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Daffodil International University

Department of Software Engineering
Faculty of Science & Information Technology
Final Examination, Spring 2025
Course Code: ENG 101; Course Title: English-1
Sections & Teachers: A-L; MA, JC, SIS

Time: 2:00 Hrs **Marks: 40**

Answer ALL Questions

[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered sequentially.]

Read the passage carefully and answer the following questions.

Is There Anybody Out There ? The Search For Extra - Terrestrial Intelligence

A. Our basic curiosity is being the fundamental reason for human search. This same curiosity about the natural world drives all pure science. We are curious about whether we are alone in the universe. We are having a drive to know if the right conditions are enough to bring out life or is there anything special about earth which fostered a variety of life forms that we are seeing around us. The simple detection of radio signals is enough to satisfy our curiosity. In this way, we can say that SETI is part of the pure science machinery which is continually expanding the horizons of knowledge. There are other reasons also why we are inquiring whether life exists elsewhere. For example, Civilization on earth started only about a few thousand years ago only but our survival disturbed because of pollution and nuclear war that has happened over the last few decades. Can we survive for a few more years or we'll be dead. The lifetime of a planet is about several billion years. If any other civilization survived in our galaxy, then their ages will range from zero to several billion years. We'll have a positive note just by knowing the existence of such civilizations as proof of long-term survival is possible. We might also gain some lessons on how to tackle the threats like nuclear war or global pollution and the threat that we have not encountered as of now, from the experience of older civilization.

B. Most SETI scientists have two ground rules, in the discussion of whether we are alone in the universe. First, most of the scientists ignore UFOs (Unidentified Flying Objects) as they don't have strong evidence, which can be considered seriously. It is still important to have an open mind since any convincing evidence could emerge in future. Second, we have a conservative belief that we are looking for a life form which is similar to ours, so it is difficult to recognize the life form as a life form if it does not resemble us. To put it another way, the life form we are looking for might have blue heads and five legs, still, it nevertheless has similarities to us in that it must communicate with its fellows. It could be interested in the universe, living in a planet orbiting a star like our Sun, and likely it has chemistry based on carbon and water.

C. Though we are making these sorts of assumptions, we have a limited understanding about other life forms. For example, we are lacking knowledge about how many stars have planets or how likely life arises naturally, given the appropriate conditions. When we look at the 100 billion stars in our galaxy and 100 billion galaxies, it is impossible to believe that at least one of the planets does not have a life form on it. Guessing based on our limited knowledge about the conditions for carbon-based life, we can estimate that probably one in 100,000 stars might have a life-bearing planet orbiting it. Perhaps, our nearest neighbour could be a thousand light years away. It is almost like a next door in astronomical terms.

D. An alien civilization could send information by using a variety of ways, across the galaxy. But, either it requires too much energy to send the information or it could be disturbed while travelling through the vast distances across the galaxy. In the frequency range of 1000 to 3000 MHz, radio waves travel the greatest distance. To date, All searches have focused on looking for radio waves in this frequency range. For now, there have been a number of searches done by various groups, like Australian searches using the radio telescope at Parkes, New South Wales. Still now, nothing is detected from the few hundred stars which have been searched. Since 1992, the scale of searches has increased tremendously, as the US Congress voted NASA $10 million per year for ten years to perform a thorough search for extraterrestrial life. For this project, a lot of money is being spent on developing the special hardware required to search multiple frequencies at the same time. The project constitutes two parts. First part is a targeted search by the means of world's largest radio telescopes. The American operated telescope in Arecibo and the French telescope in

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France. This part of the project is searching for the signals in the frequency range of 1000 to 3000 MHz, in the nearest 1000 stars. The second part of the project is an undirected search which monitors all of the space with a lower one using the NASA Deep Space Network's smaller antennas.

E. There is a substantial amount of debate happening based on how we must react if we detect a signal from an alien civilization. Everyone agrees that we must not respond immediately. Even if it is not possible to send a reply for a long distance at short notice, there are ethical questions emerging that should be addressed by the global community before sending the reply. Is it that we face a cultural shock if we encounter a superior and much older civilization ? Fortunately, there is no urgency about this. We aresearching for stars which are hundreds of light years away. So, it takes hundreds of years of time for their signal to reach us. And, it will take a further few hundred years for our reply to reach them. Therefore, it is not important whether there is a delay of a few years or decades, while the human race debates about whether to reply to them or perhaps draft a reply carefully.

1.	*a)*	**Select** the most suitable headings for the given paragraphs from the list of nine headings below. Write the appropriate number I-IX with paragraph list A-E in your script. There are more headings than the number of paragraphs, so you will not use them all. List of headings: I. Limitations in Human Understanding II. Great Astronomers III. What should humans do if they got the signal from an alien civilization IV. Project for searching for the aliens' signals V. How telescope contributes for finding the signals of alien civilization VI. Chances of Aliens wreaking havoc on our earth VII. How finding alien civilization can help humans. VIII. Ground rules of SETI scientists IX. Signs of Alien existence found so far 1. Paragraph A___ 2. Paragraph B___ 3. Paragraph C___ 4. Paragraph D___ 5. Paragraph E___	[5x1=5]	CLO-3 *Level-C4*
	b)	**Identify** the correct answer to the following questions i. What might happen If we ever get to contact another civilization dwelling in our galaxy? A. We will learn to restore the ecological balance of the earth. B. We could learn to handle issues that are harming our planet. C. They will teach us the ultimate key to their long-term survival. D. We will learn technological advances from the experience of the older generation. ii. One of the assumptions that are maintained at SETI is: A. Aliens might have features that resemble us. B. They aren't enthusiastic enough to explore the outer world. C. All of the attempts Extraterrestrials have made to contact us has failed. D. It's unlikely that their habitat and ours have anything in common. iii. There's a possibility that our next door Alien friends might be: A. 1000 to 3000MHz away from us. B. 100 Billion light hours away from us. C. A 1000 Light years away from us. D. 100000 stars away from us. iv. The US Congress backed NASA's projects which A. Involves both specified and unspecified search. B. Focus on targeted search for only the entities intelligent enough to	[5x1=5]	

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C. Conducts thorough searches for signals in the nearest 1000 planets.
D. Conducts only undirected search that uses NASA's smaller antenna.

v. The decision on whether to reply to the Extraterrestrials or not will be taken by:

A. The nation that faces culture shock the most after an Alien encounter.
B. The Global community.
C. The decision has not been made yet.
D. NASA.

Read the passage below and answer the following questions.

Flying tortoises

An airborne reintroduction program has supported conservationists to take important measures to save the endangered Galapagos tortoise. Spiny cacti forests cover the most uneven volcanic plains that divide the interior of Isabella's Galapagos Island from the Pacific Ocean. This unfriendly environment is house to the huge Galapagos tortoise. About five million years after the birth of the Galapagos, the islands were occupied by one or more turtles off the mainland of South America. As these ancestral turtles settled on separate islands, distinct people developed at least 14 different subspecies to suit their unique environments. Island life agreed with them. In the absence of important predators, they grew into the biggest and longest turtles on the planet, weighing more than 400 kilograms, sometimes 1.8 meters long, and living for more than a century.

Before humans arrived, the archipelago had millions of turtles. From the 17th century, pirates took some for food, but with the arrival of whale ships in the 1790s, this exploitation increased exponentially. The turtles, which are relatively unmoving and capable of surviving for months without food or water, were transported on these ships to serve as food items during lengthy sea journeys. Sometimes, their bodies were processed into top-quality oil. Today, only 11 of the actual subspecies survive, many of which are highly endangered. In 1989, work started in a turtle breeding center outside the city of Puerto Villamil in Isabela, dedicated to saving the island's turtle population. The center's captive breeding program proved to be very successful, and it finally had to deal with a large population issue. The issue was also stressful. Captive turtles cannot be reintroduced into the wild until they are at least five years old and weigh at least 4.5 kilograms, at which time their size and weight and the toughened shells are capable of saving them from predators. But if people wait too long after that, the turtles will ultimately become too big to carry.

For many years, on long, treacherous walks on narrow paths, turtles were carried in small numbers, carried on the backs of males. But in November 2010, Godfrey Merlin, an environmentalist and liaison officer for Galapagos National Park, and the visiting private motorboat captain and helicopter pilot assembled around a table in a small cafe on the island of Santa Cruz in Puerto Ayora to perform a more ambitious reintroduction. The purpose was to transport the 300 turtles from the breeding center to different places near the Sierra Negra by helicopter.

This remarkable action was made by the owners of the 67-meter White Cloud boat, who used the helicopter and its professional pilot and boat, as well as the logistics help of its captain and crew, for free to Galapagos National Park. First, an air ambulance, the boat's helicopter has a rear dual door and a big interior space very appropriate for cargo, so a custom crate is created to hold 33 turtles with a total weight of 150 kilograms.

With this weight, fuel, pilot, and four crew, the helicopter's full payload was approaching, and there were times when it was undoubtedly on the border of the helicopter's capacities. For three days, a team of volunteers from the breeding center worked 24 hours a day to prepare young turtles for transport.

Once they are released, the young turtles quickly spread to their ancestral territory, exploring their new environment and eating the plants. Finally, a small tortoise saw a full-grown giant who had been cutting down trees for a hundred years around the island. The two stood side by side, a strong sign of the regeneration of an ancient race.

c)	**Trace** the answer to the following questions. Choose NO MORE THAN THREE WORDS from the passage for each answer. i. Identify the geographical feature that separates the Galapagos and the Pacific Ocean. ii. Trace the problem that occurred following the success of an initiative taken	**[5x1=5]**	

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		by a breeding center in Isabella. iii. Coin the age in which reintroduction of the captive turtles in the wilderness can be done. iv. Point out the tortoise holding capacity of the crate. v. Apart from the turtles, What else did the helicopter's payload involve?		
2.	*a)*	**Write** the correct form of the verbs in the bracket to complete the following conditional sentences as directed. **i.** If you heat water up to 212 degrees Fahrenheit, it boils (Use Zero Conditional) **ii.** If I ___(be) you, I ____(drive) more carefully in the rain.. (Use Second Conditional) **iii.** If you _____(cook) the supper, I _____(wash) the dishes.(Use First Conditional) **iv.** If we ___(take) a taxi, we ___(not miss) the plane. (Use Third Conditional) **v.** It ____(take) longer time to get to work if the traffic (be) heavy, . (Use Zero Conditional) **vi.** If the train ___(be) delayed, she___ (be) late to attend the meeting. (Use First Conditional)	[6x0.5= 3]	CLO-1 *Level-C1*
	b)	**Identify** if the following sentences are Fragment, Run-on, or Complete. If the sentence is complete, write "Complete Sentence"; if the sentence is Fragment, or Run-on, then rewrite the sentence to fix the syntax error. **i.** Helen cooked dinner therefore Ralph will wash the dishes. **ii.** Our company needs to address the client's complaints we cannot afford to lose their trust. **iii.** Ran to the store faster than a rabbit. **iv.** I was too tired to go to the store, but the guys shopped for three hours. **v.** Since he is honest. **vi.** My favorite history teacher. **vii.** Raffi sings upbeat children's songs he is an excellent musician.	[7x1=7]	
3.	*a)*	A friend of yours is going on holiday soon and has asked you to recommend a destination. **Compose** a letter to your friend. In your letter: • Recommend a good place for a holiday that you have visited • Describe where you stayed and what he can do there • Provide one negative aspect about the destination	[7]	CLO-4 *Level-C3*
	b)	**Construct** an essay on any one of the following topics: 1. The causes of using social media and its impact on interpersonal relationships. 2. Should parents limit screen time for kids?	[8]	