



**Question 2: [20 marks]**

1. Why do we need to organize the requirements information of non-trivial software?
2. Explain how the requirements of a family of related software products are organized.
3. What is a vision document? and why it is needed?
4. What are the main classical sections in a vision document?

**Question 3:** [20 marks]

1. What is a project scope? and what does it depend on?
2. What does usually happen to the software quality when a project proceeds with a 200% project scope?
3. Brooks' law states that adding labor to a late software project makes it even later. **Explain why** this should be true.
4. The problem of project scope can be solved by defining a requirement baseline. **Explain** what this means **and how** it can be done.

**Question 4: [22 marks]**

1. The software requirement can be defined from the user's perspective or from the development team's perspective. **State these two definitions.**
2. What are **the five major classes** needed to describe any software system?
3. **Is it true** that every requirement can be expressed by a use case? **Support your answer by giving an example.**
4. **State and explain** the difference between the three main types of software requirements. **For each type**, support your answer by giving **an example of a requirement** regarding a cash-withdrawing function in a bank ATM.

**Question 5: [18 marks]**

Refer to the prioritized feature of HOLIS case study (at the end of this exam) and answer the following:

1. State **three of the mandatory features** that have to be delivered in the current version of HOLIS.
2. State **three of the optional features** that could be delivered in the current version of HOLIS if they can be done.
3. State **three of the future features** that are not going to be delivered in the current version of HOLIS.