01680

Sri Lanka Institute of Information Technology

B.Sc. Honours Degree in Information Technology

Final Examination
Year 1, Semester 2 (2022)

IT1080 – English for Academic Purposes

Duration: 3 hours

May 2022

Instructions to Candidates:

- This paper has 5 questions.
- The total marks for the paper is 100.
- This paper contains **11** pages including the cover page.
- Answer **all** the questions on the paper itself.
- Electronic devices capable of storing and retrieving text, including calculators and mobile phones are not allowed.

Student ID	

Q1	Q2	Q3	Q4	Q5	Total

Question 1 **(14 marks)**

Part 1: Read the article and answer the given questions. (1 x 8 = 8 marks)

Predicting Volcanic Eruptions

Predicting a volcanic eruption is hard even in developed countries such as Italy, Iceland and the USA, where there is intensive monitoring to detect movements beneath the surface. But in the developing world the majority of active volcanoes, including some that pose a high risk to large populations, have no local monitoring or warning system.

Help is on the way, however, from the sky. Earth-observing satellites, such as the European Space Agency's Envisat, can detect u n rest in unmonitored volcanoes using a technique called Interferometric Synthetic Aperture Radar (InSAR). InSAR is the most revealing way to show slight deformations in the ground due to movements of molten rock below. It works by combining satellite radar images of the same place taken at different times. This is displayed in the form of rainbow-coloured interference patterns, or interferograms as they are known, in which the arrangement of coloured bands shows the direction and extent of ground deformation. InSAR is particularly useful for tropical volcanoes, where cloud cover can obscure visual observations, because the radar beam can see through it.

As a result, many volcanoes previously thought to be dormant are now known to be showing signs of unrest. The resources for acquiring more detailed, ground-based monitoring can now be targeted at such volcanoes. A recent review of InSAR technology in the journal Science gave Mount Longonot, Kenya, as an example. Radar data from Envisat showed a nine-centimetre uplift over two years in the volcano, which was previously thought dormant.

While InSAR has enormous potential, it is still a new technique that relies on frequent observations and long duration space missions. A series of Earth-observing satellites called Sentinel is expected to provide the data continuity required for serious InSAR volcano modelling. Sentinel is expected to observe all land masses regularly, with a six-day cycle in operation for the next two decades.

"InSAR is a growing field", says Juliet Biggs of Bristol University, co-author of the Science paper, "In the past ten years of my involvement . . . the community has gone from a small handful of specialists to a wide range of practitioners".

Of course, early warning of eruptions still faces challenges, as scientists try to work out how to tell whether a period of volcanic unrest will lead to eruption. Unrest usually subsides without an eruption, and false alarms can undermine public trust. But consistent InSAR monitoring will give vulcanologists a clearer picture of potentially threatening behaviour.

Complete the sentences below.

Choose NO MORE THAN THREE WORDS from the passage for each answer.

1. There is relatively little monitoring of most active volcanoes located in .....
2. InSAR techniques can indicate pieces of land where .....may be moving beneath the surface.
3. The term .....is used to describe the coloured patterns produced by InSAR techniques.
4. InSAR can be used in places where .....makes other methods problematic.
5. The type of movement measured at Mount Longonot is described as.....
6. InSAR techniques depend on space flights of .....in order to function.
7. Regular data for InSAR modelling will be provided on a ..... by Sentinel.
8. The writer is concerned about the effects of ..... on people's attitude towards predicting volcanic activity.

Part 2: Read the article and answer the given questions. (1 x 6 = 6 marks)

Biophilia in the city

Biophilia, as defined by evolutionary biologist E.O. Wilson, is 'the human bond with other species', and the idea was elaborated in his work Biophilia, published in 1984, in which he argues that our very existence depends on this close relationship with the natural world. The concept of biophilia with reference to whole cities is, however, a 21st-century phenomenon, as evidenced by the communique released at the end of the Copenhagen Climate Summit in 2009 which stated: 'the future of our globe will be won or lost in the cities of the world.'

Climate change has probably been the single greatest influence on this debate. This idea has been further fuelled by the United Nations identifying cities as the source of 75% of greenhouse gas emissions, which have an environmental impact around the world. Cities are also the consumers of 75% of the world's natural resources, the extraction of which affects many habitats across the globe.

Since 2009, work has been going on around Europe and beyond to encourage city leaders to adapt their policies to the reality of climate change in a concerted manner. One group of cities has gone a step further and formed the Biophilic Cities Network, which recognises people's need to access and respond to nature as part of their daily lives.

Any city joining the network is asked to commit to the following aims:

• Work diligently to protect and restore nature within their boundaries and to forge new links with the natural world wherever possible.

• Share information and insights about tools, techniques, programmes and projects which have been successfully applied in the city.

• Assist other cities outside the group, which are also striving to become more biophilic, offering help in data collection and analysis, sharing technical expertise and knowledge, and other forms of professional support for the expansion of urban nature.

• Meet periodically as a group to share experiences and insights and provide mutual support and guidance in advancing the practice of biophilic urbanism.

Complete the summary using the list of words, A-K below.

Write the correct letter, A-K.

A initiatives	B formation	C commitment	D impact
E protection	F management	G non-members	H expertise
I proportion	J insights	K collection	

Biophilia Cities Network

Biophilia is the idea that human existence relies on maintaining a close relationship with the natural world, and it has recently been acknowledged that cities play a key part in this. The United Nations identified that cities are responsible for creating 75% of greenhouse gas emissions whilst at the same time consuming around the same **1** ..... of the world's natural resources.

This led to the **2** ..... of the Biophilic Cities Network, a group of city governments that has made a **3** ..... to work together in addressing not only the issue of climate change, but also the need for their citizens to have access to nature as part of their everyday lives. Each city in the group will work towards the **4** ..... of its own natural environment, as well as restoring nature wherever possible. Through co-

operation with the other members, cities will share information about **5** ..... which have worked. They will also help non-members to achieve the same goals through the sharing of both skills and **6** ..... Regular meetings of the group will help to further these aims.

Question 2 **(20 marks)**

Part 1 (1 x 10 = 10 marks)

Fill in the blanks with active or passive form of the verb in parentheses ( ).

In 1904 the French psychologist Alfred Binet ..... **(develop)** intelligence tests to help teachers in Paris schools. His simple tests, which were given the name Intelligence Quotient IQ tests, ... **(design)** to make it easier to put disruptive schoolchildren into a class that suited their abilities. At the time, Binet ..... **(warn)** users of the tests not to look at the test results in isolation, but to use them along with other assessments of intelligence. However, IQ tests were so easy to carry out that, in spite of Binet's warnings, almost immediately they ..... **(use)** all over the world as the only method of assessing brainpower. In some countries, they ..... **(use)** to support the testers' prejudices about race, social class or educational abilities. For several years in Britain, school pupils who ..... **(fail)** tests of this type ..... **(allow)** to attend normal secondary schools because it was felt that their low IQ scores meant they would never be capable of performing well academically. Now, a century after their invention, IQ tests ..... **(be)** still controversial, but psychologists say they ..... **(can use)** in some specific situations. For example, they are helpful in deciding whether a disruptive pupil ..... **(be)** emotional or academic problems. That, of course, was Binet's intention all along.

Part 2 (1 x 10 = 10 marks)

In the texts below some words are missing. Fill the blanks with an appropriate word given in the box.

Passengers on board commercial ships are provided with an on-board safety **1**..... known as a marine-evacuation system. The equipment, **2** ..... invented in the 1970s for high-speed craft, has an inflatable escape slide which allows passengers on ships to **3** ..... safely and quickly if the vessel is

in danger of **4** ..... . Passengers slide down the ramp onto life rafts in order to evacuate the boat in a similar **5** .....to the escape systems found on aeroplanes.

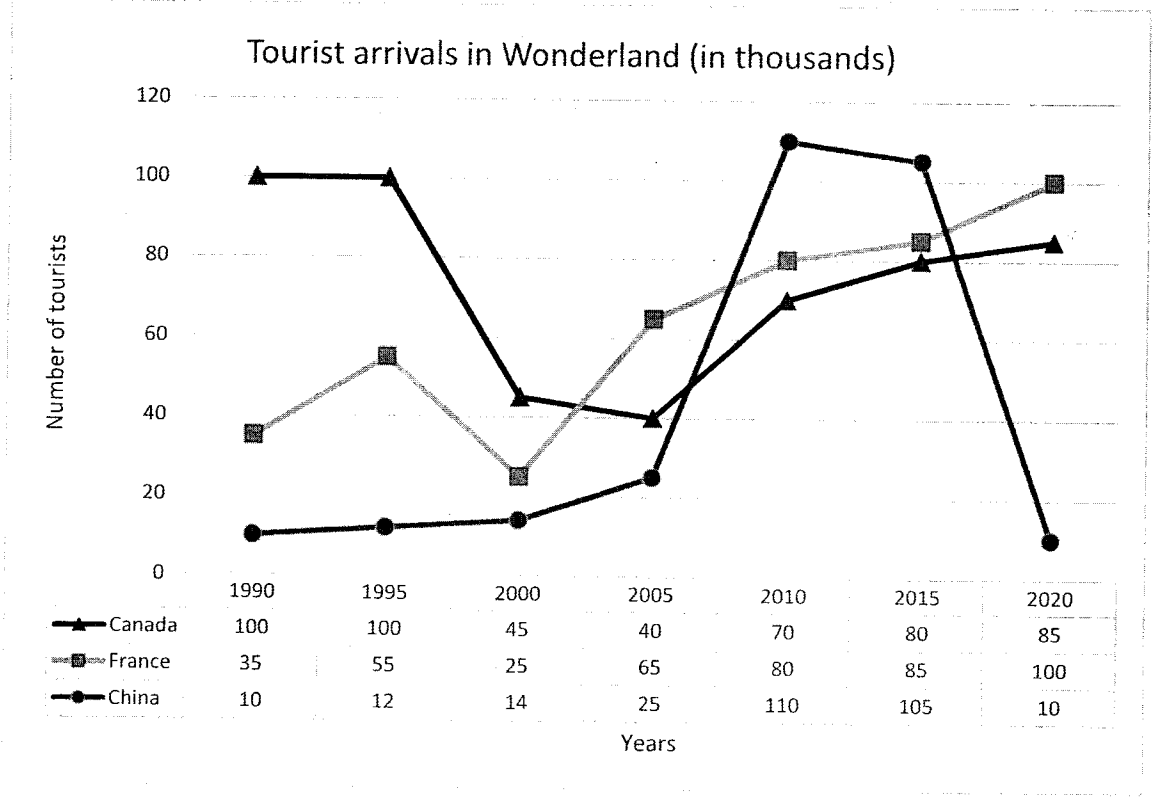
device	originally	trialled	avoidance	exit
sinking	fashion	strategies		

Kore is the name for a **1**..... style of ancient sculpture representing female figures that was produced in Greece between the seventh and the fifth centuries BCE. These statues served two principal **2** ..... : firstly, many were installed in temples as **3** ..... to individual goddesses. Others, **4** ..... portraying young maidens, were placed in front of tombs as grave markers. The statues are **5** ..... by a gracious but cool smile expressing little emotion.

voyages	recent	particular	functions	offerings
seemingly	characterized	sacrificing		

Question 3 **(20 marks)**

The graph below gives information about the tourist arrivals in Wonderland. Summarize the information by selecting and reporting the main features and make comparisons where relevant. (Write at least 150 words)



	1990	1995	2000	2005	2010	2015	2020
Canada	100	100	45	40	70	80	85
France	35	55	25	65	80	85	100
China	10	12	14	25	110	105	10

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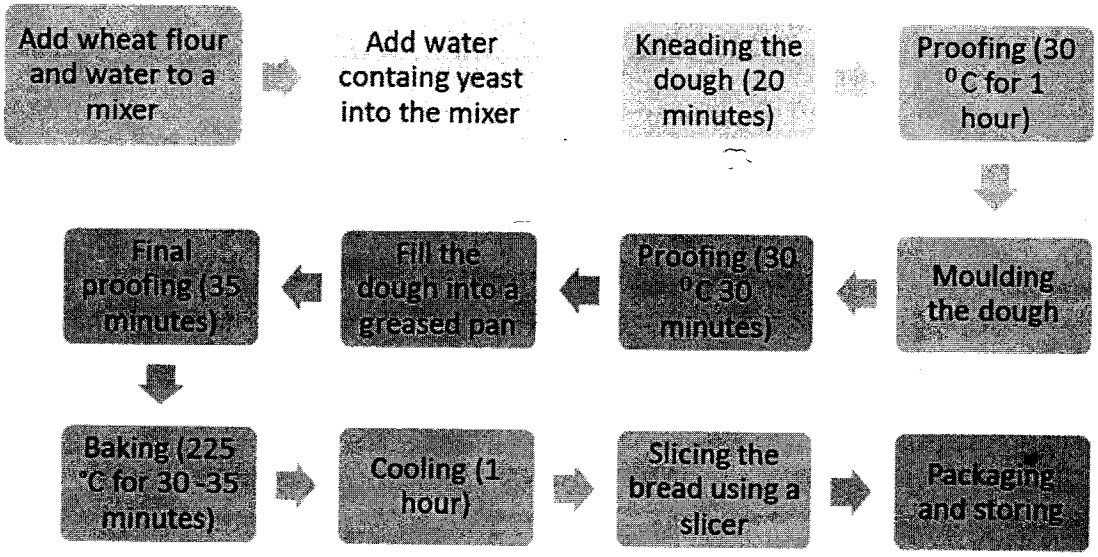
Question 4 **(20 marks)**

The diagram below gives information about the process of making bread in a bakery. Describe the process by using at least 150 words.



Proofing refers to the fermentation action of the yeast, causing the dough to rise and create an airy texture.

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Question 5 **(13 x 2= 26 marks)**

Read the following text and summarize it with no more than 50 words. Write only 1 word in each cell.

Text 1

Work From Home (WFH) provides many benefits to employees as well as to employers. From the employee's point of view, reduced commuting time and related expenses, greater flexibility in terms of location and working time, less distractions and better work life balance are the key benefits. Reduced operational expenses related to utility costs and workspace, and staff expenses related to overtime and transport allowances, improved productivity, engagement and employee satisfaction, and reduced turnover are the key benefits of such arrangements, from the employer's point of view. In addition, WFH has been continuously highlighted as a measure to improve female labour force participation in Sri Lanka, which has been stagnating at a low level for a prolonged period. WFH is a mechanism to augment resource availability in the country, thereby promoting the economic growth in the long run. Positive impact on the environment through reduced carbon emissions and reduced traffic congestion and oil imports as a result of less vehicular movements, and reduced urbanisation are additional benefits of such arrangements at the national level.

Read the following text and summarize it with no more than 50 words. Write only 1 word in each cell.

Text 2

Effects of the COVID-19 pandemic transmit to food systems through both demand and supply sides. Although crop cultivation activities were not restricted in Sri Lanka, mobility restrictions resulted in a shortage of manpower for labour-intensive crop cultivation and other food supply chain activities during the lockdown period. Accordingly, intermediary processes of food manufacturing, including processing, packaging, storage, and distribution, were impacted with labour shortages arising from the island wide mobility restrictions imposed during the period from March to end April 2020, in particular. Meanwhile, post-harvest losses in perishable products increased notably during the lockdown due to disruptions to food distribution channels and closure of markets. Such supply side disruptions drove up food prices, adversely impacting vulnerable groups with less purchasing power, which prompted the Government to interfere through various measures to mitigate the situation.

.....End of Paper.....