

X833/77/11

Geography

TUESDAY, 23 APRIL 1:00 PM - 3:30 PM

Total marks — 50

Attempt ALL questions.

Marks will be given for appropriately labelled sketch-maps and diagrams.

You must use the supplementary items and tracing overlays provided for annotation or as a base for diagrams. These resources should be placed inside the front cover of your answer booklet.

You should use the atlas provided.

Write your answers clearly in the answer booklet provided. In the answer booklet you must clearly identify the question number you are attempting.

Use **blue** or **black** ink. You may use pencil for the completion of Supplementary item B — tracing overlay.

Before leaving the examination room you must give your answer booklet to the Invigilator; if you do not, you may lose all the marks for this paper.





Total marks — 50 marks Attempt ALL questions

Question 1 — Map interpretation Gathering and processing techniques

To answer this question you will need to use:

- Supplementary item A Ordnance Survey (OS) Map Extract Chichester
- Supplementary item B tracing overlay
- Supplementary item C
- the atlas provided.

You should make detailed use of the whole map extract as well as using your atlas appropriately. You should also carefully read the information in the text boxes.

A new lorry park is planned in the Chichester area to serve Portsmouth International Port which lies to the west of the area shown on the map extract. The lorry park will reduce traffic congestion in the area, caused by lorries queuing on the main road while waiting to undergo checks on heavy good vehicles (HGVs), that are required now that the UK has left the European Union. The plan for the lorry park includes space for overnight parking for up to 400 lorries, a café, shop, gym, refuelling and electric charging points, as well as a new border control and check in facility.

Study Diagram 1 (Supplementary item C).

(a)	On the tracing paper overlay (Supplementary item B) draw accurately to scale a suitable site for the lorry park. The size of the proposed site is to be $300~\text{m} \times 250~\text{m}$.		3
(b)	(i)	Discuss , in detail, the reasons for your choice of location. You may wish to annotate your tracing overlay to support your answer.	4
	(ii)	Explain the negative impacts that the development may have on the local area.	4
	(iii)	Suggest strategies that could be used to minimise these negative impacts.	4

Question 1 (continued)

To support the choice of location for the lorry park the Department for Transport has authorised an investigation into current traffic patterns within the area of the map extract. The information from this investigation will be displayed at a public consultation.

- (c) Study Diagram 2 (Supplementary item C).
 - (i) Traffic surveys are being considered for gathering appropriate data. **Explain** how this technique would be carried out by the Department for Transport.
 - (ii) **Discuss** the limitations that could be encountered when collecting the traffic data.

(d) Study Diagram 2 and Diagram 3 (Supplementary item C).

Proportional symbols are being considered for processing the information for the public consultation. **Evaluate** the suitability of using this processing technique.

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Much of the area shown on the map extract, with its unspoilt coastal landscape, is nationally important as a habitat for a wide variety of plants and animals. The area is also popular for the outdoor activities it has to offer.

(e) Study Diagram 4 (Supplementary item C), the atlas provided and the whole map extract.

Analyse the influence physical geography has on:

- (i) Plant and animal habitats, and
- (ii) Outdoor recreation and tourism.

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[Turn over

Question 2 — Geographical data handling

To answer this question you will need to use:

- Supplementary item D
- the atlas provided.

A triangular graph has been drawn to show the structure of the population of selected countries in 1980. The population of each country has been divided to show the percentage of the population in three age categories: 0–14 years, 15–64 years and over 65 years.

Study Diagram 1 (Supplementary item D).

(a) (i) **Describe** the data shown in the triangular graph.

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(ii) **Explain** the factors that could have accounted for the pattern of population structures of the countries shown on the triangular graph in 1980. You may wish to refer to the atlas.

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(iii) **Evaluate** the effectiveness of using a triangular graph to show this information.

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Researchers believe that a country's changing population structure can have an impact on various aspects of its development.

(b) Study Diagram 2 (Supplementary item D).

The researchers wish to carry out a statistical analysis of the possible relationships within the data sets in Diagram 2.

Discuss the suitability of a statistical technique that could be used to carry out this analysis. You should name the technique in your answer.

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(c) Study Diagram 3 (Supplementary item D).

The countries in Diagram 3 will experience changes in the structure of their populations.

Using the data in Diagram 3, suggest possible consequences that the changes in age structure could have for these countries.

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[END OF QUESTION PAPER]