



The Open University of Sri Lanka
 DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING
 Bachelor of Software Engineering
 ECJ4160 Communication Skills for Engineers
 FINAL EXAMINATION 2011/12 (CLOSED BOOK)

Index No. :

DATE : 12-03-2012

Time : 1400 - 1700

Answer all questions. Write your answers on the question paper itself.

(1) Fill in the gaps of the following passage with the correct form of the verb given within brackets.

The importance of both IT and business process redesign is well known to industrial engineers. IT (1) (use) in industrial engineering as an analysis and modeling tool, and IEs (2) (often take) the lead in applying IT to manufacturing environments. Well-known uses of IT (3) (include) process modeling, production scheduling and control among others. IEs (4) (begin) to analyze work activities in manufacturing environments but their penetration into offices (5) (be) far less than in factories. IT (6) (penetrate) the offices and services environment – in 1987 Business Week (7) (report) that about 40% of all US capital spending (8) (go) to information systems. With a few exceptions, IT's role in the design non-manufacturing work has been disappointing; few firms (9) (achieve) major productivity gains. Aggregate productivity figures for the US (10) (show) no increase since 1973.

(10 marks)

(2) Fill in the blanks of the following passage with suitable words. Use only one word in each blank.

The better prepared a negotiation, the greater its chances of success. Start by deciding (1) your objectives. Next, (2) who will conduct the (3) Will it be one person or a (4) ? If it is a team, who will (5) the best partnerships? Ensure (6) team thoroughly researches the issues (7) their positions. The research will (8) to determine the agenda agreed (9) the other side. Have the team (10) at least one role-play beforehand. Finally develop your minimum position.

(10 marks)

(3) Complete the following passage with *a*, *an*, *the* where necessary.

A nightmare scenario is as follows: the speaker finishes his talk with (1) words 'Any questions?' This is met by (2) total silence. Not a word. Then (3) embarrassed shuffling, a cough. How can this be avoided? (4) possible answer is that if (5) presentation has been good and (6) audience is clearly interested, *someone* will have *something* to say. Another way to avoid (7) nightmare of utter silence is to end with (8) Instruction to the audience. This should ensure (9) immediate audience response. Giving (10) instruction is often useful in sales presentations and where the audience has special requirements.

(10 marks)

(4) Underline the correct word of the three given within each bracket in the following extract of a SRS document.

Introduction

The purpose of this document is to [**achieve**, develop, present] a detailed description of an Inventory Control System for Design Lanka (Pvt) Ltd. It [**explains**, gives, shows] the purpose of the system the interface of the system, what the system [**should perform**, could perform, will perform], the constraints under which it [**must operate**, may operate, could operate] and how the system [**can act**, may act, will act] to external stimuli. This document [**is intended**, is being intended, will be intended] for both stakeholders and developers of the system.

Design Lanka (Pvt) Ltd. is a company engaged in supplying office furniture. It [**had established**, is established, was established] in 2003 and [**employs**, employed, employ] around 55 personnel.

Currently almost all of the work processes of the company [**are handled**, is handled, was handled] manually. Apart from [**maintain**, maintaining, maintained] customer records, all other transactions including keeping an inventory of existing furniture stocks go through a manual process.

(10 marks)

(5) You are the manager of a web design company. Your services consist of web designing, web hosting and software development. You receive the following letter of inquiry regarding your products and services. Write a reply detailing your services.

*K & D Enterprises Ltd.
No. 14/2 Duplication Road
Colombo 3*

17 February 2012

*The Manager
Multilinks Ltd.
15 Uyana Road
Moratuwa*

Dear Sir

Web designing and hosting

We are a newly established company dealing in children's clothing. We are seeking the services of a web designing and hosting company to advertise our products. Could you let us know of your products and services as soon as possible?

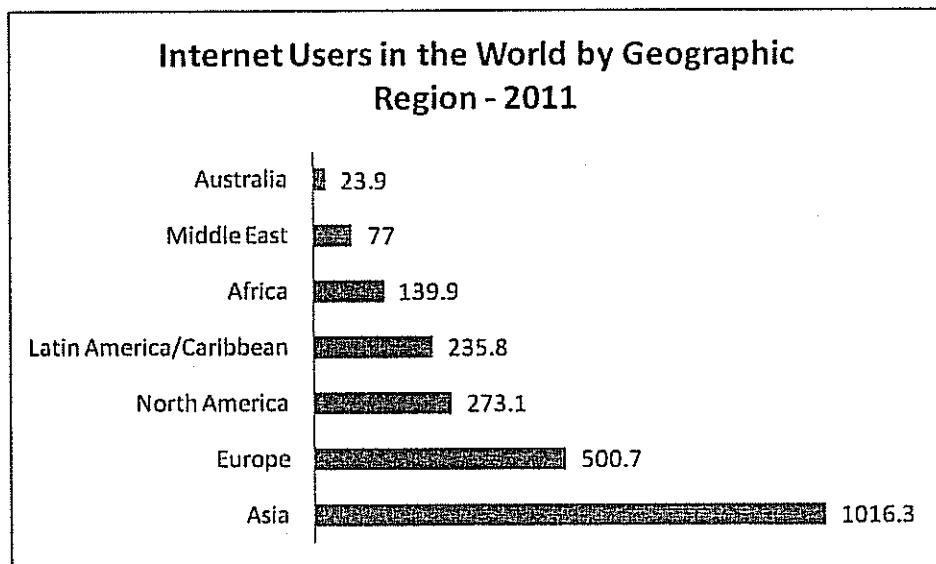
I look forward to an early reply.

Yours faithfully

*Nihal Fernando
Manager*

(15 marks)

(6) The graph below shows statistics of world internet users in different geographic regions in millions. Write a report of not more than 150 words, highlighting important information.



(20 marks)

(7) Read the following text and answer the questions.

Students who want to enter the University of Montreal's Athletic Complex need more than just a conventional ID card; their identities must be **authenticated** by an electronic hand scanner. In some Californian housing estates, a key alone is insufficient to get someone through the door; his or her voiceprint must also be verified. And soon, customers at some Japanese banks will have to present **their** faces for scanning before they can enter a building.

All of these are biometrics, a little-known but fast-growing technology that involves the use of physical or biological characteristics to identify individuals. In use for more than a decade at some high-security government institutions in the United States and Canada, biometrics are now rapidly popping up in the everyday world. Already, more than 10,000 facilities, from prisons to day-care centres, monitor people's fingerprints or other physical parts to ensure that they are who they claim to be.

Biometric security systems operate by storing a digitized record of some **unique** human feature. When an authorized user wishes to enter or use the facility, the system scans the person's corresponding characteristics and attempts to match **them** against those on record. Systems using fingerprints, hands voices, irises, retinas, and faces are already on the market. Others using typing patterns and even body odours are in various stages of development.

Fingerprint scanners are currently the most widely deployed type of biometric application, thanks to **their** growing use over the last 20 years by law-enforcement agencies. Sixteen American states now use biometric fingerprint verification systems to check that people claiming welfare status are genuine.

To date, the most widely used commercial biometric system is the handkey, a type of hand scanner which reads the unique shape, size and irregularities of people's hands. Originally developed for nuclear power plants, the handkey received its big break when it was used to control access to the Olympic Village in Atlanta by more than 65,000 athletes, trainers and support staff. Now there are scores of other applications.

Around the world, the market is growing rapidly. Malaysia, for example, is preparing to equip all of its airports with biometric face scanners to match passengers with luggage. Although the first commercial biometric, a hand reader used by an American company to monitor employee attendance was introduced in 1974, it is only in the past few years the technology improved enough to make them commercially **viable**.

Not surprisingly however, biometrics raise **thorny** questions about privacy and the potential for abuse. Some worry that governments and industry will be tempted to use the technology to monitor individual behaviour. For instance, fingerprints can be used to match health-insurance records with credit-card records and if the latter showed regular payments for cigarettes and fatty foods, insurance payments are likely to increase manifold. In Toronto, critics of the welfare fingerprint plan complained that it would **stigmatize** recipients by forcing them to submit to a procedure widely identified with criminals.

Nevertheless, support for biometrics is growing in Toronto as in many other communities. In an increasingly crowded and complicated world, biometrics may well be a technology whose time has come.

1. (i) What is 'biometrics'?

(ii) Name 2 countries that use biometrics.

(3 marks)

2. (i) What is the most widely used biometric application?

(ii) Why?

(2 marks)

3. Which of the following statements are 'true' (T) and which ones are 'false' (F)? Indicate 'T' or 'F' against each statement.

- a) Some banks in Japan have already started using biometrics. ()
- b) Biometric applications require prior programming of a human feature. ()
- c) Some biometric systems currently use body smells to identify people. ()
- d) The handkey was initially used in nuclear power plants. ()
- e) The first commercial biometric was developed to keep track of employee attendance. ()

(5 marks)

4. Why have some people expressed concern about the use of biometrics by governments and industry?

(2 marks)

5. Match the groups of people to the biometric system associated with them. (Write the letter of the biometric system against the corresponding group of people.)

Group of people		Biometric system
Olympic athletes		A hand reader
airline passengers		B voiceprint
business employee		C fingerprint scanner
house owners		D hand scanner
welfare claimants		E face scanner

(5 marks)

6. What do these words refer to in the text?

(i) their (paragraph 1)

(ii) them (paragraph 3)

(iii) their (paragraph 4)

(3 marks)

7. Match the words to their meanings. (Write the letter of the meaning against the matching word.)

Word	Meaning
authenticated	A problematic
unique	B operational
viable	C to mark out
thorny	D established as genuine
stigmatize	E exclusive

(5 marks)