60-322-01 Sample Questions for Exams

1. (*CONCEPTS*)

   Answer each of the questions by making the correct selection with a check mark.

   1) Object orientation in object-oriented software development refers to one of the following concepts, or ⓔ if none of them:

      ⓐ It is about placing objects in the right orientation for alignment in diagrams.

      ⓑ It is about identifying and grouping objects with the same orientation in the world.

      ⓒ It is about defining software classes for objects with the same orientation in the world.

      ⓓ It is about viewing and modeling the world as a set of interacting and interrelated objects.

   2) Select one of the following descriptions if that description does not apply to the concept of `class`. Otherwise, select ⓔ.

      ⓐ A class is a uniquely identified abstraction;

      ⓑ In a class, a set of logically related instances share the same or similar characteristics;

      ⓒ An attribute of a class is a named property of the class;

      ⓓ An operation of a class is the implementation of a service provided by the class.

   3) The relationship between `software process` and `software process model` is described by one of the following statements, or ⓔ if none of them:

      ⓐ Both software process and process model are abstractions of software development activities.

      ⓑ The former is an abstraction of the latter.

      ⓒ While the former consists of a set of activities, the latter represents a process paradigm.

      ⓓ While the latter consists of a set of activities, the former represents a process paradigm.

2. (*TECHNIQUES/METHODOLOGIES/PRINCIPLES*)

   (Question 4 of Assignment 1) Write a fully dressed description of the "Add Book" use case for the bookstore system we have been discussing in class.

3. (*PROCESSES/GUIDELINES*)

   (Question 2 of Assignment 2) Among the OOA artifacts illustrated in the figure (to be provided), describe their relationship with explanations (use examples(s) when necessary):

   (a) For one use case diagram with `N` use cases, how many use case descriptions need to be documented? Among them, how are are brief and how many are fully dressed?

   (b) For one brief use case description, how many system sequence diagram needs to be created?

   (c) For one fully-dressed use case description, how many system sequence diagram needs to be created?

   (d) In one system sequence diagram, which type of its elements needs to be further detailed with operation contracts?