

CITY UNIVERSITY OF HONG KONG

Course code & title : FB1500 Management Information Systems I
Session : Semester A 1997-98
Time Allowed : Two Hours

This paper has 6 pages

1. This paper consists of 4 questions in two sections.
2. Answer all 20 questions in Section A. Use the City University Multiple Choice Answer Sheet provided.
3. Answer Question One and one other question in Section B. Start each question on a new page of the answer book.

Section A (40 marks)

You **must** answer all 20 questions in this section. Use the City University Multiple Choice Answer Sheet provided.

Read the case. Choose the appropriate answer for each of the underlined sections below from the list that follows the case and mark the special sheet provided according to your selection. Thus, if you think that option (a) is correct for Question 1, you should fill in the circle for the letter (a) under Question 1 on the sheet.

Janice Lim is a recent graduate of CityU's BBA programme and an aspiring business lady. She has studied various aspects of business and conducted her final year project on the potential of Electronic Commerce for global business. Janice has decided to form her own company - GlobalTravel - and to use her newly acquired skills to enter the highly competitive [1 _____] marketplace. Janice plans to take advantage of the current drop in numbers of tourists visiting Hong Kong and specialise in offering discounted travel related services (flights, tours, hotels bookings, etc.) to customers anywhere in the world. To do this, she will need to make extensive use of connections on [2 _____].

Janice needs to design a [3 _____] that will guide potential customers to the services they require. She must also ensure that potential customers can find her services and so must register the [4 _____] of her site at a [5 _____].

Since Janice is offering a wide (and expanding) range of services in the travel market and she will need to create [6 _____] and reports concerning her customers on a regular basis, she needs to employ a [7 _____], such as MS Access. She also needs a fast connection to the Internet so as to ensure her web-server can send information to her customers, and high capacity [8 _____] such as a two [9 _____] hard disk for [10 _____] retrieval of data and [11 _____] for high volume, long term storage.

When GlobalTravel is finally up and running, Janice experiences some technical difficulties. Her [12 _____] is not co-operative in helping her get connected to the world and she finds that she can only [13 _____] information from her site to customers at 2K [14 _____] - too slow for a commercial operator. The transmission [15 _____] are also unreliable and tend to pick up [16 _____]. She overcomes this problem by subscribing to a newly formed communications company that provides dedicated high-speed access for www users via a satellite placed in [17 _____] thereby by-passing the local traffic chaos in Hong Kong.

In future, Janice hopes to expand GlobalTravel to a round-the-world business. She plans to communicate with the overseas offices using [18 _____] and [19 _____] technology. She believes a seamless web of communication networks will be achieved very soon, with everyone joining the [20 _____] in the near future.

Answer Options

- 1 a) Remote buying
b) Distance learning
c) Virtual Shopping
d) Proximity customising

- 2 a) The Internet
b) The FTP
c) Veronica
d) NASA's Spacelink

- 3 a) Building site
b) Home page
c) House address
d) Home zone

- 4 a) IRL
b) Zip code
c) email address
d) URL

- 5 a) Search engine
b) Finding machine
c) Search Computer
d) Re-engineering robot

- 6 a) Demands
b) Requests
c) Queries
d) Macros

- 7 a) Object-oriented database
b) Relational database
c) Hierarchical database
d) Network database

- 8 a) Storage locations
b) Tertiary memory
c) Memory slivers
d) Storage devices

- 9 a) Terabyte
b) Gigabyte
c) Megabyte
d) Kilobyte

- 10 a) Low-speed
 - b) High-speed
 - c) Short-distance
 - d) Remote-access

- 11 a) Optical strips
 - b) WORM CD-ROMs
 - c) Floppy disks
 - d) RAM wafers

- 12 a) IDD
 - b) FDDI
 - c) GFLOP
 - d) ISP

- 13 a) Upload
 - b) Download
 - c) Uplink
 - d) Downlink

- 14 a) Words per page
 - b) Words per bus
 - c) Bytes per second
 - d) MIPS

- 15 a) Protocols
 - b) Sequences
 - c) Media
 - d) Hawsers

- 16 a) Attraction
 - b) Interference
 - c) Radiation
 - d) Contamination

- 17 a) Geosynchronous orbit
 - b) Parallel orbit
 - c) Elliptical orbit
 - d) Superimposed orbit

- 18 a) Snail mail
 - b) Email
 - c) Cleft stick
 - d) Z-transfer

- 19 a) Executive information filtering
 - b) Decision support systems
 - c) Transaction messaging
 - d) Videoconferencing

- 20 a) Data expressway
b) Multinational information corridor
c) Infrastructural information path
d) Information superhighway

Section B: (60 marks)

Answer Question One and one other question in Section B. Start each question on a new page of the answer book.

Question One (30 marks) (You must answer this question)

ABC chain store uses POS terminals connected to a computer in each store to capture sales data. Sales data are processed immediately to update the store's inventory database and add records to a sales transaction file. The sale transaction files are stored on a magnetic disk unit. Each night, the central computer in Causeway Bay polls each store's computer to access and process the day's sales data, update the sales database and produce management report. The next morning, managers use their terminals to interrogate the updated databases.

- a) Identify and explain how each of the following types of computer-based information processing is occurring in the case above (12 marks):
- interactive processing (6 marks)
 - batch processing (3 marks)
 - database maintenance (3 marks)
- b) Suggest two functions provided by a database interrogation software that can be useful to the managers of ABC chain store (6 marks).
- c) Define the following two terms used in the case (4 marks):
- terminal (2 marks)
 - transaction file (2 marks)
- d) Suggest four ways that ABC chain store can use its sales and inventory databases to support its business operations (8 marks).

Question Two (30 marks)

In the 1990s, we see a situation where, at least in developed countries, rapid expansions in the development of computing technology are bringing major changes to the lifestyles of people. Large quantities of information are now available on the Internet, and it will soon be possible for home users to use Video on Demand (VOD) and Shopping on Demand (SOD) services. In fact, they can already shop over the www from supermarkets, travel agents, book sellers and so on. All of these characteristics are sometimes collectively known as components of the "Information Society".

- a) What do you think will be the business opportunities for this technology in Hong Kong over the next 5 years (10 marks)?
- b) What might be the social consequences of the development of this technology in Hong Kong (10 marks)?
- c) What barriers might exist to the development of the Information Society in a developing country, such as Mainland China (10 marks)?

Question Three (30 marks)

West Kowloon University of Business (WKUB) is a newly established university in Cheung Sha Wan. The University administration has invited recommendations to provide computer hardware, software and netware for students to use during their studies. It is expected that initially there will be 1000 students. The students will only be able to take business-related courses.

- a) Identify three suitable items of input and/or output devices and three items of application software for the students to use and specify for each item that you select why it is suitable or necessary (18 marks).
- b) Explain also how students from overseas may be able to attend lectures at WKUB electronically (12 marks).