

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) Concurrence**
- (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**