

IBM WEBSHERE MQ V7.0, SOLUTION DESIGN COURSE CONTENT

❖ **SECTION 1 - ENVIRONMENT FOR MESSAGING-BASED APPLICATIONS (20%):**

- A. Compare the various enterprise integration patterns (e.g., asynchronous messaging, Remote Procedure Call (RPC), data integration).
- B. Assess the suitability of IBM WebSphere MQ V7.0 as a solution technology.
- C. Describe advantages and disadvantages of running IBM WebSphere MQ V7.0 on various hardware and operating systems.
- D. Plan for the IBM WebSphere MQ V7.0 features to address security, recovery, availability, reliability, performance, scalability.
- E. Assess/apply best practices (e.g., naming standards) relating to integration. Infrastructure.

❖ **SECTION 2 – SOLUTION ARCHITECTURE (60%):**

- A. Apply messaging and queuing paradigm to solutions.
- B. Use IBM WebSphere MQ V7.0 features, including triggering, data conversion, and message properties.
- C. Create messaging based solutions from business requirements.
- D. Apply appropriate IBM WebSphere MQ V7.0 features to address:
 - 1. Availability, scalability and capacity requirements (e.g., clustering, shared queues, etc).
 - 2. Integrity and reliability requirements (e.g., persistence, transactionality, and logging, etc).
 - 3. Message distribution requirements (e.g., point-to-point, publish/subscribe).
 - 4. Solution performance requirements.
- E. Illustrate Service Oriented Architecture (SOA) requirements (e.g., HTTP, URI's, etc).
- F. Select appropriate SupportPacs for IBM WebSphere MQ V7.0 solutions.
- G. Discuss and apply best practices around messaging solutions (e.g., patterns).

❖ **SECTION 3 - IMPLEMENTATION (20%):**

- A. Apply Message Queue Interface (MQI) and JMS capabilities.
- B. Use techniques for resolving JMS and IBM WebSphere MQ V7.0 related application problems.
- C. Design test plans for IBM WebSphere MQ V7.0 solutions.
- D. Apply best practices around solution deployment.