



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2011/2012**

COURSE NAME : INTRODUCTION TO INFORMATION TECHNOLOGY

COURSE CODE : BIT 10203

PROGRAMME : BACHELOR OF INFORMATION TECHNOLOGY

EXAMINATION DATE : JANUARY 2012

DURATION : 2 ½ HOURS

INSTRUCTION : ANSWER ALL QUESTIONS IN SECTION A, B, C AND CHOOSE ONE (1) QUESTION IN SECTION D

THIS QUESTION PAPER CONSISTS OF SEVEN (7) PAGES

SECTION A

Instruction: State whether each of the following statement is **TRUE** or **FALSE**.

- Q1** In order to receive e-mail, the user being sent the e-mail must have their e-mail program running.
- Q2** A network is a collection of computers and devices connected together via communications devices and transmission media.
- Q3** A hierarchical database can be described as a many-to-many relationship.
- Q4** Physical transmission media send communications signal through the air or space using radio and infrared signals.
- Q5** Unauthorized copying of software, called software piracy, incurs huge financial loss to software developers.
- Q6** Data warehouse contains a huge database system that stores and manages data required to analyze historical and current transaction.
- Q7** A strategic planning is decided at the highest management level.
- Q8** Communication channel is the media on which data, instruction or information travel.
- Q9** A periodic report is produced based on the request.
- Q10** Validity check analyzes entered data to reduce data entry errors.

(10 marks)

SECTION B

Instruction: Choose the **BEST** answer.

Q11 Presentations can be made live over the Internet to groups of people using which of the followings?

- A. E-mail
- B. Collaborative conferencing
- C. Videoconferencing
- D. Webcasting

Q12 Al-Farique is a student at Universiti Tun Hussein Onn Malaysia (UTHM). He wants to contact his parent in Dubai via electronic mail. Which type of network is involved in the above communication?

- A. Local Area Network (LAN)
- B. Metropolitan Area Network (MAN)
- C. Wide Area Network (WAN)
- D. College Area Network (CAN)

Q13 Multiple dimensional database is also known as _____.

- A. object-oriented
- B. relational
- C. hierarchical
- D. hypercube

Q14 Management Information System produces standardized reports in _____.

- A. summarized structure form
- B. routine structure form
- C. fixed structure form
- D. flexible structure form

- Q15** Which of the followings describes someone who gains illegal access to a computer system?
- A. Hacker
 - B. Identity thief
 - C. Intruder
 - D. Cyber-terrorist
- Q16.** The design phase includes the following activities **EXCEPT**:
- A. database design
 - B. user design
 - C. input and output design
 - D. program design
- Q17** Which of the followings allows existing bank customers to interact with their account without actually going to the bank?
- A. Cyberbanking
 - B. Virtual banking
 - C. Online banking
 - D. E-commerce banking.
- Q18** Which of the followings is a network architecture category?
- A. Ethernet
 - B. IrDA
 - C. T-Carrier Line
 - D. Peer-to-peer network
- Q19** Decision Support System contains the following parts **EXCEPT**:
- A. user
 - B. system analyst
 - C. system software
 - D. decision models

Q20 Relational database has the following characteristics **EXCEPT**:

- A. flexible database
- B. have access paths down a hierarchy
- C. has hierarchical arrangement of nodes
- D. data elements are stored in different table

(10 marks)

SECTION C

Instruction: Answer **ALL** questions.

Q21 (a) Discuss the **FOUR (4)** elements of a URL below and the purpose of each.

<http://www.uthm.edu.my>

(8 marks)

(b) Give a reason a company uses Virtual Private Network (VPN) over the Internet.

(2 marks)

Q22 (a) Discuss **THREE (3)** ways in which a typical computer virus can get on a non- infected computer.

(6 marks)

(b) Give **TWO (2)** approaches to minimize piracy?

(4 marks)

Q23 (a) Explain **ONE (1)** difference between Intranet and Extranet.

(2 marks)

(b) Use **FOUR (4)** reasons why businesses should implementing computer network?

(8 marks)

Q24 (a) Illustrate and name any **TWO (2)** types of network topologies for setup a network in cyber cafe. (6 marks)

(b) Explain **TWO (2)** disadvantages of the above topology. (4 marks)

Q25 The manager of a MyBooks bookstore uses a database to store data about books he sells. **Table 1** shows *booklist* table that is a part of the MyBooks database.

Table 1: Booklist

Book_id	Title	Publisher	Author	Category	Price (Ringgit Malaysia)
AS0067	Accounting and Finance for Non-Accountants	Leeds Publication	Lazar, Jane	Accounting & Statistics	39.00
AS0023	Professional Advancement Achievement Centre Sdn Bhd	Professional Advancement Achievement Centre Sdn Bhd	Tan Liong Tong	Accounting & Statistics	75.00
MC0012	What Your Teacher Didn't Tell You: The Annexe Lectures	Matahari Books	Farish A. Noor	Malaysian Collection	40.00
AS0234	Cost Management: Strategies For Business Decision	Mcgraw Hill	Hilton	Accounting & Statistics	103.80
BM0365	The 5 Levels of Leadership: Proven Steps to Maximise Your Potential	Hodder & Stoughton Ltd	Maxwell, John C.	Business and Management	59.90

(a) How many records are there in the database? (1 mark)

(b) How many fields are there in the database? (1 mark)

(c) Create a data dictionary for the respective database. (5 marks)

- (c) Produce the output from the following SQL statement.

```
SELECT * FROM booklist
      WHERE price > RM50
      ORDER BY Title
```

(3 marks)

- Q26** (a) What is information system?

(2 marks)

- (b) Illustrate **FOUR (4)** types of Computer Based Information Systems (CBIS) in different management level for an organization.

(8 marks)

SECTION D

Instruction: Answer **ONE (1)** question only.

- Q27** Discuss information systems security for both technology and human-based safeguards to secure the digital environment.

(20 marks)

- Q28** The cost and demand of hardware, networking services, computing resources and skilled specialist to maintain complex information systems dramatically increase. These opposing trends have led to an increase in the use of virtualization, cloud computing and grid computing. Discuss how virtualization, cloud computing and grid computing can assist to enterprise to reduce the cost.

(20 marks)

- Q29** To kick start Malaysia's journey towards transforming the nation into knowledge based economy, MSC Malaysia has achieved excellence in innovation through four flagship applications. The four flagships are MyKad, Smartschool, Electronic Government (EG) and Tele-health. Discuss all the flagships how MSC Malaysia has achieved excellence in innovation.

(20 marks)