

1. Which type of software provides additional function to your operating system?
  - a. System software
  - b. Operating System Software
  - c. Utility Software
  - d. Application Software
2. Which of the following detects the presence or absence of mark in a predetermined place?
  - a. Pointing stick
  - b. Bar code reader
  - c. Optical mark reader
  - d. Trackball
3. What is the binary number for the decimal number 217?
  - a. 11011001
  - b. 11101001
  - c. 10110101
  - d. 11000001
4. Of the following components of a computer, which one performs computations?
  - a. Output device
  - b. Arithmetic/logic unit
  - c. Control unit
  - d. Memory unit
5. To create a capital letter, you must use which special key simultaneously with the letter key?
  - a. Enter
  - b. Esc
  - c. Tab
  - d. Shift
6. Which of the following translates a program written in high-level language into machine code?
  - a. An assembler
  - b. A compiler
  - c. An operating system
  - d. An editor
7. Software engineers must behave in ethical and morally responsible way. Which of the following statements is WRONG when describing the acceptable behavior of software engineers?
  - a. Software engineers are permitted to disclose the confidential data of their employers and clients if a formal confidentiality agreement is not signed
  - b. Software engineers should not knowingly accept work that is outside their competence.
  - c. Software engineer should ensure that the intellectual property of employers and clients is protected.
  - d. Software engineers should not use their technical skills to misuse other people's computers
8. What is the result of requirements documentation activity?
  - (a) Requirements document
  - (b) Test cases
  - (c) System models
  - (d) Complete

**9. Which one of the following is NOT a user interface design principle?**

- (a) The interface should include mechanism to allow users to recover from errors.
- (b) The interface should provide meaningful feedback when error occurs.
- (c) Full element of surprises must be included in the system to impress the user.
- (d) The interface should use terms and concepts that are familiar to the user.

**10. Which one is the most practical way to design and develop graphical user interfaces for software systems?**

- (a) Evolutionary prototype with end-user involvement
- (b) Evolutionary prototype with stake holder involvement
- (c) Textual description
- (d) Modeling technique

**11. What term refers to the degree to which a system is easy to learn and use?**

- (a) Validity
- (b) Visibility
- (c) Reusability
- (d) Usability

**12. All the following statements are TRUE to describe evolutionary development, EXCEPT:**

- (a) Activities are interleaved rather than separate.
- (b) Specification can be developed incrementally.
- (c) Suitable for project that its customer requirements are clearly understood.
- (d) The following phase should not start until the previous phase has finished.

**13. \_\_\_\_\_ is concerned with modifying existing software systems to meet new requirements.**

- (a) Software specification
- (b) Software design and implementation
- (c) Software validation
- (d) Software evolution

**14. Which statement best describe a meaning of "waterfall" life cycle model.**

- (a) When a phase in the lifecycle is completed, the results fall down to the next phase and there is no going back.
- (b) When a phase in the lifecycle iterates like a ring on the spiral, moving outward from the center.
- (c) When a phase in the lifecycle overlapping with each others.
- (d) When a phase in the lifecycle is executed continuously without stop.

15. \_\_\_\_\_ is an observational technique that can be used to understand social and organizational requirements.

- (a) Viewpoints
- (b) Requirements discovery
- (c) Ethnography
- (d) Interviewing

16. Critical systems are technical or socio-technical systems that people or businesses depend on. All the following systems are type of critical systems, EXCEPT:

- (a) Safety-critical systems
- (b) Life-critical systems
- (c) Business-critical systems
- (d) Mission-critical systems

17. Control and monitoring systems in aircraft are example of:

- (a) Safety-critical systems
- (b) Life-critical systems
- (c) Business-critical systems
- (d) Mission-critical systems

18. Functional independence of modules can be measured using these two criteria, \_\_\_\_\_ and \_\_\_\_\_

- (a) information hiding, abstraction
- (b) cohesion, coupling
- (c) modularity, architecture
- (d) refinement, refactoring

19. Cohesion is a qualitative indication of the degree to which a module \_\_\_\_\_.

- (a) can be written more compactly.
- (b) focuses on just one thing.
- (c) is able to complete its function in a timely manner.
- (d) is connected to other modules and the outside world.

20. Which of these is characteristic of a good software design?

- (a) Exhibits strong coupling between its modules
- (b) Implements all requirements in the analysis model
- (c) Includes test cases for all components
- (d) Provides a complete picture of the software