



FINAL
Examination Paper
(COVER PAGE)

Session : April 2016

Programme : Diploma in Electrical and Electronic Engineering (DEEI)

Course : ENL 1102: Technical English

Date of Examination : 28 July 2016, Thursday

Time : 5.00pm – 7.00pm

Duration : 2 Hours Reading Time : Nil

Special Instructions :

SECTION A, B and C answer **ALL** questions.

SECTION D answer **ONE (1)** out of **TWO (2)** questions.

IMPORTANT NOTE : **THIS PAPER SHOULD NOT BE TAKEN OUT OF THE EXAMINATION HALL**

Materials Permitted :
Nil

Materials Provided :
Answer Booklet

Examiner(s) : Ms. Subarshini A/P Ramakrishnan

Moderator : Dr. Ting Su Hie

This paper consists of 6 printed pages, including the cover page.

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DIPLOMA IN ELECTRONIC AND ELECTRICAL ENGINEERING
ENL 1102 – TECHNICAL ENGLISH
FINAL EXAMINATIONS: APRIL 2016 SESSION

SECTION A (25 marks)**READING COMPREHENSION**

Read the passage below and answer the questions that follow using your own words.

"Culture of Disengagement" a new research by a sociologist at Rice University.

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| 1. For the first-of-its-kind study, the researcher used survey data from four U.S. colleges to examine how students' public-welfare beliefs change during their college engineering education and whether the curricular emphases of their engineering programs are related to students' beliefs about public welfare. The study found that engineering students leave college less concerned about public welfare than when they entered. |
| 2. Study author Erin Cech, an assistant professor of sociology who has B.S. degrees in both electrical engineering and sociology, said that many people inside and outside engineering have emphasized the importance of training ethical, socially conscious engineers, but she wonders if engineering education in the U.S, actually encourages young engineers to take seriously their professional responsibility to public welfare. |
| 3. "There's an overarching assumption that professional engineering education results in individuals who have a deeper understanding of the public welfare concerns of their profession," Cech said. "My study found that this is not necessarily the case for the engineering students in my sample." |
| 4. Cech said that as part of their education, engineering students learn the profession's code of ethics, which includes taking seriously the safety, health and welfare of the public. However, she said, it appears that there is something about engineering education that results in students becoming more cynical and less concerned with public policy and social engagement issues. |
| 5. "The way many people think about the engineering profession as separate from social, political and emotional realms is not an accurate assessment," Cech said. "People have emotional and social reactions to engineered products all the time, and those products shape people's lives in deep ways; so it stands to reason that it is important for engineers to be conscious of broader ethical and social issues related to technology." |
| 6. Cech said that this "culture of disengagement" is rooted in how engineering education frames engineering problem-solving. "Issues that are nontechnical in nature are often perceived as irrelevant to the problem-solving process," Cech said. "There seems to be |

very little time or space in engineering curricula for nontechnical conversations about how particular designs may reproduce inequality -- for example, debating whether to make a computer faster, more technologically savvy and expensive versus making it less sophisticated and more accessible for customers."

7. Cech said ignoring these issues does a disservice to students because practicing engineers are required to address social welfare concerns on a regular basis, even if it involves a conflict of interest or whistleblowing. "If students are not prepared to think through these issues of public welfare, then we might say they are not fully prepared to enter the engineering practice," Cech said.

8. Cech became interested in this research topic as an undergraduate electrical engineering student. "Because I went through engineering education myself, I care deeply about this topic," she said. "I want to advance the conversation about how engineering education can be the best it can possibly be."

9. The study included more than 300 students who entered engineering programs as freshmen in 2003 at four U.S. universities in the Northeast. Participants were surveyed in the spring of each year and at 18 months after graduation. In the surveys, students were asked to rate the importance of professional and ethical responsibilities and their individual views on the importance of improving society, being active in their community, promoting racial understanding and helping others in need. In addition, the students were asked how important the following factors are to their engineering programs: ethical and/or social issues, policy implications of engineering, and broad education in humanities and social sciences.

1. What is the objective of the study by a sociologist at Rice University? 2 marks
2. Why is it paramount for engineers to be socially conscious? 3 marks
3. What is the common assumption of the professional engineering education? 3 marks
4. Explain what are the consequences of ignoring non- technical issues? 3 marks
5. How does the profession's code of ethics help ensure an engineering graduate will be responsible to public welfare? 3 marks
6. Do you agree with Erin Cech's research that engineering students lack social and public responsibility in local context? Explain your answer. 3 marks
7. Describe an activity, project or assignment in your current semester which has created ethical awareness and/or social responsibility in you. 4 marks

8. Find words in the passage which has similar meaning to the following words provided. 4 marks
- a. showing contempt for accepted standard (para 4)
 - b. a domain (para 5)
 - c. interpreted (para 6)
 - d. relating to moral principles (para 9)

SECTION B (25 marks)

Write your answers in the answer script (5 marks)

PART I

Change the sentences to passive voice.

1. Edison invented the gramophone.
2. We will have to give them more attention.
3. Millions of fans will see the final game tomorrow.
4. They told us to leave the room.
5. The doctors have made the announcements over the loudspeakers.

PART II

Identify the parts of speech as indicated below (5 marks)

The famous and talented singer, Taylor Swift was scheduled to perform live one day and a group of four friends was waiting patiently in line to buy tickets. After 5 hours, it was finally their turn at the ticket counter but they found out that they did not have enough money to buy tickets for all of them. "Oh no!" they wailed loudly. They looked at one another for a long time and finally decided not to go for the show.

6. noun :

7. collective noun :

8. adjective :

9. adverb :

10. interjection :

PART III

Write the correct verb tense. Write your answer in the answer script. (10 marks)

Sue Thomas is a fashion designer. She 0) ... has been making.... (make) clothes ever since she 11)(be) a young girl. She 12) (get) her first job in a clothes factory when she was sixteen. She 13) (sew) buttons onto a shirt one day when she 14)..... (have) a brilliant idea for a design. After she 15) (speak) to her bank manager, she got a loan and she 16)(open) her own little workshop. Now she 17) (make) lots of money. Next year she 18) (open) a shop which will sell all her own designs. She 19) (sell) clothes to a lot of famous people, including film stars and singers, and she 20) (think) she will be very rich soon.

PART IV

Choose the correct words to fill in the blanks. Write your answer in the answer script.

(5 marks)

Dialysis Process

mixes	pumping	replaces	monitors	filtering
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A kidney dialysis machine 21)..... the functions of a healthy kidney for people whose own kidneys are severely compromised. Although the machine cannot produce hormones as a normal kidney, it takes care of the blood 22) and waste removal that a healthy kidney does on a continuous basis. In addition to removing waste products and excess fluid from the blood, the machine is also responsible for 23). blood out of the body and back in. It also 24). the solution used for the procedure based on settings entered to match an individual patient's needs. The dialysis machine 25)..... the pressure and temperature of blood

flow and pumps heparin into the patient's blood to prevent blood clotting. Alarms sound if any of the variables that the machine monitors goes out of the specified range.

SECTION C (25 marks)

E-MAIL / LETTER

You purchased a digital camera, Sony Alpha A7S II, online from a reputable website. However, there were numerous defects on the camera such as scratches, and the pictures taken were blurry due to some internal defects. Write an email to the Customer Service Centre (customerservice@sony.com.my) explaining the defects stated and other defects too. Express your dissatisfaction of the item received and request the company to resolve the issue. Give suggestions on how you would like the matter to be resolved. End with a goodwill note.

SECTION D (25 marks)

ESSAY WRITING

Choose any **ONE (1)** of the following topics and write a five (5) paragraphed essay of about 300 words.

1. Many engineers are working to build a robot that can move and act as a human. Give your views whether this is an evolution or a danger to human race?
2. Biofuels are a source of energy which comes from living sources, such as crops, trees and even animal manure. What are the advantages of biofuel energy in our lives.

-THE END-

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