

## **Module/Unit 3 & 4 - Software Project and Configuration Management,**

### **Monitoring and Planning**

1. Normally software project planning activity is undertaken
  - a. before the development starts to plan the activities to be undertaken ✓
  - b. during development
  - c. once the development activities start
  - d. after the completion of the project monitoring and control
  - e. none of the above
2. Which of the following estimations is carried out first by a project manager during project planning?
  - a. estimation of cost
  - b. estimation of the duration of the project
  - c. project size estimation ✓
  - d. estimation of development effort
3. Sliding Window Planning involves
  - a. planning a project before development starts
  - b. planning progressively as development proceeds ✓
  - c. planning a project after development starts
  - d. none of the above
4. A project estimation technique based on making an educated guess of the project parameters (such as project size, effort required to develop the software, project duration, cost etc.) is
  - a. analytical estimation technique
  - b. heuristic estimation technique
  - c. empirical estimation technique ✓
  - d. None of these
5. An example of single variable heuristic cost estimation model is
  - a. Halstead's software science
  - b. basic COCOMO model ✓
  - c. intermediate COCOMO model
  - d. complete COCOMO model
6. During project scheduling, resource allocation to different activities is done using which of the following representations?
  - a. PERT chart
  - b. activity network representation
  - c. work breakdown structure
  - d. Gantt chart ✓
7. When are the software project monitoring and control activities undertaken?

- a. before the development starts to plan the activities to be undertaken during development
  - b. once the development activities start with the aim of ensuring that the development proceeds as per plan ✓
  - c. at the end of the development
  - d. none of the above
8. Job specialization is one of the main advantages in case of which organization structure?
- a. project format
  - b. functional format ✓
  - c. either project format or function format
  - d. both of project format and function format
9. Pure egoless programming is encouraged by which team organization?
- a. chief programmer team structure
  - b. democratic team structure ✓
  - c. mixed control team structure
  - d. none of the above
10. In which type of team organization a single point failure of development occurs when an individual leaves the team?
- a. chief programmer team structure ✓
  - b. democratic team structure
  - c. mixed control team structure
  - d. none of the above
11. The primary purpose of risk management is
- a. risk containment
  - b. risk assessment
  - c. risk identification
  - d. all of the above ✓
12. Schedule slippage is a type of
- a. business risk
  - b. project risk ✓
  - c. technical risk
  - d. none of the above
13. A development team's insufficient knowledge of the product being developed is one of the main factors contributing to
- a. business risk
  - b. project risk
  - c. technical risk ✓
  - d. none of the above
14. Visibility of a software product can be increased by
- a. producing relevant documents during the development process

- b. properly reviewing those relevant documents by an expert team
  - c. placing milestones at regular intervals through a software engineering process
  - d. all of the above ✓
15. A new version of a software is produced when there is a
- a. minor bug fix
  - b. minor enhancements to the functionality, usability etc.
  - c. significant change in functionality, technology, or the hardware the software runs on ✓
  - d. all of the above
16. A revision of a software refers to
- a. minor bug fix ✓
  - b. minor enhancements to the functionality, usability etc.
  - c. significant change in functionality, technology, or the hardware the software runs on
  - d. all of the above
17. If configuration management is not during a software development effort used then which of the following problems are likely to appear:
- a. inconsistency problem when the objects are replicated
  - b. problems associated with concurrent access
  - c. problems with handling several variants
  - d. all of the above ✓
18. If we develop several versions of the same software product without using any configuration management tools then the problems that we would face are
- a. bug fixing in any version would require manually fixing the same bug in all versions
  - b. large storage requirements would be needed
  - c. difficulty in keeping track the updated configurations of various versions ✓
  - d. all of the above
19. Revisions to different software products are handled by
- a. version control ✓
  - b. change control
  - c. neither version control nor change control
  - d. both version control and change control
20. For effective configuration control, in order to change a controlled object such as a module, a developer can get a private copy of the module by using:
- a. restore operation
  - b. reserve operation ✓
  - c. update operation
  - d. none of the above
21. What is configuration management in software engineering?

- a. Overall management of the design of the system
  - b. Management of the configurable components in a system
  - c. Identification of the configuration of a system at discrete points in time to control changes to configuration ✓
  - d. Management of objects that control the configuration of some other function(s) in the system
22. The type of failure that occurs for all input values while invoking a function of the system is
- a. Transient failure
  - b. Permanent failure ✓
  - c. Recoverable failure
  - d. Cosmetic failure
23. The basic premise of modern quality assurance is
- a. Continuous process improvement
  - b. Thorough product testing
  - c. If an organization's processes are good and are followed rigorously then the products are bound to be of a good quality ✓
  - d. Collection of process metrics
24. PERT stands for
- a. Program Evaluation and Review Technique ✓
  - b. Project Evaluation and Review Technique
  - c. Program Evaluation and Revision Technique
  - d. Project Evaluation and Revision Technique
25. The \_\_\_\_\_ team structure does not enforce any formal team hierarchy.
- a. Autocratic
  - b. Mixed-control
  - c. chief-programmer
  - d. Democratic ✓