الجامعة السعودية الالكترونية
Saudi Electronic University

Ministry of Higher
Saudi Electronic University
College of Computing and Informatics

(10 Marks)

Question 1:
For each of the following multiple choice questions, choose one correct answer.

1- REA stands for:
   a) Reality Exchange for Activities
   b) Reapplication of Enterprising Accounting
   c) Resources, Events, and Agents
   d) Resources, Events, and Applications

2- System flowcharts consist of these three simple graphical elements combined to represent various types of physical information flows and processes:
   a) Charts, lines, and documents
   b) Charts, symbols, and annotations
   c) Symbols, lines, and documents
   d) Symbols, flow lines, and areas of responsibility

3- Which of the statements listed below accurately explains one or more of the following cardinalities between the "Customer Order" and the "Delivery" events?

   a) Each delivery can be associated with only one order
   b) A delivery cannot be made without a valid order
   c) An order cannot be accepted without a prior delivery to the customer
   d) A delivery can happen before the associated order event

4- Which of the following models focuses primarily on the resource exchanges between the enterprise and its various external business partners?
   a) Value system level REA model
   b) Value chain level REA model
   c) Business process level REA model
   d) Task level REA model

5- Which of the following often result from reengineering?

a) Streamlined workflow

b) Reduced head count

c) Consolidation of disparate information systems to eliminate duplication of efforts in various activities

d) All of the above

6- Which type of processing occurs during the course of a business event and provides immediate response to an information user's request?

a) Online processing

b) Batch processing

c) Report-time processing

d) Real-time processing

7- Which model represents reality in the format required by a particular database model?

a) Conceptual model

b) Logical model

c) Physical model

d) None of the above

8- Calculating amounts, sending documents to outside parties such as customers, and generating analysis reports are all examples of:

a) Operating events

b) Economic events

c) Business processes

d) Information process events

9- Which of the following is NOT an example of a resource in the REA ontology?

a) Suppliers

b) Employee labor

c) Cash

10- Regardless of the type of goods or services provided, each organization typically includes these three business processes/ transaction cycles:

a) Inventory, Wage Payments, and Sales

b) Payments, Collections, and Debt Financing

c) Inputs, Outputs, and Returns

d) Acquisition / Payment, Conversion, and Sales / Collection

Question 2:   (5 Marks)

For each of the following statements, answer with True or False and Correct the False statement.

1	The Context Level DFD shows the highest level of the entire system as a single process along with source and sinks representing the boundaries of the system.	T
2	System flowcharts are used to represent the physical components and information flow in an information system.	T
3	The REA ontology approach is intended to encourage stovepipes. limited prevent	F
4	A primary key in a table can contain a null value. integrity constrine not can't allow that	F
5	Inbound logistics are activities associated with collecting, storing, and physically distributing the products or services. outbound	F

Outbound

(5 Marks)

Question 3:

Fill-in each black with the most suitable expression:

1. The redesign of business processes or systems to achieve a dramatic improvement in enterprise performance is called _Reengineering_

2. The pair of Purchase and Inventory entities can be associated with each other in _StockFlow_ relationship in a REA model.

3. An event in which a resource is either given up or taken is called _Economic_ event.

4. _Generlization_ is specification of subclass-superclass relationships, I.e., "Is-A" relationships.

5. C **fact** d/conf reset Key is a pairing of a candidate key attribute value with another attribute value.

Short Questions

Question 4:

Answer the following questions briefly: **(10 Marks)**

a) Why can most failed software implementations be blamed on people?

*Usually, people lak chmf... ...

b) What's the difference between a script pattern and an object pattern?
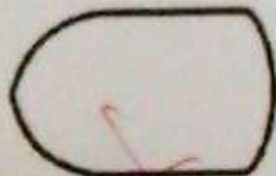
... ... the needed training.

c) Differentiate between instigation event and mutual commitment event

d) Define the terms redundancy and load in the conversion from conceptual model to a relational model.
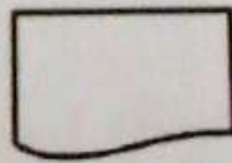
e) What does each of the following flowchart symbols mean?

magnetig tub

Termination

documents "single"

field
Permanent
"archive"

Long Questions

Question 5:
Discussion!

(10 Marks)

Say you are trying to create relational database tables to implement a conceptual model that has a relationship (0,1) Sale – duality – (0,N) Cash Receipt. You have created a table for Sale and a table for Cash Receipt. You are considering whether to post a foreign key from Cash Receipt into Sale. You have the following information available. Explain whether each of these statements adds to the knowledge you already had and how they affects your decision as to whether to post the foreign key. If you decide not to post a foreign key from Cash receipt into sale, what other choice(s) do you have for implementing this relationship in the relational tables?

a. Nearly all of this enterprise's sales are made on credit.

b. The enterprise very rarely has any bad debts resulting from sales.

c. Nearly all of this enterprise's cash receipts apply to sales.

Ahmad's Farm owns approximately 50 acres of peach trees. Migrant farm workers perform almost all of the work. In the late winter and early spring they prune the trees. During the mid-spring they thin the fruit from the trees, and in late summer and early autumn they pick the fruit. The farm manager does most of the other work, such as spraying the trees, irrigating, and selling the fruit. Spray concentrate, fruit boxes, and other supplies are purchased on account from the local food co-op stores. Fruit is sold on account to major grocery such as Panda and Carrefour.

Draw a value system level diagram for Ahmad's Farm.