

## 一、客观题

- 1: Process indicators enable a software project manager to
  - A) assess the status of an on-going project
  - B) track potential risks
  - C) adjust work flow or tasks
  - D) all of the above
- 2: Which of the following are advantages of using function points (FP) as a measure of the functionality delivered by a software application?
  - A) FP is easily computed.
  - B) FP is a language dependent measure.
  - C) FP is a language independent measure.
  - D) FP can be computed before a design is completed.
  - E) both c and d
- 3: Which of these are valid reasons for measuring software processes, products, and resources?
  - A) to characterize them
  - B) to evaluate them
  - C) to price them
  - D) to improve them
  - E) a, b, and d
- 4: Use-case oriented metrics are computed directly from UML diagrams and they are often used as normalization measures.
  - A) True
  - B) False
- 5: Baseline data must be collected in an on-going manner and cannot be computed by formal study of historical project data.
  - A) True
  - B) False
- 6: The software metrics chosen by an organization are driven by the business or technical goals an organization wishes to accomplish.
  - A) True
  - B) False
- 7: The terms measure, measurement, and metric all share the same definition according to the IEEE Standard Glossary of Software Engineering Terms.
  - A) True
  - B) False
- 8: Which of following are advantages of using LOC (lines of code) as a size-oriented metric?
  - A) LOC is easily computed.
  - B) LOC is a language dependent measure.
  - C) LOC is a language independent measure.
  - D) LOC can be computed before a design is completed.
- 9: Public metrics are used
  - A) to evaluate the performance of software development teams.
  - B) to appraise the performance of individual team members.
  - C) to make strategic changes to the software process.

D) to make tactical changes during a software project

E) both c and d

10 : Which of the following is not a measure that can be collected from a Web application project?

A) Customization index

B) Number of dynamic objects

C) Number of internal page links

D) Number of static web pages

11: Which of the following provide useful measures of software quality?

A) correctness, business relevance, integrity, usability

B) reliability, maintainability, integrity, sales

C) correctness, maintainability, size, satisfaction

D) correctness, maintainability, integrity, usability

12: Which of the following items are not measured by software project metrics?

A) inputs

B) markets

C) outputs

D) results

13: To be an effective aid in process improvement the baseline data used must be:

A) based on reasonable guestimates from past projects

B) measured consistently across projects

C) drawn from similar projects

D) based only on successful projects

E) both b and c

14: There is no need to reconcile LOC and FP measures since each is meaningful in its own right as a project measure.

A) True

B) False

15 : Which of the following software quality factors is most likely to be affected by radical changes to computing architectures?

A) operation

B) transition

C) revision

D) none of the above

16: Object-oriented project measures may be combined with historical project data to provide metrics that aid in project estimation.

A) True

B) False

17: Small software organizations are not likely to see any economic return from establishing software metrics program.

A) True

B) False

18: Software quality and functionality must be measured indirectly.

A) True

B) False

19 : Why is it important to measure the process of software engineering and software it produces?

A) It is really not necessary unless the project is extremely complex.

B) To determine costs and allow a profit margin to be set.

C) To determine whether a software group is improving or not.

D) To make software engineering more like other engineering processes.

20 : A software quality metric that can be used at both the process and project levels is defect removal efficiency (DRE).

A) True

B) False

## 二、主观题

21 : Explain how size-oriented metrics differ from function-oriented metrics. Discuss the pros and cons of each.

22 : How do software process metrics differ from software project metrics?

23 : What are the goals for using object-oriented software metrics?

24 : Why is it important for software developers to make use of measurement to guide their work?

25 : What are four useful indicators of software quality that should have measures defined and monitored by the software project team?