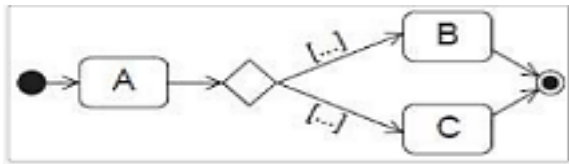


Name: Department: Section No:

Q1: Choose the correct answer [6 Marks]

1. Parallel flows are illustrated in activity diagrams using fork and join
 - (A) True
 - (B) False
2. Which of these software engineering activities are not a part of software processes?
 - (A) Software specification
 - (B) Software validation
 - (C) Software dependence
 - (D) Software development
3. are effective techniques for eliciting requirements from stakeholders who interact directly with the system.
 - (A) Scenarios
 - (B) Use cases
 - (C) Ethnography
 - (D) Interviews
4. Requirements can be refined using
 - (A) The waterfall model
 - (B) Prototyping model
 - (C) The reuse-oriented model
 - (D) The incremental model
5. You are given the following activity diagram, which of the following action sequences are possible during one execution of the activity diagram?



- (A) A → C
- (B) A → B → C
- (C) A → B
- (D) A → C → B

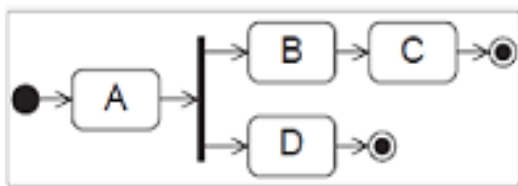
Q2: State the main activities of requirements engineering process? [4 Marks]

CS (5, 6, 7)

Name: Department: Section No:

Q1: There are many different types of software applications. Specify the type of each of the following applications: [6 Marks]

- a) Systems that collect data from their environment using sensors.
- b) Systems that are developed by scientists and engineers to model physical situations.
- c) Software control systems that control and manage hardware devices.
- d) Periodic billing systems, such as phone billing systems and salary payment systems.
- e) You are given the following activity diagram, which of the following action sequences are possible during one execution of the activity diagram?



- (A) A → B → C
- (B) A → B → D
- (C) A → D
- (D) A → B → C → D

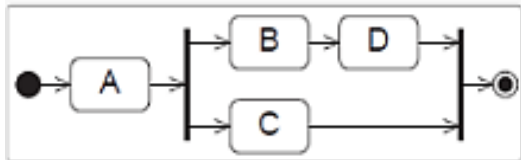
Q2: State the main activities of the process of prototype development? [4 Marks]

CS (5, 6, 7)

Name: Department: Section No:

Q1: For each of the following situations, identify the approach: *plan-driven or agile* [6 Marks]

- When the delivery time is not a problem.
- Used for large systems engineering projects where a system is developed at several sites.
- Lower risk of overall project failure.
- The system needs a very detailed specifications and design before moving to implementation.
- You are given the following activity diagram, which of the following action sequences are possible during one execution of the activity diagram?



(A) A → B → C → D

(C) A → C

(B) A → B → D

(D) A → B → D → C

Q2: State the types of non-functional requirements?

[4 Marks]

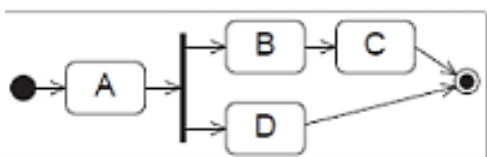
CS (2, 4)

Name: Department: Section No:

Q1: Choose the correct answer

[6 Marks]

- Agile Software Development is based on
 - Incremental development
 - Iterative development
 - Linear development
 - Both A and B development
- help discover implicit system requirements that reflect the actual ways that people work.
 - Interviews
 - Ethnography
 - Use cases
 - Scenarios
- Use case diagrams show the order of the use cases' execution?
 - True
 - False
- If requirements are easily understandable and defined then which model is best suited?
 - Prototyping model
 - Incremental development
 - Waterfall model
 - None of them
- You are given the following activity diagram, which of the following action sequences are possible during one execution of the activity diagram?



(A) A → B → C

(C) A → D

(B) A → B → D

(D) A → B → D → C

Q2: State the main activities of the waterfall model of the software development process? [4 Marks]

CS (2, 4)