Review of partial exam questions, Software Engineering

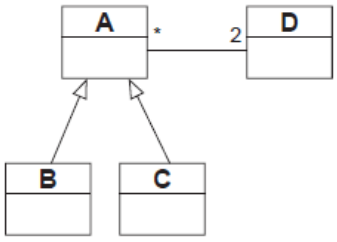
Last update: Wednesday, 14 de December de 2022

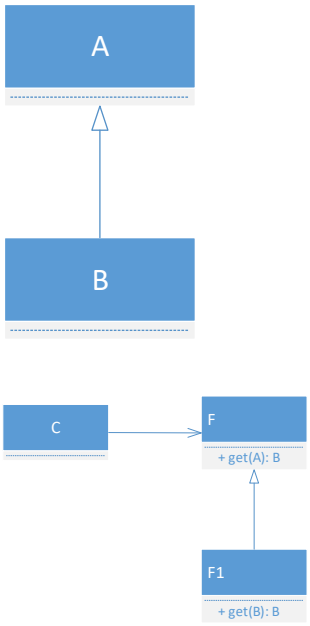
The present document has been created with the objective of providing a response to the review requests related to the partial exams of blocks I, II and III.

To do so, all requests have been reviewed justifying a response and proposing an action. More specifically and due to the impact in the grades, the actions have been taken to maximize the grades.

This document is firm and ends with the review process of blocks I, II and III. Afterwards, a detailed view of all continuous assessment grades will be published according to the university guidelines.

Block	Question	Review	Status	Action
I	Regarding the different types of requirements, select the CORRECT option: Select one: *a.Leave this question blank.* *b.Functional requirements, also known as -ilitities of a system, state restrictions on how a set of objectives can be reached.* *c.Non-functional requirements state capabilities and/or conditions necessary to solve a problem or reach an objective.* *d.None of the options is correct.* *e.Functional requirements state capabilities and/or conditions necessary to solve a problem or reach an objective.*	Option e) is correct since a functional requirement is a requirement. Option c) is also correct for the same reason, a non-functional requirement is a requirement.	Accepted	c, e and d are now correct.
I	In the requirements elicitation and description process, if there is a “NON SATISFIED” transition, What it should NOT BE done?	See slide 14.	Not accepted	Not applicable

II	*Given the next UML2 diagram, select the INCORRECT answer:* *a) One object of B must be associated with exactly 2 objects of D.* *b) One object of D must be associated with multiple objects of C.* *c) Objects of B and C must be associated with exactly 2 objects of D.* *d) Two objects of D must be associated with multiple objects of A.* 	Here we must select the **INCORRECT** answer, so we have to interpret the diagram (multiplicity, types of relationships, etc.). Option a: an instance of class A is associated with exactly 2 instances of class D. B is of type A, so instances of B are also instances of A. That is why, one instance of B requires 2 instances of D. Option b: again, this is an interpretation of multiplicity and inheritance. One instance of D is associated with * instances of A. Instances of C are also instances of A. Option c: equivalent to the explanation in option a. Option d: one (no two) instance of D will be associated with * instances of A.	Not accepted	Not applicable
II	*What kind of relationships can appear in a class diagram to represent a conceptual model?* *a. Leave this question blank.* *b. Association, Dependency, Aggregation, Composition and Generalization.* *c. Association, Dependency, Aggregation, Composition and Contracting.* *d. Association and Contracting.* *e. Association and Dependency*	Here, the question is whether the option e) is the unique valid option. Any relationship in a class diagram is an association. Then, there are different types of relationships that are expressed through different types of associations (and their corresponding notations). Dependency is an association as aggregation, composition and generalization are, so b) is the correct answer. Contracting does not exist as an association.	Not accepted	Not applicable

	Question10: Given the next relationships and considering that the type of input parameters is a kind of precondition and the type of return values is a kind a postcondition, select the CORRECT answer: 	Class B is more restrictive than A, it is a subclass, more specific, therefore, if a method accepts in the parent class (ex: vehicle) and in the child class, it only accepts B (ex: bicycle), the contract is NOT fulfilled, since the possible range of admitted values is being restricted. In case of postconditions, both methods (original and overloaded) return the same thing, there is no problem.	Not accepted	Not applicable