Multiple Choice
Identify the choice that best completes the statement or answers the question.

1. The outcome of the design phase is the:
   a. Feasibility Analysis document
   b. System proposal document
   c. System specification document
   d. System request document
   e. Business Process document

2. Another outcome of the planning phase is the:
   a. Feasibility Analysis document
   b. Project Plan
   c. System specification document
   d. System proposal document
   e. Business Process document

3. Which is NOT an attribute of a systems analyst?
   a. Understanding what to change
   b. Knowing how to change it
   c. Convincing others of the need to change
   d. Serving as a change agent
   e. Selecting which projects to approve

4. Jona’s project is to take a fairly straight-forward manual process and make it an electronic process. This will make the processing more efficient. Which of the following requirements analysis strategies is she using?
   a. Business Process Automation
   b. Business Process Improvement
   c. Business Process Internalization
   d. Business Process Reengineering
   e. Business Process Renovation

5. Which would normally NOT be a reason for a project?
   a. When a business need has been identified
   b. A consultant has suggest a new customer relationship management system
   c. An open source platform has just come on the market
   d. An existing system just isn’t working properly and the workaround is tedious
   e. To support a new business initiative

6. Linda is a clerk in the accounting department. She was interviewed by David and is excited about the proposed system that will utilize electronic funds transfer. This would be an example of ______.
   a. Tangible benefit
   b. Cash flow
   c. Break even analysis
   d. Intangible benefit
   e. Return on investment
7. Ramya is preparing an economic feasibility study. She has a calculation where she takes total benefits minus total costs and divides that answer by the total costs. She is calculating:
   a. Cash flow
   b. Return on investment
   c. Break-even point
   d. Net present value
   e. Internal rate of return

8. Robert is doing an economic analysis using today’s dollar values. He is doing:
   a. Cash flow analysis
   b. Return on investment analysis
   c. Break-even point analysis
   d. Net present value analysis
   e. Internal rate of return analysis

9. TJ has prepared a spreadsheet where the total benefits are $182,000; the total cumulative costs are $120,000. The ROI would be:
   a. $62,000
   b. About 34%
   c. About 51.7%
   d. About 65.3%
   e. Less than 20%

10. Which is an activity the users probably will NOT do on a project?
    a. Make decisions that influence the project
    b. Budget funds for the project
    c. Perform hands-on activities for the project
    d. Be assigned specific tasks to perform (with clear deadlines)
    e. Have some official roles on the project team

11. The type of skill that is common to systems analysts to understand how IT can be applied to business situations and to ensure that the IT delivers real business value is:
    a. Technical
    b. Business
    c. Analytical
    d. Interpersonal
    e. Ethical

12. Kallie is creating use cases, data flow diagrams and entity relationship diagrams. In what phase of the SDLC would she do this?
    a. Planning
    b. Analysis
    c. Design
    d. Construction
    e. Implementation

13. A critical success factor in project management is to:
    a. Say “no” to all requests as they add to ‘scope creep’
    b. Use throwaway prototyping
    c. Use a CASE tool to delineate requirements from work tasks
    d. Start with a realistic assessment of the work that needs to be done
    e. Hire an outside project management consulting group
14. Which is a true statement about IT projects?
   a. Most IS departments face a demand for IT projects that far exceed the ability to do them.
   b. Project Managers must be certified as PMP (Project Management Professionals)
   c. Project estimates tend to have a built-in buffer of time
   d. Project teams of 12 to 15 are generally considered optimum
   e. The majority of projects taken on by IT departments are not strategic to the business

15. The V-model pays more explicit attention to ___________:  
   a. Iteration  
   b. Return on investment (ROI)  
   c. Business Value (the “V”)  
   d. Testing  
   e. Prototyping

16. RAD is an acronym for:  
   a. Real Application Development  
   b. Rapid Application Design  
   c. Rapid Authentic Development  
   d. Real Autonomous Development  
   e. Rapid Application Development

17. Which of the following might result in version 1; version 2 (etc.) of a system?  
   a. System Prototyping  
   b. Waterfall Development  
   c. Iterative Development  
   d. System Prototyping  
   e. Parallel Development

18. Extreme Programming (XP) is BEST characterized as:  
   a. A ‘Quick and Dirty’ system  
   b. A series of versions  
   c. A method for exploring design alternatives  
   d. A method for stressing customer satisfaction  
   e. More explicit testing

19. What the MAIN difference between systems prototyping and throwaway prototyping?  
   a. Systems prototyping involves users while throwaway prototyping does not  
   b. Throwaway prototyping involves users while systems prototyping does not  
   c. Systems prototyping is a rapid application development methodology; while throwaway prototyping is not  
   d. Systems prototyping works with users to quickly develop a simplified working version of the proposed system; while throwaway prototyping focuses more on exploring design alternatives  
   e. Throwaway prototyping develops systems that will be use as ‘stop-gap’ systems – and generally for less than six months; while systems prototyping results in systems that will be used extensively for several years.
20. Which of the following methodologies might be most appropriate if you have a system project with: unclear user requirements; unfamiliar technologies; somewhat complex; needs to be reliable; time is not an issue and the schedule visibility is somewhat important?
   a. Waterfall
   b. Parallel
   c. Iterative
   d. System prototyping
   e. Throwaway prototyping

21. Which of the following methodologies might be most appropriate if you have a system project with: clear requirements; very familiar technologies; not all that complex; reasonably reliable; a short time schedule and the schedule visibility is not important?
   a. Waterfall
   b. Parallel
   c. Iterative
   d. System prototyping
   e. Throwaway prototyping

22. Which of the following methodologies might be most appropriate if you have a system project with: somewhat unclear requirements; somewhat unfamiliar technologies; that is complex; reasonably reliable; a short time schedule and high schedule visibility?
   a. Waterfall
   b. Parallel
   c. Iterative
   d. System prototyping
   e. Throwaway prototyping

23. Which of the following methodologies might be most appropriate if you have a system project with: unclear requirements; very familiar technologies; not all that complex; reasonably reliable; a short time schedule and the schedule visibility is somewhat important?
   a. Waterfall
   b. Parallel
   c. Iterative
   d. System prototyping
   e. Extreme Programming

24. Which of the following methodologies might be most appropriate if you have a system project with: unclear user requirements; unfamiliar technologies; very complex; must be reliable; a short to medium time schedule and the schedule visibility is somewhat important?
   a. Waterfall
   b. Parallel
   c. Iterative
   d. System prototyping
   e. Throwaway prototyping

25. Which of the following methodologies is the historic standard, but is used less today because it takes the longest to complete all the SDLC steps?
   a. Waterfall
   b. Parallel
   c. Iterative
   d. System prototyping
   e. Throwaway prototyping
26. Which of the following would BEST describe “system reliability”?
   a. The aspect of using technologies that analysts and developers are familiar with
   b. The aspect of what the business side really wants the system to do
   c. The aspect of how quickly the system can be developed and implemented
   d. The aspect of how complex the system must be
   e. The aspect of how accurate the system must be (such as medical equipment or for games)

27. Bob is selecting a systems analysis and design methodology. What might be the first step?
   a. Selecting the shortest methodology
   b. Researching the organizations standards and policies for ‘approved’ methodologies
   c. Interviewing senior management as to their suggestions on methodologies
   d. Do a quick ‘cost/benefit’ analysis on which methodology will provide the most benefits at the lowest cost
   e. Do an analysis on which methodology might lessen or eliminate scope creep

28. Kumar is the project manager for a revised TTP system. Which of the following most likely would NOT be considered in developing a work plan?
   a. Identifying tasks that need to be completed
   b. Estimating the time that will be needed on tasks
   c. Creating a dependency chart
   d. The organizational readiness for the project
   e. Key milestones that need to be met

29. Garrett has been told by management that his project MUST be completed on time. His best estimates are more than two weeks after the absolute deadline. Which technique could he use to get a functional system on time?
   a. Risk management
   b. System prototyping
   c. Benchmarking
   d. Timeboxing
   e. Activity elimination

30. Interpersonal skills for a project manager might be important when:
   a. Making assignments for a project
   b. Creating a cost/benefit spreadsheet
   c. Creating the system proposal
   d. Working with a highly controversial project that may have political implications
   e. Using the V-model variation of the Waterfall Methodology.

True/False

Indicate whether the statement is true or false.

31. Systems that are not cancelled or abandoned are frequently delivered to the users significantly late or costing more than expected.

32. Because of the need to be focused on providing information about the business value of a system, a systems analyst will probably have much training or experience in programming or application development.

33. Anne has asked users and managers to identify problems with the as-is system and to describe how to solve them in the to-be system. She is probably doing Business Process Automation (BPA) in this case.
34. Online loan companies (like LendingTree) attempt to return quotes for loans within an hour. With more traditional banks, getting a quote on a loan may take weeks to a month. Two techniques that were probably carefully analyzed in creating online loan quotation systems would be duration analysis and activity elimination.

35. The primary output of the analysis phase is the System Proposal.

36. The normal sequence of SDLC phase outputs (from beginning to end) would be: System Request; System Proposal; System Specifications; and Installed system.

37. The question ‘Can we build it’ is asked in the design phase.

38. Interviewing is generally done in the analysis phase of the SDLC.

39. Juan is creating use cases. He is working in the design phase of the SDLC.

40. The project sponsor should have an idea of the business value to be gained from the system.

41. The document that describes the business reasons for building a system and the value that the system is expected to provide is called the “System Proposal”.

42. A system request will generally have these items: project sponsor; business need; business requirements; business value; special issues or constraints.

43. The three factors in the text for a Feasibility analysis are: Technical Feasibility; Organizational Feasibility and Economic Feasibility.

44. If the development team of an organization is not familiar with the technologies that may be used, the project should be cancelled.

45. A critical success factor for project management is to start with a realistic assessment of the work that needs to be accomplished.

46. Investments in information systems projects today are evaluated in the context of an entire portfolio of projects.

47. In most IT departments, the demand for IT projects is generally about the same as the department’s ability to supply them.

48. The corporate IT department carefully needs to prioritize, select and manage a portfolio of projects.

49. Projects can be classified by: size, cost, purpose, length, programming language and hardware platform.

50. The project methodology that takes the longest to complete is the Waterfall Development Methodology.

51. The Waterfall Methodology breaks the overall project into a series of release versions.

52. The Iterative approach of the RAD methodology breaks the overall project into a series of release versions.

53. The Throwaway Prototyping methodology is especially good for exploring design alternatives.
54. The Throwaway Prototyping methodology is good at creating release version 1.0 for users; and then the methodology shifts to system prototyping to finish the system.

55. Extreme Programming (XP) stresses customer satisfaction and teamwork.

56. If you had a project with very clear requirements; familiar technologies; not super complex; reliable; a very long time schedule and where the need for schedule visibility is low – the best methodology might be Extreme programming

57. Wendy has been informed by the CIO that the project she is managing MUST be done by December 20th and must be fully tested and implemented by December 31st. She realizes that will mean she will have to prioritize the functionality and build the system to meet the core functions, even if that means something gets delayed until the next release of that system. She is practicing the ‘timeboxing’ approach to scope management.

58. Using industry standards, the general estimated project time for the Implementation phase is 30%.

59. Using industry standards, the general estimated project time for the Analysis phase is 20%

60. Either systems prototyping or throwaway prototyping are generally a good methodology choice when the project has unclear user requirements.

Essay

61. Can the project sponsor and the project champion be the same person? Explain

62. What calculations are used in economic feasibility?

63. Which types of people (or specific people) are important in “Organizational Feasibility” and why?

64. What is the difference between systems prototyping and throwaway prototyping methodologies?

65. What are the main differences between the Waterfall Development and the Rapid Application Development methodologies?