UNIVERSITI UTARA MALAYSIA

FINAL EXAM
SEMESTER PERTAMA SESI 2004/2005

KOD/NAMA KURSUS : TM5013 / IT FOR MANAGERS
TARIKH : 3 September 2004
MASA : 9.30 – 12.00 PM (2 ½ JAM)
TEMPAT : IKIP Kuantan

INSTRUCTIONS:

1. This questions booklet contains Section A – 10 Ques =10 Marks, Section B – 20 Ques = 20 Marks and Section C – 9 Ques = 70 Marks printed in ELEVEN (11) pages excluding the cover. Total Marks = 100 marks
2. You are REQUIRED to answer ALL the questions in the SPACE provided.
3. PLEASE make sure you answer CLEARLY and in BLACK or BLUE INK PEN

NO. MATRIX : ____________________________
(IN WORDS)  (IN NUMBERS)

NO. KAD PENGENALAN :

LECTURER NAME : ________________________

KUMPULAN :  [ ]  NOMBOR MEJA :  [ ]

DO NOT OPEN THIS QUESTIONS BOOKLET UNTIL YOU ARE TOLD TO DO SO
Section A: True/False. Indicate whether the sentence or statement is true or false. Please write clearly ‘T’ for True and ‘F’ for False. (10 QUESTIONS - 10 MARKS)

1. Reengineering relies on radical process redesign.

2. The technology acceptance model considers the degree to which an organization supports the use of the information system.

3. Information systems are usually justified by the return on investment which investigates the additional profits or benefits generated as a percentage of the investment in information systems.

4. The hierarchical data model corrects inherent problems found in the network data model.

5. Data warehouses typically start out as very large databases.

6. ER diagrams can serve as reference documents once a database is in use.

7. T1 generally has a higher monthly fee than DSL or ISDN.

8. ISDN was developed by AT&T and used in North America to increase the number of voice calls that can be handled through existing cables.

9. With on-line banking customers can pay their bills, but at this time they can not transfer money between accounts.

10. The smart card is a credit card-sized device with an embedded microchip to provide electronic memory and processing capability.
Section B: Multiple Choice. Identify the letter of the choice that best completes the statement or answers the question. Please write CLEARLY. (20 Questions = 20 Marks)

1. Models are used because _____.
   a. mathematics describe a system in more detail than its real implementation
   b. decision makers can explore and gain an improved understanding of real-world situations
   c. the world is simplistic if all rules are understood
   d. reality can be mathematically described with little effort

2. In Figure 1.7, Box 1 represents _____.
   a. knowledge
   b. processing
   c. information
   d. a computer

3. A management information system is used primarily to _____.
   a. predict future sales
   b. collect point of sales information
   c. provide routine information to managers
   d. manage database systems

4. Seeking ways to constantly improve the business process in order to add value to products and services is called _____.
   a. continuous improvement
   b. downsizing
   c. outsourcing
   d. Reengineering

5. An example of using an information system for a strategic purpose is _____.
   a. using an automated payroll system
   b. using colored graphics on internal reports
   c. creating a large central data repository to create a merchandising database
   d. the use of e-mail

6. Which of the following is not a primary responsibility of an information systems department?
   a. Operations
   b. Support
   c. Systems development
   d. Systems planning

7. Machine cycle time can be measured in _____.
   a. MIPS
8. The idea of reducing the number of microcode instructions built into a chip is known as ____.
   a. CISC
   b. RISC
   c. Moore's Law
   d. assembly language

9. RAID is different from other storage devices because it ____.
   a. is based on optics
   b. is less expensive
   c. can rebuild lost data
   d. minimizes storage requirements

10. ____ devices are used in retail operations to enter sales information into the computer system.
    a. MICR
    b. DASD
    c. OCR
    d. POS

11. ____ is an improved version of Windows 95 that provided faster system start-up and shutdown.
    a. Windows NT
    b. Windows 98
    c. Unix
    d. Linux

12. A DBMS is a(n) ____.
    a. interface between the database and application programs
    b. data repository
    c. knowledge base
    d. unique group of records

13. A(n) ____ is a generalized class of people, places, or things for which data is collected, stored, and maintained.
    a. record
    b. entity
    c. attribute
    d. file
14. Data redundancy can lead to problems with ____.
   a. key fields
   b. data integrity
   c. data model range
   d. data domain

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15. In the figure above, the area enclosed by bracket '2' represents ____.
   a. key fields
   b. records
   c. attributes
   d. entities

16. A ____ allows the database's creator to describe the logical access paths and logical records in a database.
   a. DDL
   b. DML
   c. data model
   d. data dictionary

17. ____ is the most widely installed local area network (LAN) technology.
   a. Ethernet
   b. SNA
   c. TCP/IP
   d. DOS
18. A _____ is an assigned address for each computer on the Internet.
   a. URL
   b. HTTP
   c. HTML
   d. Codec

19. _____ technology allows phone calls and fax transmissions to be routed over the same networks used for data.
   a. Videoconferencing
   b. Codec
   c. VOIP
   d. TCP/IP

20. Many on-line customers claim that _____ causes them to abandon a Web site and seek out a different one.
   a. slow response time
   b. unattractive graphics
   c. lack of wide selection
   d. electronic bill presentment
Section C: Essay. Please write CLEARLY on the space provided. (10 Questions = 70 Marks)

1. What is a model and how is it used? Give an example. (5 marks)

2. What is the difference between a management information system (MIS) and a decision support system (DSS)? (5 marks)

3. What is the difference between technology infusion and technology diffusion? (5 marks)

4. On a microchip, why is a faster clock speed desirable? Explain. (5 marks)
5. Why might a business decide to develop proprietary software rather than just purchasing off-the-shelf applications? (5 marks)

6. Why has the DBMS become a central feature of most organizational information systems? (5 marks)

7. What services does on-line banking provide for an Internet user? (5 marks)

8. What are the main components of an e-commerce software package? (5 marks)
9. Define the terms digital signature and firewall. (5 marks)
10. Please **READ** carefully this case study and **ANSWER** the questions below.

Since GM paid $600 million for half of Saab in 1990 and invested another $700 million, the company has lost a cumulative $1.7 billion. GM expects Saab to be in the black by the 1999 model year. That means selling 150,000 vehicles annually worldwide. Much of the onus falls on the new 9-5 sedan, the successor to the 9000, and a wagon targeted for the 1999 model year. Those two models should account for 40 to 45 percent of the 150,000 vehicles sold by 2000, says Saab CEO Bob Hendry. Between 10,000 and 15,000 will be sold in the United States each year, he predicts.

The Saab 9-5 sedan is priced at $32,000 to $40,000 and is expected to help the struggling company compete with other luxury sedans, such as the Volvo S70, Audi A6, Mercedes E-Class, Lexus and BMW 5-series. The model debuted in the United States in April 1998 as a 1999 model. Saab executives say the new model was built with more concern for quality. It features a 2.3-liter turbocharged engine.

Saab Cars USA rolled out an intranet to its dealers just in time to support the 1999 models. The intranet application allows Saab’s 250 U.S. dealers to track every car they sell from the assembly line to the junkyard. The goal of the system, dubbed IRIS (Intranet Retail Information System), is to improve customer satisfaction by providing everyone in a car dealership with information about customers and their Saab automobiles. The business payoff comes from being able to answer the customer’s questions on the spot and having access to timely, accurate information. Dealers use IRIS to view all the information about a car, including ownership, service history, and warranty.

Prior to IRIS, records about service, ownership, warranties, and parts were distributed across three separate systems: an AS/400 mid-range computer at Saab’s U.S. headquarters in Norcross, Georgia, an IBM System 390 mainframe that held historical data including data about parts distributors, and dealer-management systems at each dealership. It was not possible to pull all this data together and integrate it in a way that was useful. Now all data is centralized in an IBM DB/400 relational database that resides on the AS/400. The database contains information from Saab’s information systems and from the parts distributors’ mainframe. Work is in progress, with the vendors that supply its dealers with dealer management software, to develop a system to forward warranty information from the dealers’ servers to the IBM DB/400 database. When this is complete, IRIS will represent the repository for all customer information.
The effort required a high degree of collaboration among representatives of Saab Cars USA, several Saab dealerships, and technical resources from IBM Global Services, EDS, and CST Inc. IBM Global Services was the primary vendor on the project. EDS maintains Saab’s information systems and worked with IBM to modify Saab’s existing applications for the intranet. CST Inc. provided special-purpose software to pull data from the IBM DB/400 database and deliver it to the dealer via the intranet.


a) Would you assess IRIS as being strategic to the success of Saab Cars USA? Why or why not? (5 marks)

b) What issues may keep Saab from using IRIS worldwide? (5 marks)
c) What sort of questions would IRIS be used to answer? Identify at least eight data entities for which data should be collected to support this application. Specify at least three data attributes for each data entity. (10 marks)

d) What sort of issues might arise in trying to integrate data from a number of disparate dealer management systems? (5 marks)