The Open University of Sri Lanka
DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING
Bachelor of Software Engineering
ECJ4160 Communication Skills for Engineers
FINAL EXAMINATION 2013/14 (*CLOSED BOOK*)

Index No. :   ....

DATE : 25-08-2014	**Time : 0930 - 1230**

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

Language in use

1. Complete the sentences with the correct form of the word given within brackets.

a   The computer is the greatest .... (technology) invention of the 20th century.

b   A password is a mechanism for .... (identify) the computer user and allowing access.

c   Our maths ....(instruct) explained to us the principles of binary construction.

d   A source programme cannot be directly processed by the computer until it has been .... (compile).

e   We have spent a .... (consider) amount of money on developing the software the company needs.

f   The .... (result) of these mathematical operations were obtained from the university mainframe.

g   The .... (create) of this database will give us a huge advantage over our competitors in the long run.

h   All user requests to .... (access) the database are handled by the database administrator.

i   Our company is working on a new .... (generate) of computers.

j   The data was entered .... (correct), so the results must be accurate.

(10 marks)

2. Fill in the gaps of the passage below with the correct form of the verbs given within brackets.

On 30 April 1993 CERN put the World Wide Web software in the public domain. CERN .... (make) the next release available with an open licence as a more sure way to maximise its dissemination. Through these actions, making the software required to run a web server freely available, along with a basic browser and a library of code, the web .... (allow) to flourish.

British physicist Tim Berners-Lee .... (invent) the Web at CERN in 1989. The project, which Berners-Lee named "World Wide Web", was originally conceived and .... (develop) to meet the demand for information sharing between physicists in universities and institutes around the world.

1

Other information retrieval systems that used the internet - such as WAIS and Gopher - .... (be) available at the time, but the Web's simplicity, along with the fact that the technology was royalty free, ... (lead) to its rapid adoption and development.

"There .... (be) no sector of society that has not been transformed by the invention, in a physics laboratory, of the web," says Rolf Heuer, CERN Director-General. "From research to business and education, the web .... (reshape) the way we communicate, work, innovate and live. The Web .... (be) a powerful example of the way that basic research benefits humankind."

The first website at CERN, and in the world .... (dedicate) to the World Wide Web project itself and .... (host) on Berners-Lee's NeXT computer. The website .... (describe) the basic features of the Web: how to access other people's documents and how to set up your own server. Although the NeXT machine - the original web server - .... (be) still at CERN, sadly the world's first website ....(be) no longer online at its original address.

To mark the anniversary of the publication of the document that made web technology free for everyone to use, CERN .... (start) a project to restore the first website and to preserve the digital assets that are associated with the birth of the Web.

(15 marks)

3. Here are some points to note when writing letters. Use the words in the box to fill in the gaps. You may use one word more than once.

with	above	in	of	to	by	on	at

- Most company notepaper is headed. However, if you are writing on unheaded paper, put your address (but not your name) .... the top left-hand corner. The address of the company should appear .... the left, so that it can be seen through an envelope .... a window. If you are writing .... a specific individual .... the company, his/her name and position go .... the address.

- Dates can cause some confusion. 2/3/14 means 'the second of March' in English letters, but 'February third' in American ones. Confusion can be avoided .... writing dates as follows: *2 March* (or *March 2* in the US) *2014*. The names .... the month should not be abbreviated in formal letters.

- When you receive a business letter, there is usually a reference number .... the top following the words *Our ref*. This is designed .... help the sender to file related correspondence and you should quote this reference when you reply.

(10 marks)

4. Underline the correct linking expressions in the passage below.

Strange as it may sound, the computer virus is something of an Information Age marvel. *First and foremost / On one hand*, viruses show us how vulnerable we are - a properly engineered virus can have a devastating effect, disrupting productivity and doing billions of dollars in damages. *On the other hand / Another reason* is, they show us how sophisticated and interconnected human beings have become.

Nevertheless / For example, experts estimate that the Mydoom worm infected approximately a quarter-million computers in a single day in January 2004. Back in March 1999, the Melissa virus was so powerful that it forced Microsoft and a number of other very large companies to completely turn off their e-mail systems until the virus could be contained. *Similarly / In contrast,* the ILOVEYOU virus in 2000 had a devastating effect. *However / Then* in January 2007, a worm called Storm appeared - by October, experts believed up to 50 million computers were infected. That's pretty impressive when you consider that many viruses are incredibly simple.

(5 marks)

Reading

5. Read the text below and answer the questions.

1   A jet aircraft technician peers into the bowels of a malfunctioning engine searching for the source of the problem. Finally, he **spots** _it_. Buried deep within the engine is the troublesome part. He will have to replace it. A complicated **procedure**, to say the least.

2   The technician goes to his high-powered workstation attached to a network and calls up the information on the part and the **replacement** procedure. An image of the part seated in the engine appears. In another window, an instructor demonstrates the repair procedure in full-motion video, while the technician listens through the audio channel as the instructor explains the process. Diagrams pop up to further clarify key points. In a text window, _he_ reviews lists of necessary parts and **tools** he will need to complete the repair.

3   Still confused about an irregularity in this situation, the technician presses the help key and a real-time image of a live supervisor **pops up** in another window. Using the attached microphone, the technician discusses the particular problem with the supervisor, _who_ directs more information onto the technician's screen. The technician points a video camera at the part in question to show the supervisor the specific situation.

4   Welcome to the world of **high-end** multimedia. The situation described above is not quite here yet, but most of the pieces already exist to make this scenario become a reality using a networked RS/6000 or other high-powered workstation.

5   Or, take this example of a scenario that is more likely today. A manager creates a detailed business presentation involving text, graphics, digitized photographic still images and tables of

spreadsheet data, all **combined** in a single compound document. Before sending the document across the network to a colleague, the manager picks up the microphone and attaches an audio note to one of the tables, reminding the colleague about something unusual or potentially confusing in the accompanying figures.

6   Using a networked RS/6000 equipped with the necessary audio boards and Bolt Baranek & Newman's (Cambridge, Mass.) BBN/Slate, a compound document/office automation application, this scenario is possible today. High-end multimedia is only in its **infancy**, but _it_ is here. And over the next few years, industry observers expect multimedia development to accelerate as current **barriers** are overcome.

7   Multimedia is not a new **phenomenon**, although it is new to business computing. We live in a multimedia world. At home, we experience a variety of media through our television: full-motion video, still images, graphics, sound and animation. At school, we learn through systematic exposure to different media: the instructors' words, text, audio tapes, graphics and a variety of visuals and video.

8   Computers, however, have tended to be uni-medium. Traditionally, computers have been text-based, and _this_ continues to be the primary format for business information. A few systems have provided sound or graphics, but until recently, the efforts were **rudimentary** compared to the **seamlessly** integrated, high-quality visuals, video and audio we experience every evening at home.

1. Which one of these sentences best summarises the text you just read? Tick the correct option.

    a   Computers cannot yet match the technological achievements of conventional audio-visual systems.
    b   Although multimedia computers are improving very fast, they do not yet reflect the multimedia world we already live in.
    c   Multimedia computer technology will soon be widely used in business, in industry and in the home.

    (3 marks)

2. Decide whether the following statements are true (T) or false (F) in relation to the information in the text. Write 'T' or 'F' against the statement.

a   The jet aircraft technician first locates the faulty part and makes a mark on it.

b   the technician calls up his supervisor from his workstation to get information about the faulty part and the replacement procedure.

c   The technician is able to display a computer-generated graphical representation of a supervisor on his screen.

d   The supervisor looks at the faulty part to understand the problem.

e   This kind of repair procedure could well be possible before long.

f   You can already buy multimedia business presentation applications.

g   Top quality multimedia is yet to be fully developed.

h   Industrial experts expect multimedia development to get faster and faster.

i   Multimedia has been in existence long before the invention of the computer.

j   In terms of quality, multimedia computer systems have only recently become comparable with the media we already use.

(10 marks)

3. Match the words with their definitions as they mean in the text.

Word		Definition	
1	spots	a	top quality
2	procedure	b	undeveloped
3	replacement	c	smoothly
4	tools	d	occurrence
5	pops up	e	catches sight of
6	high-end	f	obstacles
7	combined	g	order of doing things
8	infancy	h	appears
9	barriers	i	made up of two or more things
10	phenomenon	j	substitution
11	rudimentary	k	instruments
12	seamlessly	l	early stages of development

(12 marks)

4. What do the words below refer to as they appear in the text?

a   *it*   (paragraph 1)

b   *he*   (paragraph 2)

c   *who*   (paragraph 3)

d   *it*   (paragraph 6)

e   *this*   (paragraph 8)

(5 marks)

4

Writing

6. You are a supplier of HP personal computers. You have received the following e-mail from a client.

From:	niranjan@yahoo.com
To :	lilani.j@hpstore.lk
CC :	
Subject:	Order no. 3985/AAB

Dear Ms Jayasinghe,

I am writing regarding the consignment of 14 HP-15Z notebooks (Order no. 3985/AAB) which was delivered today.

It was clearly stated on the order form that these machines should be pre-loaded with Windows 8.1. Unfortunately, they have all been loaded with Windows 8 and we are therefore unable to run a number of programmes. In addition, you agreed to supply all the necessary cables, but three of these are missing.

Could you send one of your representatives to load the machines with the correct version of Windows as soon as possible? In addition, please make sure that the three cables are sent without delay.

Yours sincerely

Niranjan Fernando

Write a reply e-mail apologising to the client. Say that the error was a result of a misunderstanding by the ordering department and that your Coporate Computing Consultant, Sunesh Rodrigo will call over on Friday 01 August at 9.00 a.m.

(10 marks)

7. You manage WebLanka (Pvt) Ltd., a web hosting company. Apart from tailor made packages, you offer three main packages, the details of which appear below.

	Starter	Small Business	Business
Disk span	200 MB	500 MB	1 GB
Bandwidth	5 GB	Unlimited	Unlimited
E-mail accounts	3	Unlimited	Unlimited
Hosted domain	1	2	3
Price (1 year)	Rs 900	Rs 1900	Rs 3900
Languages	HTML, PHP	APACHE PHP, MySQL	APACHE PHP, MySQL

Your company has been in existence since 2007 and your client base today exceeds 2000. You have six server locations with the latest hosting infrastructure. You also use CloudLinux technology with cPanel, which can limit abusers while allowing genuine customers to use what they need. Not only do you offer 24x7 support, but also a 30-days money back guarantee. The top features of your packages include dedicated hardware and software firewalls and account holder isolation for best performance.

You have had an inquiry from the manager of a small newly established motel in the east coast of Sri Lanka. **Write a reply** detailing the most suitable plan for the potential customer. Invent details as necessary.

(20 marks)