

**FINAL  
Examination Paper**

(COVER PAGE)

Session : August 2018

Programme : Diploma in Electrical and Electronic Engineering (DEEI)  
Diploma in Mechanical Engineering (DMEN)

Course : ENL1102 : Technical English

Date of Examination : December 6, 2018 (Thursday)

Time : 5:00 pm – 7:00 pm Reading Time: Nil

Duration : 2 Hours

Special Instructions :

This paper consists of **SIX (6)** questions. Answer any **FOUR (4)** questions in the answer booklet provided. All questions carry equal marks.

Materials permitted : Nil

Materials provided : Nil

Examiner (s) : Dolly Singh & Archanaa Maniappen

Moderator : Mr Muhamad Izzat Bin Rahim

*This paper consists of 11 printed pages, including the cover page.*

DIPLOMA IN ELECTRICAL AND ELECTRONIC ENGINEERING (DEEI)  
DIPLOMA IN MECHANICAL ENGINEERING (DMEN)  
ENL1102: TECHNICAL ENGLISH  
FINAL EXAMINATION: AUGUST 2018 SESSION

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**Question 1 (25 marks)**

**Part A: Reading & Comprehension (15 marks)**

**Read the passage below and answer the questions that follow in Part 1 & 2.**

**A: Howard Bloom, Author:**

Even though most people are convinced that peak oil has already passed, to me, peak oil is just a hypothesis. There is a theory that carbon molecules can be found in interstellar gas clouds, comets and in space ice, and if this is the case, our planet could ooze oil for ever. And even if we stay earthbound, those who say we have raped the planet of all its resources are wrong. There's a huge stock of raw materials we haven't yet learned to use. There are bacteria two miles beneath our feet which can turn solid granite into food. If bacteria can do it, surely we creatures with brains can do it better. As far as the near future of energy is concerned, I believe the most promising alternative fuels are biofuels, such as ethanol. It's an alcohol made from waste products such as the bark of trees, woodchips, and other 'waste materials'. And that's not the only waste that can create energy. My friend in the biomass industry is perfecting an energy-generation plant which can run on human waste. We produce that in vast quantities, and it's already gathered in centralised locations.

**B: Michael Lardelli, Lecturer in Genetics at The University of Adelaide**

Nothing exists on this planet without energy. It enables flowers and people to grow and we need it to mine minerals, extract oil or cut wood and then to process these into finished goods. Recently, people have been using more energy than ever before. Until 2005 it was possible to expand our energy use to meet this demand. However, since 2005 oil supply has been in decline, and at the same time, and as a direct result of this, the world's economy has been unable to expand, leading to global recession. With the world's energy and the profitability of energy production in decline at the same time, the net energy available to support activities other than energy procurement will decrease. We could increase energy production by diverting a large proportion of our remaining oil energy into building nuclear power stations and investing in renewable forms of energy. However, this is very unlikely to happen in democratic nations, because it would require huge, voluntary reductions in living standards. Consequently, the world economy will continue to contract as oil production declines. With energy in decline, it will be impossible for everyone in the world to become wealthier. One person's increased wealth can only come at the expense of another person's worsened poverty.

**C: Jeroen van der Veer, Chief Executive of Royal Dutch Shell**

People are understandably worried about a future of growing energy shortages, rising prices and international conflict for supplies. These fears are not without foundation. With continued economic growth, the world's energy needs could increase by 50% in the next 25 years. However, I do not believe that the world is running out of energy. Fossil fuels will be able to meet growing demand for a long time in the future. Taking unconventional resources into account, we are not even close to peak oil. The priority for oil companies is to improve efficiency, by increasing the amount of oil recovered from reservoirs. At present, just over a third is recovered. We can also improve the technology to control reservoir processes and improve oil flow. However, these projects are costly, complex and technically demanding, and they depend on experienced people, so it is essential to encourage young people to take up a technical career in the energy industry. Meanwhile, alternative forms of energy need to be made economically viable. International energy companies have the capability, the experience and the commercial drive to work towards solving the energy problem so they will play a key role. But it is not as simple as merely making scientific advances and developing new tools; the challenge is to deliver the technology to people worldwide. Companies will need to share knowledge and use their ideas effectively.

**D: Craig Severance, Blogger**

What will it take to end our oil addiction? It's time we moved on to something else. Not only are world oil supplies running out, but what oil is still left is proving very dirty to obtain. The Deepwater Horizon oil spill occurred precisely because the easy-to-obtain oil is already tapped. If we don't kick oil now, we will see more disasters as oil companies move to the Arctic offshore and clear more forests. The cheap petroleum is gone; from now on, we will pay steadily more and more for our oil — not just in dollars, but in the biological systems that sustain life on this planet. The only solution is to get on with what we will have to do anyway - end our dependence on it! There are many instances in which oil need not be used at all. Heat and electricity can be produced in a multitude of other ways, such as solar power or natural gas. The biggest challenge is the oil that is used in transportation. That doesn't mean the transportation of goods worldwide, it's the day-to-day moving around of people. It means we have to change what we drive. The good news is that it's possible. There are a wide range of fuel efficient cars on offer, and the number of all-electric plug-in cars is set to increase. For long distance travel and freight, the solution to this is to look to rail. An electrified railway would not be reliant upon oil, but could be powered by solar, geothermal, hydro, and wind sources. There is a long way to go, but actions we take now to kick our oil addiction can help us adapt to a world of shrinking oil supplies.

**Part 1:**

**For questions 1 – 10, choose from the answers provided.**

**(10 marks)**

**Which writer says / believes the following:**

1. believes oil will be available for many more years.
  - A Howard Bloom
  - B Michael Lardelli
  - C Jeroen van der Veer
  - D Craig Severance

2. believes that from now on less oil is available.
  - A Howard Bloom
  - B Michael Lardelli
  - C Jeroen van der Veer
  - D Craig Severance
  
3. believes there are ways to obtain energy that we have not yet discovered.
  - A Howard Bloom
  - B Michael Lardelli
  - C Jeroen van der Veer
  - D Craig Severance
  
4. sees a great potential in natural fuels.
  - A Howard Bloom
  - B Michael Lardelli
  - C Jeroen van der Veer
  - D Craig Severance
  
5. believes the fuel crisis will cause the poor to become poorer.
  - A Howard Bloom
  - B Michael Lardelli
  - C Jeroen van der Veer
  - D Craig Severance
  
6. sees energy and the economy as intrinsically linked.
  - A Howard Bloom
  - B Michael Lardelli
  - C Jeroen van der Veer
  - D Craig Severance
  
7. believes we should reduce our dependence on oil immediately.
  - A Howard Bloom
  - B Michael Lardelli
  - C Jeroen van der Veer
  - D Craig Severance

8. believes that people need to be attracted to working in the energy industry.
- A Howard Bloom
  - B Michael Lardelli
  - C Jeroen van der Veer
  - D Craig Severance
9. believes that it is unlikely governments will invest a lot of money into alternative energy.
- A Howard Bloom
  - B Michael Lardelli
  - C Jeroen van der Veer
  - D Craig Severance
10. believes that future oil recovery will lead to more environmental disasters.
- A Howard Bloom
  - B Michael Lardelli
  - C Jeroen van der Veer
  - D Craig Severance

**Part 2: Answer the following questions.**

**(5 marks)**

1. The genetics lecturer has suggested that energy production can be improved by ...  
(1 mark)
2. What makes fossil fuel depletion a valid issue to be concerned about?  
(2 marks)
3. State 2 forms of alternative energy that you think Malaysia should invest in, and why?  
(2 marks)

**Part B (10 marks)**

**Define the following terms in not more than 45 words. Use full sentences.**

- 1. Hard disk
- 2. Thermometer

**Question 2 (25 marks)****Part A (15 marks)**

Read the description below carefully, and write a letter that would be sent to the Dean of the School of Engineering and Information Technology, INTI.

An “International Young Inventors Fair 2019 (IYIF ’19)” is going to take place from 2 - 8 March 2019, in the Humboldt University of Berlin, Germany. Tertiary level Engineering, Science and Technology students from all over the world have been invited to take part in this Fair. Students are given special discounts and privileges if they attend as a participating team representing an educational institution. The IYIF is a prestigious and exciting event that provides youth with a platform to exhibit their talents, and explore new areas of study in the field of engineering, science, and technology.

You, as the INTI Engineering Club’s President have spoken to your members about the IYIF ’19, and you have a team that’s ready to create, and present their invention in an international arena. You’ll just need some guidance from the resident Engineering lecturers and you’re confident that your team can produce good work. Also, you will be needing permission, funds and support, from INTI management to participate in this event.

Write to INTI Management through the Dean of the School of Engineering and Information Technology, to request for what you deem necessary for the INTI Engineering Club to attend and participate in the IYIF ’19. Convince the management that your team and its invention would be a worthy investment.

**Part B (10 marks)**

Identify the parts of speech of the bolded word in each of the following sentences.

1. The cleaner forgot to **mop** the floor.
2. James had a **scary** dream last night so he couldn’t sleep properly.
3. **They** met at the field house yesterday.
4. Is there any empty tin in the **garage**?
5. I can’t afford to buy that car. It’s too **expensive**.
6. He **accidentally** tripped over the wire and fell over his face.
7. He went to see the dentist **because** he had a bad toothache.
8. They didn’t return home **until** it was very dark.
9. My whole family went to **the** art museum in Melacca.
10. The boy ran **fast** but he couldn’t win the race.

**Question 3 (25 marks)****Part A: (15 marks)**

In a paragraph of **150-200** words discuss *how an engineer can contribute towards the development of a country*. Your paragraph should have clear topic sentence, supporting details and a conclusion.

**PART B: (10 marks)**

Some of the sentences contain mistakes. Underline the mistakes and write the correct answers in the booklet provided.

1. Each of the children were given a packet of sweets.
2. Neither of the pistons are working.
3. My father as well as my uncle is an engineer.
4. There isn't any tea left in the pot. Please make some when the water start to boil.
5. Most of the boys likes to play football.
6. A large amount of money have been spent.
7. Much of the smoke come from the factory.
8. Mary, like Jim love swimming.
9. Is either of the twins singing?
10. Every house on the street have a garden.

**Question 4 (25 marks)****Part A (15 marks)**

Choose the best answer to fill the blank.

1. I \_\_\_\_\_ where I put my keys.
  - A forever forget
  - B am forever forgetting
  
2. \_\_\_\_\_ of changing your job?
  - A Are you ever thinking
  - B Do you ever think
  
3. Food prices \_\_\_\_\_ by over 20% in the past 12 months.
  - A have been rising
  - B have risen

4. I \_\_\_\_\_ in London at the time I met Xin Lyn.  
A was living  
B lived
5. She \_\_\_\_\_ English at the university.  
A teaches  
B is teaches
6. The cost of online security \_\_\_\_\_ rapidly.  
A is increased  
B is increasing
7. We \_\_\_\_\_ of moving to Miri, Sarawak. It depends on whether we can find jobs there.  
A think  
B are thinking
8. She \_\_\_\_\_ her keys in a special place so she doesn't lose them.  
A is always putting  
B always puts
9. They \_\_\_\_\_ over 40 km and still there was no sign of civilization.  
A was walking  
B had walked
10. She \_\_\_\_\_ a 14-week course on Artificial Intelligence this semester.  
A teaches  
B is teaching
11. I \_\_\_\_\_ of going for a run. Care to join me?  
A was thinking  
B thought

12. It \_\_\_\_\_ more and more difficult for young people to buy property.  
A is getting  
B got
13. Your worth \_\_\_\_\_ not in the gadgets you possess, but in how you utilize them.  
A is reflected  
B reflects
14. I'm sorry I can't join you for lunch. I \_\_\_\_\_ for a movie with my friends.  
A am going  
B will go
15. Sharon loves to travel. She \_\_\_\_\_ abroad almost every December.  
A went  
B goes

**Part B (10 marks)**

**Rewrite the following sentences into the passive or active forms as instructed.**

*A= active; P= passive*

**(10 marks)**

1. A nurse looks after the patients in the hospital. (*P*)
2. He is going to join Nasa in January. (*P*)
3. The kids are being taken care of by the volunteers. (*A*)
4. The flow of electricity is broken by the circuit breaker. (*A*)
5. The students have been scolded for coming late. (*A*)
6. Mr David will look into the matter. (*P*)
7. All the bills were paid by Harry. (*A*)
8. The class will be postponed if the rain does not stop. (*A*)
9. Kelly must put all the documents in the boxes. (*P*)
10. After the fight was over, the landlord threw the stuff out of the house. (*P*)

**Question 5 (25 marks)**

Write an essay of about **350 words** on **ONE (1)** of the following topics

1. It is easy to blame certain parties as the cause of pollution, and mismanagement of natural resources. But, it is more important that we analyse the effects and implement effective solutions to the problem at hand. What are the effects of pollution and mismanagement of natural resources? Suggest practical, and sustainable arrangements, or activities to handle this global issue.
2. Compare or contrast between studying abroad and taking up local courses.
3. Discuss the effects of technology on us.

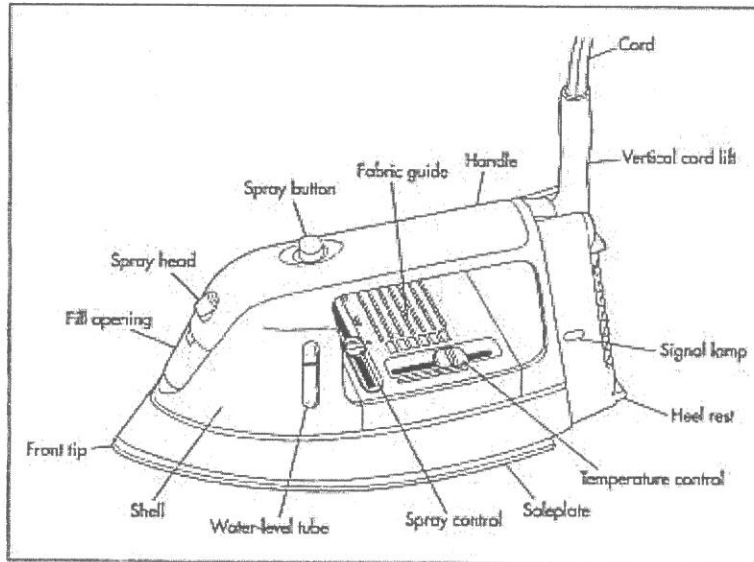
**Question 6 (25 marks)**

**Part A: Rewrite each pair of simple sentences into either a simple, compound or complex sentence as instructed in the bracket. Accept suitable answers. (10 marks)**

1. I called her many times. She didn't answer the phone. (*Compound*)
2. The boy worked hard, but he didn't succeed. (*Simple*)
3. Jill should show up on time. He will not be able to enter. (*Compound*)
4. I need to go to the library. I have to complete my assignment. (*Complex*)
5. Sally went shopping. She didn't have much money in her pocket. (*Complex*)
6. The boy was diligent, so the teacher praised him. (*Simple*)
7. Make sure you sleep early. You will not wake up on time. (*Compound*)
8. I got my credit card. I started spending money recklessly. (*Complex*)
9. Mike yelled at the kids. They were making a lot of noise. (*Complex*)
10. Bruce is very efficient at work. He is efficient at home too. (*Compound*)

**Part B (15 marks)**

In about **150-200** words write the *iron* as shown in the picture below, provide a definition for the object, an overview of the whole description of the parts, and a description of the mechanism in use.



**-THE END-**

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