MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Which of the following is based on an iterative, incremental approach to systems development and has inception, elaboration, construction, and transition phases?
   A) RAD  
   B) RUP  
   C) eXtreme Programming  
   D) JAD

2) Which of the following grew out of the convergence of the increased speed and turbulence of doing business in the late 1980s and early 1990s and the ready availability of high-powered, computer-based tools to support systems development and easy maintenance?
   A) Object-oriented programming  
   B) RAD  
   C) JAD  
   D) CASE

3) Which of the following is one of the three classes of information systems mentioned in the textbook?
   A) expert systems  
   B) neural networks  
   C) production systems  
   D) transaction processing systems

4) Oracle's Designer, Computer Associates' Advantage Gen, and IBM's Rational Rose are examples of:
   A) third-generation programming languages  
   B) DBMS  
   C) visual programming languages  
   D) CASE tools

5) Vendor support can take the form of:
   A) providing help as problems arise after installation  
   B) training users and system staff on the software  
   C) providing assistance to install software  
   D) all of the above

6) The first administrative information system was:
   A) General Electric's payroll system  
   B) General Motor's order tracking system  
   C) Ford Motor Company's order tracking system  
   D) Coca-Cola's payroll system

7) The tools and technology associated with the managed software reuse approach are:
   A) requirements and portfolio management tools, frameworks standards, generators, and change management tools  
   B) self-use repository or Web site, submitters may add some metadata to improve search and evaluation  
   C) registrar-monitored repository, extensive metadata, multiproject source code control, asset quality assurance, change notification, and utilization measurements  
   D) file system or minimal Web site and e-mail
A system that integrates individual traditional business functions into a series of modules so that a single transaction occurs seamlessly within a single information system rather than several separate systems best describes:

A) enterprise resource planning  B) packaged software
C) storage area network  D) application service

Which of the following is true regarding Gantt chart construction?

A) Squares are used to represent activities.
B) Arrows are used to reflect the sequence of activities.
C) To show precedence relationships, arrows are used to connect actions.
D) To construct the Gantt chart, a horizontal bar is drawn for each activity that reflects its sequence and duration.

Developing an understanding of the content and complexity of the project is the purpose of:

A) setting a Baseline Project Plan
B) describing the project scope, alternatives, and feasibility
C) developing a Statement Of Work
D) determining project standards and procedures

Skills that include defining and sequencing activities, communicating expectations, assigning resources to activities, and monitoring outcomes best represent:

A) leadership  B) technical problem solving
C) management  D) team management

Arguably, the most instrumental person to the successful completion of any project is the:

A) department manager  B) staff consultant
C) project manager  D) chief information officer

An Internet-based communication that supports business-to-business activities best describes:

A) Internet  B) electronic data interchange
C) Extranet  D) electronic commerce

Which of the following characteristics is associated with the steering committee selection method?

A) less concern on cost-benefit analysis
B) fewer users, management layers, and business functions
C) greater organizational change
D) greater strategic focus

Which of the following is an advantage of the bottom-up planning approach?

A) IS plans can be created faster and are less costly to develop than using the top-down approach.
B) By using the bottom-up approach, planners may gain the understanding necessary to implement information systems across the entire business.
C) By using the bottom-up approach, a broader perspective can be achieved.
D) By using the bottom-up approach, planners will have sufficient management acceptance of the role of information systems in helping them achieve business objectives.
16) A major outcome and deliverable from the project initiation and planning phase that contains the best estimate of a project's scope, benefits, costs, risks, and resource requirements defines the:  
A) Information Systems Plan  
B) Statement of Work  
C) Mission Statement  
D) Baseline Project Plan

17) The justification for an information system, presented in terms of the tangible and intangible economic benefits and costs and the technical and organizational feasibility of the proposed system best defines:  
A) Business Case  
B) Baseline Project Plan  
C) Statement of Work  
D) Information Systems Plan

18) A peer group review of any product created during the system development process refers to:  
A) walkthrough  
B) product evaluation  
C) joint application discussion  
D) feasibility assessment

19) Questions in interviews asking those responding to choose from among a set of specified responses are:  
A) open-ended questions  
B) closed-ended questions  
C) structured questions  
D) specific questions

20) Questions in interviews that have no pre-specified answers are:  
A) investigative questions  
B) closed-ended questions  
C) nonspecific questions  
D) open-ended questions

21) When comparing observations and document analysis:  
A) the potential audience of the observation method is limited  
B) the observee is not known to the interviewer  
C) the time required to conduct observations compared to document analysis is low  
D) with document analysis, a clear commitment is discernible

22) The extent to which all necessary components of a data flow diagram have been included and fully described refers to:  
A) DFD consistency  
B) DFD completeness  
C) DFD flexibility  
D) DFD gap proofing

23) Calculating an employee's salary is represented on a data flow diagram as a:  
A) data store  
B) source  
C) data flow  
D) process

24) A supplier of auto parts to our company is represented on a data flow diagram as a:  
A) data store  
B) data flow  
C) process  
D) source

25) If several different conditions are involved, and combinations of these conditions dictate which of several actions should be taken, then:  
A) Structured English provides a better representation than a decision tree  
B) decision tables are less effective in presenting the process logic  
C) a decision table is much clearer than a Structured English statement  
D) Structured English is preferred over a state-transition diagram
26) The deliverables for logic modeling include:
   A) a Structured English representation of process logic
   B) decision table representation
   C) state-transition diagrams
   D) all of the above

27) If each employee can have more than one skill, then SKILL is referred to as a:
   A) multivalued attribute
   B) gerund
   C) nonexclusive attribute
   D) repeating attribute

28) Which of the following specifies that if an entity instance of the supertype is a member of one subtype it cannot simultaneously be a member of any other subtype?
   A) disjoint rule
   B) overlap rule
   C) partial specialization rule
   D) total specialization rule

29) When displaying text, a person should:
   A) hyphenate words between lines
   B) right justify text
   C) use obscure abbreviations and acronyms
   D) use double spacing if space permits

30) All of the following are general guidelines for the design of forms and reports except:
   A) the layout should be balanced
   B) extraneous information should be used to provide additional information as needed
   C) meaningful titles should be used
   D) the user should be able to navigate easily through the document

31) Potentially high usability problems for some applications exist for keyboards in all of the following areas except:
   A) movement scaling
   B) speed
   C) visual blocking
   D) adequate feedback

32) How can you avoid a hidden links error?
   A) Make sure users can use the back button to return to prior pages.
   B) Make sure you leave a border around images that are links, do not change link colors from normal defaults, and avoid embedding links within long blocks of text.
   C) Make sure users know which links are internal anchor points versus external links and indicate if a link brings up a separate browser window from those that do not.
   D) Make sure your pages conform to users expectations by providing commonly used icon links.

33) A diagrammatic representation of a message passed between two modules best defines:
   A) flag
   B) data couple
   C) data flow
   D) statement

34) When the prototype serves as the basis for the production system itself, this is referred to as:
   A) evolutionary prototyping
   B) cumulative prototyping
   C) throwaway prototyping
   D) iterative prototyping

35) The type of testing responsible for determining what the code does is:
   A) walkthrough
   B) inspection
   C) syntax checking.
   D) system testing
36) A testing technique in which participants examine program code for predictable language-specific errors defines:
   A) desk checking   B) walkthrough
   C) inspections       D) syntax checking

37) Software designed to support the payroll function would best be classified as:
   A) application software   B) design software
   C) system software        D) analysis software

38) When considering reuse, which of the following issues should be addressed?
   A) lack of proper training and rewards needed to promote reuse
   B) The current lack of a methodology for creating and clearly defining and labeling reusable components for placement in a library
   C) the lack of commitment to reuse
   D) all of the above

39) Skills that include interpreting system requests and specifications, site preparation and user training, and contact point for customers best represent:
   A) team management   B) leadership
   C) customer relations D) conflict management

40) If the project team and organizational officials reassess the project after each subsequent SDLC phase to determine if the business conditions have changed or if a more detailed understanding of a system’s costs, benefits, and risks suggest that the project is not as worthy as previously thought, they are:
   A) overly cautious
   B) adhering to a bottom-up commitment principle
   C) using a CASE methodology
   D) adhering to the incremental commitment principle

41) To identify the financial benefits and costs associated with the development project is the purpose of:
   A) schedule feasibility   B) technical feasibility
   C) operational feasibility D) economic feasibility

42) One advantage of open-ended questions in an interview is:
   A) they work well when the answers to the questions are well known
   B) a significant amount of time can be devoted to each interviewee
   C) previously unknown information can result
   D) the interviewee is restricted to providing just a few answers

43) A black hole is one that:
   A) has only inputs
   B) has only outputs
   C) has insufficient inputs to produce the associated processes
   D) has not been exploded to show enough detail
44) Which of the following is not true regarding decision tables?
   A) Structured English is more useful than decision tables when modeling the complicated logic of a process.
   B) Decision tables can model the relatively complicated logic of a process.
   C) Decision tables are compact.
   D) Decision tables allow you to check for the extent to which your logic is complete, consistent, and not redundant.

45) During requirements structuring:
   A) a specific E-R model is built to help explain the scope of a particular systems analysis and design effort
   B) the conceptual E-R data model is refined before it is translated into a logical format from which database definition and physical database design are done
   C) an enterprise-wide data model with very broad categories of data and little detail is prepared
   D) an E-R model represents conceptual data requirements for a particular system

46) Graphs should be used instead of tables for all of the following except:
   A) reading individual data values
   B) detecting trends over time
   C) comparing points and patterns of different variables
   D) forecasting activities

47) The ability to provide field-level help is often referred to as:
   A) application-level help
   B) systems-level help
   C) screen-level help
   D) context-sensitive help

48) In a structure chart, data couples are represented as:
   A) unfilled circles with arrows coming out of them
   B) rectangles
   C) ovals
   D) ellipses

49) During which of the following generic life-cycle phases would a management plan be produced?
   A) requirements specification
   B) system delivery
   C) project control structuring
   D) system development

50) The particular processes that an analyst will follow to help ensure that his work is complete, well-done, and understood by project team members best defines:
   A) methodologies
   B) data flows
   C) techniques
   D) tools

51) A major vendor that provides enterprise solution software is:
   A) SAP AG
   B) Microsoft
   C) Adobe
   D) Macromedia

52) Which of the following are primary reasons for undertaking systems development projects?
   A) to take advantage of business opportunities
   B) to solve business problems
   C) to use state-of-the-art technology
   D) both A and B
53) Which of the following is the first ISP step?
   A) Develop target blueprints   B) Assess current IS-related assets
   C) Assign resources   D) Define a series of scheduled projects

54) The Baseline Project Plan:
   A) contains all information collected and analyzed during project initiation and planning
   B) is used by the project selection committee to help decide if the project should be accepted,
      redirected, or canceled
   C) specifies detailed project activities for the next life cycle phase, analysis, and less detail for
      subsequent project phases
   D) all of the above

55) Which of the following is not a step in the Agile Usage-Centered Design Method?
   A) Test each program module separately from every other program module, and then perform
      system testing.
   B) Determine what the most important user roles would be.
   C) Determine what tasks user roles will have to complete in order to achieve their goals.
   D) Give everyone a chance to vent about the current system and to talk about the features every
      one wants in the new system.

56) A data flow diagram that represents a system's major processes, data flows, and data stores at a
    high level of detail refers to:
    A) level-0 diagram   B) context diagram
    C) level-1 diagram   D) level-00 diagram

57) A decision table is simplified by:
    A) removing extended entries
    B) removing any rules with static actions
    C) removing any rules with impossible actions
    D) removing simple entries

58) A detailed, logical representation of the entities, associations, and data elements for an organization
    or business area defines:
    A) conceptual model   B) entity-relationship model
    C) entity-relationship diagram   D) data flow diagram

59) The general guidelines for displaying tables and lists include:
    A) providing meaningful labels for all columns and rows
    B) breaking long sequences of alphanumeric data into small groups of three to four characters
    C) allowing white space on printed reports for users to write notes
    D) all of the above

60) A technique for showing a user where they are in a Web site by placing a series of "tabs" on a Web
    page that shows a user where they are and where they have been best describes:
    A) cookie crumbs   B) lightweight images
    C) MPEG files   D) icons
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

61) During the _______ phase of RUP, analysts detail user requirements and develop a baseline architecture.  
62) The three basic software reuse steps are ________, ________, and ________.  

Match each of the following activities with its corresponding skills.

a. technical problem solving  
b. management  
c. customer relations  
d. team management  
e. risk and change management  
f. leadership  
g. conflict management  
63) Defining and sequencing activities, communicating expectations, assigning resources to activities, monitoring outcomes  
64) ________ is the process of arranging planning matrix information so the clusters of information with some predetermined level or type of affinity are placed next to each other on a matrix report.  
65) ________ is the process of identifying the financial benefits and costs associated with a development project.  

Match each of the following terms with its corresponding definition.

a. business process reengineering  
b. closed-ended questions  
c. disruptive technologies  
d. formal system  
e. informal system  
f. JAD session leader  
g. key business processes  
h. open-ended questions  
i. scribe  
66) The trained individual who plans and leads Joint Application Design sessions.  
67) ________ on a DFD have unique names.  
68) ________ are the part of a decision table that lists the conditions relevant to the decision.
Match each of the following terms with its corresponding definition.

a. entity
b. entity type
c. attribute
d. multivalued attribute
e. entity instance
f. supertype
g. subtype

69) A named property or characteristic of an entity that is of interest to the organization.

For each of the following statements, answer "A" if it is a problem using color, or answer "B" if it is a benefit.

70) Facilitates subtle discriminations in complex displays.

Match each of the following guidelines for structuring data entry fields with corresponding examples.

a. entry
b. defaults
c. units
d. replacement
e. captioning
f. format
g. justify
h. help

71) Numbers are right justified and aligned on decimal points, and text is left justified.

For each of the following descriptions, answer "A" if it best exemplifies a quality requirement statement characteristic, or answer "B" if it best exemplifies a quality requirement characteristic.

72) Can be altered, with a history of the changes made

Match each of the following types of testing with its corresponding description.

a. integration testing
b. system testing
c. stub testing
d. acceptance testing
e. alpha testing
f. beta testing
g. recovery testing
h. security testing
i. stress testing
j. performance testing

73) This type of testing verifies protection mechanisms built into the system will protect it from improper penetration.

74) ________ is a systems development methodology created to radically decrease the time needed to design and implement information systems.
75) enable a firm to integrate all parts of a business process into a unified information system.

76) is the final phase of the project management process that focuses on ending the project.

77) are a series of statements that express an organization’s qualitative and quantitative goals for reaching a desired future position.

Match each of the following terms with its definition.

a. economic feasibility
b. legal and contractual feasibility
c. operational feasibility
d. political feasibility
e. schedule feasibility
f. technical feasibility

78) A process of assessing the development organization’s ability to construct a proposed system.

Match each of the following terms with its corresponding definition.

a. business process reengineering
b. closed-ended questions
c. disruptive technologies
d. formal system
e. informal system
f. JAD session leader
g. key business processes
h. open-ended questions
i. scribe

79) The search for, and implementation of, radical change in business processes to achieve breakthrough improvements in products and services.

80) is an iterative process of breaking the description of a system down into finer and finer detail, which creates a set of charts in which one process on a given chart is explained in greater detail on another chart.