

PART I –Multiple Choice (60 Marks)

- 1) The basic premise of Moore's law is
- a. IT makes people more efficient.
 - b. the density of transistors on a computer chip doubles roughly every 20 months.
 - c. people tend to want more information than they need.
 - d. IT makes people more productive.
 - e. computer memory is getting bigger.

Answer: b

- 2) Social Networking sites generate revenue through
- a. government subsidy.
 - b. subscription fees.
 - c. social networking sites do not generate revenue.
 - d. advertising.
 - e. corporate sponsorship.

Answer: d

- 3) Which of the following is an example of a social networking site?
- a. Youtube
 - b. Yahoo.ca
 - c. Facebook.com
 - d. Wikipedia
 - e. Google.ca

Answer: c

- 4) What is an Information System?
- a. An information system is a group of components that interact to produce information.
 - b. Computer hardware and software.
 - c. Software development process.
 - d. A framework describing human computer interaction.
 - e. An information gathering application.

Answer: a

5) Which of the following is an example of an output device?

- a. A mouse
- b. A set of headphones
- c. A scanner
- d. A computer keyboard
- e. A microphone

Answer: b

6) What of the following is not a function of the central processing unit?

- a. Stores results in memory
- b. Performs arithmetic and logical comparisons
- c. Stores data
- d. Performs calculations
- e. Selects instructions

Answer: c

7) As predicted by Moore's Law, the capacity of storage devices is _____ as the costs _____.

- a. decreasing; decrease
- b. increasing; increase
- c. decreasing; stay the same
- d. increasing; stay the same
- e. increasing; decrease

Answer: e

8) Bytes consist of _____ bits of memory.

- a. 2
- b. 12
- c. 8
- d. 4
- e. 6

Answer: c

9) Instructions move from main memory into the CPU via the (a)

- a. network card.
- b. memory chip.
- c. operating system.
- d. data channel.
- e. cache.

Answer: d

10) Which of the following is an example of an operating system?

- a. Glass Fish
- b. Java
- c. Unix
- d. Boot Camp
- e. VMware Fusion

Answer: c

11) Volatile memory means that

- a. such devices are fragile.
- b. such devices are susceptible to electromagnetic interference.
- c. these devices maintain their contents as soon as the content is added to them.
- d. the contents are lost once power is off.
- e. these devices are cheaper than non-volatile memory.

Answer: d

12) Software applications that provides capabilities common across all organizations and industries are called

- a. horizontal market applications.
- b. supply chain management applications.
- c. value chain management applications.
- d. enterprise resource planning applications.
- e. operating systems software.

Answer: a

13) Porter originally developed the five forces model to determine _____.

- A) the reason why certain industries collapse
- B) the means by which to improve industrial viability
- C) the nature of competitive industrial environments
- D) the potential profitability of an industry

Answer: D

14) Which of the following is an example of a competitive strategy employed by a firm?

- A) increasing the price of its product when raw material prices increase
- B) launching a unique product targeted at a section of consumers
- C) advertising its products nationwide like its competitor organizations
- D) laying off staff in order to cut down costs during a recession period

Answer: B

15) Which of the following is a process implementation principle of competitive advantage?

- A) establishing alliances
- B) enhancing a product
- C) differentiating a product
- D) creating a new product

Answer: A

16) Manufacturing systems that use linkages also use _____ to plan production.

- A) past reports
- B) sales forecasts
- C) software packages
- D) competitors' information

Answer: B

17) _____ includes general management, finance, accounting, legal, and government affairs.

- A) Operations management
- B) Human resources
- C) Firm infrastructure
- D) Research and development

Answer: C

18) Each stage of the value chain not only adds value to the product but also _____.

- A) devalues the final product
- B) accumulates costs
- C) attracts buyers
- D) attracts competitors

Answer: B

19) _____ are commonplace, routine, everyday business processes.

- A) Managerial processes
- B) Strategic processes
- C) Operational processes
- D) Transformational processes

Answer: C

20)

Which of the following is true about strategic processes?

- A) They are broad in scope and impact most of the firm.
- B) They rely more on computerized actors compared to other types of processes.
- C) They are concerned primarily with the use of resources.
- D) They are facilitated mainly by management information systems.

Answer: A

21. The internet uses:

- A) TCP/IP suite of packet switching protocols
- B) Number of routers connecting points throughout a worldwide backbone
- C) Proprietary set of rules
- D) A and B
- E) B and C

Answer: D

22. In the internet networks messages are divided into smaller units called _____ each of which contains a specific number of bits.

- A) parcels
- B) packs
- C) packets
- D) pings
- E) cookies

Answer: C

23. A(n) _____ is a device with the sole purpose of accepting packets and determining the best way to send them to the destination computer.

- A) hub
- B) bridge
- C) switch
- D) router
- E) mainframe

Answer: D

24. A _____ is placed in a computer to provide the physical connection between the computer and a local network.

- A) switch
- B) hub
- C) network interface card
- D) cable
- E) router

Answer: C

25) Social media _____ are the companies that operate the SM sites.

- A) application providers
- B) sponsors
- C) sectors
- D) outlets

Answer: A

26) Which of the following is true about Web 2.0 applications?

- A) They are designed for one-way communication.
- B) Their content is produced and controlled by site owners.
- C) They require product licenses.
- D) They are subject to frequent interface changes.

Answer: D

27) Which of the following is true of social networking problems?

- A) If the problematic content represents reasonable criticism of the organization's products, the best response is to delete it.
- B) Inappropriate contributions that contain obscene or otherwise inappropriate content should be ignored indefinitely.
- C) It is unnecessary to communicate the criticism to the product development team.
- D) Responses are best reserved for when the problematic content has caused the organization to do something positive as a result.

Answer: D

28) Which of the following is true of systems analysts? 1) _____

- A) They are active mainly during the system conversion phase of the systems development process.
- B) They integrate the work of programmers, testers, and users.
- C) They focus on information systems development and lack knowledge on process design.
- D) They work primarily with business processes.

Answer: B

29) Which of the following is true of systems development? 10) _____

- A) It has little need for human relations skills as tasks are performed by individuals, not groups.
- B) It is limited to the four domains of hardware, software, data, and procedures.
- C) It requires coordinated teamwork of both specialists and nonspecialists with business knowledge.
- D) It is exclusively a technical task undertaken by programmers and hardware specialists.

Answer: C

30) Which of the following is a disadvantage of building information systems before business processes?

- A) System requirements cannot be collected if systems are developed before business processes.
- B) Some aspects of business processes are unlikely to be considered when the system is constructed first.
- C) Organizations will lose focus on building hardware and software if information systems are built first.
- D) Organizations will lose focus on data procedures and training if information systems are developed first.

Answer: B

31) The IT structure is like a

- a. city building.
- b. city plan.
- c. enterprise project.
- d. enterprise design.
- e. governmental design.

Answer: b

32) Alignment is not only about planning and building frameworks, but also about

- a. effectiveness in productivity.
- b. effectiveness in communication.
- c. efficiency in productivity.
- d. effectiveness in governance.
- e. efficiency in computing.

Answer: b

33) What is the role of the ISACA?

- a. Providing a set of tools and guidelines for whistleblowers
- b. Enforcing the law on corporate IT governance
- c. Providing a framework for best IT practices
- d. Enforcing the control of IT standards
- e. Developing knowledge and standards relating to IT audits and IS governance.

Answer: e

34) Moving downward in the Zachman framework provides a higher levels of

- a. outsourcing.
- b. feasibility.
- c. perspectives.
- d. detail.
- e. alignment.

Answer: d

35) Though it may seem obvious, one of the hardest things to do when planning how your organization will use information systems is to

- a. export applications to a Web platform.
- b. align IS with organizational strategy.
- c. outsource some of the functions.
- d. get quotes from vendors.
- e. develop the business strategy.

Answer: b

36) Which of the following is true regarding an incident-response plan?

- A) The plan should require minimal training on the part of employees.
- B) The plan should provide decentralized reporting of all security incidents.
- C) The plan should be simple enough to ensure a fast response with limited practice.
- D) The plan should identify critical personnel and their off-hours contact information.

Answer: D

37) Which of the following is a valid difference between a password and user name?

- A) A user name identifies the user whereas a password authenticates the user.
- B) A user name is more complex compared to a password.
- C) A user name is a primary authentication measure whereas a password is a secondary authentication measure.
- D) A password is used to encode information whereas a user name is used to decode information.

Answer: A

38) Which of the following is true about biometric authentication?

- A) It is less invasive than other methods of authentication.
- B) It uses personal physical characteristics for authentication.
- C) It uses a microchip loaded with identifying data to authenticate users.
- D) It provides weak authentication compared to other methods.

Answer: B

39) Which of the following is NOT an element of computer security?

- A) System owners should not have computer security responsibilities outside their own organizations.
- B) Computer security responsibilities and accountability should be made explicit.
- C) Computer security should be periodically reassessed.
- D) Computer security is constrained by societal factors.

Answer: A

40) A group of intruders accessed RK Bank's IP address and accepted payments on the bank's behalf. This attack is an example of _____.

- A) denial-of-service
- B) sniffing
- C) spyware
- D) spoofing

Answer: D

PART II) Database problem (20 marks)

MyOld.com is an antiques web site that buys and sells antiques of all kinds (e.g., furniture, jewelry, china, and clothing). Each item is uniquely identified by an item number and is also characterized by a description, asking price, condition, and open-ended comments. MyOld.com works with many different individuals, called clients, who sell items to and buy items from the store. Some clients only sell items to MyOld.com, some only buy items, and some others both sell and buy. A client is identified by a client number and is also described by a client name and client address. When MyOld.com sells an item in stock to a client, the owners want to record the commission paid, the actual selling price, sales tax (tax of zero indicates a tax exempt sale), and date sold. When MyOld.com buys an item from a client, the owners want to record the purchase cost, date purchased, and condition at time of purchase.

The entities for the data model are below. You are required to complete the following:

- Identify Primary Keys for the entities in the data model below (You may have to add one or more attributes for this purpose) in the form of entity->primary key (5 marks):
- Identify the relationships between entities and show their cardinality in the form of parent entity->child entity where the parent entity can be linked to multiple children entities (10 marks)
- Identify the foreign keys that are required to implement the relationships in the form of entity->foreign key (5 marks).

Item	
	Description Asking_Price Condition Comments

Sell	
	Selling_Price Commission Sales_Tax Date_Sold

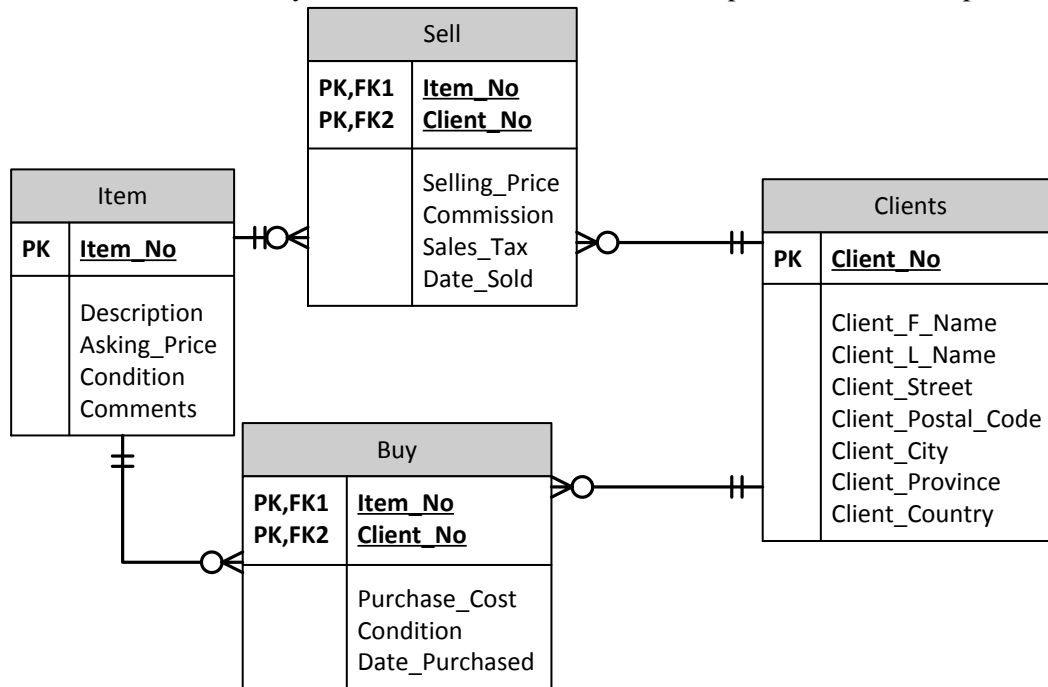
Clients	
	Client_F_Name Client_L_Name Client_Street Client_Postal_Code Client_City Client_Province Client_Country

Buy	
	Purchase_Cost Condition Date_Purchased

Solution:

- a) Item->Item_No Sell-> Item_No, Client_No Clients->Client_No Buy->Item_No, Client_No
- b) Item->Sell Item->Buy Clients->Sell Clients->Buy
- c) Sell-> Item_No, Client_No Buy->Item_No, Client_No

Diagram of the solution is included below (Note: in the exam you will not be required to draw it but I have included it here so you can understand how to solve the problem in this computer exam)



PART III- Problem solving (20 marks)

1. Men R Us Limited (MRU) is a large men’s wear store with locations in Canada and the U.S. MRU has been in business for over 50 years, and has resisted the development of an online store, as it felt that its customers prefer to try on and buy their clothing, rather than purchase over the internet. Therefore, MRU has only a basic web site that provides information about store locations and the different lines of clothing that it offers.
 Recently, the number of telephone calls to MRU’s stores about prices has increased, as customers seem to be comparison shopping much more often than in the past. MRU now believes that an enhanced store presence online could increase its sales, because it could advertise its products and sell them online.. Accordingly, it has decided that it will have its web site upgraded to provide for secure shopping.MRU is considering several different development approaches in the development of its online store, and would like a further explanation of the advantages and disadvantages of these approaches before proceeding. In particular, it is considering outsourcing and the use of an application service provider.

Required:

A) Describe the advantages and disadvantages to MRU of outsourcing the development of its online store. (5 marks)

Solution:

Advantages:

1. Easy way to gain expertise to develop online store
2. Cost reduction as programmers in other countries make less
3. Reduce development risk

Disadvantages:

1. Loss of Control of the project
2. Ending the contract might not be easy due to dependency with contracted company
3. Risk of change of price of the contractor

B) Describe the advantages and disadvantages to MRU of the use of an application service provider. (5 marks)

Solution:

Advantage:

- Cost reduction for supporting the application
- Reduces the cost of outsourcing
- There is no need to invest large amounts of capital to buy software and hardware to implement the website

Disadvantage:

The Client loses physical control over corporate data that is stored in the vendor's machine
Potential risk for "lock in" of the ASP, not easy way to port data to a different ASP
Potential problems with ownership of the data

2. The athletics director buys sports equipment from a supplier with a well-implemented ERP
a. What advantages are there for your school to buy from a supplier with an ERP system? (5 marks).

Answer:

The supplier's ERP may be able to integrate with your ERP to increase order efficiency and efficacy.

The supplier would potentially be able to automatically combine shipping for products ordered by different departments.

University status as a customer for negotiated discounts, prices, product customization, etc. would be known across the supplier's organization via the ERP.

b. You might expect to see an advertising claim from that company like, "We can meet customer orders in 20 percent less time than the industry average." Create a list of two or

three measures you would expect to hear from a supplier with an effective ERP system and two or three measures that an ERP system might not provide (5 marks).

Answer:

Some measures you might be able to see include:

1. Measures of order delivery time
2. Measures of inventory availability
3. Measures of order cost process savings
4. Measures of order fulfillment accuracy

Measures you might not expect to hear:

1. Measures of customer satisfaction
2. Measures of product quality
3. Measures of supplier "greenness"