

University of Ruhuna- Faculty of Technology

**Bachelor of Information and Communication Technology/ Bachelor of Engineering
Technology/ Bachelor of Biosystems Technology Honours Degree**

Level II (Semester II) Examination, November 2022

Academic year 2021/2022

Course Unit: ENG 2222/2212/2232 - English IV (Written)

Duration: 2 hours

Registration Number:

Instructions

- This paper contains **seven (07)** questions.
- Answer all the questions **on the paper itself**.
- Total Marks: 60 marks

For Examiners' Use Only			
Question No.	Maximum Marks	Marks Obtained	
		Examiner 1	Examiner 2
1	05		
2	10		
3	10		
4	10		
5	05		
6	10		
7	10		

Question 01

Choose the correct preposition from the brackets to complete the following sentences.

(0.5x 10=05 Marks)

- i. There are several circuit diagrams.....the wall of his room. (in/on/at)
- ii. The Calculus session for freshers starts.....the lunch break. (in/under/at)
- iii. I could not see the film because of my friend who satof me. (behind/under/ in front of)
- iv. Many students fail to climbthe spiral staircase. (up /on /through).
- v. The diver divedthe deep sea to rescue the passenger. (in /into/ under)
- vi. The talent show was conducted the supervision of the lecturers. (on/upon/under)
- vii. Such an honest student is incapablecheating at exams. (of /with / at)
- viii. The hostel isthe canteen and the music room. (under/ over/between)
- ix. If you are confident, there is no need to relythe others. (with/of /on)
- x. The juice barthe road serves some fresh juices. (across/ above /between)

Question 02

a). Fill in the blanks using the most appropriate discourse marker from the list given below.

(1x 5= 5 Marks)

nevertheless/ compared to/similarly/ although/ as a result/ however

- i. All the plants remained alive at the end of seawater treatments, their vitality was strongly reduced.
- ii. Sri Lankan government has been spending its money recklessly for too long. the whole nation is at a great economic risk.
- iii. High level positions are stressful at times;, they can be harmful to your health.
- iv. sons whose mothers did not smoke during pregnancy, those young men whose birth mothers did smoke were more than twice as likely to commit criminal acts.
- v. Some scientists take the existence of black holes for granted;, in 2014, a physicist at the University of North Carolina claimed to have mathematically proven that they do not exist.

b). Complete the following conversation by using the most appropriate adverbial clause selecting from the list given below. (1x 5= 5 Marks)

where /whenever/ when /while/ in case

A- Hi there, so when are we going to see the movie?

B- I am ok with any day. Let's go (i) everyone is free.

C- I am free on Sundays. But (iii) the others are available, I can make myself free.

D- Great. So, shall we go on next Sunday? I will bring snacks for us to have (iii) watching the movie.

A- That would be great. Let's think of a plan B (iv) we fail to make it to see the movie. Since it's the weekend there will be huge rush.

C- well why don't we go to the park (v) there is a very shady Mango tree and have a picnic.

B- Wow that's a great idea too. Let's decide when everyone comes.

Question 03

a). Following is a POOR example of an abstract of a dissertation on JAVA Security on the Internet. This contains serious issues in terms of the content, structure and the language used in the abstract. **Underline 5 instances** where the writer has **not followed the conventions in academic writing** properly. (1x 5= 5 Marks)

Whenever someone uses a Java-enabled browser like Netscape Navigator or Microsoft Internet Explorer to surf the Web, he becomes a java user. All Java users are taking security risks, because most java code is automatically downloaded across the network and runs on the user's machine. The hostile Java programs could trash their machine. Fortunately, the creators of Java made an awesome effort to protect users from these hazards. Security for the Java Platform has multiple layers. First, the Java language is strongly typed and doesn't include any unsafe constructs, such as array accesses without index checking. Second, the mechanism of class loaders is in place to ensure a sufficient degree of separation between multiple Java programs. Third, access to crucial system resources is mediated by the Java virtual machine. A security manager is installed to deny all requests for unauthorized access. The Java and the latest version incorporate a security architecture that support policy-driven, fine-grained, flexible, and extensible access control. This thesis is meant to introduce basic concepts of Java and about risks, and to provide a general overview of Java security in distributed program environments and give references.

b). Underlined parts of the sentences given below do not adhere to conventions in academic writing. Rewrite them by following the conventions in academic writing. (1 x5= 05 Marks)

- i. Financial mismanagement of the government is a major reason that led our country into this state.
.....
.....
- ii. The desire of students to pursue their higher studies in English Medium is getting bigger and bigger.
.....
.....
- iii. The worldwide consumption of plastic has gone up to 2.6 million metric tons over the years.
.....
.....
- iv. The existing systems aren't efficient, thus there is a need to develop a more sophisticated system.
.....
.....
- v. A young child who has a bone marrow cancer has a higher possibility to survive the condition, thus, he must be provided with all the due medical care.
.....
.....

Question 04

Read the passages given below extracted from the **Discovery Online Science Magazine** and answer the questions given. (10 Marks)

Can New AI Technology Help Us Understand the Languages of Animals?

A California-based nonprofit is searching to build an AI language that allows humans more deeply understand non-human languages to help change our ecological impact on our Earth. Aza Raskin is the co-founder and president of the Earth Species Project (ESP), a non-profit that uses a form of artificial intelligence (AI) to translate non-human languages. ESP wants to use **its** machine learning technology to translate and make this vital information widely available to the public. Raskin emphasized their goal to help conservation by explaining, "The end we are working towards is, can we decode animal communication, discover the non-human language. Along the way and equally important is that we are developing technology that

supports biologists and conservation now.” ESP believes that understanding languages can help deepen our relationship with animals and allow us to protect them more efficiently.

In the past, understanding the communication of animals was heavily reliant on tedious observation. From primate calls of alarms to dolphin whistles, scientists have been fascinated by the different forms of non-human communication present in these animals. With the development of new technologies, researchers have now begun to understand the huge amounts of data available through machine learning. Elodie Briefer, an associate professor at the University of Copenhagen, has recently helped co-develop a pig grunt analyzing algorithm that helps scientists understand whether the pigs are expressing positive or negative emotions. In contrast, ESP is approaching decoding differently, by focusing on all species, not just one. The Earth Species Project believes that there is a likelihood that social species communicate with each other, for instance, whales and dolphins. Although the Earth Species Project believe that understanding AI machine learning data is only one step to full communication, they are hopeful that one day we will be able to understand entire systems of communication.

- i. Who is the President of the Earth Species Project? **(1 Mark)**
.....
- ii. What is the ultimate aim of the Earth Species Project (ESP)? **(1 Mark)**
.....
.....
- iii. What is referred to as ‘its’ in paragraph 1? **(1Mark)**
.....
- iv. Write 2 advantages of being able to understand animal- language **(2 Marks)**
 - a.
 - b.
- v. How will machine learning be beneficial in understanding non-human language?
(2 Marks)
.....
.....
- vi. Find synonyms from the passage to match the meaning of the words given below
(0.5 x2=1 Mark).
 - a. Convert-
 - b. Important-
- vii. How does ESP differ from the algorithm developed by Prof. Elodie Briefer? **(2 Marks)**
.....
.....

Question 05

Write the correct word that best explains the definitions given on the structure of a research paper selecting from the list given below. (1 x 5= 5 Marks)

Title/ results/ introduction/ conclusion/discussion/literature review/ acknowledgement / abstract/ methodology/ references

- i. This provides a summary of your research. It is nearly as important as the title because the reader will be able to quickly read through it.
.....
- ii. This clearly explains your methods and materials used so that it can be duplicated.
.....
- iii. This includes the background information on the subject and your objectives.
.....
- iv. You interpret your results in this section.
.....
- v. This section comments on the current knowledge and provides a comprehensive idea on possible gaps and questions that need further research.
.....

Question 06

Read the following abstract and answer the questions given below (10 marks).

Insect Repellant Potential of Juniper Berry

The Southwest shrub *Juniperus communis* (Juniper Berry) has many significant medicinal value in the Native American culture that has not been proven scientifically. One of the popular uses of Juniper berries aside from its detoxifying action is its potential to repel insects. This study focuses on the development of insect repellant from its essential oil obtained through steam distillation. 50 g of fresh berries was collected and dried for 5 days and is placed in a still tank with 100 mL of water for steam distillation using the Flinn Scientific Borosilicate Lab Kit. Gather the extracted oil and dilute 70% in three separate containers to be transferred into spray bottles. Testing involved the spraying of the dilute sample into a class jar with *Anopheles juidthae* (common NM mosquito) and compared this to the effect of a commercial insect repellant. After testing and comparing the result, the commercial insect repellant significantly

showed that it is a better insect repellent compared to the *J. communis* diluted essential oil. However, the essential oil has also an insect repellent potential.

- i. Which property of the Juniper Berry is observed in this experiment? **(1 Mark)**
.....
- ii. What is the scientific name of the Juniper Berry? **(1 Mark)**
.....
- iii. What is the research sample? **(2 Marks)**
.....
- iv. Briefly explain the testing method used in the experiment in your own words.
(3 Marks)
.....
.....
- v. Briefly explain the conclusion of the experiment in your own words. **(3 Marks)**
.....
.....
.....

Question 07

Write a comprehensive paragraph on the “**Importance of Academic Writing for Undergraduates**”. Use no more than 150 words **(10 Marks)**.

.....**End of the paper**.....