

# CIS Program

## e-commerce 1

1. The written document that identifies the business goals and outlines the plan how to achieve them is called:

**a) Business plan**

b) business model

c) revenue model

d) Business case

2. The revenue model that a company receives commission paid on the volume of transaction made is called:

a) Affiliate fees

b) Subscription fees

**c) Transaction fees**

d) Sales

3. Data Encryption Standard (DES) algorithm is an example of -----

a) Public key encryption

**b) Private key encryption**

c) Digital signature

d) Asymmetric systems

4. Which of the following is not a limitation of EC?

a) Some customers like to physically inspect products before buying

**b) Customers now have nearly unlimited bandwidth**

c) The standards for security are still evolving

d) Software tools change frequently

5. Which of the following is a benefit of EC?

**a) Individuals can telecommute more easily**

b) Insufficient telecommunications bandwidth

c) Customers may be unsure of EC security

d) EC theory and practice is constantly evolving

6. Which of the following is a pure electronic commerce corporation?

a) Mike's business sells products out of his store in Chicago

b) Tom's business sells products out of his store in Chicago and online

**c) Jane's business sells products out of her website**

d) Ann's business sells products out of her website and mail order catalog

7. The purpose of a digital certificate is to:

**a) Verify that the holder of a public and private key is who they claim to be.**

- b) Verify the time a message was sent.
- c) Verify the domain name of the computer that sent a message.
- d) Encrypt data so that it cannot be easily intercepted by hackers.

8. Third parties who issue digital certificates are called:

- a) Certificate brokers.
- b) Certificate processors.
- c) Certificate issuers.
- d) Certificate authorities.**

9. Currently, digital certificates may be used to authenticate all of the following **EXCEPT**:

- a) Web sites (site certificates).
- b) Individuals (individual certificates).
- c) Merchants (merchant certificates).**
- d) Software companies (publisher certificates).

10. The card which provides the holder credit to make purchases which are paid in full upon receipt of the monthly statement is called the:

- a) Credit card.
- b) Charge card.**
- c) Debit card.
- d) e-wallet.

11. Dell Computers allows its customers to design computers which meet specific needs. This is an example of the \_\_\_\_\_ EC business model.

- a) Find the best price
- b) Group purchasing
- c) Affiliate marketing
- d) Customization and personalization**

12. Which of the following is **not** a type of EC?

- a) B2B
- b) B2C
- c) C2C
- d) D2B**

13. Which of the following is not an example of an e-payment?

- a) Smart cards
- b) Cash**
- c) Digital checks
- d) Electronic billing

14. The mathematical formula used to encrypt information is what part of cryptography?

a) Plaintext

b) Cipher text

**c) Encryption algorithm**

d) Key

15. Which of the following is not one of the major types of payment cards?

a) Credit cards

b) Charge cards

c) Debit cards

**d) Flip cards**

## **Management Information Systems**

1. \_\_\_\_ is the raw material in the production of information.

a. **Data**

c. Managing

b. Decision making

d. Programming

2. Simply put, a \_\_\_\_ is an array of components that work together to achieve a common goal, or multiple goals, by accepting input, processing it, and producing output in an organized manner.

a. plan

c. project

b. process

d. **system**

3. A(n) \_\_\_\_ interfaces and interacts with other systems.

a. closed system

c. initial system

b. final system

d. **open system**

4. Thinking of an organization in terms of its sub-organizations or subsystems called \_\_\_\_\_ is a powerful management approach.

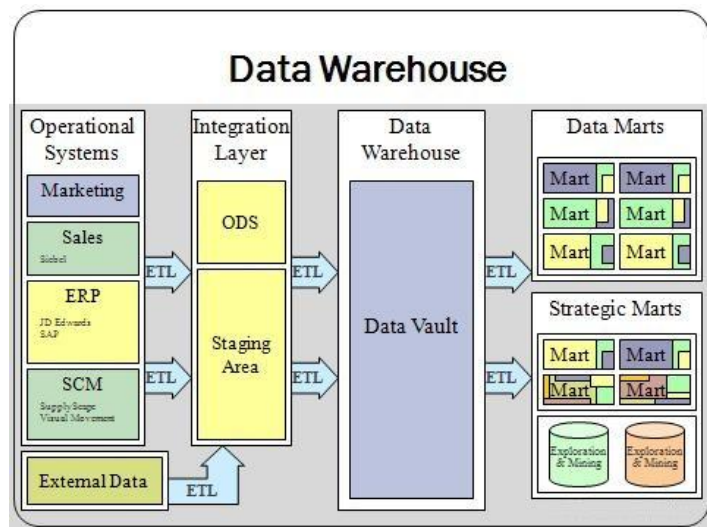
- a. organization thinking
  - c. **systems thinking**
  - b. organization validating
  - d. systems validating
5. In today's world, organizations must continuously \_\_\_\_ hardware, software, and the skills of their employees to stay competitive.
- a. downsize
  - c. specify
  - b. share
  - d. **upgrade**
6. Business intelligence applications access large pools of data, usually transactional records stored in large databases called \_\_\_\_.
- a. **data warehouses**
  - c. demographic data
  - b. decision data
  - d. supply chains
7. \_\_\_\_ have been used to provide service via the Web, such as helping residents find locations of different services on a city map or plan travel routes.
- a. BIs
  - c. **GISs**
  - b. DSSs
  - d. MISs
8. In \_\_\_\_, information systems help organize budgets, manage cash flow, analyze investments, and make decisions that could reduce interest payments and increase revenues from financial transactions.
- a. accounting
  - c. **finance**
  - b. e-commerce
  - d. marketing
9. \_\_\_\_ systems mainly help in record-keeping, employee evaluation, and employee benefits.
- a. Accounting
  - c. **Human resource (HR) management**
  - b. Financial
  - d. Marketing
10. Many IT professionals start their careers as programmers, or programmer/analysts, and then are promoted to \_\_\_\_, positions that require a broad range of skills.

- a. network administrators
  - b. network analysts
  - c. systems administrators
  - d. **systems analysts**
11. A \_\_\_\_ is partly involved in the analysis of business needs and ISs, but the greater part of the job involves setting up business applications.
- a. database analyst
  - b. database programmer
  - c. **programmer/analyst**
  - d. systems administrator
12. A \_\_\_\_ is responsible for researching, planning, and recommending software and systems choices to meet an organization's business requirements.
- a. database designer
  - b. programmer
  - c. project manager
  - d. **systems analyst**
13. A \_\_\_\_ is responsible for the databases and data warehouses of an organization—a very sensitive and powerful position.
- a. **database administrator**
  - b. database programmer
  - c. project leader
  - d. project manager
14. A \_\_\_\_ is responsible for developing or acquiring database applications and must carefully consider how data will be used.
- a. **DBA**
  - b. database programmer
  - c. programmer
  - d. systems analyst
15. A \_\_\_\_ is highly involved in the implementation of SCM systems, because they access corporate databases.
- a. **DBA**
  - b. database programmer
  - c. programmer
  - d. systems analyst

# Data Warehousing

1. The full form of OLAP is

- A) Online Analytical Processing
- B) Online Advanced Processing
- C) Online Advanced Preparation
- D) Online Analytical Performance



2. .... is a subject-oriented, integrated, time-variant, nonvolatile collection or data in support of management decisions.

- A) Data Mining
- B) Data Warehousing
- C) Document Mining
- D) Text Mining

3. The data is stored, retrieved and updated in .....

- A) OLAP
- B) OLTP
- C) SMTP
- D) FTP

4. An ..... system is market-oriented and is used for data analysis by knowledge workers, including managers, executives, and analysts.

- A) OLAP
- B) OLTP
- C) Both of the above

D) None of the above

**5. .... is a good alternative to the star schema.**

A) Star schema

B) Snowflake schema

**C) Fact constellation**

D) Star-snowflake schema

**6. The ..... exposes the information being captured, stored, and managed by operational systems.**

A) top-down view

B) data warehouse view

**C) data source view**

D) business query view

**7. The type of relationship in star schema is .....**

A) many to many

B) one to one

**C) one to many**

D) many to one

**8. The ..... allows the selection of the relevant information necessary for the data warehouse.**

**A) top-down view**

B) data warehouse view

C) data source view

D) business query view

**9. Which of the following is not a component of a data warehouse?**

A) Metadata

B) Current detail data

C) Lightly summarized data

**D) Component Key**

**10. Which of the following is not a kind of data warehouse application?**

- A) Information processing
- B) Analytical processing
- C) Data mining
- D) Transaction processing**

**11. Copying and integrating data from transactional database and other data sources in preparation for cleansing and loading into the data warehouse is called:**

- A. Extract**
- B. Transform
- C. Load
- D. None of the above

**12. Cleaning and converting data to prepare it for loading into the data warehouse is called:**

- A. Extract
- B. Transform**
- C. Load
- D. None of the above

**13. The process of transforming data from a detailed to a summary level is called:**

- A. Extracting.
- B. Updating.
- C. Aggregating**
- D. Joining.

**14. An example of distribute measure is**

- A. count.
- B. Sum.
- C. Max
- D. All of the above**
- E. None of the above

**15. An example of algebraic measure is**

- A. count.
- B. Sum.
- C. Average**
- D. All of the above
- E. None of the above

**16. With multidimensional modeling, "Dimensions" are used to:**

- A. Quantify facts, usually numeric values.
- B. Analyze data from several perspectives, (for example: Time and Location)**
- C. Extract and transform data from several systems



D. Cache the results of executing data warehousing query.

## Data Mining

1. Finding relations between the registrations of different courses in a university warehouse is

- (A) Clustering
- (B) **Association**
- (C) Classification
- (D) Non of them

2. Dividing the families according to their standard of living into groups is

- (A) **Clustering**
- (B) Association
- (C) Classification
- (D) Non of them

3. For the following Data set

Transaction	Items_bought
T1	{K, A, D, B}
T2	{D, A, C, E, B}
T3	{C, A, E, B}
T4	{B, A, D}

Support  $\{A, B\} \rightarrow \{D\}$  is

- (A) **75%**
- (B) 50%
- (C) 30%
- (D) 100%

4. Data Preprocessing consists of

- (A) Cleaning
- (B) Reduction
- (C) Transforming and Loading
- (D) **All of the above**

5. Finding missing values can be done using

- (A) Overall average
- (B) Class average
- (C) Most popular value
- (D) **All of the above**

6. Data mining techniques can be

- (A) Classification and prediction
- (B) Clustering
- (C) Association
- (D) **All of the above**

7. Finding relations between smokers and Cancer is of type

- (A) Clustering

- (B) Classification
- (C) **Association**
- (D) Non of the above

8. Grouping houses in a city according to their prices is of type

- (A) **Clustering**
- (B) Classification
- (C) Association
- (D) Non of the above

9. Bayessian algorithm is used for

- (A) Clustering
- (B) **Classification**
- (C) Association
- (D) Prediction

10. Apriori algorithm is used for

- (A) Clustering
- (B) Classification
- (C) **Association**
- (D) Prediction

11. K-Means method is used for

- (A) **Clustering**
- (B) Classification
- (C) Association
- (D) Prediction and smoothing

12. Putting objects into groups with undefined class labels is called

- (A) Classification
- (B) Association
- (C) Prediction and smoothing
- (D) **Clustering**

13. Putting objects into groups with previously defined class labels is called

- (A) **Classification**
- (B) Association
- (C) Prediction and smoothing
- (D) Clustering

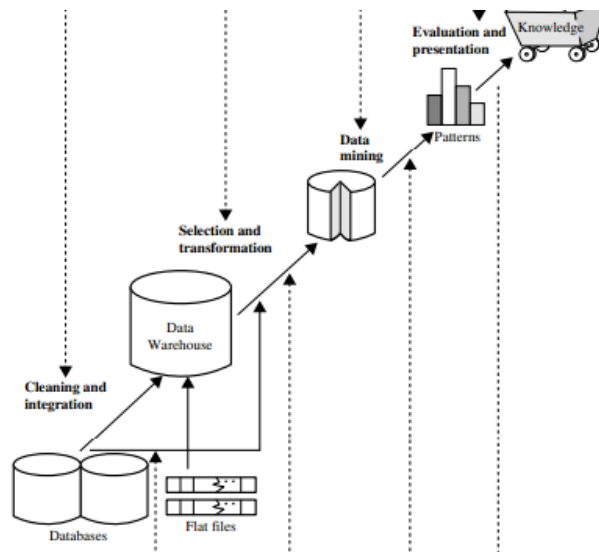
14. Confidence  $A \rightarrow B$  in a data set D is given by

- (A)  $P(A)/P(B)$
- (B)  $P(B)/P(A)$
- (C)  **$P(A \cup B)/P(A)$**
- (D)  $P(A \cup B)/D$

15. Support  $A \rightarrow B$  in a data set D is given by

- (A)  $P(A)/P(B)$
- (B)  $P(B)/P(A)$
- (C)  $P(A \cup B)/P(A)$
- (D)  **$P(A \cup B)/D$**

16. A strong itemset refers to the itemset having  
 (A) **Support greater than the minimum support**  
 (B) Support less than the minimum support  
 (C) Confidence greater than the minimum confidence  
 (D) An instance of the fact table
17. Frequent items refer to  
 (A) **Items that came or purchased together within the specified support and confidence**  
 (B) Any items in a given transaction  
 (C) Items having support less than the minimum support  
 (D) Non of the above
18. Finding out the population for the next ten years is of type  
 (A) Classification  
 (B) Association  
 (C) Clustering  
 (D) **Prediction**
19. .... is an essential process where intelligent methods are applied to extract data patterns.



- A) Data warehousing  
 B) **Data mining**  
 C) Text mining  
 D) Data selection

20. Data mining can also applied to other forms such as .....
- i) Data streams
  - ii) Sequence data
  - iii) Networked data
  - iv) Text data
  - v) Spatial data

- A) i, ii, iii and v only
- B) ii, iii, iv and v only
- C) i, iii, iv and v only
- D) All i, ii, iii, iv and v**

**21. Which of the following is not a data mining functionality?**

- A) Characterization and Discrimination
- B) Classification and regression
- C) Selection and interpretation**
- D) Clustering and Analysis

**22. .... is a summarization of the general characteristics or features of a target class of data.**

- A) Data Characterization**
- B) Data Classification
- C) Data discrimination
- D) Data selection

**23. .... is a comparison of the general features of the target class data objects against the general features of objects from one or multiple contrasting classes.**

- A) Data Characterization
- B) Data Classification
- C) Data discrimination**
- D) Data selection

**24. Strategic value of data mining is .....**

- A) cost-sensitive
- B) work-sensitive
- C) time-sensitive**
- D) technical-sensitive

**25. .... is the process of finding a model that describes and distinguishes data classes or concepts.**

- A) Data Characterization
- B) Data Classification**
- C) Data discrimination
- D) Data selection

**26. The various aspects of data mining methodologies is/are .....**

- i) Mining various and new kinds of knowledge**
- ii) Mining knowledge in multidimensional space**
- iii) Pattern evaluation and pattern or constraint-guided mining.**
- iv) Handling uncertainty, noise, or incompleteness of data**

- A) i, ii and iv only
- B) ii, iii and iv only
- C) i, ii and iii only
- D) All i, ii, iii and iv**

**27. The full form of KDD is .....**

- A) Knowledge Database
- B) Knowledge Discovery Database**
- C) Knowledge Data House
- D) Knowledge Data Definition

**28. The output of KDD is .....**

- A) Data
- B) Information
- C) Query
- D) Useful information**

## Data Base Administration

- 1) Which of the following table space holds the data dictionary:
  - a) INDX
  - b) USERS
  - c) SYSTEM**
  - d) TEMP
  
- 2) A tablespace can be dropped even if it contains data by including the following option:
  - a) DROP ALL DATA
  - b) ON CASCADE
  - c) WITH OBJECTS
  - d) INCLUDING CONTENTS**
  
- 3) Deadlock happens when
  - a) Two trans reading the same data items
  - b) Two trans writing the same data items
  - c) Two trans waiting for each other to unlock data items**
  - d) Two trans run simultaneously
  - e) None of the above
  
- 4) The following is not a property of a transaction
  - a) Atomicity
  - b) Durability
  - c) Redoing**
  - d) Isolation
  - e) Consistency
  
- 5) What keyword must be included in a DROP USER statement if you want to drop a user that owns objects?
  - a) ALL
  - b) DELETE CONSTRAINTS
  - c) BYPASSING REFERENTIAL INTEGRITY
  - d) CASCADE**
  
- 6) The two types of Oracle Server privileges are:

- a) Table and DBA
- b) Item and system
- c) Object and DBA
- d) Object and system

7) To grant object privileges for objects you do not own, you must have the privileges with the following option:

- a) CASCADE
- b) ADMIN
- c) GRANT
- d) EXTERNAL

8) Recovery means that

- a) The database can be restored to operation after database damage and failure.
- b) The mechanism used to insure the separation of concurrent activities
- c) The database provides an access control for authorized users
- d) Certain rules to be preserved in the database data.

9) A view is

- a) A subset of the database, presented to one user or set of users
- b) A set of files interrelated to each other
- c) A set of relations in a relational database
- d) None of the above

10) One of the following is a benefit of database views:

- a) Reducing security on the data
- b) Increasing complexity of user perspective on the data
- c) Customize the appearance of the database
- d) Violate program-data independence

11) Concurrency in DBMS means

- a) The restoration of the databases after any type of failure
- b) More than one user can access the same data items at the same time.
- c) More than one user can change the same data item at the same time.
- d) No more than one user can access the same data items at the same time.

12) Software that defines a database, stores the data, supports a query language, produces reports and creates data entry screens is a:

- A) data dictionary
- B) database management system (DBMS)
- C) decision support system
- D) relational database

13) The separation of the data definition from the program is known as:

- A) data dictionary
- B) data independence
- C) data integrity
- D) referential integrity

14) In the client / server model, the database:

- A) is downloaded to the client upon request

- B) is shared by both the client and server
- C) resides on the client side
- D) resides on the server side**

- 15) The traditional storage of data that is organized by customer, stored in separate folders in filing cabinets is an example of what type of 'database' system?
- A) Hierarchical**
  - B) Network
  - C) Object oriented
  - D) Relational
- 16) The database design that consists of multiple tables that are linked together through matching data stored in each table is called a:
- A) Hierarchical database
  - B) Network database
  - C) Object oriented database
  - D) Relational database**

## Information Network Security

- 1) Which of the following is FALSE about hash functions
- A. Can be applied to any sized message M
  - B. Produces fixed-length output h
  - ☒ C. It is easy to compute  $h=H(M)$  for any message M
  - D. Given h, it is feasible to find x, where  $H(x)=h$**
- (2) A dedicated appliance or software running on a device installed between the internal network of a system and public networks (Internet) to forward some packets and filter out others is known as:
- ☒ A. Router
  - B. Firewall**
  - C. Switch
  - D. Gateway
- (3) Which sequence is correct for the virus operation?
- ☒ A. Dormant, propagation, triggering, execution
  - B. Propagation, triggering, execution, dormant
  - C. Dormant, execution, triggering, propagation
  - D. Dormant, triggering, propagation, execution
- (4) The policy in which the firewall shall drop all packets arrive to it regardless of destination port number they want to communicate with is called:
- A. Default drop policy**
  - B. Default accept policy
  - C. Specified accept policy
  - D. Random drop policy
- (5) Digital signature provides\_\_\_\_\_

- A. Authentication
- ☒ B. Nonrepudiation
- ☐ C. Both (A) and (B)
- D. Neither (A) nor (B)

(6) **Malicious code embedded in legitimate program is called**

- A. Trap door
- B. Logic bomb
- ☒ C. Zombie
- ☐ D. Trojan horse

(7) **A piece of self-replicating code attached to some other code is referred to as:**

- A. Worms
- ☒ B. Viruses
- C. Zombies
- D. Trapdoors

(8) **Which of the following is FALSE about Trojan horse?**

- ☒ A. Program with hidden side-effects
- ☐ B. Activated when specified conditions met
- C. When run performs some additional tasks, for example allowing attacker to indirectly gain access they do not have directly
- D. Used to propagate a virus/worm or install a backdoor

(9) **A virus spreads using E-mail with attachment containing a macro virus is called**

- ☒ A. Macro virus
- ☐ B. E-mail virus
- C. Worms
- D. Trojan horse

(10) **An authentication technique involves the use of a secret key to generate a small fixed-size block of data is known as:**

- ☒ A. Message authentication code (MAC)
- B. Encryption
- C. Decryption
- D. Digital signature

(11) **A secret entry point into a program allows those who know access bypassing usual security procedures is**

- ☒ A. Trap door
- B. Logic bomb
- C. Zombie
- D. Trojan horse



# Wireless Networks

Q 1: HSPA stands for \_\_\_\_\_.

- A) **High Speed Packet Access**
- B) High Signal Packet Access
- C) High stream Packet Access
- D) High Spread Packet Access

Q 2: A user needs to send 3 bits using DSSS, if the user has spreading code consists of 8 bits what is the total transmitted bits?

- A) 3 bytes
- B) 8 bytes
- C) **24 bytes**
- D) 12 bytes

Q 3: Which of the following technologies has the highest data rate?

- A) UMTS
- B) **LTE**
- C) HSPA
- D) HSPA+

Q 4: UMTS technology does not use Internet Protocol

- ☐ Yes ☒ **No**

Q 5: In CDMA all users' data transmitted simultaneously over one channel .

- ☒ **Yes** ☐ No

Q 6: Loss of data is one of wireless technology disadvantage.

- ☒ **Yes** ☐ No