

# Questions for the oral exam in software cost estimation

First term 2023/2024

## Q1: Choose T or F:

- (1) The size of the project is affected by the reused components and the programming language. **T**
- (2) Doubling the number of staff means that the duration of the project will be halved. **F**
- (3) If 4 people can complete a project in 13 month, then 5 people can complete it in 11 month. **F**
- (4) LOC can be used for estimating an individual's task assignments because of the little differences in productivity between programmers. **F**
- (5) Measurements in LOC allow for project comparisons and estimation of future projects based on data from past projects. **T**
- (6) In the Simplified Function-Point Techniques, counting FP depends only on internal logical files (ILF) and external interface files (EIF). **T**
- (7) Windows, interfaces, and dialog boxes are GUI that can be used in counting function points. **T**
- (8) If you don't have your own historical data, you can look up a rough estimate of effort by using an effort graph. **T**
- (9) Adding people to a project increases the productivity of existing team members. **F**
- (10) The use of historical data is positively correlated with cost and schedule overruns. **F**
- (11) If the feature set of a project is flexible and can be cut, the schedule can be shortened as much as you want, subject to your willingness to cut features. **T**
- (12) We can reduce costs by shortening the schedule and conducting the project with a smaller team. **F**

- (13) Medium and large projects typically experience some ramp down of team members from the beginning to the middle of the project, and some ramp up in the final stages. **F**
- (14) Measurements in LOC allow for project comparisons and estimation of future projects based on data from past projects. **T**

**Q2: Choose the correct answer:**

- (15) Which of the following methods of computing effort is based on these factors: the size of a project in function points, the kind of development environment, and the maximum team size:
- (a) Industry average graphs
  - (b) Science estimate
  - (c) **(ISBSG) method**
  - (d) Informal comparison
- (16) One of the following is a function point estimation method
- (a) Use cases method
  - (b) Task list
  - (c) Web pages
  - (d) **The Dutch method**
- (17) One of the following is a size estimation method
- (a) Task list
  - (b) **GUI components**
  - (c) Industry average graphs
  - (d) The Dutch method
- (18) While scheduling the project, we find a set of sequential tasks upon which the project completion date depends this is called ...
- (a) Precedence
  - (b) Concurrence
  - (c) **Critical Path**
  - (d) Outline

(19) While scheduling the project, when a task must occur in parallel with another this is called ...

(a) Precedence

**(b) Concurrency**

(c) Critical Path

(d) Outline

(20) The most popular method in estimating development effort is:

(a) Function points method

**(b) Lines of code method (LOC)**

(c) Use case points method

(21) Tasks that occur before each other is said to be:

(a) Concurrent

**(b) Precedent**

(c) Critical

(22) One of the following is a size estimation method:

**(a) GUI components**

(b) Industry average graphs

(c) The Dutch method

(23) The consensus of researchers is that schedule compression must be not more than:

**(a) 25 % from nominal**

(b) 20 % from nominal

(c) 30 % from nominal