



OXFORD BROOKES UNIVERSITY

BACHELOR OF SCIENCE (HONS)

APRIL 2003 EXAMINATION

15TH APRIL 2003

M 7011: MANAGEMENT INFORMATION SYSTEMS

TIME: 2 HOURS + 10 MINUTES READING

INSTRUCTIONS:

- ☐ All Questions in Section A are Compulsory and choose any 3 questions in Section B.
- ☐ Section A carries 25 marks.
- ☐ All questions in Section B carry 25 marks each.
- ☐ Please start every question on a new page.
- ☐ Answers will not be marked if they are illegible.
- ☐ Enter the question numbers (in the order you have attempted) in the boxes provided in the answer script.
- ☐ Write your INDEX NUMBER and MODULE NUMBER on the cover page of the answer script.

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SECTION A
(ANSWER ALL QUESTIONS)

QUESTION 1:
FOR PARTS 1A - 1J, WRITE THE QN. NO. AND THE MOST SUITABLE ANSWER (E.G. A OR B OR C OR D) ONLY.

- A. Which one is the part of network security and control:
- a. Callback procedures.
 - b. Firewall.
 - c. Encryption.
 - d. All of the above.
- B. Which one is part of Sensory system :
- a. Vision system.
 - b. Tactile system.
 - c. Signal processing system.
 - d. Robotics system.
- C. Data transfer rate for SONET is :
- a. 10 GB/sec.
 - b. 11 GB/sec.
 - c. 12 GB/sec.
 - d. 13 GB/sec.
- D. The purposes of MIS (Management Information system) is to :
- a. Support management of operations
 - b. Support operations.
 - c. Support decision making in less structured situations.
 - d. Support senior executives.

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- Y. Which one is not part of dedicated Wireless WAN:
- CDPD
 - Metricom's Ricochet
 - ARJIS and RAM Mobile Data.
 - GSM.
- F. Which one is disadvantage of decentralised data processing:
- Duplication of staff and effort.
 - Local autonomy and user control.
 - Local systems analysts more attuned to local needs.
 - Consistent with decentralise corporate structure.
- G. ES (Expert system) have following limitations:
- ESs can handle only narrow domain.
 - ESs do not possess common sense.
 - ESs have limited ability to learn.
 - All of the above.
- H. The characteristics of Useful information systems are:
- Accurate.
 - Current.
 - Economical.
 - All of the above.
- I. Which bandwidth is not T4 category bandwidth for Europe:
- 139.263 mbps.
 - 139.264 mbps.
 - 139.265 mbps.
 - 139.266 mbps.

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- J. Bluetooths-equipped devices simply have to come within a:
- 5 metre range of each other to communicate each other.
 - 10metre range of each other to communicate each other.
 - 15metre of range of each other to communicate each other.
 - 20 metre range of each other to communicate each other.

[1 MARK EACH]

QUESTION 2:

- A. Thumb drive gives users data portability
- TRUE
 - FALSE
- B. GPRS technology allows mobile phones to be used for sending and receiving data over an Internet Protocol (IP)-based network.
- TRUE
 - FALSE
- C. When EDP (Electronic data processing) auditors use the term threat, they refer to the people, actions, events, or other situations that could trigger losses.
- TRUE
 - FALSE
- D. The theft of organisational data by competitors is sometimes often called Hacking :
- TRUE
 - FALSE
- E. Data diddling like a Trojan horse and is also unauthorised program code. This code is added to a system in order to steal very small amounts of money from many customers or endor accounts.
- TRUE
 - FALSE

[1 MARK EACH]

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QUESTION 3:

EXPLAIN THE FOLLOWING (MINIMUM 4 TO 5 SENTENCES EACH):

- A. Bluetooth.
- B. GPRS (General Packet Radio Service)

[10 MARKS]

[TOTAL: 25 MARKS]

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SECTION B

(ANSWER ANY 3 QUESTIONS)

INTERNAL REVENUE SERVICE'S CORE BUSINESS SYSTEM

The Internal Revenue Service (IRS) significantly changed its strategy in 1992, totally re-examining its business processes using the Core Business System (CBS) Business Process Improvement (BPI) approach. The CBS BPI is a long-term initiative to understand and improve IRS' core business systems or processes (managing accounts, informing and educating, ensuring compliance, resourcing, developing and managing systems, and value tracking).

For the 1990s, the Internal Revenue Service (IRS) has goals to increase voluntary compliance with the tax laws, reduce the taxpayer burden resulting from compliance efforts, and improve productivity and customer satisfaction. The IRS is developing a business master plan which has business performance measures. The plan blends technology, human resources, and operations for the first time.

Under CBS, IRS reorganized functionally-based units such as Collection, Examination, and Taxpayer Service and Returns Processing into six core business systems designed to "cross over" functions. The Value Tracking System determines, communicates, and tracks the extent to which taxpayers value IRS products and services and discovers new products and service opportunities that will further the IRS mission. The Informing and Educating System enables taxpayers to comply with the tax laws by providing effective and efficient information and education. The Managing Accounts System receives, maintains, and provides account and revenue information. The Ensuring Compliance System preserves the integrity of the voluntary tax system by continually measuring compliance behaviour, identifying non-compliance, determining root causes, and taking actions to improve compliance. The Resourcing System plans, acquires, and manages resources (facilities, procurement, and personnel resources) to enable the IRS to provide the best customer value. The Developing and Maintaining System designs, develops, delivers, and operates information systems needed to meet operational, TSM, customer, and other reengineering objectives. It does this by providing an IT infrastructure, on-line information resources, and software applications and tools.

A new IRS hierarchy removed two layers of management and represents the core business systems in a more process-based organization headed by a deputy commissioner and the six business system owners. IRS has formed reengineering teams to redesign taxpayer-facing processes. In addition, each of the CBS owners is responsible for improving their individual systems.

Source: Bouke, K., "TCC productivity takes off with imaging" The Industry Standard, June 14, 1998, p.116.

M 7011 – 15th April 2003**QUESTION 4:**

Q4.4 ANSWER THE QUESTIONS (Q4.4A TO Q4.4D) BASED ON THE APPLICATION SCENARIO.

- A. What was the reason for IRS to do change their system through BPR? [6 MARKS]
- B. How does new system improve customer services? [6 MARKS]
- C. How significantly their new system will have impact on staffs efficiency? [6 MARKS]
- C. What major changes were made to new IRS system [7 MARKS]
- [TOTAL: 25 MARKS]

QUESTION 5:

- A. The mission of Information system is to support into functional business. How can Information system help the following business are:
- Accounting
 - Finance
 - Marketing
 - Human resource
- [12 MARKS]
- B. "Paperless office, or the office of the future". What do you understand by the term Paperless office, Explain. [4 MARKS]
- C. Identify and explain any 3 characteristics for useful Information System. [9 MARKS]
- [TOTAL: 25 MARKS]

M 7011 – 15th April 2003**QUESTION 6:**

- A. DSS (Decision support systems) provides support for decision makers mainly in semi structured and unstructured situations by bringing together human judgement and computerised information. Discuss their characteristics and capabilities. [ANY 4] [12 MARKS]
- B. The attributes of decision makers also affect the types of decision strategies used in decision making. These attributes include perceptual ability, information capacity, risk-taking propensity, and aspiration level. Discuss the above four attributes. [8 MARKS]
- D. Business process redesign includes all the challenges of any organizational change. Some of the strategies that apply to orchestrating organizational change also apply to business process redesign. Identify any five strategies that you may follow during transition. [5 MARKS]
- [TOTAL: 25 MARKS]

QUESTION 7:

- A. Issues and concerns pertaining to security and threat typically permeate any manager's job, especially when information systems are involved. Identify seven tenets of good and basic security system. [7 MARKS]
- B. In today's business environment, communications and information technology equipment transcend all organizations' boundaries. Plans to restore both need to be an integral part of every organization's business recovery plans. Some businesses believe they cannot afford the time to create recovery plans, then find out later that they cannot continue to operate when disaster does strike. As a MIS manager how would you plan to protect your communications system before disaster strikes. [identify at least 8 points] [16 MARKS]
- C. What do you understand by "Structured Problems"? [2 MARKS]
- [TOTAL: 25 MARKS]

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