



# BEDOK VIEW SECONDARY SCHOOL PRELIMINARY EXAMINATION 2021

CANDIDATE  
NAME

REGISTER  
NUMBER

CLASS

**HUMANITIES**  
**Secondary Four Normal (Academic)**  
Paper 2 Geography

**2175/02**  
**30 July 2021**  
**1 hour 40 minutes**

Candidates answer on the Question Paper.

## READ THESE INSTRUCTIONS FIRST

Write your index number and name on all the work you hand in.  
Write in dark blue or black pen.  
You may use an HB pencil for any diagrams or graphs.  
Do not use staples, paper clips, glue or correction fluid.

### Section A

Answer **one** question.

### Section B

You must answer Question 3.

### Section C

Answer **one** question.

Candidates should support their answers with the use of relevant examples.  
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.  
The Insert contains Photograph A for Question 1.

The number of marks is given in brackets [ ] at the end of each question or part question.

For Examiner's use		
Section A		/ 13
Section B		/ 12
Section C		/ 25
Total		/ 50
% / Grade		/

Setter: Ms Ee-laine Oh

Parent's / Guardian's Signature: .....

*This document consists of 21 printed pages and 1 blank page, including this cover page.*

**Do not turn over the page until you are told to do so.**

**[Turn over**

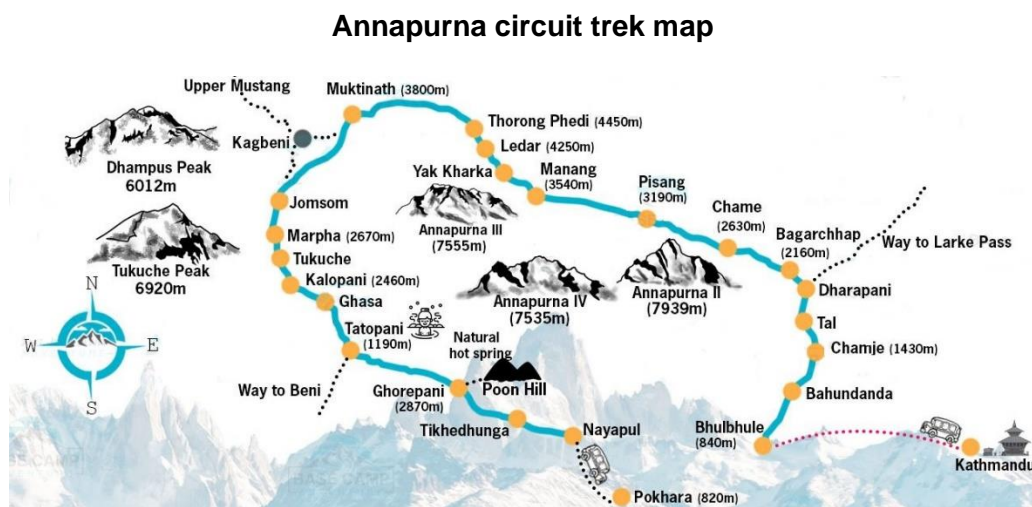
## Section A

Answer **either** Question 1 **or** Question 2 from this section.

- 1 A group of students wanted to understand the tourist profile of tourists who visited the Annapurna region in Nepal as part of their geographical investigation on niche tourism.

The Annapurna region is part of a mountain range which is a popular tourist trekking destination in Nepal. Aside from mountainous treks, it offers opportunities for interactions with the locals, lush forests and agriculture. One of its most popular treks is the Annapurna circuit trek.

- (a) Fig. 1 shows the Annapurna circuit trek map, where tourists travel from Kathmandu to attempt it.



**Fig. 1**

- (i) The students wanted to use a questionnaire to find out the age groups of tourists visiting the Annapurna circuit trek and what they enjoyed about the trek.

State one question relevant to their investigation on tourist profiles which the students should include in their questionnaire.

..... [1]

- (ii) Describe other considerations the students should make in the design of their questionnaire before carrying it out.

..... [2]

- (iii) The students decided to use random sampling to survey 50 tourists at Nayapul, which is the end point of the trek. Describe how random sampling is conducted.

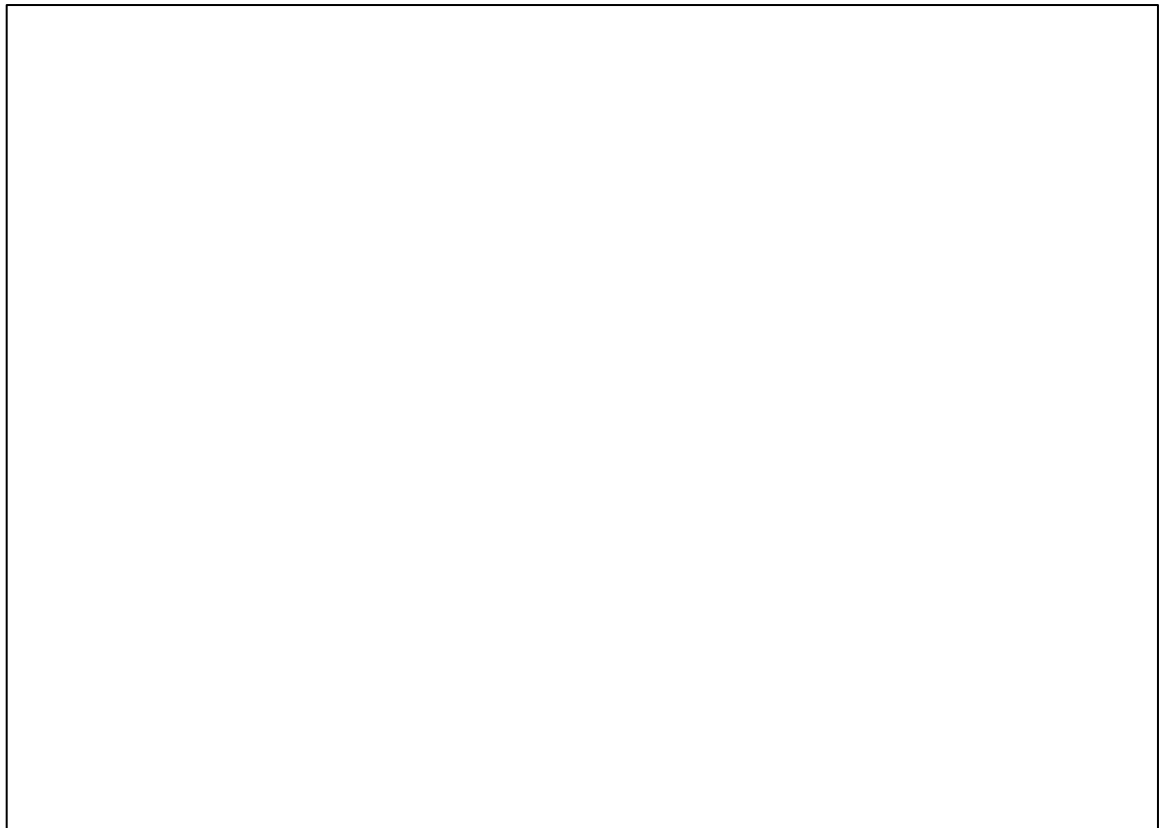
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..... [2]

- (b) Suggest one way the students could ensure their data collection method is reliable.

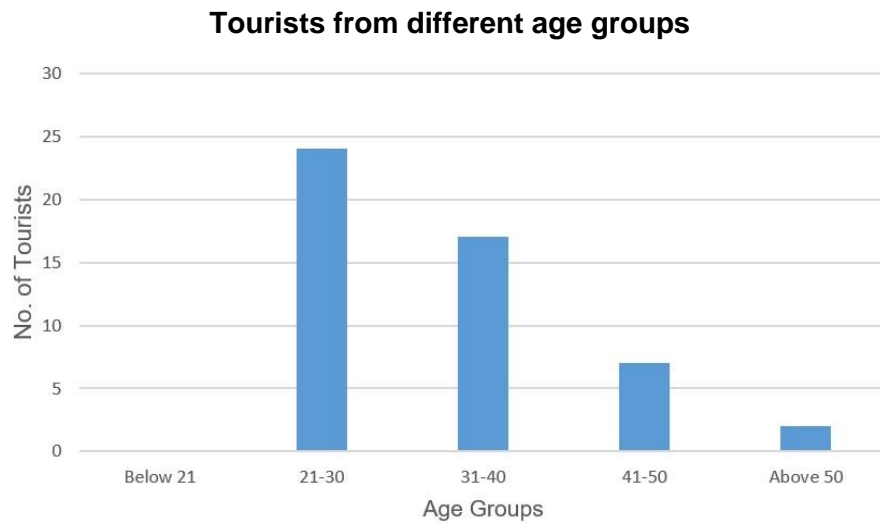
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..... [1]

- (c) Study Photograph A (Insert), which shows the scenery along the Annapurna circuit trek.

In the box below, draw a field sketch of the scenery and annotate **two** features which provide tourist opportunities. [3]



**(d)** Fig. 2 and Table 1 show information on tourists' profiles from the students' investigation.



**Fig. 2**

### Table 1

	Activity	21-30	31-40	41-50	Above 50
1	Interaction with locals and learning about local culture	6	2	0	0
2	Volunteering opportunities to help locals	5	1	1	0
3	Mountaineering sport	10	11	4	0
4	Scenery	3	3	2	2

For the purpose of their investigation, the students came up with the hypothesis 'The Annapurna circuit trek is more popular among tourists of 30 years and above, who enjoy mountaineering as a sport.'

Using evidence from Fig. 2 and Table 1, explain if the students' hypothesis is proven.

[illegible]

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..... [4]

[Total: 13 marks]

- 2 A group of students in Lanarkshire, Scotland, wanted to find out if cloud cover had an impact on temperature and relative humidity. They conducted a weather investigation over a period of 14 days.

- (a) (i) Name an instrument, aside from a weather tracker, which the students can use to measure temperature.

..... [1]

- (ii) Briefly describe how the sling psychrometer can be used to accurately measure relative humidity.

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 ..... [3]

- (b) The students collected data on temperature, relative humidity and cloud cover. The data is shown in Fig. 3 below.

**Weather data for Lanarkshire, Scotland**

Day	Temperature (°C)	Relative Humidity (%)	Cloud Cover (%)
1	21	91	71
2	13	69	77
3	17	63	61
4	16	72	70
5	17	66	64
6	15	73	71
7	17	66	62
8	15	76	68
9	12	82	69
10	12	80	69
11	12	70	61
12	19	60	55
13	18	59	60
14	20	55	52

**Fig. 3**

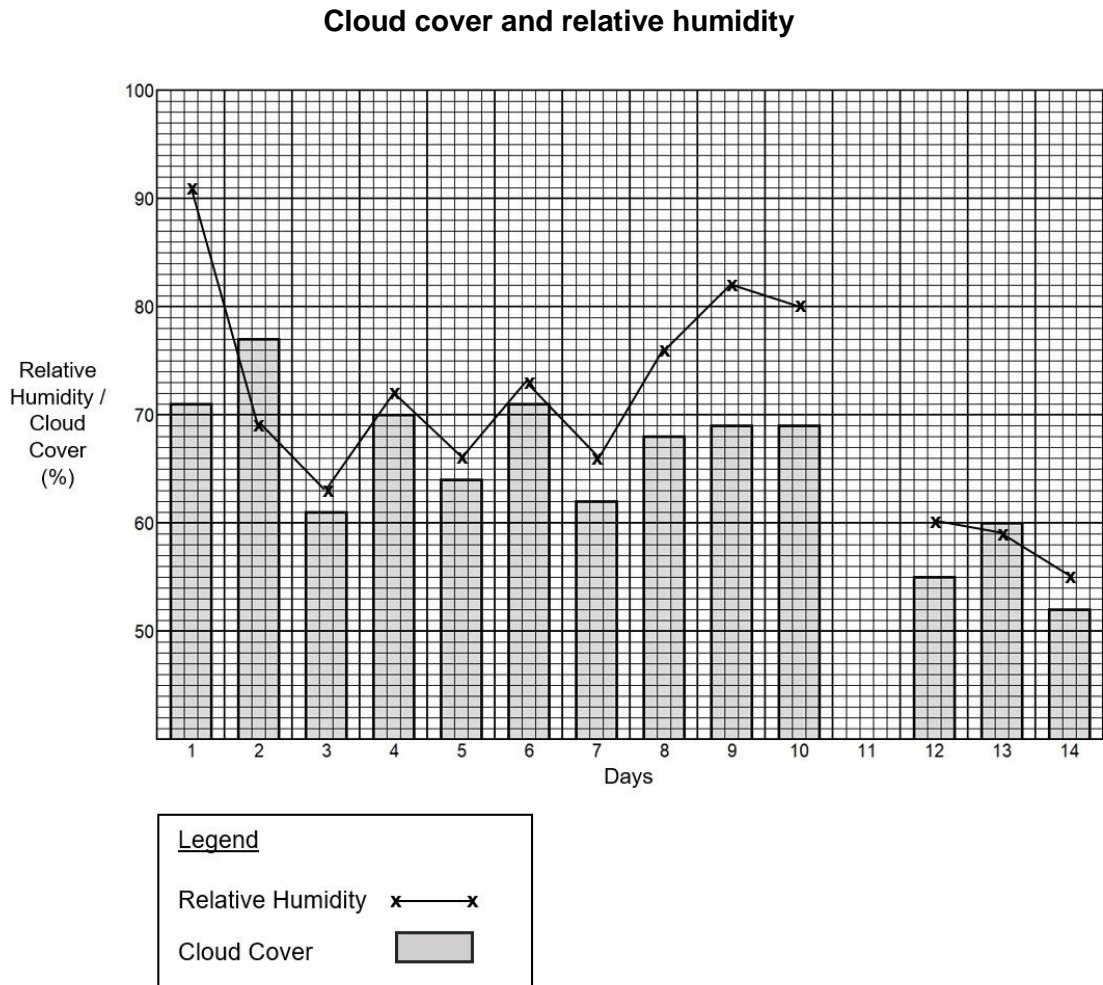
Using Fig. 3, state the day with the highest temperature and calculate the average temperature across all 14 days.

Day with highest temperature ..... [1]

Calculate

.....  
 ..... [1]

- (c) To test the guiding question 'Does cloud cover affect relative humidity?', the students used data from Fig. 3 to draw two graphs comparing cloud cover and relative humidity shown in Fig. 4 below.



**Fig. 4**

- (i) Using the data in Fig. 3, complete Fig. 4 to show cloud cover and relative humidity on Day 11. [2]
- (ii) Using Figs. 3 and 4, state if the guiding question 'Does cloud cover affect relative humidity?' is answered.

Give reasons for your answer and state if there are any anomalies.

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**[Turn over**

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- (d)** Suggest some considerations the students should take into account in order to collect reliable data for Fig. 3.

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[Total: 13 marks]

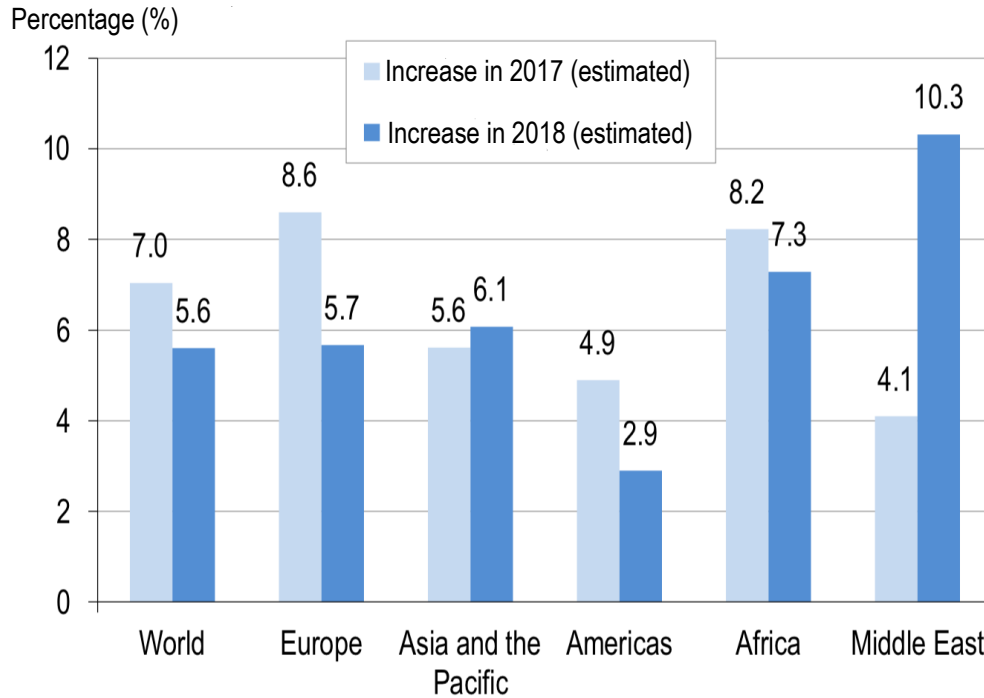


### Section B

Answer Question 3 from this section.

- 3 (a) Study Fig. 5, a graph which shows percentage increase in international tourist arrivals in various regions of the world in 2017 and 2018.

**Percentage increase in international tourist arrivals in 2017 and 2018**



Source: World Tourism Organization (UNWTO) ©

**Fig. 5**

Using Fig. 5, compare the changes in international tourist arrivals from 2017 to 2018 between Europe, Americas and the Middle East.

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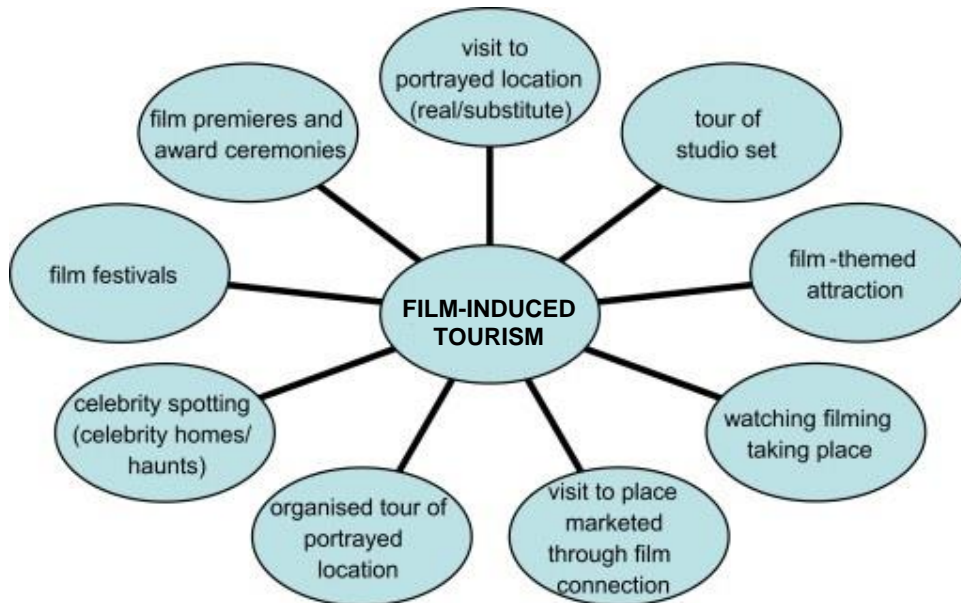
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**[Turn over**

**(b)** Study Fig. 6, a diagram on characteristics of film-induced tourism.

### Characteristics of film-induced tourism



**Fig. 6**

Using Fig. 6 and your own studies, explain the characteristics of film-induced tourism.

..... [3]

- (c)** 'Tourists prefer to participate in mass tourism than niche tourism opportunities.'

How far do you agree with this statement? Using examples, give reasons for your answer.

[6]

[Total: 12 marks]

**[Turn over**

**Section C**

Answer **either** Question 4 **or** Question 5 from this section.

- 4 (a) Explain how sea breeze is formed. You may illustrate your answer with an annotated diagram.

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[4]

- (b) Using a named example, outline how maritime effect influences the temperature at coastal locations.

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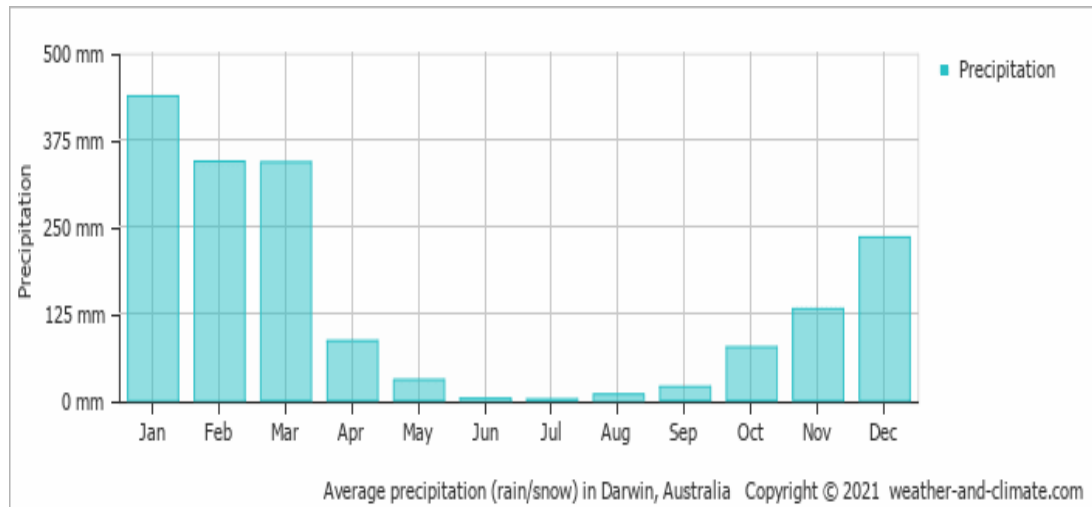
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..... [3]

(c) Study Fig. 7, a graph which shows the precipitation pattern in Darwin, Australia.

**Average precipitation in Darwin, Australia**



**Fig. 7**

Using Fig. 7, account for the precipitation pattern in Darwin, Australia.

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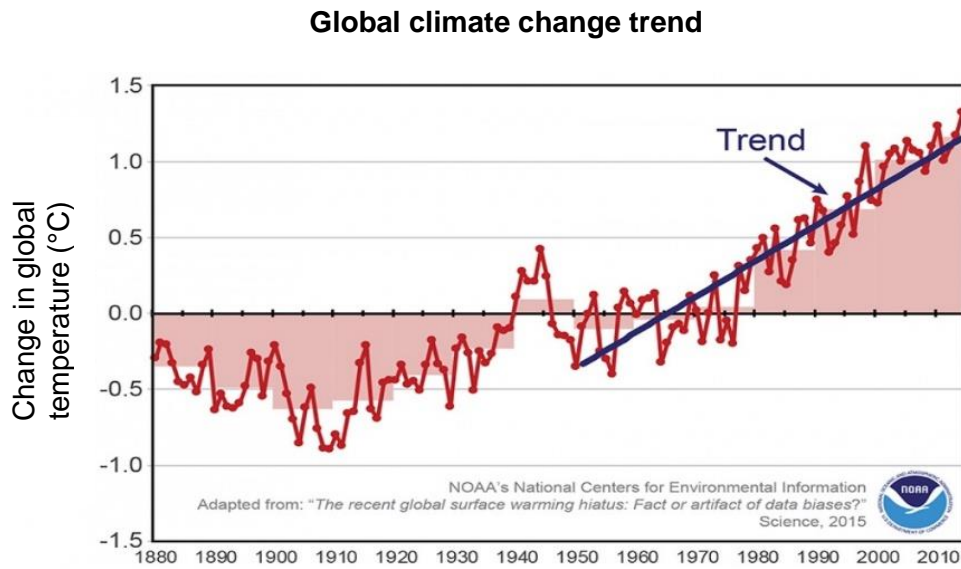
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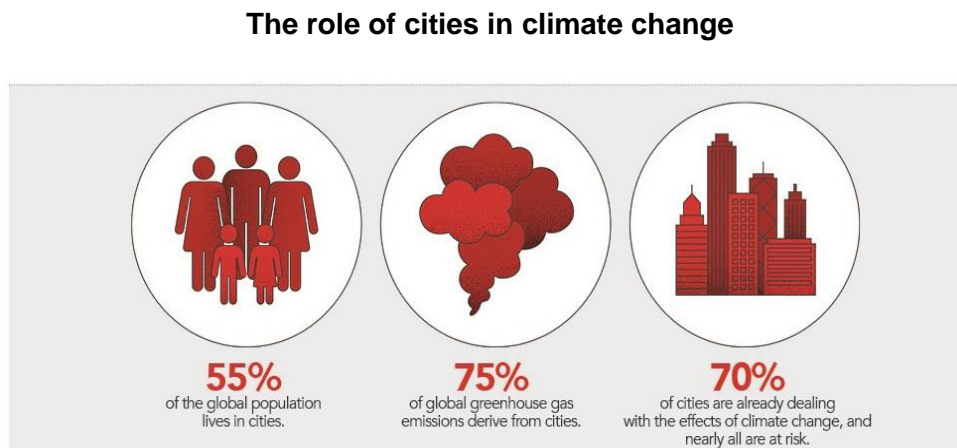
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..... [4]

- (d) Study Figs. 8 and 9, which show the global climate change trend and roles of cities in climate change.



**Fig. 8**



**Fig. 9**

Using Figs. 8 and 9, describe the global climate change trend from 1880 to 2010 and explain the role of cities in climate change.

Describe: .....

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Explain: .....

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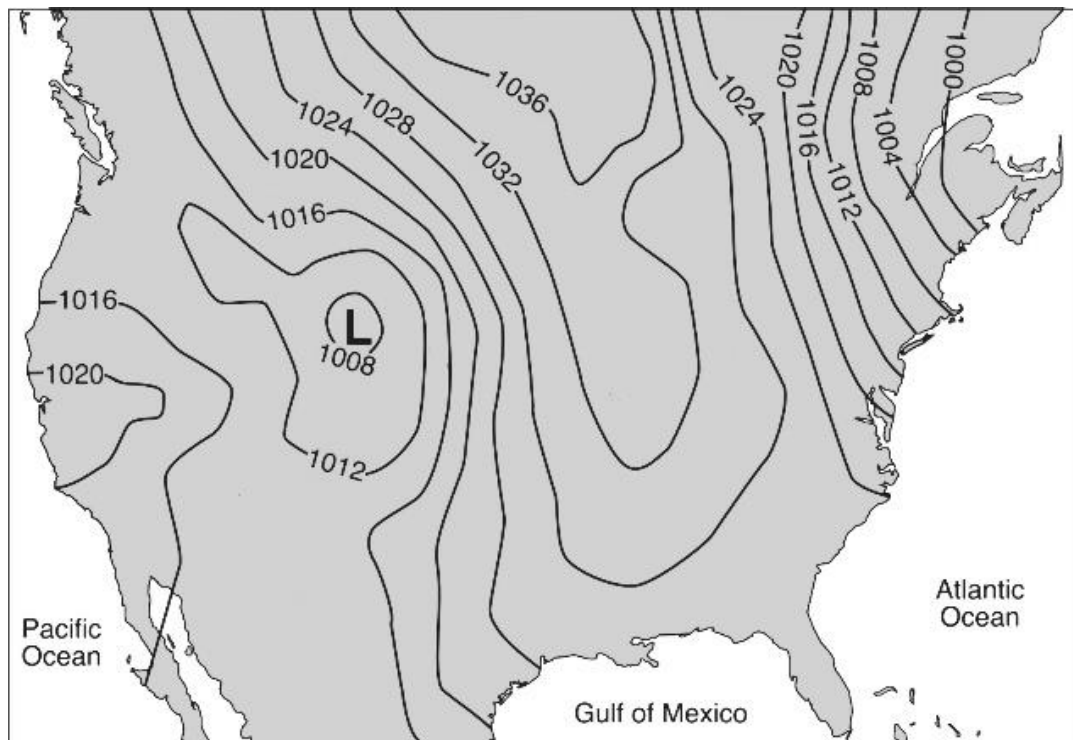
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..... [5]

- (e) Study Fig. 10, which shows pressure systems around the United States of America (USA) and Mexico.

**Pressure systems around USA and Mexico**



**Fig. 10**

On Fig. 10, mark and name, using the appropriate letter, the following features:

- An area of highest pressure (H)
- An area where air pressure is 1010 mb (A)
- An area of low wind speed (B)

An example, an area of low pressure (L), has been completed for you.

[3]

**[Turn over**

[6]

[Total: 25 marks]



- 5 (a) Explain how the process of sea-floor spreading results in landforms at a divergent plate boundary. You may illustrate your answer with an annotated diagram.

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[4]

- (b) Study Photograph B, which shows a rift valley in Iceland.

**Photograph B**



Using Photograph B, describe the appearance of the rift valley and explain its formation.

Describe: .....

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Explain: .....

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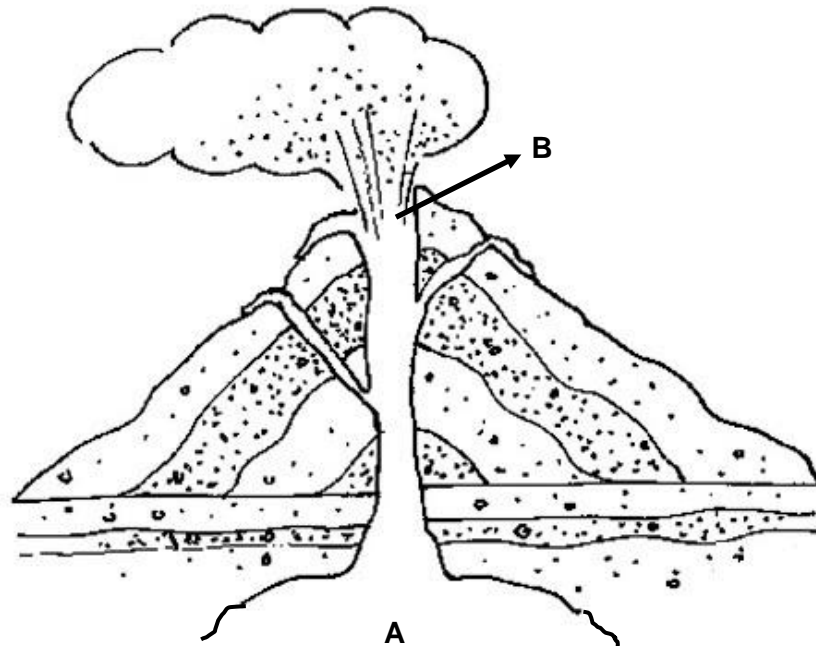
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..... [5]

- (c) Study Fig. 11, which shows the structure of a volcano.

**Structure of a volcano**



**Fig. 11**

Name the parts of the volcano labelled A and B and describe the risks of living in volcanic regions.

A .....

B .....

Describe .....

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..... [4]

- (d) With the help of a named example, explain how altitude affects the temperature of a location.

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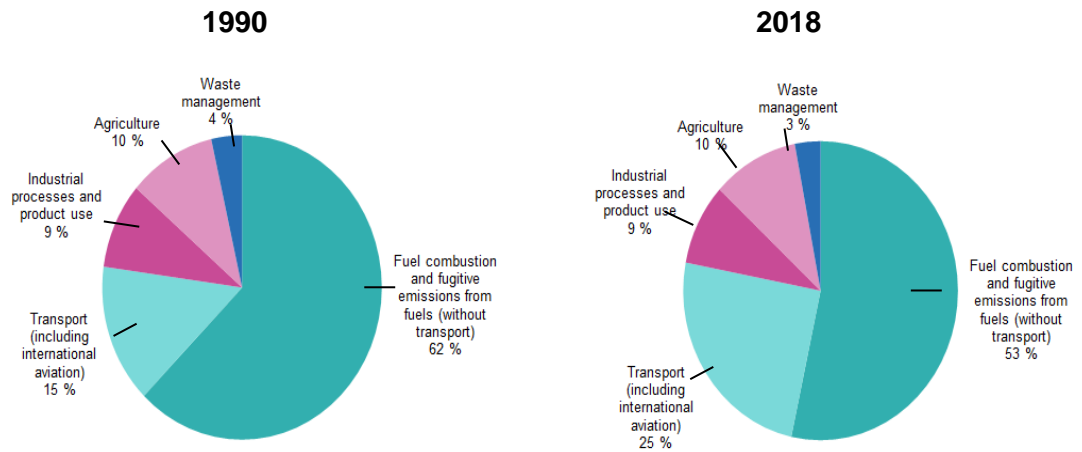
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[3]

- (e) Study Fig. 12, which shows sources of greenhouse gas emissions in several European Union (EU) countries in 1990 and 2018.

**Greenhouse gas emissions in EU countries in 1990 and 2018**



Source: European Environment Agency (online data code: [env\_air\_gge])

eurostat 

**Fig. 12**

Using Fig. 12, describe the changes in sources of greenhouse gas emissions from 1990 to 2018 in the EU countries.

[3]

- (f) 'The time of occurrence is the most important factor influencing the extent of earthquake damage in a location.'

How far do you agree with this statement? Using examples, give reasons for your answer.

[6]

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*Copyright Acknowledgements:*

- Question 1(a)     © <https://basecampadventure.com/annapurna-circuit-trek-map/>  
Figure 1  
Question 2(b)     © <https://www.netweather.tv/weather-forecasts/uk/14-day/25321~Scotland>  
Figure 3  
Question 3(a)     © <https://skift.com/2019/01/21/global-tourism-growth-slowed-in-2018-but-arrivals-still-hit-1-4-billion/>  
Figure 5  
Question 3(b)     © <https://www.sciencedirect.com/science/article/abs/pii/S0261517712000404>  
Figure 6  
Question 4(c)     © <https://weather-and-climate.com/average-monthly-precipitation-Rainfall,point-stuart-northern-territory-au,Australia>  
Figure 7  
Question 4(d)     © <https://www.climatecentral.org/news/warming-hiatus-might-not-exist-19074>  
Figure 8  
Question 4(d)     © <https://city2city.network/infographic-climate-change-and-cities>  
Figure 9  
Question 4(e)     © <https://docplayer.net/41455926-Air-pressure-homework-a-b-c-d.html>  
Figure 10  
Question 5(b)     © <https://www.locationscout.net/themes/rift-valley>  
Photograph B  
Question 5(c)     © <http://getdrawings.com/volcano-drawing>  
Figure 11  
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Figure 12

