Multiple choice questionnaire

A question might have several correct answers. (1 point)

1. What is a dependum?
   - Depending actor;
   - Element around which a dependency relationship centres,
   - A position to cover a role
   - Actor who is dependent upon a dependency

2. What is operationalization?
   - A goal assigned to the responsibility of a single agent
   - Relationship when the agent performs an operation
   - An actual assignment of a goal to an agent
   - Relationship between goal and operation

3. What is a post-condition?
   - Another legitimate usage scenario that can take place
   - A relative priority of implementing the functionality
   - Any business rules that influence the case
   - A state of the system at the conclusion of the use case execution

4. What are the key activities of middle-level management?
   - Set objectives
   - Allocate & control resources
   - Establish goals and perform day-to-day planning
   - Do planning and measuring performance

5. How to classify goals based on their temporality?
   - Satisfaction and information goals
   - Achieve and cease goals
   - Performance and accuracy goals
   - Maintain and avoid goals

6. Which characterizations of the scenario are correct?
   - A scenario can be
     - A negative descriptive exceptional and exploratory scenario
     - A positive descriptive instance scenario in the current system’s state
     - A misuse scenario in the desired system
     - An alternative exploratory context scenario
Read the following case description and complete Tasks 1-4.

**Task evaluation criteria:** Semantic correctness (i.e., solution correspondence to the given case), Syntactic correctness (i.e., correct use of modelling language), Consistence (no conflicting Task 1-4 solutions) and Traceability (i.e., logical traceable links among Task 1-4 solutions).

**Case description.** The AUTOservice company has no software-intensive system to manage and organize the AUTOservice work and to store information about the cars to repair. The major goals to achieve are:
- New car to repair registered;
- Car repairing status is up to date;
- Maintaining tracking of repairing schedules;
- Information about car conditions (e.g., particular defects) is recorded.

The major stakeholders are
- *Car owner* who would like to know all the information about the car to repair but she has no other tasks to fulfil in or intention to use the information system.
- *Technician* who can read data related to the car, such as general data, repairing status, and particular defects. She will also be able to work with schedules (e.g., for repairing) and add other notes.
- *Manager* who can enter and update information about a new car to repair in the AUTOservice, create repairing schedules, and print generated reports.

---

**Task 1:** What are the social relationships between the stakeholders of the AUTOservice system? To support your answer, create a [strategic dependency model](#) (using the * modelling language), where the social viewpoint of the given case is illustrated.

(1 point)

**Task 2:** Use [KAOS modelling languages](#) and refine goal “Information about car conditions (e.g., particular defects) is recorded” to the goal hierarchy (containing at least 4 hierarchy levels and including at least 2 alternative refinements). Your model should separate between requirements and expectations.

(1 point)

**Task 3:** Create a [use case diagram](#) to illustrate functions of the AUTOservice system. In the ideal case, the use case diagram could potentially show how some requirements from task 2 are operationalised.

(1 point)

**Task 4:** Select one use case from the diagram created in Task 3 and illustrate its scenarios by filling in this [use case template](#).

(1 point)
<table>
<thead>
<tr>
<th>Use case ID: name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date created:</td>
<td></td>
</tr>
<tr>
<td>Actors:</td>
<td></td>
</tr>
<tr>
<td>Description:</td>
<td></td>
</tr>
<tr>
<td>Trigger:</td>
<td></td>
</tr>
<tr>
<td>Precondition:</td>
<td></td>
</tr>
<tr>
<td>Postcondition:</td>
<td></td>
</tr>
<tr>
<td>Main flow:</td>
<td></td>
</tr>
<tr>
<td>Alternative flow:</td>
<td></td>
</tr>
<tr>
<td>Priority:</td>
<td></td>
</tr>
<tr>
<td>Assumptions:</td>
<td></td>
</tr>
</tbody>
</table>