

Chapter 8 Information Systems Development and Acquisition

- 1) Keane Inc. (headquartered in Boston) is the latest example of _____ outsourcing in which U.S. companies shift IT work to Canada.
- A) close source
 - B) nearshore
 - C) proto source
 - D) system source

Answer: B

Page Ref: 265

Skill: R

- 2) U.S. companies such as Keane Inc., are shifting IT work to Canada for all of the following reasons EXCEPT:
- A) political disenchantment.
 - B) lower salary and infrastructure costs.
 - C) quality of service.
 - D) similarity of culture.

Answer: A

Page Ref: 265

Skill: R

- 3) Having an outside organization or consultant company custom build a system is referred to as:
- A) outsourcing.
 - B) external development.
 - C) end-user development.
 - D) prototyping.

Answer: A

Page Ref: 266

Skill: A

- 4) IS spending in most organizations is controlled by:
- A) specific business functions.
 - B) marketing.
 - C) accounting.
 - D) human resources.

Answer: A

Page Ref: 266

Skill: A

- 5) The process of designing, building, and maintaining information systems is often referred to as:
- A) systems building maintenance.
 - B) systems analysis and design.
 - C) systems designing and building.
 - D) systems maintenance and control.

Answer: B

Page Ref: 266

Skill: A

- 6) Organizations would not normally obtain new information systems by:
- A) having members of the organization build the system.
 - B) having outside consultants custom build the system.
 - C) obtaining them from spying on other companies.
 - D) purchasing prepackaged systems.

Answer: C

Page Ref: 266

Skill: A

- 7) The demand for these individuals currently is very strong:
- A) systems analysts.
 - B) database administrators.
 - C) Web designers.
 - D) LAN administrators.

Answer: A

Page Ref: 266

Skill: R

- 8) Organizations want to hire _____ because they possess a unique blend of both managerial and technical expertise.
- A) Web page designers
 - B) systems analysts
 - C) database administrators
 - D) programmers

Answer: B

Page Ref: 266

Skill: R

- 9) A disciplined approach for constructing information systems through the use of common methods, techniques, or tools is called:
- A) software engineering.
 - B) software re-engineering.
 - C) software building.
 - D) software development.

Answer: A

Page Ref: 266

Skill: A

- 10) End-user development is usually reserved for:
- A) constructing a limited range of systems.
 - B) developing corporate databases.
 - C) perform complex operations.
 - D) systems that span organizational boundaries.

Answer: A

Page Ref: 266

Skill: A

- 11) Who are primarily responsible for making sure that the system will meet the needs of the organizations business needs?
- A) Consultants
 - B) Management and users
 - C) Developers
 - D) Suppliers

Answer: B

Page Ref: 267

Skill: R

- 12) Systems analysts become adept at _____ large, complex problems into many small, simple problems.
- A) coding
 - B) decomposing
 - C) making
 - D) turning

Answer: B

Page Ref: 243

Skill: A

- 13) The key to IT project success is:
- A) a close and mutually respectful working relationship between the users and the analysts.
 - B) everyone involved with the project performing their jobs.
 - C) programmers understanding the requirements.
 - D) users understanding what they want.

Answer: A

Page Ref: 243

Skill: A

- 14) SDLC is short for:
- A) systems deployment life cycle.
 - B) systems deployment learning cycle.
 - C) systems development learning cycle.
 - D) systems development life cycle.

Answer: D

Page Ref: 267

Skill: R

- 15) A term used to describe the life of an information system from conception to retirement is:
- A) product development life cycle.
 - B) systems development life cycle.
 - C) development process life cycle.
 - D) systems analysis and design.

Answer: B

Page Ref: 267

Skill: A

- 16) The five phases of the SDLC in order from first to last are:
- A) identification + selection + planning, design, analysis, implementation and maintenance.
 - B) analysis, design, identification + selection + planning, implementation and maintenance.
 - C) analysis, identification + selection + planning, design, implementation and maintenance.
 - D) identification + selection + planning, analysis, design, implementation and maintenance.

Answer: D

Page Ref: 267

Skill: R

- 17) The first phase of the SDLC includes:
- A) identification and planning.
 - B) identification, selection and planning.
 - C) selection and planning.
 - D) identification and selection.

Answer: B

Page Ref: 267

Skill: R

- 18) This organization uses the SDLC guidelines in every step of its IT development process to ensure that its earth-based and space-based systems function according to plans.
- A) NASA
 - B) NSA
 - C) FCC
 - D) CIA

Answer: A

Page Ref: 269

Skill: R

- 19) The goal of systems identification and selection is:
- A) to identify and purchase a project from all possible projects that could be performed.
 - B) to identify and select a project from all possible projects that could be performed.
 - C) to identify a project from all possible projects that could be performed.
 - D) to identify the best developers for the project.

Answer: B

Page Ref: 269

Skill: A

- 20) Some organizations have a formal _____ process whereby a senior manager, a business group, an IS manager, and other committee members identify and assess all possible systems development projects that an organization could undertake.
- A) information systems planning
 - B) implementation committee
 - C) information systems purchasing
 - D) steering committee

Answer: A

Page Ref: 269

Skill: A

21) Projects identified by steering committees tend to have a:

- A) narrow focus.
- B) cross functional focus.
- C) financial focus.
- D) HR focus.

Answer: B

Page Ref: 270-271

Skill: A

22) Projects identified by business units tend to have a:

- A) financial focus.
- B) HR focus.
- C) tactical focus.
- D) production focus.

Answer: C

Page Ref: 271

Skill: A

23) The primary purpose of the systems analysis phase is for:

- A) management to determine which features are desired.
- B) designers to gain a thorough understanding of an organizations current way of doing things.
- C) designers to layout design procedures.
- D) users to formalize the procedures and methods used in performing tasks.

Answer: B

Page Ref: 271

Skill: A

24) The collection and structuring of _____ is arguably the most important activity in systems development.

- A) system design
- B) system identification
- C) system implementation
- D) system requirements

Answer: D

Page Ref: 271

Skill: A

25) _____ is the process of gathering and organizing information from users, managers, business processes, and documents to understand how a proposed information system should function.

- A) Design analysis
- B) System identification
- C) Systems implementation
- D) Requirements collection

Answer: D

Page Ref: 272

Skill: R

- 26) Systems analysts use _____ for collection system requirements.
- A) interviews, questionnaires, document analysis and observations and problem decomposition
 - B) interviews, questionnaires and observations
 - C) interviews, questionnaires, document analysis and observations
 - D) interviews and observations

Answer: C

Page Ref: 272

Skill: A

- 27) _____ is/are important to discover issues, policies and rules as well as concrete examples of the use of data and information in the organization.

- A) Observations
- B) Questionnaires
- C) Interviews
- D) Document analysis

Answer: D

Page Ref: 272

Skill: A

- 28) CSF is an acronym for:

- A) Crucial Success Factor.
- B) Critical Success Factor.
- C) Crucial Success Function.
- D) Critical Success Function.

Answer: B

Page Ref: 272

Skill: R

- 29) In determining the CSF of an organization the analyst must determine:

- A) managements CSFs.
- B) organizational and individual CSFs.
- C) organizational, managerial and departmental CSFs.
- D) organizational, departmental and individual CSFs.

Answer: D

Page Ref: 273

Skill: A

- 30) _____ is a special type of group meeting in which all or most of the users meet with the analyst at the same time.

- A) Systems analysis
- B) Interviews
- C) JAD
- D) CSF

Answer: C

Page Ref: 272

Skill: R

- 31) Analysts use _____ to collect and describe the data to users, so as to confirm that all needed data are known and presented to users as useful information.
- A) JAD
 - B) CSF
 - C) pseudocode
 - D) data modeling tools

Answer: D

Page Ref: 273

Skill: R

- 32) The key elements to development of a system are:
- A) Data flows, data, ERDs and processing logic.
 - B) Data flows, data, requirements and processing logic.
 - C) Data, data flows and processing logic.
 - D) Data, data flows and ERDs.

Answer: B

Page Ref: 275

Skill: A

- 33) _____ represents the movement of data through an organization or within an information system.
- A) Processing logic
 - B) Data flows
 - C) System design
 - D) System logic

Answer: B

Page Ref: 273

Skill: R

- 34) _____ represents the way in which data are transformed.
- A) Processing logic
 - B) System logic
 - C) System design
 - D) Data flows

Answer: A

Page Ref: 274

Skill: A

- 35) During the _____ phase the details of the chosen approach are developed.
- A) data flows
 - B) system design
 - C) processing logic
 - D) system logic

Answer: B

Page Ref: 276

Skill: R

36) A _____ is a business document containing some predefined data and often some spaces for additional information.

- A) file
- B) report
- C) form
- D) dialogue

Answer: C

Page Ref: 276

Skill: R

37) A _____ is a business document containing only predefined data.

- A) dialogue
- B) form
- C) file
- D) report

Answer: D

Page Ref: 276

Skill: R

38) After the conceptual model has been completed using an entity-relation diagram, it can be easily translated into a physical data model in a:

- A) form.
- B) database management system.
- C) file.
- D) report.

Answer: B

Page Ref: 277

Skill: A

39) The steps and procedures which transform raw data inputs into new or modified information are/is the:

- A) processing operation.
- B) database management system.
- C) processing and logic operations.
- D) files.

Answer: C

Page Ref: 277

Skill: A

40) One way of representing the logic and steps needed to perform calculations is to use:

- A) flow charts.
- B) pseudocode.
- C) P-charts.
- D) hierarchy charts.

Answer: B

Page Ref: 277

Skill: A

41) Some of the activities which take place during this phase include: system conversion, software programming and testing, documentation, training and support.

- A) System logic
- B) System design
- C) System implementation
- D) Programming

Answer: C

Page Ref: 278

Skill: R

42) _____ is the processes of transforming the system design into a working computer system.

- A) System design
- B) Processing logic
- C) System logic
- D) Programming

Answer: D

Page Ref: 278

Skill: R

43) _____ is testing correctness of individual models and the integration of multiple modules.

- A) Developmental testing
- B) Beta testing
- C) Systems testing
- D) Alpha testing

Answer: A

Page Ref: 279

Skill: A

44) _____ is testing the overall system to see whether it meets design requirements.

- A) Developmental testing
- B) Alpha testing
- C) Systems testing
- D) Beta testing

Answer: B

Page Ref: 279

Skill: A

45) _____ is testing of the capabilities of the system in the user environment with actual data.

- A) Alpha testing
- B) Beta testing
- C) Systems testing
- D) Developmental testing

Answer: B

Page Ref: 279

Skill: A

- 46) In addition to having good communication skills and being good at problem solving, support personnel must also:
- A) be a developer.
 - B) be expert users of the system.
 - C) understand the business processes.
 - D) have programming skills.

Answer: B

Page Ref: 278, 281

Skill: A

- 47) The process of decommissioning the current system and installing the new system in the organization is called:
- A) system conversion.
 - B) system implementation.
 - C) system maintenance.
 - D) system finalization.

Answer: A

Page Ref: 279

Skill: R

- 48) In this type of system conversion the old system is discontinued one day and the new one is used on the next.
- A) phased
 - B) direct
 - C) pilot
 - D) parallel

Answer: B

Page Ref: 279

Skill: R

- 49) After an information system is installed it is in the:
- A) analysis phase.
 - B) testing phase.
 - C) development phase.
 - D) maintenance phase.

Answer: D

Page Ref: 281

Skill: A

- 50) Who is usually responsible for making initial changes to the system after it has been installed?
- A) A member of the development team
 - B) Information centre personnel
 - C) Help desk personnel
 - D) CIO

Answer: A

Page Ref: 281

Skill: R

- 51) It is during the _____ that the largest part of the system development occurs.
- A) analysis phase
 - B) testing phase
 - C) maintenance phase
 - D) development phase

Answer: C

Page Ref: 281

Skill: A

- 52) The four types of system maintenance referenced in the book are:
- A) corrective, adaptive, perfective and preventative.
 - B) developmental, corrective, adaptive and preventative.
 - C) developmental, corrective, perfective and preventative.
 - D) developmental, adaptive, perfective and preventative.

Answer: A

Page Ref: 281

Skill: R

- 53) _____ maintenance is making changes to an information system to repair flaws in the design, coding or implementation.
- A) Adaptive
 - B) Perfective
 - C) Preventative
 - D) Corrective

Answer: D

Page Ref: 281

Skill: R

- 54) _____ maintenance is making changes to an information system to reduce the chance of future system failure.
- A) Preventative
 - B) Perfective
 - C) Corrective
 - D) Adaptive

Answer: A

Page Ref: 281

Skill: R

- 55) _____ maintenance is making changes to an information system to evolve its functionality to accommodate changing business needs or to migrate it to a different operating environment.
- A) Adaptive
 - B) Perfective
 - C) Preventative
 - D) Corrective

Answer: A

Page Ref: 281

Skill: R

- 56) Making enhancements to improve processing performance or interface usability, or adding desired but not necessarily required systems features is:
- A) adaptive maintenance.
 - B) perfective maintenance.
 - C) preventative maintenance.
 - D) corrective maintenance.

Answer: B

Page Ref: 281

Skill: A

- 57) This type of systems development methodology uses a trial and error approach for discovering how a system could operate.
- A) RAD
 - B) Prototyping
 - C) JAD
 - D) Object-oriented analysis and design

Answer: B

Page Ref: 282

Skill: R

- 58) Using this type of development methodology, analysts follow a top-down process in which the system requirements are broken down into smaller and smaller pieces until specific programming modules can be defined, programmed and pieced together to yield a system.
- A) Prototyping
 - B) JAD
 - C) Object-oriented analysis and design
 - D) RAD

Answer: C

Page Ref: 284

Skill: A

- 59) Using this type of development methodology the people building the system and the users of the system keep cycling between user design and construction until the system is complete.
- A) JAD
 - B) RAD
 - C) Object-oriented analysis and design
 - D) Prototyping

Answer: B

Page Ref: 283

Skill: A

- 60) _____ tools are used to structure and develop prototypes quickly.
- A) JAD
 - B) CASE
 - C) Object-oriented analysis and design
 - D) Prototyping

Answer: B

Page Ref: 283

Skill: R

- 61) This is a more integrative prototyping process than the SDLC approach, in which data and operations on the data are modeled separately and at a conceptual level and are later implemented and brought together in a subsequent phase of the systems development process.
- A) CASE
 - B) RAD
 - C) Object-oriented analysis and design
 - D) Prototyping

Answer: C

Page Ref: 284

Skill: A

- 62) This type of acquisition has been described to be similar to purchasing a car.
- A) Outsourcing
 - B) End-user development
 - C) External acquisition
 - D) Request for proposal

Answer: C

Page Ref: 284

Skill: A

- 63) A(n) _____ is a report which tells your vendors what your requirements are and to invite them to provide information about how they might be able to meet your requirements.
- A) purchase order
 - B) Performa
 - C) proposition
 - D) RFP

Answer: D

Page Ref: 287

Skill: R

- 64) This is used when you want to evaluate a proposed system to determine how long it takes to perform a specific task that will be required in your particular application.
- A) Test drive
 - B) Evaluation test
 - C) Benchmarking program
 - D) Performance test

Answer: C

Page Ref: 288

Skill: R

- 65) Which of the following is not a commonly used criteria for evaluating software?
- A) Maintenance and repair
 - B) Memory requirements
 - C) Training and documentation
 - D) Access time

Answer: D

Page Ref: 288

Skill: R

- 66) _____ is the practice of turning over responsibility of some or all of the organizations information system development and operations to an outside firm.
- A) External acquisitioning
 - B) End-user developing
 - C) Outsourcing
 - D) request for proposal

Answer: C

Page Ref: 290

Skill: R

- 67) According to the book, Canadian firms have entered into IT outsourcing contracts worth well over one _____ dollars per year over the last four years.

- A) million
- B) trillion
- C) zillion
- D) billion

Answer: A

Page Ref: 293

Skill: R

- 68) The single most important factor of an ongoing outsourcing alliance is:

- A) organizational culture.
- B) costs.
- C) personal relationships.
- D) ongoing management.

Answer: D

Page Ref: 290

Skill: A

- 69) Most organizations enter outsourcing relationships through:

- A) recommendations from other organizations.
- B) personal relationships.
- C) mutually beneficial relationships with strategic partners.
- D) strictly legal contracts.

Answer: C

Page Ref: 291

Skill: A

- 70) The types of outsourcing relationships identified are:

- A) basic, preferred and incidental.
- B) incidental, preferred and strategic.
- C) basic, preferred and strategic.
- D) basic, incidental and strategic.

Answer: C

Page Ref: 291

Skill: A

71) Organizations should try to have a few _____ outsourcing relationships, in which the buyer and the supplier set preferences and prices to the benefit of each other.

- A) strategic
- B) preferred
- C) basic
- D) incidental

Answer: B

Page Ref: 291

Skill: A

72) The Canadian Pacific Railway, Canada's second largest railway company entered into a seven-year, \$200-million outsourcing agreement with:

- A) IBM Canada.
- B) J. D. Edwards.
- C) Oracle.
- D) PeopleSoft.

Answer: A

Page Ref: 293

Skill: R

73) Departments can speed up development of systems by having _____ perform the required development tasks.

- A) end-users
- B) programmers
- C) consultants
- D) managers

Answer: A

Page Ref: 292

Skill: A

74) Currently, _____ costs constitute the majority of overall systems costs.

- A) hardware
- B) user
- C) software
- D) management

Answer: C

Page Ref: 292

Skill: A

75) Which of the following are reduced by having end-users perform the systems development?

- A) Development time
- B) Modification times
- C) Costs
- D) All of the above

Answer: D

Page Ref: 292

Skill: A

76) Which of the following are personal computing tools?

- A) CASE
- B) DSS
- C) Database management systems
- D) SQL

Answer: C

Page Ref: 294

Skill: R

77) One of the major drawbacks to end-user development is:

- A) speed.
- B) quality.
- C) end-user tools.
- D) lack of continuity.

Answer: D

Page Ref: 295

Skill: A

78) Why might an RFP (Request for Proposal) be met with no proposals from potential vendors?

- A) Vendors do not provide such services.
- B) Vendors were not aware an RFP had been issued.
- C) Proposal was not bilingual.
- D) Requirements might exceed budget limitations.

Answer: D

Page Ref: 288

Skill: R

79) The Systems Development Lifecycle (SDLC) involves preceding steps _____ the activities of subsequent ones.

- A) deleting
- B) perfecting
- C) altering
- D) seeding

Answer: D

Page Ref: 267

Skill: R

80) An alternative option for a system not developed internally is to _____ support activities _____ a vendor specialising in technical support and training.

- A) outsource; to
- B) repatriate; from
- C) farm out; to
- D) gather; from

Answer: A

Page Ref: 281

Skill: R

- 81) A system interface might be:
- A) streamed from a remote source.
 - B) text based, icon based and/or graphical.
 - C) prototypical.
 - D) constructed from hardware.

Answer: D

Page Ref: 276

Skill: R

- 82) The SDLC (Systems Development Life Cycle) is best suited to development projects which are:
- A) Web based.
 - B) Unstructured.
 - C) Structured.
 - D) Inventory based.

Answer: C

Page Ref: 282

Skill: R

- 83) A system with constantly changing requirements is most likely to need which type of maintenance?
- A) Adaptive.
 - B) Preventive.
 - C) Perfective.
 - D) Corrective.

Answer: A

Page Ref: 281

Skill: A

- 84) Which of the following processes is characteristic of prototyping?
- A) Planting a garden.
 - B) Building a house.
 - C) Buying fresh fruit.
 - D) Cleaning your carpet.

Answer: A

Page Ref: 281

Skill: A

- 85) In object-oriented programming, objects can:
- A) Be recycled and reused.
 - B) Substitute for user requirements.
 - C) A and B are correct.
 - D) Send, receive and process data.

Answer: C

Page Ref: 283

Skill: R

- 86) A banking application to process transactions at an ATM is best suited to which development method?
- A) Extreme programming.
 - B) SDLC.
 - C) RAD.
 - D) Prototyping.

Answer: B

Page Ref: 267-284

Skill: A

- 87) Object-oriented Analysis & Design (OOAD) is a more integrative approach than the Systems Development Life Cycle (SDLC) because data and operations (methods):
- A) are modelled redundantly in OOAD.
 - B) are modelled simultaneously in OOAD.
 - C) are modelled separately in OOAD.
 - D) are not modelled in the SDLC.

Answer: B

Page Ref: 284

Skill: A

- 88) The external acquisition process differs from the in-house development process (SDLC) beginning with step:
- A) 3
 - B) 4
 - C) 1
 - D) The steps are the same.

Answer: A

Page Ref: 287

Skill: R

- 89) Benchmarking programs are sample programs which:
- A) Simulate computer workload.
 - B) Calibrate objects.
 - C) Evaluate user requirements.
 - D) Create pseudocode.

Answer: A

Page Ref: 288

Skill: A

- 90) Which type of testers are required for beta testing?
- A) Actual system users.
 - B) Programmers.
 - C) Software Testers.
 - D) Systems Analysts.

Answer: A

Page Ref: 279

Skill: R

91) Vendor search, contract preparation costs and on-going management are all hidden costs of:

- A) End-user development.
- B) Prototyping.
- C) Outsourcing.
- D) Joint Application Development (JAD).

Answer: C

Page Ref: 290

Skill: R

92) Which of the following are potential pitfalls of end-user development?

- A) Continuity.
- B) Documentation.
- C) Security.
- D) All of the above.

Answer: D

Page Ref: 294-295

Skill: R

93) Even if your career interests are in an area other than IS, it is very likely that you will be involved with the IS development process.

Answer: True False

Page Ref: 266

Skill: R

94) A weakness of the Joint Application Development (JAD) process is that it is difficult to get all relevant users at the same place and the same time in order to hold a meeting.

Answer: True False

Page Ref: 272

Skill: R

95) Twenty-five percent of all outsourcing contracts are labelled 'losers' by senior executives.

Answer: True False

Page Ref: 290

Skill: R

96) Boston-based outsourcing firm Keane Inc. was the first Canadian nearshore outsourcing facility to achieve Capability Maturity Model level 5 assessment.

Answer: True False

Page Ref: 265

Skill: R

97) organizations are not able to buy pre-packaged solutions from software development companies or outsourcers because such packages are not flexible enough.

Answer: True False

Page Ref: 266

Skill: A

98) Systems analysts must piece together multiple decomposed parts in order to arrive at a comprehensive system solution.

Answer: True False

Page Ref: 267

Skill: R

99) The German government's Autobahn toll project targeted foreign vacationers.

Answer: True False

Page Ref: 268

Skill: R

100) NASA's 8-stage SDLC does not correspond to the 5-stage SDLC outlined in the text.

Answer: True False

Page Ref: 270

Skill: A

101) In terms of evaluation criteria for classifying and ranking potential systems development projects, the criterion of 'technical difficulty/risks' refers to the number of required individuals and their availability.

Answer: True False

Page Ref: 272

Skill: R

102) In an entity-relationship diagram (ERD), each data entity may have one or more attributes that describe it.

Answer: True False

Page Ref: 273

Skill: R

103) The movement of data relating to customer shipping address through various functional areas within an organization is an example of a system's processing logic.

Answer: True False

Page Ref: 273-275

Skill: A

104) If a manual system is present, no system conversion is required in phase 4 of the SDLC.

Answer: True False

Page Ref: 278

Skill: A

105) IS spending in most organizations is controlled by specific business functions.

Answer: True False

Page Ref: 266

Skill: R

106) Purchasing prepackaged systems is always the best approach to solve IT needs.

Answer: True False

Page Ref: 262

Skill: A

- 107) Most organizations hire consultants to design and build payroll systems.
Answer: True False
Page Ref: 266
Skill: A
- 108) The process of designing, building, and maintaining information systems is often referred to as systems analysis and design.
Answer: True False
Page Ref: 266
Skill: R
- 109) Management and users do not need to understand the development process in order to have an IT system that meets the organizations business needs.
Answer: True False
Page Ref: 266
Skill: A
- 110) Decomposing large problems into smaller programs makes the systems development process more difficult to maintain.
Answer: True False
Page Ref: 267
Skill: A
- 111) A close and mutually respectful working relationship between analysts and users is a key to project success.
Answer: True False
Page Ref: 267
Skill: R
- 112) The term systems development life cycle is used to describe the life of an information system from conception to retirement.
Answer: True False
Page Ref: 267
Skill: R
- 113) The goal of system identification and selection is to identify and select a development project from all possible projects that could be performed.
Answer: True False
Page Ref: 269
Skill: A
- 114) Most organizations tend to choose their information systems in varied manners.
Answer: True False
Page Ref: 269
Skill: A
- 115) Projects identified by top management tend to have a strategic organizational focus.
Answer: True False
Page Ref: 270
Skill: A

- 116) Different approaches for identifying and selecting projects are likely to have different organizational outcomes.
Answer: True False
Page Ref: 270
Skill: A
- 117) Factors such as duration and complexity usually don't have much influence on the selection of a given project.
Answer: True False
Page Ref: 271
Skill: A
- 118) The collection and structuring of system requirements is arguably the most important activity in systems development.
Answer: True False
Page Ref: 271
Skill: A
- 119) The old saying, "garbage in, garbage out," very much applies to the system-building process.
Answer: True False
Page Ref: 272
Skill: A
- 120) Requirements collection is the process of gathering and organizing information from users, managers, business processes, and documents to understand how a proposed information system should function.
Answer: True False
Page Ref: 272
Skill: A
- 121) Analysts use a variety of techniques for collecting system requirements.
Answer: True False
Page Ref: 272
Skill: A
- 122) To determine the organizations CSFs, the analyst only interviews top management.
Answer: True False
Page Ref: 272
Skill: A
- 123) JAD is a special type of group meeting in which all or most of the users meet with the analyst at the same time.
Answer: True False
Page Ref: 272
Skill: R
- 124) An ERD is a type of data model.
Answer: True False
Page Ref: 273
Skill: R

- 125) Processing logic represents the movement of data through an organization or within an information system.
Answer: True False
Page Ref: 273 or 274
Skill: A
- 126) Processing logic represents the way in which data are transformed.
Answer: True False
Page Ref: 274
Skill: A
- 127) A report is a business document containing some predefined data and often some spaces for additional information.
Answer: True False
Page Ref: 276
Skill: R
- 128) The physical data model is more complete and shows more data than the conceptual data model.
Answer: True False
Page Ref: 277
Skill: A
- 129) One way of representing the logic and steps needed to make calculations is to use pseudocode.
Answer: True False
Page Ref: 277
Skill: A
- 130) Programming is the process of transforming the system design into a working computer system.
Answer: True False
Page Ref: 278
Skill: A
- 131) Traditionally, self-paced training has been the most expensive form of training.
Answer: True False
Page Ref: 278
Skill: R
- 132) It is during the testing phase that the largest part of the system development occurs.
Answer: True False
Page Ref: 281
Skill: A
- 133) The system maintenance process parallels the process used for the initial development of the information system.
Answer: True False
Page Ref: 281
Skill: A

- 134) Perfective maintenance is making changes to an information system to repair flaws in the design, coding or implementation.
Answer: True False
Page Ref: 281
Skill: A
- 135) Using RAD development methodology, the people building the system and the users of the system keep cycling between user design and construction until the system is complete.
Answer: True False
Page Ref: 283
Skill: A
- 136) Purchasing an existing system from an outside vendor such as EDS or Andersen Consulting is referred to as outsourcing.
Answer: True False
Page Ref: 285
Skill: A
- 137) A benchmarking test used when you want to evaluate a proposed system to determine how long it takes to perform a specific task that will be required in your particular application.
Answer: True False
Page Ref: 288
Skill: A
- 138) External acquisition is the practice of turning over responsibility of some to all of the organizations information system development and operations to an outside firm.
Answer: True False
Page Ref: 285
Skill: A
- 139) The single most important factor of an ongoing outsourcing alliance is ongoing management.
Answer: True False
Page Ref: 290
Skill: A
- 140) Most organizations enter into a strictly legal contract with an outsourcing vendor.
Answer: True False
Page Ref: 291
Skill: R
- 141) End-user development means that the people who are actually going to use the system will be able to have input into the design.
Answer: True False
Page Ref: 291
Skill: A
- 142) Currently hardware costs exceed software costs.
Answer: True False
Page Ref: 292
Skill: R

143) End-user development can radically reduce development time.

Answer: True False

Page Ref: 292

Skill: A

144) A spreadsheet is an example of a personal computing tool.

Answer: True False

Page Ref: 294

Skill: A

145) Two types of documentation must be created for systems. These are _____ and _____ documentation.

Answer: system; user-related

Page Ref: 278

Skill: R

146) Several people trained at the same place at the same time is an example of _____ training.

Answer: course

Page Ref: 280

Skill: R

147) Over the life of a system, _____ maintenance is most likely to occur after initial system installation.

Answer: corrective

Page Ref: 281

Skill: R

148) Choosing sunglasses is most likely an example of the _____ method of systems development.

Answer: prototyping

Page Ref: 282

Skill: A

149) Software is a collection of _____ or _____.

Answer: procedures; instructions

Page Ref: 283

Skill: R

150) Purchasing an existing system from an outside vendor is an example of _____.

Answer: external acquisition

Page Ref: 285

Skill: R

151) _____ / _____ are usually associated with database systems and enable users to search a database by entering various criteria.

Answer: query languages/report generators

Page Ref: 294

Skill: R

- 152) GUI is an acronym for _____.
- Answer: Graphical User Interface
Page Ref: 276
Skill: R
- 153) Outsourcing is currently _____ popular than ever.
- Answer: more
Page Ref: 290
Skill: R
- 154) Firms which enter into relationships wherein each firm has an interest or a stake in the other's success are referred to as being _____ partners.
- Answer: strategic
Page Ref: 291
Skill: A
- 155) The evolution from an "art" to a "discipline" lead to the use of the term _____ to help define what systems analyst and programmers do.
- Answer: software engineering
Page Ref: 266
Skill: R
- 156) _____ is the term used to refer to having an outside organization or consultant custom build a system.
- Answer: Outsourcing
Page Ref: 266
Skill: R
- 157) The first phase of the SDLC is systems identification, _____, and planning.
- Answer: selection
Page Ref: 267
Skill: R
- 158) _____ is the process of gathering and organizing information from users, managers, business processes, and documents to understand how a proposed information system should function.
- Answer: Requirements collection
Page Ref: 272
Skill: R
- 159) _____ is a special type of group meeting in which all or most of the users meet with the analyst at the same time.
- Answer: Joint Application Development (JAD)
Page Ref: 272
Skill: R
- 160) The _____ is an example of data modeling tools discussed in the chapter.
- Answer: entity relation diagram (ERD)
Page Ref: 273
Skill: R

- 161) _____ represent the movement of data through an organization or within an information system.
Answer: Data flow
Page Ref: 273
Skill: R
- 162) _____ represents the way in which data are transformed.
Answer: Processing logic
Page Ref: 274
Skill: R
- 163) The physical data model is more complete and more detailed than a _____ data model.
Answer: conceptual
Page Ref: 277
Skill: A
- 164) _____ is the process of transforming the system design into a working computer system.
Answer: Programming
Page Ref: 278
Skill: R
- 165) _____ is testing of the capabilities of the system in the user environment with actual data.
Answer: Beta testing
Page Ref: 279
Skill: R
- 166) _____ is the process of decommissioning the current system and installing the new system in the organization.
Answer: System conversion
Page Ref: 279
Skill: R
- 167) The systems _____ phase process parallels the process used for the initial development of the information system.
Answer: maintenance
Page Ref: 281
Skill: A
- 168) _____ maintenance is enhancing the system to increase processing performance or interface usability or adding desired but not required features.
Answer: Perfective
Page Ref: 281
Skill: A
- 169) _____ is a systems development methodology that uses a trial and error approach for discovering how a system should operate.
Answer: Prototyping
Page Ref: 282
Skill: R

- 170) _____ is a four-phase development methodology that combines prototyping, computer-based development tools, special management practices, and close user involvement.
Answer: Rapid application development (RAD)
Page Ref: 282
Skill: R
- 171) A(n) _____ is a report which tells your vendors what your requirements are and to invite them to provide information about how they might be able to meet your requirements.
Answer: Request for Proposal (RFP)
Page Ref: 287
Skill: R
- 172) _____ is the practice of turning over responsibility of some or all of the organizations information system development and operations to an outside firm.
Answer: Outsourcing
Page Ref: 290
Skill: R
- 173) Organizations should try to have a few _____ outsourcing relationship in which the buyer and the supplier set preferences and prices to the benefit of each other.
Answer: preferred
Page Ref: 291
Skill: A
- 174) Spreadsheets and database management systems are examples of _____ computing tools.
Answer: personal
Page Ref: 294
Skill: A
- 175) Why was it important for systems analysis to evolve from an "art" to a "discipline?"
Answer: In the early days of computing, techniques used to construct systems varied from individual to individual. This made integration into larger organizations difficult. Systems were difficult to maintain after the original programmer left the organization. As a result, organizations were left with expensive systems that were underutilizing the technology and not returning the possible technology benefits for the organizations. By transforming systems analysis to a discipline made training programmers and analysts easier. Using common technologies made maintenance easier for all those involved.
Page Ref: 266
Skill: R
- 176) Explain the term 'garbage in, garbage out' (sometimes referred to as GIGO by systems analysts and programmers) in terms of systems development.
Answer: GIGO means that if the requirements, analysis, input data and design of a system are not carefully thought out (they are garbage), the resulting system can do no better than to produce garbage as output.
Page Ref: 272
Skill: A

177) List and describe the five (5) possible evaluation criteria for classifying and ranking potential systems development projects as used in Stage 1 of the SDLC.

- Answer:
- 1) Strategic alignment: The extent to which the project is viewed as helping the organization achieve its strategic and long-term goals.
 - 2) Potential benefits: The extent to which the project is viewed as improving profits, customer service, and so forth, and the duration of these benefits.
 - 3) Potential costs and resource availability: The number and types of resources the project requires and their availability.
 - 4) Project size / duration: The number of individuals and the length of time needed to complete the project.
 - 5) Technical difficulty / risks: The level of technical difficulty involved in successfully completing the project within a given time and resource constraint.

Page Ref: 272

Skill: R

178) List the strengths and weaknesses of the Joint Application Development (JAD) approach to systems development.

Answer: Strengths:

- 1) Group-based process enables more people to be involved in the development effort without adversely slowing the project.
- 2) Group-based process can lead to higher levels of system acceptance and quality.
- 3) Group involvement in the design and development process helps to ease implementation, user training and ongoing support.

Weaknesses:

- 1) Very difficult to get all relevant users to the same place at the same time to hold a JAD meeting.
- 2) Requires high-level executive sponsor to ensure that adequate resources are available in order to allow widespread participation.

Page Ref: 274

Skill: R

179) Which training option would best suit the situation where field sales personnel (one in each of 20 different cities, for example) must be trained to use a new system? Justify your answer.

Answer: Probably best would be computer-aided instruction. Such instruction is described in the book as being self-paced and is by nature identical from user to user. There is no need to gather the personnel together for a session and no need to hire an expert to travel to the personnel.

Page Ref: 280

Skill: A

180) List the strengths and weaknesses of the CSF approach.

Answer: The strengths include: senior managers intuitively understand this approach and support its usage; it provides a way for understanding the information needs of the organization in order to make effective decisions; the group-based process allows more people to be involved in the development process without slowing it down; and group-based processes lead to higher system acceptance, quality, eases implementation, user training and ongoing support. The weaknesses include: high-level focus leads to oversimplification; it is difficult to find and train analysts in the CSF process, which requires an understanding of the information system and being able to effectively communicate with senior executives; it is difficult to get all relevant users in the same place to have a JAD session and it requires high-level executive sponsorship.

Page Ref: 272-273

Skill: R

181) Describe four of the seven types of training options for training new users during the implementation phase.

Answer: Tutorial is the option where one person taught at one time by human or paper-based exercise. Course is several people taught at one time. Computer-aided instruction is one person taught at one time by the computer system. Interactive training manuals are a combination of tutorial and computer-aided instruction. Resident expert is an expert on call to assist users as needed. Software help components are built-in system components designed to train and troubleshoot problems. External sources are vendors and training providers to provide tutorials, courses and other training activities.

Page Ref: 278, 280- *281

Skill: R

182) What is the role of the systems development team in the maintenance phase?

Answer: During the maintenance phase one member of the development team is responsible for collecting maintenance requests from users. After the requests are collected they are analyzed so the developer can better understand how the proposed change might alter the system and what business benefits and necessities might result from such a change. If the request is approved, the system changes are made.

Page Ref: 281

Skill: A

183) List and describe the four types of systems maintenance referenced in the book.

Answer: Corrective maintenance is making changes to the system to correct errors and flaws. Adaptive maintenance is making changes to the system as it evolves and changes to meet the changing business needs or migrates to a different operating environment. Perfective maintenance is enhancing the system to increase processing performance or interface usability or adding desired but not required features. Preventative maintenance is making changes to a system to reduce the chance of future system failure.

Page Ref: 281

Skill: R

184) List and describe three alternate methods of system development.

Answer: Prototyping is a systems development methodology that uses a trial and error approach for discovering how a system could operate. Rapid application development (RAD) is a four-phase systems development methodology that combines prototyping, computer-based development tools, special management practices and close user involvement. Using object-oriented analysis and design, analysts follow a top-down process in which the system requirements are broken down into smaller and smaller pieces until specific programming modules can be defined, programmed and pieced together to yield a system.

Page Ref: 282-284

Skill: R

185) Why do organizations need alternatives to building their own information systems?

Answer: Often organizations do not have the capability to build the system themselves. This may result from a staff that is limited in number, or they may be deployed on other projects and developing a new project would entail hiring new personnel. The IT staff may not have the skills required to develop this particular type of system. The IS staff may be overworked and do not have time to work on a new system. Often there are problems with IS staff turnover and performance. Training new personnel takes time and places constraints on the budget.

Page Ref: 284-285

Skill: A

186) List and describe some of the reasons firms outsource information systems services.

Answer: Costs and quality concerns. In many cases it is possible to achieve better systems at lower prices because of the economies of scale achieved by the outsourcing organization. Problems with IS performance. IS departments may have problems meeting acceptable service standards due to cost overruns, delayed systems, underutilized systems, or poor performing systems. Supplier pressure. Some of the largest service providers are also the largest equipment suppliers. Simplifying, downsizing and reengineering. Organizations are attempting to focus on only their core competencies. Financial factors. By turning over their IT systems to service providers companies may be able to liquidate their IT assets. Organizational culture. Political or organizational problems are often difficult for IT groups to overcome.

Page Ref: 290

Skill: A

187) What are some benefits of end-user development?

Answer: Conventional systems development is labor intensive. New systems can take months or even years to develop, depending on the scope and scale of the new system. Related to the time it takes to develop new systems is the problem of maintaining existing systems. One reason for the long development and slow modification times is the workload on the IT department. When end-users develop their own systems they have the responsibility of maintaining and updating the system as needed. End-user development can radically reduce development workload.

Page Ref: 292

Skill: A

188) List and describe the phases of the SDLC.

Answer: System identification, selection and planning is the first phase in which projects are identified and prioritized. System analysis is the phase in which designers gain a thorough understanding of an organizations current way of conducting business. The third phase is the system design. This is the phase where the details of the proposed system are chosen. The fourth phase is system implementation. In this phase software is programmed, tested, the system is converted and documentation, training and support for users are provided. System maintenance comprises the stage in which the system is in use within the organization and is subject to the four forms of maintenance outlined in the text (corrective, adaptive, preventive and perfective).

Page Ref: 269-282

Skill: A