

**Examples of multiple-choice questions:**

1. A regression test:
  - a) Is only run once.
  - b) Will always be automated.
  - c) Will check changed areas of the software to see if they have been affected.
  - d) Will check unchanged areas of the software to see if they have been affected.
2. Which of the following elements are the components of the HCI testing framework? (draw arrows)

Components of the HCI testing framework	Laws and regulations
	Interface standards
	Interface dynamics
	Usability
	Security
	Aesthetics

3. As part of the acceptance testing, \_\_\_\_ testing is performed by customers at their own site.
  - a) Alpha
  - b) Beta
4. Which of the following are valid aspects to investigate, in order to build quality in a software system?
  - I. Is the customer the same as the user?
  - II. How much can my customers can afford to pay for my product?
  - III. Can I reduce the user roles even more, to reach a minimum number of user profiles?
  - a) I
  - b) I, II
  - c) II, III
  - d) I, II, III
5. Is it true that you can use copyrighted work without the permission from the author for non-profit educational purposes? YES / NO

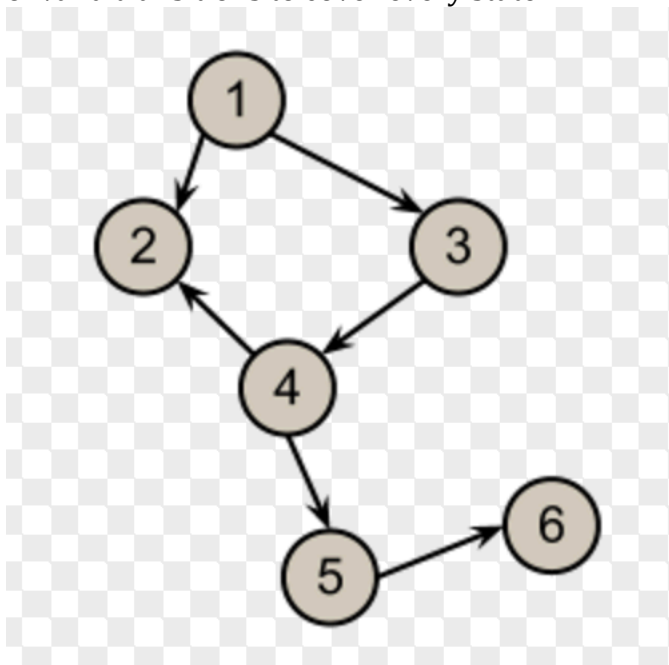
### **Example of short questions:**

1. Explain briefly the following terms:
  - functional testing
  - non-functional testing
2. Why do testers have to design test data, besides the tests cases themselves?
3. Describe the notions of:
  - Test pre-condition
  - Test post-condition
4. How would you introduce a new test tool to an organization?
5. What is an equivalence partition? Provide an example.

### **Examples of problems to solve**

#### **Problem 1:**

Given the state diagram in the next figure, which test case is the minimum series of valid transitions to cover every state?



#### **Problem 2:**

Postal rates for 'light letters' are 100 NOK up to 10g, 20 NOK up to 50g plus an extra 10 NOK for each additional 50g up to 150g.

Which test inputs (in grams) would be selected using equivalence partitioning? Please consider a minimum number of tests to cover the maximum number of cases needed to be tested.

### **Examples of essay-type questions:**

#### **1. Manual testing of a self-service POS**

POS systems are a very popular way of self-service for customers in retail store. POS (points of sales) are hardware and software systems that allow customers to scan for their products, make the payment and receive a receipt for the purchased goods. A typical self-service POS is depicted in the images below.



Requirement:

- Imagine a version of a self-service POS system and write a brief description for it.

- Create a list with the manual tests that you would run on such as elf-service POS. Specify the actors that you took into consideration for your testing.
- Prioritize the list of tests created above, in function of their importance.
- Specify what you have left out of your list of tests and why.

## 2. **Maintenance testing**

Explain the triggers for maintenance testing.

Explain how the amount of maintenance testing depends on the type of change to the software system.

Describe the role of regression testing in maintenance.

Describe the role of impact analysis in maintenance.