IBM WEBSPHERE PROCESS SERVER V7.0, INTEGRATION DEVELOPMENT COURSE CONTENT

- **SECTION 1 - SERVICE COMPONENT ARCHITECTURE (SCA) PROGRAMMING MODEL AND SOLUTION DESIGN (19%):**
  - A. Effectively organize a project into modules taking into consideration component reuse and application maintainability.
  - B. Design and use business objects and the business object framework API when developing a solution.
  - C. Design and use WSDL interfaces.
  - D. Articulate the business value of SCA.
  - E. Determine the use of microflows versus long running processes as appropriate.
  - F. Include mediation flows using basic mediation primitives in the design when appropriate.
  - G. Work with and understand generated deployment artifacts.
  - H. Support solution versioning and maintenance using appropriate tools in the product.

- **SECTION 2 - BUSINESS SOLUTION DEVELOPMENT (35%):**
  - A. Use the module dependency editor to declare dependencies for modules, mediation modules, and libraries.
  - B. Use the business process editor to create and configure a business process including any BPEL supported activity.
  - C. Use the business state machine editor to create a State Machine component (including events, guards, actions and correlation sets).
  - D. Understand the use of mediation flows using service message objects (SMO) and mediation primitives.
  - E. Create and configure business rules.
  - F. Create custom logic using the visual snippet editor.
  - G. Create custom logic by using Java code.
  - H. Configure a selector to dynamically invoke SCA components.
  - I. Use the appropriate transaction Quality of Service qualifiers.
  - J. Use the appropriate security Quality of Service qualifiers.
  - K. Implement error handling and compensation within a business process.
  - L. Configure CEI events.

- **SECTION 3 - HUMAN TASKS (21%):**
  - A. Distinguish (use, demonstrate usage of) different types of human tasks (i.e., invocation task, collaboration task, to-do task).
  - B. Use of human task to define security privileges in long-running processes.
  - C. Choose between inline human task and stand-alone human task.
  - D. Assign people to a human task.
  - E. Use the escalation and notification mechanisms available for human tasks.
  - F. Implement subtasks and follow-on tasks.
  - G. Understand and work with the human task life-cycle.
  - H. Implement client interactions for human tasks (including API, human task manager, business flow manager).
  - I. Use different possible clients for a human task.

- **SECTION 4 - CONNECTIVITY (12%):**
  - A. Configure import and export bindings to support different types of connectivity (i.e. JMS, MQ, Web Services, HTTP, EJB, EIS and SCA).
  - B. Add and configure an included technology adapter.
  - C. Demonstrate the usage of synchronous and asynchronous invocation patterns.
  - D. Transform data using data maps.

❖ **SECTION 5 - TESTING AND TROUBLESHOOTING (13%):**

A. Configure and use the integrated test environment to test modules and components.
B. Use the test client for component testing (including data pools creation, test suite usage, etc.).
C. Enable cross component trace for troubleshooting.
D. Use the integrated debugger to troubleshoot components.
E. Use appropriate server logs for problem determination.
F. Use the BPC Explorer to test, inspect, and interact with business processes and tasks☐