# THE DEPARTMENT OF HIGHER EDUCATION UNIVERSITY OF COMPUTER STUDIES FIFTH YEAR (B.C.Sc./B.C.Tech.) RE- EXAMINATION SEPTEMBER 2018 Answer all questions. ENGLISH

#### **QUESTION I**

#### Glaciers

(20 marks)

**A** Besides the earth's oceans, glacier ice is the largest source of water on earth. A glacier is a massive stream or sheet of ice that moves underneath itself under the influence of gravity. Some glaciers travel down mountains or valleys, while others spread across a large expanse of land. Heavily glaciated regions such as Greenland and Antarctica are called continental glaciers. These two ice sheets encompass more than 95 percent of the earth's glacial ice. The Greenland ice sheet is almost 10,000 feet thick in some areas, and the weight of this glacier is so heavy that much of the region has been depressed below sea level. Smaller glaciers that occur at higher elevations are called alpine or valley glaciers. Another way of classifying glaciers is in terms of their internal temperature. In temperate glaciers, the ice within the glacier is near its melting point. Polar glaciers, in contrast, always maintain temperatures far below melting.

**B** The majority of the earth's glaciers are located near the poles, though glaciers exist on all continents, including Africa and Oceania. The reason glaciers are generally formed in high alpine regions is that they require cold temperatures throughout the year. In these areas where there is little opportunity for summer ablation (loss of mass), snow changes to compacted firn and then crystallized ice. During periods in which melting and evaporation exceed the amount of snowfall, glaciers will retreat rather than progress. While glaciers rely heavily on snowfall, other climatic conditions including freezing rain, avalanches, and wind, contribute to their growth. One year of below average precipitation can stunt the growth of a glacier tremendously. With the rare exception of surging glaciers, a common glacier flows about 10 inches per day in the summer and 5 inches per day in the winter. The fastest glacial surge on record occurred in 1953, when Kutiah Glacier in Pakistan grew more than 12 kilometers in three months.

**C** The weight and pressure of ice accumulation causes glacier movement. Glaciers move out from under themselves, via plastic deformation and basal slippage. First, the internal flow of ice crystals begins to spread outward and downward from the thickened snow pack also known as the zone of accumulation. Next, the ice along the ground surface begins to slip in the same direction. Seasonal thawing at the base of the glacier helps to facilitate this slippage. The middle of the glacier moves faster than the sides and bottom because there is no rock to cause friction. The upper part of a glacier rides on the ice below. As a glacier moves, it carves out a U-shaped valley similar to a riverbed, but with much steeper walls and a flatter bottom.

**D** Besides the extraordinary rivers of ice, glacial erosion creates other unique physical features in the landscape such as horns, fjords, hanging valleys, and cirques. Most of these landforms do not become visible until after a glacier has receded. Many are created by moraines, which occur at the sides and front of a glacier. Moraines are formed when material is picked up along the way and deposited in a new location. When many alpine glaciers occur on the same mountain, these moraines can create a horn. The Matterhorn, in the Swiss Alps is one of the most

famous horns. Fjords, which are very common in Norway, are coastal valleys that fill with ocean water during a glacial retreat. Hanging valleys occur when two or more glacial valleys intersect at varying elevations. It is common for waterfalls to connect the higher and lower hanging valleys, such as in Yosemite National Park. A cirque is a large bowl-shaped valley that forms at the front of a glacier. Cirques often have a lip on their down slope that is deep enough to hold small lakes when the ice melts away.

**E** Glacier movement and shape shifting typically occur over hundreds of years. While presently about 10 percent of the earth's land is covered with glaciers, it is believed that during the last Ice Age glaciers covered approximately 32 percent of the earth's surface. In the past century, most glaciers have been retreating rather than flowing forward. It is unknown whether this glacial activity is due to human impact or natural causes, but by studying glacier movement, and comparing climate and agricultural profiles over hundreds of years, glaciologists can begin to understand environmental issues such as global warming.

#### Questions 1-5

# The given passage has five paragraphs, A-E. Choose the most suitable heading for each paragraph from the list of headings below.

List of Headings

- i. Glacial Continents
- ii. Formation and Growth of Glaciers
- iii. Glacial Movement
- iv. Glaciers in the Last Ice Age
- v. Glaciers Through the Years
- vi. Types of Glaciers
- vii. Glacial Effects on Landscape
- viii. Glaciers in National Parks

(1)Paragraph A
(3) Paragraph C
(5) Paragraph E
(2)Paragraph B
(4) Paragraph D

Questions 6-10

#### Do the following statements agree with the information in the above passage?

True	if the statement is true according to the passage.
False	if the statement contradicts the passage.
Not Given	if there is no information about this in the passage.

- (6) Glaciers exist only near the north and south poles.
- (7) Glaciers are formed by a combination of snow and other weather conditions.
- (8) Glaciers normally move at a rate of about 5 to 10 inches a day.
- (9) All parts of the glacier move at the same speed.
- (10)During the last Ice Age, average temperatures were much lower than they are now.

#### **QUESTION – II**

(A)Fill in the gaps with an appropriate form of the verbs in brackets. Just write down the number and answer.

- 1. Up until now students...... (allow) to wear what they want, but the new head teacher has decided to introduce a uniform.
- 2. It..... (expect) that the president will resign due to the recent revelations.
- 3. I went on holiday because I really needed...... (take) a break.
- 4. She..... (consider) to be the best singer in the group.
- 5. My car needs...... (clean) because it gets so much mud on it.
- 6. Next year the new theatre ...... (open) by some of Britain's biggest acting stars.
- 7. At the beginning of the experiment, the chemicals .......... (place) in the baker.
- 8. This report ...... (claim) that there is corruption throughout the company.
- 9. People need...... (encourage) to use public transport if we want to reduce our carbon emissions.
- 10. Customers ...... (advise) to buy their tickets in advance.

(B) Choose the correct form of the verbs or phrases from the sentences. Just write down the number and the answer.

- 1. We.....(are having the house painted/ have the house painted) this week.
- 2. This carpet got stained. It needed...... (cleaning/ to clean).
- 3. When are you going to .....(get the roof repaired/ got the roof repaired)?
- 4. Our guests ......(were supposed to come/ supposed to come) at 7.30, but they were late.
- 5. I want to ...... (have renewed this book/have this book renewed) please.
- 6. We are going to ......(had fixed our car/ have our car fixed) before we go to Taunggyi.
- 7. Two people are reported .....(to have been injured/ to have injured) in the explosion.
- 8. Let's (get some of our money exchanged/ get some of our money exchange) for dollars.
- 9. I hate ...... (being kept/ keeping) waiting.
- 10. Thida ...... (was supposed to phone/ supposed to phone) me last night, but she didn't.

#### **QUESTION III**

(A) Complete the sentences choosing the right preposition from the list below. Just write down the number and the answer.

#### from of in to

- 1. The radio station experienced a fall ..... 36,000 listeners to a total audience ...... 2.1million.
- 2. There were improvements ..... healthcare ..... 1980.
- 3. The figures show a drop .....5% ..... student numbers.
- 4. The increase ......car use was accompanied by a decline in the use of public transport.
- 5. The table shows the number ...... students enrolled at the school between 1960 and 1990.
- 6. The figures had increased ...... 35% ..... Over 60% within five years.
- 7. The figures ...... train and bicycle use reveal a steady drop in these types of transport.
- 8. Current figures show that this has now risen ...... over twelve millions.
- 9. The number of students fell ...... a low of 1,500 in the second half of the year.
- 10. Demand reached a peak ...... 45,000 in early March.

(B) Rewrite the following sentences using synonyms to replace the underlined words.

- 1. There was a sharp <u>decrease in sales between 2007 and 2010</u>.
- 2. It is predicted that the numbers will begin to <u>increase</u> from 2025.
- 3. The pie charts show <u>the average household expenditure</u> in the US.
- 4. The figures <u>fell</u> steadily over the next year.
- 5. It is predicted that the numbers will <u>remain the same for the next ten years</u>.
- 6. The charts <u>show</u> how many people travelled by train in 1950 and 2000.
- 7. The bar chart tells us the <u>sporting preferences of 100 adults</u>, boys and girls in Manchester.
- 8. According to the <u>data</u> in the table, 2005 was the most successful year.
- 9. The graph shows the changes in <u>traffic</u>, in the Netherlands from 1960 to 2010.
- 10. From the graphs, we can see <u>the number of students</u> that have attended the college since 1980.

## **QUESTION IV**

# (A)Write about the period of your life that you have enjoyed the most so far.

### You should say:

- ✤ when it was
- what happened during this period
- $\diamond$  who were the most important people in your life in this period
- ✤ and explain why you enjoyed it.

(**B**) Answer the following questions completely.

1. What are the advantages and disadvantages of using machines like robots?

2.Do you think modern civilization will develop over the next half century? Why/ Why not?

3.In what way do you predict society will change in the future?

4.Do you believe humans will be living on another planet in the future? Why/ Why not?

5. How can people make predictions in changes of the world in the future?

# **QUESTION V**

# (20 marks)

Write an *ESSAY* on the following topic.

"Some people prefer to live in a small town. Others prefer to live in the big city."

Which place would you prefer to live in? Use specific reasons and details to support your answer.

# THE END