Testbank

to accompany

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by Rainer et al.

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Chapter 3
Data and knowledge management

True or False Questions

1. It is easy to manage all the data coming into an organisation.

a. True
*b. False

General Feedback:
Chapter 3: LO 1: Discuss ways that common challenges in managing data can be addressed using data governance. Difficulty: Easy.

2. The best way to capture the data in an organised format is to use a database.

*a. True
b. False

General Feedback:
Chapter 3: LO 1: Discuss ways that common challenges in managing data can be addressed using data governance. Difficulty: Medium.

3. Increasing amounts of external data need to be considered in making organisational decisions.

*a. True
b. False

General Feedback:
Chapter 3: LO 1: Discuss ways that common challenges in managing data can be addressed using data governance. Difficulty: Easy.

4. Data rot refers to the quality of the data itself.

a. True
*b. False

General Feedback:
Chapter 3: LO 1: Discuss ways that common challenges in managing data can be addressed using data governance. Difficulty: Medium.

5. Master data are generated and captured by operational systems.

a. True
*b. False

General Feedback:
Chapter 3: LO 1: Discuss ways that common challenges in managing data can be addressed using data governance. Difficulty: Easy.

6. It is important for applications and data to be dependent on each other.

a. True
*b. False

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram. Difficulty: Easy.

7. A negative value for a student's grade point average is an example of a data integrity problem.

*a. True
b. False

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram. Difficulty: Easy.

8. An entity is a person, place, thing, or event about which information is maintained.

*a. True
b. False

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram. Difficulty: Easy.

9. An attribute is any characteristic or quality that describes a particular entity.

*a. True
b. False

General Feedback:

Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

10. The secondary key is a field that identifies a record with complete uniqueness.

a. True
*b. False

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

11. Entity-relationship diagrams are documents that show the primary and secondary keys associated with a conceptual data model.

a. True
*b. False

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

12. You would be an instance of your university's STUDENT class.

*a. True
b. False

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

13. The relational database model is based on the concept of three-dimensional tables.

a. True
*b. False

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Easy.

14. Structured query language is a relational database language that enables users to perform complicated searches with relatively simple statements.

*a. True
b. False

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Easy.

15. The data dictionary stores definitions of data elements, characteristics that use the data elements, physical representation of the data elements, data ownership, and security.

*a. True
b. False

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Easy.

16. When data are normalised, attributes in the table depend on the primary key and any secondary keys.

a. True
*b. False

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Easy.

17. In a data warehouse, existing data are constantly purged as new data come in.

a. True
*b. False

General Feedback:
Chapter 3: LO 4: Explain the elements necessary to successfully implement and maintain data warehouses. Difficulty: Easy.

18. An organisation's data warehouse generally maintains its operational data.

a. True
*b. False

General Feedback:
Chapter 3: LO 4: Explain the elements necessary to successfully implement and maintain data warehouses. Difficulty: Easy.

19. Online analytical processing (OLAP) involves the analysis of accumulated data by end users.

*a. True
b. False

General Feedback:
Chapter 3: LO 4: Explain the elements necessary to successfully implement and maintain data warehouses. Difficulty: Easy.

20. Data marts are designed for the end-user needs in a strategic business unit or department.

*a. True
b. False

General Feedback:
Chapter 3: LO 4: Explain the elements necessary to successfully implement and maintain data warehouses. Difficulty: Easy.

21. Tacit knowledge is the more objective, rational, and technical types of knowledge.

a. True
*b. False

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Easy.

22. Explicit knowledge refers to the cumulative store of subjective learning, which is personal and hard to formalise.

a. True
*b. False

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Easy.

Multiple Choice Questions

23. Which of the following has (have) the broadest impact on an organisation?

a. Decisions about hardware.
b. Decisions about software.
*c. Decisions about data.

d. a and b.
e. All of the above have an equal impact.

General Feedback:
Chapter 3: LO 1: Discuss ways that common challenges in managing data can be addressed using data governance. Difficulty: Easy.

24. Which of the following is not a reason why managing data is difficult over time?

a. New systems are developed.
b. The media the data are stored on becomes problematic.
c. New sources of data are created.
d. The amount of data increases exponentially.
*e. All of these are reasons why managing data is difficult over time.

General Feedback:
Chapter 3: LO 1: Discuss ways that common challenges in managing data can be addressed using data governance. Difficulty: Medium.

25. _____ is a formal approach to managing data consistently across an entire organisation.

a. Database management
b. Enterprise information management
c. Data warehousing
*d. Data governance
e. Data mart

General Feedback:
Chapter 3: LO 1: Discuss ways that common challenges in managing data can be addressed using data governance. Difficulty: Easy.

26. _____ provide(s) companies with a single version of the truth for their data.

a. Data warehouses
b. Data marts
c. Databases
*d. Master data management
e. Enterprise information management

General Feedback:
Chapter 3: LO 1: Discuss ways that common challenges in managing data can be addressed using data governance. Difficulty: Easy.

27. Organisations are turning to data governance for which of the following reasons?

a. They have too little data.
*b. They are responding to federal regulations.
c. Their data are typically structured.
d. Their data are usually located in the organisation's databases.
e. Data across their organisations are generally consistent.

General Feedback:
Chapter 3: LO 1: Discuss ways that common challenges in managing data can be addressed using data governance. Difficulty: Hard.

28. _____ describe the activities of the business, whereas _____ categorise(s), aggregate(s), and evaluate(s) data generated by the organisation's activities.

*a. Transaction data, master data
b. Source data, transaction data
c. Operational data, master data
d. Master data, source data
e. Business dimensional data, databases

General Feedback:
Chapter 3: LO 1: Discuss ways that common challenges in managing data can be addressed using data governance. Difficulty: Medium.

29. Not including alphabetic characters in a Social Security Number field is an example of _____.

a. data isolation
*b. data integrity
c. data consistency
d. data redundancy
e. application/data dependence

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram. Difficulty: Easy.

30. _____ occurs when applications cannot access data associated with other applications.

*a. Data isolation
b. Data integrity
c. Data consistency
d. Data redundancy
e. Application/Data dependence

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

31. _____ occurs when the same data are stored in many places.

a. Data isolation
b. Data integrity
c. Data consistency
*d. Data redundancy
e. Application/Data dependence

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

32. _____ occurs when various copies of the data agree.

a. Data isolation
b. Data integrity
*c. Data consistency
d. Data redundancy
e. Application/Data dependence

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

33. Place the following members of the data hierarchy in their correct order:

a. bit - byte - field - record - database - file
b. bit - field - byte - record - file - database
c. byte - bit - record - field - database
*d. bit - byte - field - record - file - database
e. bit - record - field - byte - file -- database

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

34. In the data hierarchy, the smallest element is the _____.

a. record
*b. bit
c. byte
d. character
e. file

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

35. A(n) _____ is a logical grouping of characters into a word, a small group of words, or a complete number.

a. byte
*b. field
c. record
d. file
e. database

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

36. A(n) _____ is a logical grouping of related fields.

a. byte
b. field
*c. record
d. file
e. database

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

37. A(n) _____ is a logical grouping of related records.

a. byte
b. field
c. record
*d. file
e. database

General Feedback:

Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

38. A(n) _____ represents a single character, such as a letter, number, or symbol.

*a. byte
b. field
c. record
d. file
e. database

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

39. In a database, the primary key field is used to _____.

a. specify an entity
b. create linked lists
c. identify duplicated data
*d. uniquely identify a record
e. uniquely identify an attribute

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

40. _____ are fields in a record that have some identifying information but typically do not identify the record with complete accuracy.

a. Primary keys
*b. Secondary keys
c. Duplicate keys
d. Attribute keys
e. Record keys

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

41. As an individual student in your university's student database, you are a(n) _____ of the STUDENT class.

*a. instance
b. individual
c. representative
d. entity
e. relationship

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Medium.

42. At your university, students can take more than one class, and each class can have more than one student. This is an example of what kind of relationship?

a. One-to-one.
b. One-to-many.
c. Many-to-one.
*d. Many-to-many.
e. Some-to-many.

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

43. In a university's relational database, the student record contains information regarding the student's last name. The last name is a(n):

*a. attribute.
b. entity.
c. primary key.
d. object.
e. file.

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

44. A database management system is primarily a(n) _____.

a. file-handling program
b. data-modelling program
*c. interface between applications and a database
d. interface between data and a database
e. interface between queries and a database

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Easy.

45. In the relational database model, related tables can be joined when they contain common _____.

a. primary keys
b. rows
c. records
*d. columns
e. files

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Medium.

46. _____ tell the database management system which records are joined with others in related tables.

*a. Primary keys
b. Secondary keys
c. Common attributes
d. Common files
e. Common fields

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Medium.

47. Data dictionaries perform all of the following functions except:

*a. providing information on each record.
b. providing information on why attributes are needed in the database.
c. defining the format necessary to enter data into the database.
d. providing information on the name of each attribute.
e. providing information on how often attributes should be updated.

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Medium.

48. In a relational database, every row represents a(n) _____.

a. file
*b. record
c. attribute
d. primary key
e. secondary key

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Easy.

49. A standardised language used to manipulate data is _____.

a. MS-Excel
b. Oracle
c. query-by-example language
*d. Structured Query Language
e. data-manipulation language

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Easy.

50. Data dictionaries provide which of the following advantages to the organisation?

a. They display data values.
*b. They enable faster program development.
c. They make it easier to input data.
d. They can be used by end users.

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Medium.

51. _____ is a method for analysing and reducing a relational database to its most streamlined form.

a. Structured query
*b. Normalisation
c. Query by example
d. Joining
e. Relational analysis

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Easy.

52. When data are normalised, attributes in the table depend only on the _____.

a. secondary key
b. common attribute
*c. primary key
d. common row
e. common record

General Feedback:
Chapter 3: LO 3: Discuss the advantages and disadvantages of relational databases. Difficulty: Medium.

53. The data in a data warehouse have which of the following characteristics?

*a. They are organised by subject.
b. They are coded in different formats.
c. They are updated in real time.
d. They are typically retained for a defined, but limited, period of time.
e. They are organised in a hierarchical structure.

General Feedback:
Chapter 3: LO 4: Explain the elements necessary to successfully implement and maintain data warehouses. Difficulty: Medium.

54. The data in a data warehouse:

a. are updated constantly in real time.
b. are updated in batch mode, approximately once per day.
*c. are not updated.
d. are purged constantly as new data enter.
e. are available for MIS analysts, but not users.

General Feedback:
Chapter 3: LO 4: Explain the elements necessary to successfully implement and maintain data warehouses. Difficulty: Medium.

55. The process of moving data from various sources into the data warehouse is called:

a. uploading.
*b. extracting, transforming, and loading.
c. online transaction processing.
d. master data management.
e. online analytical processing.

General Feedback:
Chapter 3: LO 4: Explain the elements necessary to successfully implement and maintain data warehouses. Difficulty: Easy.

56. Compared to data warehouses, data marts have which one of the following characteristics?

*a. They cost less.

b. They have longer lead times for implementation.
c. They provide for central rather than local control.
d. They contain more information.
e. They are more difficult to navigate.

General Feedback:
Chapter 3: LO 4: Explain the elements necessary to successfully implement and maintain data warehouses. Difficulty: Medium.

57. _____ is a process that helps organisations identify, select, organise, disseminate, transfer, and apply expertise that are part of the organisation's memory and typically reside inside the organisation in an unstructured manner.

a. Discovery
*b. Knowledge management
c. Decision support
d. Online analytical processing
e. Data mining

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management systems in organisations. Difficulty: Easy.

58. _____ can be exercised to solve a problem, whereas _____ may or may not be able to be exercised to solve a problem.

*a. Knowledge, information
b. Data, information
c. Information, data
d. Information, knowledge
e. Data, knowledge

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management systems in organisations. Difficulty: Medium.

59. Explicit knowledge has which of the following characteristics?

*a. Objective.
b. Personal.
c. Slow.
d. Costly to transfer.
e. Ambiguous.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management systems in organisations. Difficulty: Medium.

60. Tacit knowledge has which of the following characteristics?

a. Codified.
b. Objective.
*c. Unstructured.
d. Rational.
e. Technical.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management systems in organisations. Difficulty: Easy.

61. Historically, management information systems have focused on capturing, storing, managing, and reporting _____ knowledge.

a. tacit
*b. explicit
c. managerial
d. geographical
e. cultural

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management systems in organisations. Difficulty: Easy.

62. The most important benefit of knowledge management systems is:

a. they improve customer service.
*b. they make best practices available to employees.
c. they enable the organisation to retain scarce knowledge when employees retire.
d. they improve employee morale.
e. they make product development more efficient.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management systems in organisations. Difficulty: Medium.

63. You have a checking account and a separate savings account in your neighbourhood bank. You've recently moved and gave the bank your new address for your checking account. You forgot all about the

savings account. About three months later you receive a letter about your savings account which was sent to the wrong address. This is an example of:

a. data redundancy
*b. data inconsistency
c. data isolation
d. data security
e. data dependence.

General Feedback:
Chapter 3: LO 2: Explain how to interpret relationships depicted in an entity-relationship diagram.
Difficulty: Easy.

64. In data warehouses and data marts, data are stored in a multidimensional structure and visually represented as a data cube. Figure 3.12 is an example of a data cube of sales with the dimensions of product, geographic area, and time period (year). These are called business dimensions.
What would the business dimensions be for Walmart's sales with its many sales transactions for many products in many stores that would allow them to do weekly analysis?

a. Customer, product, and month.
b. Customer, product, store.
c. Customer, product, store, and week.
*d. Product, store, and week.

General Feedback:
Chapter 3: LO 4: Explain the elements necessary to successfully implement and maintain data warehouses. Difficulty: Medium.

65. In data warehouses and data marts, data are stored in a multidimensional structure and visually represented as a data cube. Figure 3.12 is an example of a data cube of sales with the dimensions of product, geographic area, and time period (year). These are called business dimensions.
What would the business dimensions be for Amazon's sales with its many sales transactions for many products that would allow them to do weekly analysis by state?

a. Customer, product, and month.
*b. Product, state, and week.
c. State, product, and month.
d. Customer, product, and week.

General Feedback:
Chapter 3: LO 4: Explain the elements necessary to successfully implement and maintain data warehouses. Difficulty: Medium.

66. Refer to Opening Case - Loyalty New Zealand - reaping the big data rewards - Big data refers to vast amounts of generally unstructured and distributed customer information collected from various sources. Which of the following is a typical big data source?

a. Transactions histories of customers.
b. Customer feedback and surveys.
c. Social media applications.
d. Mobile device activity.
*e. All of the above.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Medium.

67. Refer to Opening Case - Loyalty New Zealand - reaping the big data rewards - Select the key benefit(s) of using big data.

*a. Helps obtain new insight concerning customer behaviour.
b. Streamlines communications between suppliers in supply chains.
c. All of the above.
d. None of the above.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Easy.

68. Refer to Opening Case - Loyalty New Zealand - reaping the big data rewards - In what way are Loyalty New Zealand using big data?

a. To better understand their customers by way of profiling.
b. To segment and analyse data in order to target customers with meaningful offers and campaigns.
c. To provide the right offer to the right consumer at the right time.
*d. All of the above.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Medium.

69. Refer to Opening Case - Loyalty New Zealand - reaping the big data rewards - What new capabilities have Loyalty New Zealand developed by using big data?

a. The ability to carry out highly targeted campaigns with customised recommendations provided in real time to customers based on continuously evolving individual product preferences.
b. The ability to model behavioural propensity of consumers.

c. The ability to profile customers on the basis of the geographical area of residence and proximity to business outlets.
*d. All of the above.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Medium.

70. Refer to the It's about business case - Cloud accounting: the case of MYOB's AccountRight Live for SMEs. Which of the following is correct?

a. Cloud accounting offers organisations the tools to prepare, publish and automatically exchange financial reports online.
b. With cloud accounting, accounting software is executed using web browsers, and accounting data is securely stored and processed on the servers of cloud accounting.
c. Cloud accounting offers flexibility of accessing data ubiquitously.
*d. All of the above.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Medium.

71. Refer to the It's about business case - Cloud accounting: the case of MYOB's AccountRight Live for SMEs. Which of the following is false?

a. With cloud accounting business owners can enter expenses data immediately through a variety of devices including smart phones, tables and traditional computers.
*b. With cloud accounting small business owners must enter receipts into their accounting systems only at the end of the month.
c. Using cloud accounting reduces the need for software and hardware upgrades which results in high cost savings for small businesses.
d. With cloud accounting business owners can assess purchase and investment decisions more frequently.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Medium.

72. Refer to the It's about business case - Cloud accounting: the case of MYOB's AccountRight Live for SMEs. Which of the following is correct?

a. With cloud accounting business owners can enter expenses data immediately through a variety of devices including smart phones, tables and traditional computers.
b. With cloud accounting business owners can assess purchase and investment decisions more frequently.

c. Using cloud accounting reduces the need for software and hardware upgrades which results in high cost savings for small businesses.
*d. All of the above.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Medium.

73. Refer to the It's about business case - How data warehousing is supporting tourism business in Australia - The Australian Tourism Data Warehouse (ATDW) includes over 33 000 tourism product listings that can be published across ATDW's multi-channel partner distribution network. Which of the following benefits can tourism business owners experience when they join the ATDW?

a. Enhanced cost-effective online marketing including content dissemination through state, territory and Tourism Australia sponsored websites.
b. Efficient content distribution as business information is supplied once to the ATDW and distributed to multiple partners.
c. Increased exposure of tourism business through licensed tourism distributors and through inclusion in the most comprehensive tourism data warehouse in Australia.
*d. All of the above.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Medium.

74. Refer to the It's about business case - How data warehousing is supporting tourism business in Australia - The Australian Tourism Booking Widget (ATBW) was recently launched by the Australian Tourism Data Warehouse (ATDW) to assist SMEs operating in the tourism industry that do not have online booking capabilities in order to enable them to:

a. enter the online tourism market supporting real time online bookings.
b. accept online payments from customers.
c. provide customer support services.
*d. All of the above.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Easy.

75. Refer to the Closing Case 2 (in chapter 3) - How Nimble is affecting short-term micro lending industry in Australia - What type of behavioural data does the Nimble system use to score applications from its prospective customers in relation to whether applicants are likely to repay or default on their loans?

a. How fast applicants type information in their online application and how they move through the form.
b. How they use the mouse, whether they delete characters and use of capital letters.
c. How they arrive at the Nimble website.
*d. All of the above.
e. None of the above.

General Feedback:
Chapter 3: LO 5: Describe the benefits and challenges of implementing knowledge management system in organisations. Difficulty: Easy.