Chapter 2

True-False

1. Subsystems are composed of systems. F (p. 28)

2. Systems and subsystems are interrelated and interdependent. T (p. 28)

3. The interface between a system and its environment is known as the boundary. T (p. 28)

4. Feedback is a form of system control. T (p. 28)

5. Anything which affects the functioning of an organization is considered to be an environment. F (p. 29)

6. Open systems are characterized by a free flow of ideas among organizational members. T (p. 29)

7. A context level data flow diagram includes many detailed processes representing the computer programs within the system. F (p. 32)

8. In an entity-relationship diagram, rectangles represent entities, and ovals represent relationships. F (p. 34)

9. The elements that make up an organizational system are referred to as entities. T (p. 34)

10. A crow's foot on each side of a relationship indicates a one-to-one relationship. F (p. 34)

11. An associative entity joins two entities. T (p. 36)

12. Middle managers make decisions using predetermined rules that have predictable outcomes when implemented correctly. F (p. 47)

13. Strategic managers work in a highly uncertain decision-making environment. T (p. 47)

14. Operations managers most often make one-time decisions but the decisions made by strategic managers tend to be repetitive. F (p. 48)

15. Middle managers are highly dependent on external information. F (p. 48)

16. Strategic planners tend to use information that is more current than information used by middle managers. F (p. 48)

17. Often, considering organizational subcultures is more useful than is considering organizational culture. T (p. 49)

18. Understanding organizational subcultures may help analysts overcome resistance to change. T (p. 49)

19. Virtual enterprises use computer networks and communications technology to bring people together on a project. T (p. 29)

20. One drawback of working on a virtual team is that there is no easy way for members to share project results. F (p. 29)

21. Enterprise resource planning is a method of developing specifications for computer programs and then writing custom enterprise-wide software. F (p. 32)

22. Implementing an enterprise resource system is easy because it is easy to analyze a system currently in use. F (p. 32)

23. Another name for an associative entity is a gerund. T (p. 36)

24. A many-to-many relationship may be implemented by using an attributive entity on one

end. F (p. 36)

25. A zero on one end of a relationship line indicates that there may be none of the entity that the line is connected to. T (p. 36)

26. Actors are the people inside the system, acting to do the work of the system. F (p. 39)

27. An includes relationship describes a use case that contains behavior common to more than one use case. T (p. 40)

28. A primary use case describes the standard flow of events in the system. T (p. 42)

29. Use cases allow people to tell stories. T (p. 46)

Multiple Choice

30. Which of these is most closely associated with system control?

    A.   boundary
    B.   environment
    C.   feedback (p. 28)
    D.   interface

31. The elements that make up an organizational system are called _____.

    A.   entities (p. 34)
    B.   events
    C.   factors
    D.   relationships

32. Which of the following symbols is <u>not</u> used on the context level data flow diagram?

    A.   rectangle with rounded corners
    B.   triangle (p. 32)
    C.   arrow
    D.   shaded corner square

33. The context level data flow diagram depicts:

    A.   the boundaries of a system. (p. 34)
    B.   detailed processes that transform the incoming data to information.
    C.   the system entities and how they are related.
    D.   computer programs and their files.

34. An external entity may be:

    A.   a person.
    B.   another department.
    C.   another computer system.
    D.   all of the above. (p. 33)

35. Which of these is used to depict a relationship in an entity-relationship diagram?

    A.   triangle
    B.   square
    C.   crow's foot line (p. 34).
    D.   rectangle

36. In an organization with many employees and many cubicles, with each employee having a unique phone extension is said to be a _____ relationship.

    A.   1:1 (p. 34)
    B.   1:M
    C.   M:1
    D.   M:N

37. A crow's foot notation indicates:

    A.   none of the other entity.
    B.   one of the other entity.
    C.   an attributive entity.
    D.   many of the other entity. (p. 34)

38. An entity that describes attributes, such as repeating groups is called:

    A.   a fundamental entity.
    B.   an associative entity.
    C.   an attributive entity. (p. 36)
    D.   an external entity.

39. An entity that joins two other entities is called:

    A.   a fundamental entity.
    B.   an associative entity. (p. 36)
    C.   an attributive entity.
    D.   an linking entity.

40. A many-to-many relationship is replaced with a(n) _____ to form two one-to-many relationships.

    A.   a fundamental entity.
    B.   an associative entity. (p. 37)
    C.   an attributive entity.
    D.   a bipolar entity.

41. Which level of management makes decisions using predetermined rules that have predictable outcomes?

    A.   operations (p. 47)
    B.   middle
    C.   strategic
    D.   None are interested in detailed information.

42. Which level of management is most dependent on external information?

    A.   operations
    B.   middle
    C.   strategic (p. 48)
    D.   None of these are dependent on external information.

43. Which view of organizations concentrates on myths, metaphors, humor, and ceremonies?

    A.   culture (p. 49)
    B.   human relationships
    C.   leadership style
    D.   technology

44. Anything external to an organizations boundaries is considered to be:

    A.   of little importance.
    B.   an environment. (p. 29)
    C.   an enterprise resource system.
    D.   an associative entity.

45. The free flow of information within a system is called:

    A.   open source information.
    B.   a virtual organization.
    C.   openness. (p. 29)
    D.   enterprise wide resource availability.

46. A(n) _____ _____ uses computer networks and communications technology to bring people together to work on projects

    A.   virtual enterprise (p. 29)
    B.   open system
    C.   enterprise system
    D.   official subculture

47. An integrated organizational information system is called a(n):

    A.   virtual organization.
    B.   open system.
    C.   interrelated external entity.
    D.   an enterprise resource planning system. (p. 32)

48. An enterprise resource planning system:

    A.   is purchased rather than developed. (p. 32)
    B.   links team members at remote distances.
    C.   uses project management software to develop program coding schedules.
    D.   involves the use of isolated systems that do not interact.

49. The symbol used to represent a process on a context level data flow diagram is:

   A.   a diamond inside a rectangle.
   B.   a circle.
   C.   an oval inside a rectangle.
   E.   **A rectangle with rounded corners. (p. 33)**

50. Processes on a data flow diagram:

   A.   **transform incoming data into outgoing information. (p. 32)**
   B.   represent the system boundaries.
   C.   represent the work that a specific user performs.
   D.   change the nature of the relationships on a entity-relationship diagram.

51. Another name for an associative entity is:

   A.   an attributive entity.
   B.   an external entity.
   C.   a co-variant entity.
   D.   **a gerund. (p. 36)**

52. A zero on a relationship line indicates:

   A.   that the relationship line is undefined.
   B.   the absence of any well-defined entities.
   C.   **that none is possible for the next relationship. (p. 36)**
   D.   that the relationship should be used to create an associative entity.

53. Attributes that are underlined on an entity-relationship diagram:

   A.   are the names of external entities.
   B.   **can be searched for. (p. 38)**
   C.   represent virtual organizational components.
   D.   are used to create attributive entities.

54. The management group that has a high need for historical data along with information that allows prediction of future events is:

   A.   operations management.
   B.   **middle management. (p. 48)**
   C.   strategic management.
   D.   virtual management.

55. Which of the following is a use case symbol?

   A.   **Actor. (p. 39)**
   B.   User.
   C.   External entity.
   D.   Associative entity.

56. Which of the following is <u>not</u> a type of use case relationship?

    A.   Extend
    B.   Generalize
    C.   Communicates
    D.   **Develops (p. 40)**

57. Which of the following is <u>not</u> included in a use case scenario?

    A.   Preconditions
    B.   Triggering event
    C.   **Includes (p. 44)**
    D.   Assumptions

Completion

58.	All systems are composed of interrelated (<u>subsystems</u>). (p. 28)
59.	(<u>Processes</u>) change or transform inputs into outputs. (p. 28)
60.	All systems and subsystems are interrelated and (<u>interdependent</u>), which indicates that when any element of a system is changed or eliminated, other system elements are also affected. (p. 28)
61.	The interface between a system and its environment is known as the (<u>boundary</u>). (p. 28)
62.	System outputs are used as (<u>feedback</u>) to compare performance with goals. (p. 28)
63.	An (<u>open</u>) system is a system with a relatively free flow of information within the organization. (p. 29)
64.	A (<u>context</u> <u>level</u> <u>data</u> <u>flow</u> <u>diagram</u>) defines the boundaries of the system. (p. 34)
65.	(<u>Entities</u>) supply the system with data or receive information from the system. (p. 32)
66.	An (<u>entity-relationship</u> <u>diagram</u>) is used to help model the database or files. (p. 39)
67.	A (<u>circle</u>) on one end of a relationship indicates that none of the entity are a possibility. (p. 36)
68.	An (<u>associative</u> <u>entity</u>) joins two fundamental entities. (p. 36)
69.	The level of management concerned with making decisions using predetermined rules which have predictable outcomes is the (<u>operations</u>) manager. (p. 47)
70.	(<u>Subcultures</u>) coexist with "official" organizational cultures. (p. 49)
71.	A (<u>virtual</u> <u>enterprise</u>) uses computer networks and communications technology to bring people together to work on projects. (p. 29)
72.	An (<u>enterprise</u> <u>resource</u> <u>planning</u>) system describes an integrated organizational information system. (p. 32)
73.	A use case diagram contains two symbols, the (<u>use</u> <u>case</u>) and a(n) (<u>actor</u>). (p. 39)
74.	The (<u>includes</u>) relationship contains a behavior that is common to more than one use case. (p. 41)
75.	The (<u>extends</u>) relationships handles exceptions to the basic use case. (p. 41)

76.	(Preconditions) are the state of the system before the use case may be performed. (p. 45)
77.	(Postconditions) show the state of the system after the use case has finished. (p. 45)