It needs to reset trigger depth (TRIGDPTH) for the queue through an MQSET or ALTER QLOCAL command.
- C.** It needs to reset trigger depth (TRIGDPTH) and triggering (TRIGGER) for the queue, using MQSET or an ALTER QLOCAL command.
- D.** No action needs to be taken. The queue manager will create the next trigger message when the current depth of the queue once again reaches trigger depth (TRIGDPTH).

**Answer: A**

**Question No : 3**

An application is required to retrieve rows from a relational database table and send them across WebSphere MQ to a remote queue manager, where a receiving application

consumes them.

After a successful MQPUT of a message, the corresponding row is to be deleted from the database. It is intended to run this application using the free WebSphere MQ Client. The delivery of each message is to be guaranteed. Which of the following is true about this implementation?

- A. It cannot be done using the free WebSphere MQ Client; the Extended Transactional Client is required, since two phase commits are needed for this solution.
- B. It cannot be done using the free WebSphere MQ Client; a local queue manager is required to support the guaranteed delivery of the messages.
- C. This solution can be implemented using the free WebSphere MQ Client, provided that the receiving application can recognize and handle repeated delivery of the same message.
- D. This solution cannot be implemented using the free WebSphere MQ Client; persistent messaging is not supported by the free WebSphere MQ Client.

**Answer: C**

**Question No : 4**

A solution developer is writing a C language application on a UNIX platform. There is a requirement for the transactions to be processed within syncpoint control. What is the MINIMUM required MQ component on the application platform to achieve this functionality?

- A. WebSphere MQ Client Installation
- B. WebSphere MQ Extended Transactional Client Installation
- C. WebSphere MQ Server Installation
- D. WebSphere MQ Server Installation with the XA capabilities configured

**Answer: A**

**Question No : 5**

A master data management solution has been implemented for the enterprise. Updates with customer and product data need to be distributed to several applications. What is the BEST approach given that not all applications might be interested in every customer type?

- A. Use the publish/subscribe paradigm.
- B. Receive updates on application-specific queues. Message properties and selectors should be used for filtering.

- C. Browse a common queue for updates.
- D. Use a request-reply pattern and query the MDM (Master Data Management) application.

**Answer: A**

**Question No : 6**

A new WebSphere MQ application with high volume requirements is being designed to run on Solaris. The solution designer is concerned about the performance of the application. The WebSphere MQ for Solaris V7 Performance Evaluation Report SupportPac provides all but one of the following types of information to the solution designer. Which is NOT discussed in this document?

- A. Suggestions for tuning WebSphere MQ
- B. Information that can be used to size the company new application
- C. Evaluation of the relative cost of one WebSphereMQ API vs. another in different scenarios
- D. Evaluation of the relative cost of persistent messages vs. nonpersistent messages in different scenarios

**Answer: C**

**Question No : 7**

Which of the following should generally be avoided if an application is being designed for optimal efficiency?

- A. Make messages nonpersistent if they do not need to be recoverable.
- B. Code programs to open and close queues, or connect and disconnect from the queue manager only once, if the queues or connection will be used again.
- C. Bundle the data to be transmitted into as few messages as possible (e.g., rather than sending a hundred 1MB messages, send one 100MB message).
- D. Group a batch of messages within a unit of work where appropriate, so that they can be committed all at once (e.g., get and put messages under syncpoint and commit them in groups of 10, rather than committing them individually).

**Answer: C**

**Question No : 8**

In designing a solution with availability in mind, the designer is considering the following two alternatives, one using a cluster queue and the other using a shared queue. In each scenario, Queue Managers QMA and QMB will both be capable of running Application A. In the first scenario, Application A will run on QMA and QMB on Windows accessing cluster queue QA. In the second scenario, Application A will run on QMA and QMB on z/OS accessing shared queue QA. Which of the following describes the availability scenarios in the situation where QMA fails?

- A. For Windows, the delivered messages on QA that Application A on QMA did not get to process are available for processing by Application A on QMB
- B. For z/OS, the delivered messages on QA that Application A on QMA did not get to process are available for processing by Application A on QMB
- C. For Windows, messages from QA that were in flight on QMA when it failed are made available for processing on QMB
- D. For z/OS, messages from QA that were in flight on QMA when it failed are unavailable for processing by QMB

**Answer: B**

**Question No : 9**

A solution designer is evaluating distribution scenarios and wants to understand the circumstances where messages are not delivered as expected. Which of the following are reasons that a message is placed on the DLQ?

- A. A trigger monitor is unable to start the triggered program
- B. The destination queue is full when the program puts the message to the local queue
- C. The queue manager is quiescing when the program puts the message to the queue
- D. A sending message channel agent is unable to perform data conversion when required for the message
- E. The program tries to put a message to an invalid local queue

**Answer: A,D**

**Question No : 10**

An organization has a widely distributed online environment, where applications are connected via WebSphere MQ messaging. A business requirement is brought forward that certain mission critical applications record audit trail data which is to be collected in a

central location. No information can be lost. A central data warehouse must be loaded daily with this information as soon as possible after end of business. Which of the following proposed solutions is best in terms of the requirement, reliability and overall performance? The audit trail data is:

- A.** written to a file on the local file system and transmitted to the central audit trail server via reliable filetransfer over WebSphere MQ.
- B.** sent as a persistent WebSphere MQ message and forwarded to the queue manager of the central server asynchronously.
- C.** inserted into a central database table via a remote access database client under control of the local WebSphere MQ transaction.
- D.** inserted into a local database table under two phase commit using WebSphere MQ as the transaction manager and a bulk update is performed at end of day.

**Answer: B**

**Question No : 11**

A suite of server applications is to be designed to support the graceful shutdown capabilities of WebSphere MQ implemented via the mail if quiescing feature. Which of the following best describes the use of this feature?

- A.** Applications that have this feature activated can request an extra grace period of a configurable length that will allow them to complete critical processing before the queue manager will disconnect them.
- B.** Applications using this feature will be informed of the queue manager quiescing via a completion code of MQCC\_FAILED and a reason code of MQRC\_Q\_MGR QUIESCING (or MQRC\_CONNECTION QUIESCING) and will be disconnected automatically. Applications are expected to periodically attempt reconnection.
- C.** Using FAIL\_IF QUIESCING options where valid with MQI calls, an application can finalize MQ processing, avoiding loss of data, before the queue manager is shut down.
- D.** When a queue manager is configured with the FAIL\_IF QUIESCING option and is being shut down, it will reject all MQI calls with a completion code of MQCC\_FAILED and a reason code of MQRC\_Q\_MGR QUIESCING (or MQRC\_CONNECTION QUIESCING) in order to assure fast and reliable termination.

**Answer: C**

**Question No : 12**

The topic object for the topic x/y is defined with WILDCARD=PASSTHRU. Which of the following is the most appropriate use of a wildcard for this topic?

- A. Subscribe to topic x/y/#
- B. Publish the information to topic x/y/#
- C. Publish the information to topic x/y/+
- D. It is not possible to use a wildcard with this topic

**Answer: A**

**Question No : 13**

A company has an MQI application on Windows that continuously browses a queue to identify a message before removing it for processing. The application has only one program reading the queue. The company is experiencing increased volumes, and there is a need to add additional instances of the browsing program. Which of the following options could help with splitting and managing the workload across the multiple browsing programs?

- A. Use browse with lock
- B. Use browse with message under cursor
- C. Use browse with priority sequencing
- D. Use MQ cooperative browsing options
- E. Share an object handle across the programs

**Answer: A,D**

**Question No : 14**

Business owners want to allow an existing application to be easily portable to any of four Linux servers in their data center. For this they want the four queue managers on these servers to be changed to have the same name. What must be the response of the WebSphere MQ Solution Designer?

- A. There is no problem.
- B. Queue managers cannot be renamed, so this can only be done by recreating the queue managers. Beyond that, there is no problem.
- C. It is possible to define queue managers with identical names in a network, but it is not recommended.
- D. It cannot be done. All interconnected queue managers must have unique names.

**Answer: C**

**Question No : 15**

A manufacturing company is looking to provide its customers an online version of its order maintenance application. Customers will be able to check status, update the order, or delete the order. The existing solution is currently WebSphere MQ based, and the online interface will have strict performance requirements. If the customer updates or deletes an order, the message cannot be lost. Which one of the following solutions will BEST meet the requirements stated?

- A. Ensure the queue data and logs are located together on the fastest disk possible
- B. Alter the channel to set NPMSPEED(FAST), and send the messages down multiple channels.
- C. Port the existing application to z/OS which has the highest performance and availability qualities of service
- D. Design the query and modify operations to use nonpersistent and persistent messages respectively, and utilize two phase commit only where Necessary

**Answer: D**

**Question No : 16**

The HTTP bridge included with WebSphere MQ V7.0 can be a suitable alternative to the WebSphere MQ Client under certain circumstances. Which of the following is NOT true?

- A. It fully supports WebSphere MQ V7.0 publish/subscribe.
- B. It conveniently supports WebSphere MQ access from web based applications, including those using asynchronous techniques such as AJAX.
- C. It allows applications running on platforms not supported by WebSphere MQ, but has HTTP support, to gain access to a WebSphere MQ network
- D. Its use can reduce software distribution and maintenance cost if a large number of WebSphere MQ Client instances would otherwise be required.

**Answer: A**

**Question No : 17**

An application is experiencing issues when processing large volumes of nonpersistent