Systems Analysis and Design Methods
Chapter 5: Systems Analysis

Multiple Choice Questions

1. Which of the following can be in a repository for a project:

   A. printed documentation
   B. CASE tool dictionaries or encyclopedias
   C. a network directory of word processing, spreadsheet and other computer generated files that contain project correspondence, reports and data
   D. all of the above

2. Which of the following emphasizes the drawing of pictorial system models to document and validate both existing and proposed systems:

   A. structured analysis
   B. information engineering
   C. object oriented analysis
   D. all of the above

3. Which of the following statements is false?:

   A. Entity relationship diagrams are used to model the systems data in information engineering.
   B. Data flow diagrams are used to model the processes, their inputs, outputs and files, in structured analysis.
   C. Object oriented analysis is a model-driven technique that integrates data and process concerns into constructs called objects
   D. None of the above

4. The preliminary investigation phase produces a deliverable that summarizes the problems, opportunities and directives in terms of:

   A. urgency
   B. benefits
   C. priority
   D. all of the above

5. The initial project plan

   A. should have a preliminary master plan to schedule and assign resources to the project
   B. should have a detailed plan and schedule for completing the next phase of the project
   C. is the responsibility of the project manager
   D. all of the above

6.   Which of the following statements is false about the problem analysis phase:

A. There is always a current or existing system, regardless of the degree of automation
B. It provides a more thorough understanding of the problems, opportunities and directives
C. It can be skipped, since the new system is more important than the existing one
D. Is concerned with the system owners' and system users' view of the system

7.   Which of the following is an information building block used to list and define the system domain:

A. Data
B. Processes
C. Interfaces
D. all of the above

8.   The decision analysis phase typically includes which of the following tasks:

A. identify candidate solutions
B. decide how to set up the initial project plan
C. recommend a solution
D. both (A) and (C) are true statements about the decision analysis phase

True or False Questions

9.   An information system is a set of activities, methods, best practices, deliverables, and automated tools that stakeholders use to develop and maintain business processes.

A. True   B. False

10.   A database system is where systems analysts, systems designers and systems builders keep the documentation associated with one or more systems or projects.

A. True   B. False

11.   Structured analysis is a model-driven, process-centered technique, used to either analyze an existing system, define business requirements for a new system, or both. The models are pictures that illustrate the system's component pieces and their associated inputs, outputs and files.

A. True   B. False

12.   Data Flow Diagrams (DFDs) can be used to depict the existing or proposed processes in a system along with their inputs, outputs, and files.

        A. True   B. False

13.   Objected oriented analysis (OOA) is a data-driven technique that uses entity relationship diagrams to represent objects with their entities and their processes.

        A. True   B. False

14.   Visual analysis approaches emphasize the construction of prototypes to more rapidly visualize and identify business and user requirements for a new system.

        A. True   B. False

15.   Another name for discovery prototyping is requirements prototyping.

        A. True   B. False

16.   Joint architecture analysis attempts to derive systems models from existing systems or discovery prototypes.

        A. True   B. False

17.   Requirements discovery includes those techniques to be used by a systems analyst to identify or extract system problems and solution requirements from the user community.

        A. True   B. False

18.   Another name for fact-finding is information gathering.

        A. True   B. False

19.   Examples of fact-finding techniques include: data flow diagrams; entity relationship diagrams; prototyping; joint requirements planning and reverse-engineering.

        A. True   B. False

20.   Joint requirements planning (JRP) is considered a part of joint application development (JAD), which is a more comprehensive application of the techniques to the entire system development process.

        A. True   B. False

21.   Business process redesign is the application of systems analysis methods to the goal of making incremental, small improvements over time to the fundamental business processes, and is heavily dependent on information technology.

        A. True   B. False

22. Business process re-engineering has also become common in IS projects that will be based on the purchase and integration of commercial off-the-shelf software.

    A. True   B. False

23. The preliminary investigation phase is used to define the scope of the project.

    A. True   B. False

24. A project charter defines the project scope, plan, methodology, and standards for a project. It is the first major milestone.

    A. True   B. False

25. An important task in the preliminary investigation phase is to establish an initial baseline of problems, opportunities and/or directives that triggered the project.

    A. True   B. False

26. During the preliminary investigation phase, each problem, opportunity and directive is assessed with respect to urgency, tangible and intangible benefits, technical feasibility, and operational feasibility.

    A. True   B. False

27. In the preliminary investigation phase, visibility is used to assess the degree to which a project solution or new system would be visible to customers and/or executive management.

    A. True   B. False

28. In the preliminary investigation phase, a consensus of priorities is arrived at to help adjust the project prototype.

    A. True   B. False

29. The initial project plan should consist of at least the following: a preliminary master plan that included schedule and resource assignments for the entire project; and a detailed plan and schedule for completing the next phase of the project, (the problem analysis phase).

    A. True   B. False

30. The problem analysis phase, follows the preliminary investigation phase, and immediately begins to look at the development of the new system, since the old system has already been determined to be obsolete.

    A. True   B. False

31. The deliverables of the problem analysis phase include a definition of the solution to the problem and detailed projects for its cost and implementation plan.

   A. True   B. False

32. A constraint is something that will limit your flexibility in defining a solution to your objectives. Essentially constraints cannot be changed.

   A. True   B. False

33. Constraints fall into four categories: schedule; cost; technology; and policy.

   A. True   B. False

34. The deliverables of the requirements analysis phase is the baseline project plan.

   A. True   B. False

35. A mandatory requirement is one that must be fulfilled by the minimal system. The system is useless without it.

   A. True   B. False

36. The requirements analysis phase typically included the following tasks: (1) identify candidate solutions; (2) analyze candidate solutions; (3) compare candidate solutions; (4) update the project plan; and (5) recommend a solution.

   A. True   B. False