Daffodil International University

Faculty of Science & Information Technology

Department of Computing and Information System

Final Examination, Summer-2026

Course Code:ENG 102, Course Title: English Language II

Level: 1 Term: 2

Exam Duration: 2 Hours **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.]

1.		**Reading**	**1x 20= 20 Marks**	**CO's**
		Reading Passage 1: Read the following passage and answer the following questions		
		Robots and us **Three leaders in their fields answer questions about our relationships with robot** When asked 'Should robots be used to colonise other planets?', cosmology and astrophysics Professor Martin Rees said he believed the solar system would be mapped by robotic craft by the end of the century. 'The next step would be mining of asteroids, enabling fabrication of large structures in space without having to bring all the raw materials from Earth.... I think this is more realistic and benign than the ... "terraforming"* of planets.' He maintains that colonised planets 'should be preserved with a status that is analogous to Antarctica here on Earth.' On the question of using robots to colonise other planets and exploit mineral resources, engineering Professor Daniel Wolpert replied, 'I don't see a pressing need to colonise other planets unless we can bring [these] resources back to Earth. The vast majority of Earth is currently inaccessible to us. Using robots to gather resources nearer to home would seem to be a better use of our robotic tools. Meanwhile, for anthropology Professor Kathleen Richardson, the idea of 'colonisation' of other planets seemed morally dubious: 'I think whether we do something on Earth or on Mars we should always do it in the spirit of a genuine interest in "the Other", not to impose a particular model, but to meet "the Other"." In response to the second question, 'How soon will machine intelligence outstrip human intelligence?', Rees mentions robots that are advanced enough to beat humans at chess, but then goes on to say, 'Robots are still limited in their ability to sense their environment: they can't yet recognise and move the pieces on a real chessboard as cleverly as a child can. Later this century, however, their more advanced successors may relate to their surroundings, and to people, as adeptly as we do. Moral questions then arise. ... Should we feel guilty about exploiting [sophisticated robots]? Should we fret if they are underemployed, frustrated, or bored?' Wolpert's response to the question about machine intelligence outstripping human intelligence was this: 'In a limited sense it already has. Machines can already navigate, remember and search for items with an ability that far outstrips humans. However, there is no machine that can identify visual objects or speech with the reliability and flexibility of humans.... Expecting a machine close to the creative intelligence of a human within the next 50 years would be highly ambitious. Richardson believes that our fear of machines becoming too advanced has more to do with human nature than anything intrinsic to the machines themselves. In her view, it stems from humans' tendency to personify inanimate objects: we create machines based on representations of ourselves, imagine that machines think and behave as we do, and therefore see them as an autonomous threat. 'One of the consequences of thinking that the problem lies with machines is that we tend to imagine they are greater and more powerful than they really are and subsequently they become so.'		CO 1

This led on to the third question, 'Should we be scared by advances in artificial intelligence?' To this question, Rees replied, 'Those who should be worried are the futurologists who believe in the so-called "singularity".** ... And another worry is that we are increasingly dependent on computer networks, and that these could behave like a single "brain" with a mind of its own, and with goals that may be contrary to human welfare. I think we should ensure that robots remain as no more than "idiot savants" lacking the capacity to outwit us, even though they may greatly surpass us in the ability to calculate and process information.'

Wolpert's response was to say that we have already seen the damaging effects of artificial intelligence in the form of computer viruses. 'But in this case,' he says, 'the real intelligence is the malicious designer. Critically, the benefits of computers outweigh the damage that computer viruses cause. Similarly, while there may be misuses of robotics in the near future, the benefits that they will bring are likely to outweigh these negative aspects.'

Richardson's response to this question was this: 'We need to ask why fears of artificial intelligence and robots persist; none have in fact risen up and challenged human supremacy.' She believes that as robots have never shown themselves to be a threat to humans, it seems unlikely that they ever will. In fact, she went on, 'Not all fear [robots]; many people welcome machine intelligence.'

In answer to the fourth question, What can science fiction tell us about robotics?', Rees replied, 'I sometimes advise students that it's better to read first-rate science fiction than second-rate science more stimulating, and perhaps no more likely to be wrong.'

As his response, Wolpert commented, 'Science fiction has often been remarkable at predicting the future. Science fiction has painted a vivid spectrum of possible futures, from cute and helpful robots to dystopian robotic societies. Interestingly, almost no science fiction envisages a future without robots.'

Finally, on the question of science fiction, Richardson pointed out that in modern society, people tend to think there is reality on the one hand, and fiction and fantasy on the other. She then explained that the division did not always exist, and that scientists and technologists made this separation because they wanted to carve out the sphere of their work. 'But the divide is not so clear cut, and that is why the worlds seem to collide at times,' she said. 'In some cases, we need to bring these different understandings together to get a whole perspective. Perhaps then, we won't be so frightened that something we create as a copy of ourselves will be a [threat] to us.'

***terraforming:** modifying a planet's atmosphere to suit human needs

** **singularity:** the point when robots will be able to start creating ever more sophisticated versions of themselves

Questions 1-7

Match each statement with the correct expert, A, B or C.

NB You may use any letter more than once.

List of Experts

A Martin Rees
B Daniel Wolpert
C Kathleen Richardson

1. For our own safety, humans will need to restrict the abilities of robots.
2. The risk of robots harming us is less serious than humans believe it to be.
3. It will take many decades for robot intelligence to be as imaginative as human intelligence.
4. We may have to start considering whether we are treating robots fairly.
5. Robots are probably of more help to us on Earth than in space.
6. The ideas in high-quality science fiction may prove to be just as accurate as those found in the work of mediocre scientists.
7. There are those who look forward to robots developing greater intelligence.

Questions 8-11

Choose the correct letter, **A**, **B**, **C** or **D**.

8. What point does Richardson make about fear of machines?

A It has grown alongside the development of ever more advanced robots.Astronomy

B It is the result of our inclination to attribute human characteristics to non-human entities.

C It has its origins in basic misunderstandings about how inanimate objects function.

D It demonstrates a key difference between human intelligence and machine intelligence.

9. What potential advance does Rees see as a cause for concern?

A robots outnumbering people

B robots having abilities which humans do not

C artificial intelligence developing independent thought

D artificial intelligence taking over every aspect of our lives

10. What does Wolpert emphasise in his response to the question about science fiction?

A how science fiction influences our attitudes to robots

B how fundamental robots are to the science fiction genre

C how the image of robots in science fiction has changed over time

D how reactions to similar portrayals of robots in science fiction may vary

11. What is Richardson doing in her comment about reality and fantasy?

A warning people not to confuse one with the other

B outlining ways in which one has impacted on the other

C recommending a change of approach in how people view them

D explaining why scientists have a different perspective on them from other people

Reading Passage 2: Read the following passage and answer the following questions

Adapting to the effects of climate change

A) All around the world, nations are already preparing for, and adapting to, climate change and its impacts. Even if we stopped all CO2 emissions tomorrow, we would continue to see the impact of the CO2 already released since industrial times, with scientists forecasting that global warming would continue for around 40 years. In the meantime, ice caps would continue to melt and sea levels rise. Some countries and regions will suffer more extreme impacts from these changes than others. It's in these places that innovation is thriving.

B) In Miami Beach, Florida, USA, seawater isn't just breaching the island city's walls, it's seeping up through the ground, so the only way to save the city is to lift it up above sea level. Starting in the lowest and most vulnerable neighbourhoods, roads have been raised by as much as 61 centimetres. The elevation work was carried out as part of Miami Beach's ambitious but much-needed stormwater-management programme. In addition to the road adaptations, the city has set up new pumps that can remove up to 75,000 litres of water per minute. In the face of floods, climate-mitigation strategies have often been overlooked, says Yanira Pineda, a senior sustainability coordinator. She knows that they're essential and that the job is far from over. 'We know that in 20, 30, 40 years, we'll need to go back in there and adjust to the changing environment,' she says.

C) Seawalls are a staple strategy for many coastal communities, but on the soft, muddy northern shores of Java, Indonesia, they frequently collapse, further exacerbating coastal erosion. There have been many attempts to restore the island's coastal mangroves: ecosystems of trees and shrubs that help defend coastal areas by trapping sediment in their net-like root systems, elevating the sea bed and dampening the energy of waves and tidal currents. But Susanna Tol of the not-for-profit organisation Wetlands International says that, while hugely popular, the majority of mangrove-planting projects fail. So, Wetlands International started out with a different approach, building semi-permeable dams, made from bamboo poles and brushwood, to mimic the role of mangrove roots and create favourable conditions for mangroves to grow back naturally. The programme has seen moderate success, mainly in areas with less subsidence.

"Unfortunately, traditional infrastructure is often single-solution focused,' says Tol. 'For long-term success, it's critical that we transition towards multifunctional approaches that embed natural processes and that engage and benefit communities and local decision-makers.

D)As the floodwaters rose in the rice fields of the Mekong Delta in September 2018, four small houses rose with them. Homes in this part of Vietnam are traditionally built on stilts but these ones had been built to float. The modifications were made by the Buoyant Foundation Project, a not-for-profit organisation that has been researching and retrofitting amphibious houses since 2006. 'When I started this,' explains founder Elizabeth English, 'climate change was not on the tip of everybody's tongue, but this technology is becoming necessary in places that didn't previously need it.' It's much cheaper than permanently elevating houses, English explains – about a third of what it would cost to completely replace a building's foundations. It also avoids the problem of taller houses being at greater risk from wind damage. Another plus comes from the fact that amphibious structures can be sensitively adapted to meet cultural needs and match the kind of houses that are already common in a community.

E)Bangladesh is especially vulnerable to climate change. Most of the country is less than a metre above sea level and 80 per cent of its land lies on floodplains. 'Almost 35 million people living on the coastal belt of Bangladesh are currently affected by soil and water salinity,' says Raisa Chowdhury of the international development organisation ICCO Cooperation. Rather than fighting against it, one project is helping communities adapt to salt-affected soils. ICCO Cooperation has been working with 10,000 farmers in Bangladesh to start cultivating naturally salt-tolerant crops in the region. Certain varieties of carrot, potato, kohlrabi, cabbage and beetroot have been found to be better suited to salty soil than the rice and wheat that is typically grown there. Chowdhury says that the results are very visible, comparing a barren plot of land to the 'beautiful, lush green vegetable garden' sitting beside it, in which he and his team have been working with the farmers. Since the project began, farmers trained in saline agriculture have reported increases of two to three more harvests per year.

F)Greg Spotts from Los Angeles (LA) in the USA is chief sustainability officer of the city's street services department. He leads the Cool Streets LA programme, a series of pilot projects, which include the planting of trees and the installation of a 'cool pavement' system, designed to help reach the city's goal of bringing down its average temperature by 1.5°C. 'Urban cooling is literally a matter of life and death for our future in LA,' says Spotts. Using a Geographic Information System data mapping tool, the programme identified streets with low tree canopy cover in three of the city's neighbourhoods and covered them with a light-grey, light-reflecting coating, which had already been shown to lower road surface temperature in Los Angeles by 6°C. Spotts says one of these streets, in the Winnetka neighbourhood of San Fernando Valley, can now be seen as a pale crescent, the only cool spot on an otherwise red thermal image, from the International Space Station.

c)

Questions 12–15

Reading Passage 2 has six paragraphs, **A–F**.

Which paragraph contains the following information?

12. how a type of plant functions as a natural protection for coastlines
13. a prediction about how long it could take to stop noticing the effects of climate change
14. a reference to the fact that a solution is particularly cost-effective
15. a mention of a technology used to locate areas most in need of intervention

d)

Questions 16–20

Complete the sentences below.

Choose **ONE WORD ONLY** from the passage for each answer.

- The stormwater-management programme in Miami Beach has involved the installation of efficient **16**_____.

		• The construction of **17**_____ was the first stage of a project to ensure the success of mangroves in Indonesia. • As a response to rising floodwaters in the Mekong Delta, a not-for-profit organisation has been building houses that can **18**__ _____. • Rising sea levels in Bangladesh have made it necessary to introduce various **19**_____ that are suitable for areas of high salt content. • A project in LA has increased the number of **20**_____ on the city's streets.		
2.	**a)**	**Grammar**	**1x07 = 7 Marks**	**CO2**
		Correct the following sentences. **I.** The woman was dressed with black. **II.** You can't avoid to make mistakes. **III.** The man doesn't waters the flowers. **IV.** I'm at this school two years. **V.** The nature is beautiful in spring. **VI.** I'm so tired so that I can't go. **VII.** You were at the cinema yesterday?		
3.	**a)**	**Writing**	**1x 13 = 13 Marks**	**CO3**
		Write an essay about the following topic. Some people believe that Artificial Intelligence will replace a large number of human jobs in the future. Others believe that AI will create more employment opportunities. **Discuss both views and give your opinion.** The essay must not exceed **350** words.		