# Candidate Marks Report

## *Series : 6 2018*

This candidate's script has been assessed using On-Screen Marking. The marks are therefore not shown on the script itself, but are summarised in the table below.

Centre No :                                          Assessment Code :     J384
Candidate No :                                       Component Code :      01
Candidate Name :

Total Marks :

In the table below 'Total Mark' records the mark scored by this candidate.
'Max Mark' records the Maximum Mark available for the question.

## SECTION A

Answer **all** the questions.

**Global Hazards**

**1** **(a)** Define the term extreme weather.

Extreme weather is ~~to~~ long term weather conditions that cause problems ............................................ **[1]**

**(b)** Study **Fig. 1** in the separate Resource Booklet, maps showing atmospheric and ocean circulation in the Pacific during a normal year and an El Niño year. high temp.

Using **Fig. 1**, suggest how South America may be affected during an El Niño year.

There is a rise in sea temp and trade winds weaken. Therefore, the South America becomes warmer as heat travels above the sea

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...................................................................... **[3]**

**(c)** Study the table below showing the frequency of some hazard events between 1980 and 2015.

| Year | Number of events per year | | |
| | Earthquakes | Tropical Storms | Floods |
|------|-------------|-----------------|--------|
| 1980 | 25 | 41 | 38 |
| 1985 | 21 | 55 | 52 |
| 1990 | 30 | 70 | 70 |
| 1995 | 26 | 69 | 78 |
| 2000 | 37 | 72 | 160 |
| 2005 | 40 | 130 | 182 |
| 2010 | 50 | 81 | 185 |
| 2015 | 33 | 90 | 152 |

Select the most suitable graphical technique for presenting the number of flood events column.

**A**  Bar graph

**B**  Climate graph

**C**  Line graph

**D**  Pie chart

Write the correct letter in the box.  [A]   **[1]**

(d)* Assess the technological developments used to mitigate the impacts of a tectonic hazard.

To mitigate the impacts of tectonic hazards we have improved buildings infrastructure so they are more able to withstand tectonic hazards. We have drilled poles deep into the earths crust in order to remain stable. Also, we have evacuation procedures and more technology analysing tectonic movement.

[8]

**Changing Climate**

2   (a)   Choose the correct definition of climate change.

   A   Global warming.

   B   Large-scale, long-term changes in average temperatures and weather patterns.

   C   The difference in temperature and weather during different seasons.

   D   The short-term warming of the Earth.

   Write the correct letter in the box.   $\boxed{B}$   [1]

   (b)   The graph below shows the changes in global temperature over the last 400 000 years.



Temperature change from present, °C

Year before present (present = 1950)
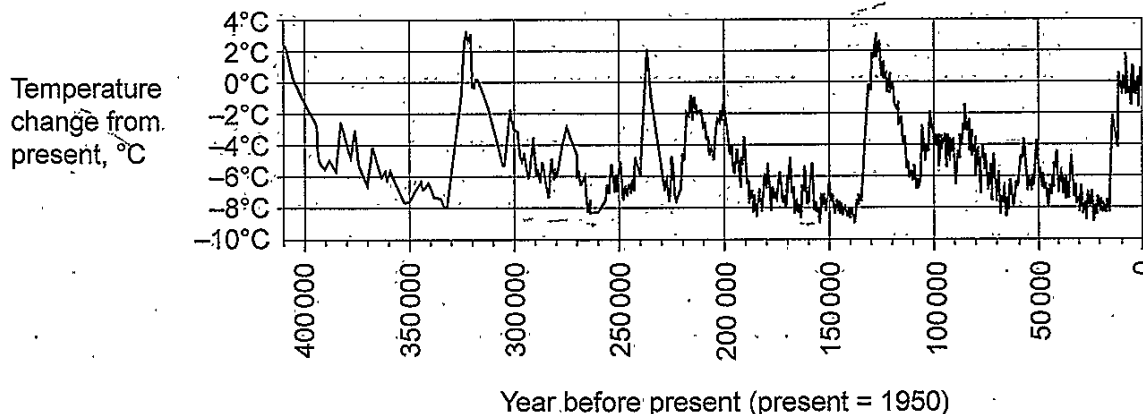
   Using data from the graph, describe the trend shown.

   The graph shows that every 100 000 ~~75~~ years the temperature change from present goes up by at least 2°c. It also shows a plucturating pattern with the lowest change from present being ~~grown~~ approximately -9.8°c and the highest being 3°c. This could be due to the El niño and El niña affect.

   [4]

(c) Study **Fig. 2** in the separate Resource Booklet, a painting from 1677 of the frozen River Thames.

Explain how this painting could be used as evidence for climate change.

It gives a visual representation of the ea weather and climate. The River Thames used to freeze over, It doesn't now, therefore we can suggest it's warmer [2]

(d) Suggest why climate change is considered to be a global issue.

Climate change is considered to be a global issue because it happens all across the world. Also everyone needs to help reduce it. It causes long term affects so plans need to be put in place in order to be able to cope with it

[6]

**Distinctive Landscapes.**

3 (a) Study **Fig. 3** in the separate Resource Booklet, a relief map of the UK.

What type of map is this?

A Choropleth

B Flow line

C Isoline

D Thematic

Write the correct letter in the box. | B | [1]

(b) Using **Fig. 3**, suggest which type of natural landscape is likely to be found at X.

........low / flat land........................................................................ [1]
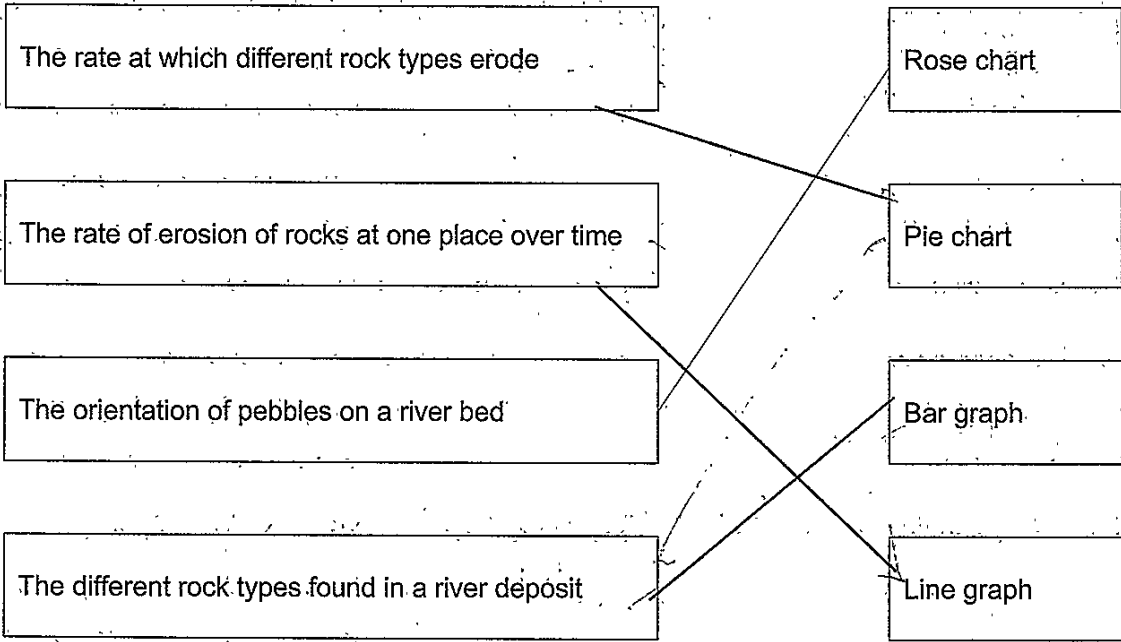
(c) Using **Fig. 3**, describe the distribution of upland areas in the UK.

The majority of upland areas tend to be in the centre and to the North in Scotland. There is aa long line of upland area from Cambridge to Manchester. of There is little upland area in the South of the Uk.

.................................................................................................................. [3]

**Turn over**

**(d)** Select which graphical technique best suits the data listed below. One has been done for you.

| | |
|---|---|
| The rate at which different rock types erode | Rose chart |
| The rate of erosion of rocks at one place over time | Pie chart |
| The orientation of pebbles on a river bed | Bar graph |
| The different rock types found in a river deposit | Line graph |

[2]

**(e)** **Case study – the landscape of a UK river basin.**

Discuss the influence of geology in the formation of river landforms within your chosen river basin.

Name of chosen river basin in the UK: ..................................................................................

The river basin is much shallow on the outside of
a bend a much more deeper on the inside of a
bend because on the inside the water has a
higher velocity and is more likely to erode the
bed. river bed.

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[6]

**Sustaining Ecosystems**

4   **(a)**   Select the correct definition of an ecosystem.

      **A**     A type of tourism that protects the environment.

      **B**     The interconnectedness of environments.

      **C**     The interdependence of plants and animals with the environment they live in.

      **D**     The place where animals and plants live.

Write the correct letter in the box.   ☐ C                 **[1]**
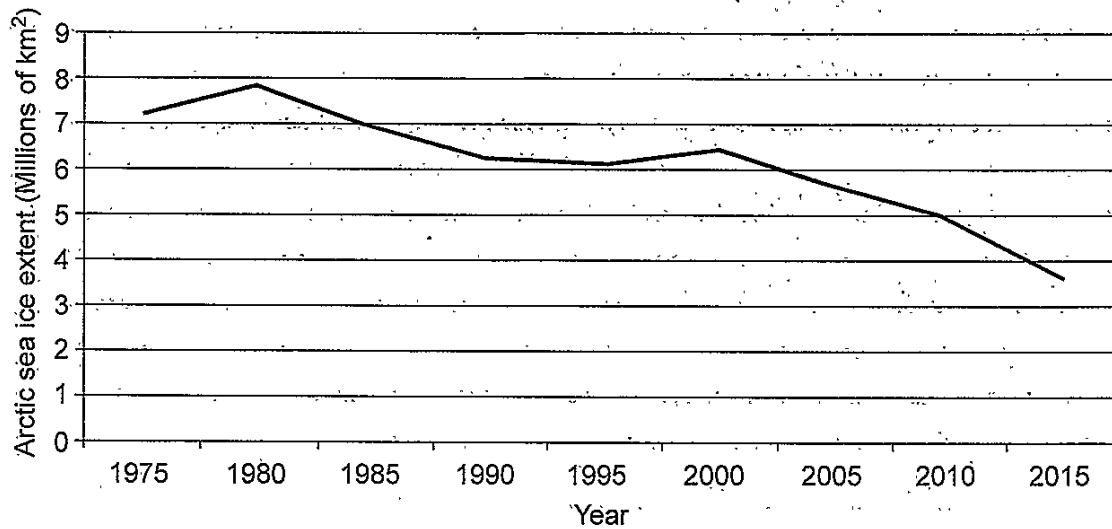
  **(b)**   Name **two** features of Arctic flora.

1 .....It includes plants growing in colder areas due to adaptation from climate change

2 ...Its got animals changing the amount of flowers in the arctic by eating them

                                                      **[2]**

(c) The graph and table below show the average September Arctic sea ice extent between 1975 and 2015.

September Arctic sea ice extent from 1975-2015



| Year | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 |
|------|------|------|------|------|------|------|------|------|------|
| Arctic sea ice extent (1 000 000 sq km) | 7.2 | 7.8 | 6.9 | 6.2 | 6.1 | 6.4 | 5.6 | 4.9 | 3.6 |

Which of these statements describing the trend shown on this graph is true?

A    The sea ice extent in 1975 and 1985 was the same.

B    The sea ice has decreased most rapidly between 1985 and 2000.

C    The sea ice has decreased most rapidly between 2000 and 2015.

D    The sea ice has rapidly increased from 2000 to 2015.

Write the correct letter in the box.    C                                      [1]

(d) Why are tropical rainforest soils considered to be amongst the poorest in the world?

Tropical rainforest soils are considered to be the poorest in the world because rainfall doesn't often reach the soil because of the upper cannopy's and all the layers that the rain lands on. Also all the plants take in nutrients from the soil.

**[3]**

(e) **Case study – Sustainable management of an area of tropical rainforest.**

Evaluate the effectiveness of **one** way in which an area of tropical rainforest you have studied is being sustainably managed.

Name of tropical rainforest area studied: .............................................................................

There are no-build areas where you cannot build or cut down trees. You also have certain paths you can walk on but you must stick to them and along the route there are information boards about the importance of keeping the rainforest in good condition. Tour guides can only take a certain amount of people and they must explain rules first.

**[6]**

**Turn over**

# SECTION B

Answer **all** the questions.

**Physical Geography Fieldwork**

5 (a) Study the table below, which shows the results of an investigation into longshore drift.

| Groyne Number | Drop North side (cm) | Drop South side (cm) | Difference |
|---|---|---|---|
| 1 | 27 | 41 | 14 |
| 2 | 31 | 51 | 20 |
| 3 | 28 | 44 | 16 |
| 4 | 25 | 39 | 14 |
| 5 | 32 | 54 | 22 |

Using data from the table, describe the pattern in the longshore drift data collected.

The data shows that Groyne number 1 and 4 had the same difference and Groyne 5 had the biggest difference. The difference fluctuates up and down showing that long shore drift has occured because it is moving sediment along the beach Shore.

**[4]**

(b) Study **Fig. 4** in the separate Resource Booklet, students' data presentation from physical geography fieldwork data.

A student has used GIS to present their findings on changes in beach sediment size.

Suggest what **Fig. 4** indicates about the pattern of beach sediment size along the shore.

It Shows that the further North the smaller the sediment size and the further south the larger the sidement size so sediment has been moved south via long shore drift.

**[2]**

**(c)** State **one** way you could adapt **Fig. 4** to make it more informative.

You could ~~find the~~ add the distances inbetween where each mean was found. [1]

**(d)*** You will have carried out some physical geography fieldwork as part of your GCSE Geography course.

Name the fieldwork To what extent does the River Goyt follow the Bradshaw model?

To what extent was your primary data collection successful?

Our data was successful. It proved that the further down the river, the higher the velocity and lower the pebble size. It showed that pebbles further down stream had an average diameter of 3.5 and were well-rounded. However we all got slightly different results due to peoples perceptions and interpretations therefore our results may not be repeatable. Also, timing the velocity meant we had to time how long it took for a float to travel 5m down stream, peoples reaction time may affect this. It is important that we do the fieldwork on the same day at three or more intervals along the river and then repeat on other days [8]

🖉 Spelling, punctuation and grammar and the use of specialist terminology [3]

**END OF QUESTION PAPER**

**ADDITIONAL ANSWER SPACE**

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).

5 (d) In order to compare our results were
5d. subjective.