UNIVERSITI KUALA LUMPUR
BUSINESS SCHOOL

FINAL EXAMINATION
MARCH 2024 SEMESTER

COURSE CODE	**: EAB11203**
COURSE NAME	**: INTRODUCTION TO INFORMATION TECHNOLOGY**
PROGRAMME NAME	**: BACHELOR IN ACCOUNTING (HONS)**
DATE	**: 10 JULY 2024**
TIME	**: 9.00 AM – 12.00 PM**
DURATION	**: 3 HOURS**

INSTRUCTIONS TO CANDIDATES

1. **Please CAREFULLY read the instructions given in the question paper.**
2. **This question paper has information printed on both sides of the paper.**
3. This question paper consists of **TWO (2) Sections**. **Section A** and **Section B**.
4. Answer **ALL** questions in **Section A** and **Section B**.
5. Please write your answers on the answer booklet provided.
6. All questions must be answered in **English** (any other language is not allowed).
7. **This question paper must not be removed from the examination hall.**

THERE ARE SEVEN (7) PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A (Total: 40 marks)

INSTRUCTION: Answer All questions.
Please use the answer booklet provided.

QUESTION 1

A. Define an information system and describe the activities it performs.

(4 marks)

B. List and describe the organizational, management, and technology dimensions of information systems.

(6 marks)

QUESTION 2

Define Porter's competitive forces model and explain how it works.

(10 marks)

QUESTION 3

A. Define a supply chain and explain how supply chain management systems help reduce the bullwhip effect and how they provide value for a business.

(4 marks)

B. Define and compare supply chain planning systems and supply chain execution systems.

(6 marks)

QUESTION 4

Describe any **FIVE (5)** of the principal e-commerce revenue models.

(10 marks)

[40 marks]

SECTION B (Total: 60 marks)

INSTRUCTION: Answer All questions.
Please use the answer booklet provided.

CASE STUDY 1

MIS In Your Pocket

Can you run your company out of your pocket? Perhaps not entirely, but there are many functions today that can be performed using an iPhone, BlackBerry, or other mobile handheld device. The smartphone has been called the "Swiss Army knife of the digital age." A flick of the finger turns it into a Web browser, a telephone, a camera, a music or video player, an e-mail and messaging machine, and for some, a gateway into corporate systems. New software applications for social networking and salesforce management (CRM) make these devices even more versatile business tools.

The BlackBerry has been the favored mobile handheld for business because it was optimized for e-mail and messaging, with strong security and tools for accessing internal corporate systems. Now that's changing. Companies large and small are starting to deploy Apple's iPhone to conduct more of their work. For some, these handhelds have become necessities.

Doylestown Hospital, a community medical center near Philadelphia, has a mobile workforce of 360 independent physicians treating thousands of patients. The physicians use the iPhone 3G to stay connected around the clock to hospital staff, colleagues, and patient information. Doylestown doctors use iPhone features such as e-mail, calendar, and contacts from Microsoft Exchange ActiveSync. The iPhone allows them to receive time-sensitive e-mail alerts from the hospital. Voice communication is important as well, and the iPhone allows the doctors to be on call wherever they are.

Doylestown Hospital customized the iPhone to provide doctors with secure mobile access from any location in the world to the hospital's MEDITECH electronic medical records system. MEDITECH delivers information on vital signs, medications, lab results, allergies, nurses' notes, therapy results, and even patient diets to the iPhone screen. "Every radiographic image a patient has had, every dictated report from a specialist is available on the iPhone," notes Dr. Scott Levy, Doylestown Hospital's vice president and chief medical officer. Doylestown doctors also use the iPhone at the patient's bedside to access medical reference applications such as Epocrates Essentials to help them interpret lab results and obtain medication information.

Doylestown's information systems department was able to establish the same high level of security for authenticating users of the system and tracking user activity as it maintains with all the hospital's Web-based medical records applications. Information is stored securely on the hospital's own server computer.

D.W. Morgan, headquartered in Pleasanton, California, serves as a supply chain consultant and transportation and logistics service provider to companies such as AT&T, Apple Computer, Johnson & Johnson, Lockheed Martin, and Chevron. It has operations in more than 85 countries on four continents, moving critical inventory to factories that use a just-in-time (JIT) strategy. In JIT, retailers and manufacturers maintain almost no excess on-hand inventory, relying upon suppliers to deliver raw materials, components, or products shortly before they are needed.

In this type of production environment, it's absolutely critical to know the exact moment when delivery trucks will arrive. In the past, it took many phone calls and a great deal of manual effort to provide customers with such precise up-to-the minute information. The company was able to develop an application called ChainLinq Mobile for its 30 drivers that updates shipment information, collects signatures, and provides global positioning system (GPS) tracking on each box it delivers.

As Morgan's drivers make their shipments, they use ChainLinq to record pickups and status updates. When they reach their destination, they collect a signature on the iPhone screen. Data collected at each point along the way, including a date- and time-stamped GPS location pinpointed on a Google map, are uploaded to the company's servers. The servers make the data available to customers on the company's Web site. Morgan's competitors take about 20 minutes to half a day to provide proof of delivery; Morgan can do it immediately.

TCHO is a start-up that uses custom-developed machinery to create unique chocolate flavors. Owner Timothy Childs developed an iPhone app that enables him to remotely log into each chocolate- making machine, control time and temperature, turn the machines on and off, and receive alerts about when to make temperature changes. The iPhone app also enables him to remotely view several video cameras that show how the TCHO FlavorLab is doing. TCHO employees also use the iPhone to exchange photos, e-mail, and text messages.

The Apple iPad is also emerging as a business tool for Web-based note-taking, file sharing, word processing, and number-crunching. Hundreds of business productivity applications are being developed, including tools for Web conferencing, word processing, spreadsheets, and electronic presentations. Properly configured, the iPad is able to connect to corporate networks to obtain e-mail messages, calendar events, and contacts securely over the air.

A. Describe business functions supported by applications that were described in the case.

(6 marks)

B. Describe with examples on how these mobile application solve problems for **EACH** organization.

(12 marks)

C. List and describe (with example form the case), **TWO (2)** strategic business objectives that can be achieved with the use of mobile application.

(6 marks)

D. Describe **TWO (2)** examples of businesses that are most likely to benefit from equipping their employees with mobile digital?

(6 marks)

[30 marks]

CASE STUDY 2

How Much Do Credit Card Companies Know about You?

When Kevin Johnson returned from his honeymoon, a letter from American Express was waiting for him. The letter informed Johnson that AmEx was slashing his credit limit by 60 percent. Why? Not because Johnson missed a payment or had bad credit. The letter stated: "Other customers who have used their card at establishments where you recently shopped, have a poor repayment history with American Express." Johnson had started shopping at Walmart. Welcome to the new era of credit card profiling.

Every time you make a purchase with a credit card, a record of that sale is logged into a massive data repository maintained by the card issuer. Each purchase is assigned a four-digit category code that describes the type of purchase that was made. There are separate codes for grocery stores, fast food restaurants, doctors, bars, bail and bond payments, and dating and escort services. Taken together, these codes allow credit card companies to learn a great deal about each of its customers at a glance.

Credit card companies use these data for multiple purposes. First, they use them to target future promotions for additional products more accurately. Users that purchase airline tickets might receive promotions for frequent flyer miles, for example. The data help card issuers guard against credit card fraud by identifying purchases that appear unusual compared to a cardholder's normal purchase history. The card companies also flag users who frequently charge more than their credit limit or demonstrate erratic spending habits. Lastly, these records are used by law enforcement agencies to track down criminals.

Credit card holders with debt, the ones who never fully pay off their balances entirely and thus have to pay monthly interest charges and other fees, have been a major source of profit for credit card issuers. However, the recent financial crisis and credit crunch have turned them into a mounting liability because so many people are defaulting on their payments and even filing for bankruptcy. So the credit card companies are now focusing on mining credit card data to predict cardholders posing the highest risk.

Using mathematical formulas and insights from behavioural science, these companies are developing more fine-grained profiles to help them get inside the heads of their customers. The data provide new insights about the relationship of certain types of purchases to a customer's ability or inability to pay off credit card balances and other debt. The card-issuing companies now use this

information to deny credit card applications or shrink the amount of credit available to high-risk customers.

These companies are generalizing based on certain types of purchases that may unfairly characterize responsible cardholders as risky. Purchases of second-hand clothing, bail bond services, massages, or gambling might cause card issuers to identify you as a risk, even if you maintain your balance responsibly from month to month. Other behaviours that raise suspicion: using your credit card to get your tires re-treaded, to pay for drinks at a bar, to pay for marriage counselling, or to obtain a cash advance. Charged speeding tickets raise suspicion because they may indicate an irrational or impulsive personality. In light of the sub-prime mortgage crisis, credit card companies have even begun to consider individuals from Florida, Nevada, California, and other states hardest hit by foreclosures to be risks simply by virtue of their state of residence.

The same fine-grained profiling also identifies the most reliable credit-worthy cardholders. For example, the credit card companies found that people who buy high-quality bird seed and snow rakes to sweep snow off of their roofs are very likely to pay heir debts and never miss payments. Credit card companies are even using their detailed knowledge of cardholder behaviour to establish personal connections with the clients that owe them money and convince them to pay off their balances.

One 49-year old woman from Missouri in the throes of a divorce owed $40,000 to various credit card companies at one point, including $28,000 to Bank of America. A Bank of America customer service representative studied the woman's profile and spoke to her numerous times, even pointing out one instance where she was erroneously charged twice. The representative forged a bond with the cardholder, and as a result she paid back the entire $28,000 she owed, (even though she failed to repay much of the remainder that she owed to other credit card companies.)

This example illustrates something the credit card companies now know: when cardholders feel more comfortable with companies, as a result of a good relationship with a customer service rep or for any other reason, they're more likely to pay their debts.
It's common practice for credit card companies to use this information to get a better idea of consumer trends, but should they be able to use it to pre-emptively deny credit or adjust terms of agreements? Law enforcement is not permitted to profile individuals, but it appears that credit card companies are doing just that.

In June 2008, the FTC filed a lawsuit against CompuCredit, a sub-prime credit card marketer. CompuCredit had been using a sophisticated behavioral scoring model to identify customers who they considered to have risky purchasing behaviors and lower these customers' credit limits.

CompuCredit settled the suit by crediting $114 million to the accounts of these supposedly risky customers and paid a $2.5 million penalty.

Congress is investigating the extent to which credit card companies use profiling to determine interest rates and policies for their cardholders. The new credit card reform law signed by President Barack Obama in May 2009 requires federal regulators to investigate this. Regulators must also determine whether minority cardholders were adversely profiled by these criteria. The new legislation also bars card companies from raising interest rates at any time and for any reason on their customers.

Going forward, you're likely to receive far fewer credit card solicitations in the mail and fewer offers of interest-free cards with rates that skyrocket after an initial grace period. You'll also see fewer policies intended to trick or deceive customers, like cashback rewards for unpaid balances, which actually encourage cardholders not to pay what they owe. But the credit card companies say that to compensate for these changes, they'll need to raise rates across the board, even for good customers.

A. Describe IS competitive strategy that the credit card companies is applying? How do information systems support that strategy?

(8 marks)

B. List and describe **FOUR (4)** major points on how the data collected bring benefits to the credit card company.

(12 marks)

C. Describe another IS competitive strategy that can be used by credit card companies. Provide best example by describing how it can be beneficial for the company.

(6 marks)

D. Decribe your opinion on these practices by credit card companies. Are they ethical? Are they an invasion of privacy? Why or why not?

(4 marks)

[30 marks]

END OF EXAMINATION PAPER