THE OPEN UNIVERSITY OF SRI LANKA
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

FINAL EXAMINATION 2009/2010
BACHELOR OF SOFTWARE ENGINEERING

ECJ 4160 Communication Skills for Engineers

Date: 9th May 2010	**Time: 9.30 – 12.30 hrs**

*Answer **ALL** questions:*

Question 1

Complete the following passage with the words given below.

biometric	*technology*	*fingerprints*	*scanners*	*privacy*
facilities	*law-enforcement*	*status*	*verification*	*governments*

Biometrics have been in use for more than a decade at some high security government institutions in the US and Canada and are rapidly popping up in the everyday world. Already, more than 10,000 (1) ...., from prisons to day-care-centres, monitor people's (2) .... or other physical parts to ensure that they are who they claim to be. Fingerprint (3) .... are currently the most widely deployed type of (4) .... application, thanks to their growing use by (5) .... agencies. Sixteen American states now use biometric fingerprint (6) .... systems to check that people claiming welfare (7) .... are genuine.

Not surprisingly however, biometrics raise thorny questions about (8) .... and potential for abuse. Some worry that (9) .... and industry will be tempted to use the (10) .... to monitor individual behaviour.

(10 marks)

Question 1/ 2

Complete the following extract of a SRS document with the correct form of the words/verbs given within brackets.

Scope

This software system (1) .... (will design) to maximize the productivity of Green Gardens (Pvt) Ltd. by (2) .... (provide) tools to assist in (3) .... (automate) the inventory control system

which is (4) .... (now perform) manually. More specifically, the system (5) .... (enable) the company to
- Keep records of plants and their lifetime
- Check the availability of plants
- Track re-order levels which (6) .... (allow) employees to order plants on time
- Have an automated book keeping system for daily transactions and monthly supplies
- Maintain an online ordering system which (7) .... (enhance) customer service tremendously

Overview of document

The next chapter (8) .... (give) an overview of the functionality of the product. It (9) .... (describe) the informal requirements and (10) .... (use) to establish a context for technical requirements specifications in the chapter that follows.

(10 marks)

Question 3
You work for Networks Ltd., a company that offers software solutions. A client has sent you the following e-mail.

From	:	s.fernando@lstf.com
To	:	himalk@networks.lk
Subject	:	MIS Project

Dear Himal,

There's a problem in one of the interfaces. Can we meet and discuss?

Thanks

Sunila

You need to find out more details about the problem and specifically which interface. **Write a reply** to the client. In your e-mail you should ask for

- Further details of the problem
- Which interface
- A date and time for a meeting, convenient to the client

(20 marks)

Question 4

You are the chairperson of a meeting to discuss the launch of a new software developed by your company. Complete the following dialogue using the cues given within brackets.

Chairperson: We're here today to discuss the new software launch. When can we fix it? What are your thoughts on this, Shyami?

Shyami :   ....
....
....
(Express the opinion that product testing should begin in May and the launch can be in July.)

Chairperson :   I see. Thank you, Shyami. Any other views on that?

Janith :   ....
....
(Agree with Shyami.)

Amina :   ....
....
(Say that you want to express a different opinion.)

Chairperson :   Yes, Amina. Go ahead.

Amina :   ....
....
....
....
(Say that May is too soon to finish the testing because of problems in the update engine. Suggest the launch be made in August.)

Chairperson :   Amina has a point, don't you think, Shyami?

Shyami :   ....
....
....
....
(Say that you don't agree. Such problems can be sorted out within a month.)

(10 marks)

3

Question 5

You work for Technical Solutions (Pvt) Ltd. Beachview Hotel, a newly established hotel has contracted your company to develop a Management Information System (MIS). You have been asked to prepare a project proposal. These are the notes you made for the introduction.

- Beachview Hotel established 6 months ago.
- Employs 450 staff.
- Variety of services including front office, food and beverage, room service, housekeeping, sporting and leisure activities.
- MIS to integrate core functions of business and automate related functions including billing and customer records.
- Core functions include sales and marketing.
- Increased efficiency and productivity from MIS.

Write an introduction (of not more than 150 words) to the project proposal.

(20 marks)

Question 6

Read the following passage and answer the questions.

> Answers must be written in complete sentences.

Can you imagine what your working day would be like if you didn't have access to the internet? Or how about trying to arrange your social life without a mobile phone? In the fast paced 24/7 world we live and work in today, it's hard to imagine what life would be like without technologies that we have come to rely on.

Yet, only a few years ago, such things would have seemed exotic. The emergence of the (almost) paperless office, and the ability to lower costs by outsourcing, are only possible due to cheap IT. Is the **revolutionary change** largely over, or is there more to come? Although there are remarkable changes in the biosciences and nanotechnology, will the way we work change radically in the next decade or two?

One factor to consider when thinking about how we will work in the future is the increase in disposable income. People are spending their wealth on the latest fashions and gadgets, and engaging much more frequently with the arts and entertainment, which in turn are becoming increasingly digital.

There is a trend towards embracing technologies that **pander to emotions**, rather than to our more basic human needs. It is no accident that teenagers spend a lot of

4

money on their mobile phones. **They** enable social engagement, which in turn fulfill an emotional need. The social habits of teenagers today will tend to determine the future of the workplace. It will be a **wireless working world** with people carrying more and more media about their person and an online virtual world that is part of the workplace.

Today people who are located in different countries can 'meet' via video conference. In the future one could hold a business meeting where both parties are virtual characters in an artificial reality world. Perhaps some of what is being traded will be virtual too. As these virtual meetings become more popular, it may encourage people to travel less and work more flexibly, thereby saving on unnecessary travel and carbon emissions.

Although some human activities will be replaced, there will be an increase in jobs in the care economy, where people are doing things for people, and where human emotion will be important. Technology will be used to make people more effective, but would not replace **them**. For example, a robotic system is unlikely to replace personal relationships in a sales department or someone with a bedside manner in a health context.

1. What is this passage about?

(1 mark)

2. Why does the writer say that 'it's hard to imagine what life would be like without the technologies we have come to rely on'?

(2 marks)

3. (i) According to paragraph 2, how have companies been able to lower costs? Give 2 examples.

1. ....
2. ....

(ii) What has made it possible for companies to lower costs?

(2 marks)

4. (i) What do you understand by 'disposable income'? Explain in your own words.

(ii) Explain the role of technology envisaged in the increase of disposable income.

(2 marks)

5. (i) Is the writer of the view that the world is moving towards using technologies that fulfill emotional needs rather than basic human needs? Answer 'yes' or 'no'.

(ii) Support your answer with a statement from the passage.

(2 marks)

6. (i) What, according to paragraph 4, will determine the future of the workplace?

(ii) Give reasons for your answer.

(2 marks)

7. (i) The current trend to hold business meetings is to use video-conference. What is the alternative the writer suggests in terms of the future office?

(ii) How will it benefit companies? Give 2 examples.

1. ....
2. ....

(2 marks)

8. (i) What is meant by a 'care economy'?

(ii) Why is technology not likely to replace humans in a 'care economy'?

6

(2 marks)

9. Explain the meanings of the following phrases as they occur in the passage.

    (i) **revolutionary change**

    (ii) **pander to human emotions**

    (iii) **wireless working world**

(3 marks)

10. What do the following words refer to in the passage?

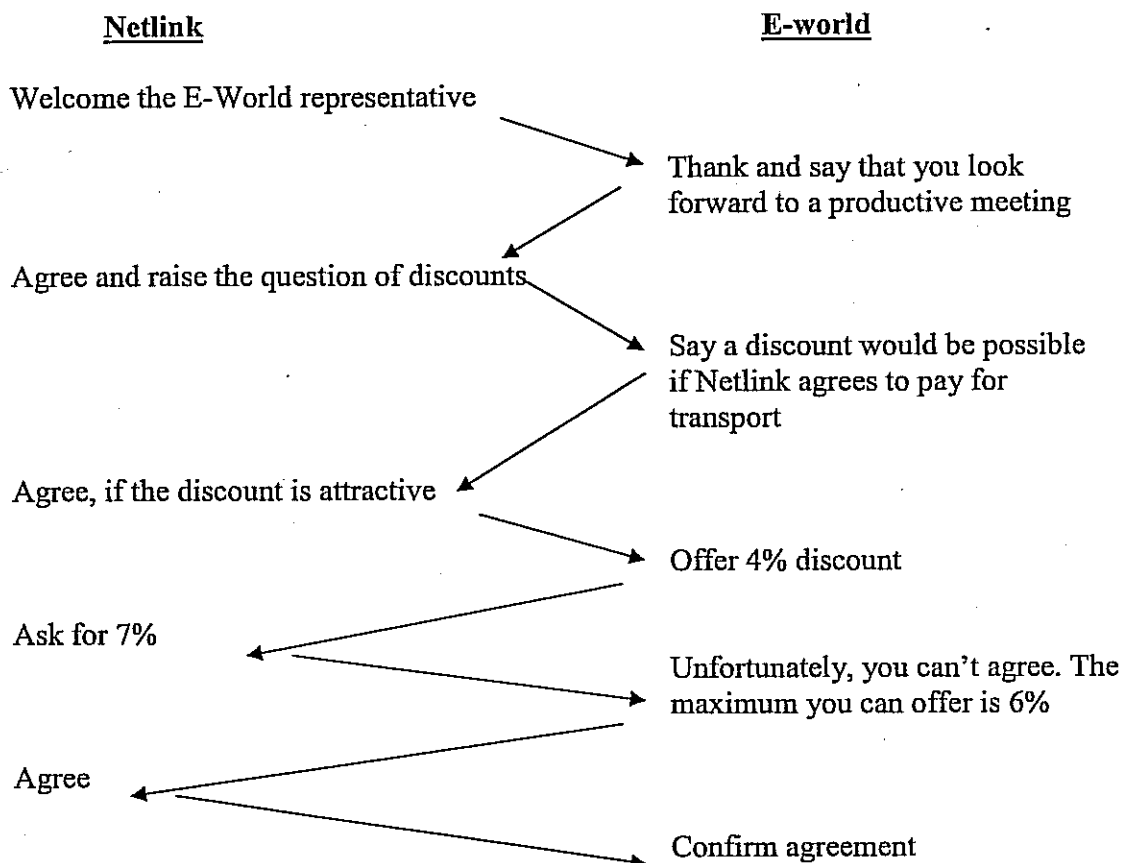   (i) **They** in paragraph 4
    (ii) **them** in paragraph 6

(2 marks)

Question 7

You are a representative of Netlink and in a negotiation with a representative of E-World. The latter wants to establish a trading partnership with your company. The meeting is one of a series.

Construct a dialogue using the flowchart below.

<u>Netlink</u>	<u>E-world</u>
Welcome the E-World representative	
	Thank and say that you look forward to a productive meeting
Agree and raise the question of discounts	
	Say a discount would be possible if Netlink agrees to pay for transport
Agree, if the discount is attractive	
	Offer 4% discount
Ask for 7%	
	Unfortunately, you can't agree. The maximum you can offer is 6%
Agree	
	Confirm agreement

(10 marks)

NB

Marks will be deducted for spelling and grammatical errors.