

PIONEER JC
PRELIMINARY EXAMINATION



GEOGRAPHY
Higher 1

8812/01

Paper 1

17 September 2014

3 hours

Additional Materials: Answer Booklet / Paper
Insert

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.
Write your Centre number, index number and name on all the work you hand in.
Write in dark blue or black pen.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Section A

Answer **four** questions

Section B

Answer **one** question.

Section C

Answer **one** question.

You are advised not to spend more than one hour 30 minutes on Section A.
All Figures and the Photograph referred to in the questions are contained in the Insert.
You should make reference to appropriate examples studied in the field or the classroom, even where such examples are not specifically requested by the question.
Sketch maps should be drawn whenever they serve to illustrate your answer.

At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [] at the end of each question or part question.

This document consists of **6** printed pages.

Section A

Answer **four** questions from this section
 Questions 1, 3 and 4 carry 12 marks and Question 2 carries 14 marks.
 You should allocate your time accordingly

Lithospheric Processes, Hazards and Management

1. Fig. 1A shows the map of New Zealand in the Pacific Ring of Fire, Fig. 1B shows the map of the epicentre of the New Zealand Earthquake in February 2011, a shallow earthquake that measures 6.3 on the richter scale and Fig. 1C shows the map of the city layout of Christchurch.
 - (a) Using Fig. 1A, name the type of plate boundary responsible for the earthquake in New Zealand and explain briefly how the earthquake was generated. [4]
 - (b) Explain two reasons that could have affect the hazard vulnerability of the New Zealand Earthquake. [4]
 - (c) Imagine that you are employed by the New Zealand Earthquake Recovery Authority as a geographer to advise the government about the earthquake hazard. With reference to Fig. 1B and 1C, suggest ways in which you might advise the government in response to the impact of the hazard on the human environment in Christchurch. [4]

The Globalisation of Economic Activity

2. Fig. 2 shows the employment structure of 6 different countries.
 - (a) With reference to Fig. 2, compare the employment structure contribution of Nigeria and Brazil. [4]
 - (b) Account for the differentials you have identified in (a). [6]
 - (c) How has globalisation affected the employment structure of DCs? [4]

Hydrologic Processes, Hazards and Management

3 Either

Fig. 3A shows two storm hydrographs of two drainage basins, for the same precipitation event; one is rural and the other is urban. Fig. 3B shows the different pathways of the precipitation, in the two drainage basins.

- (a) Identify which storm hydrograph (P or Q) shows a rural and urban drainage basin. [1]
- (b) Name the parts, R and S, on the storm hydrographs as shown in Fig. 3A. Describe the differences in R and S for the two storm hydrographs. [3]
- (c) Using Fig. 3B, describe and explain the differences between the pathways of the precipitation in the two drainage basins. [4]
- (d) Describe the methods you would use to study variations in infiltration rates in the rural area. [4]

Urban Issues & Challenges

3 Or

Fig. 4 shows percentage of households without a car or van in London.

- (a) With reference to Fig. 4 describe the overall general pattern in car ownership in London. [2]
- (b) Account for the pattern you have identified in (a). [4]
- (c) Describe how you would conduct primary fieldwork to investigate the nature of the population living in the Inner London boroughs. [6]

Lithospheric and Hydrologic Processes, Hazards and Management

4 Either

Fig. 5A shows the annual hydrograph of the Columbia River in Canada. Fig. 5B shows A rock cliff (free face) marked X and a debris slope (scree) marked Y located in highlands in Canada.

- (a) Briefly describe the pattern of the annual discharge of the Columbia River as shown in Fig. 5A. [3]
- (b) Explain **two** factors that might cause the variations in river discharge of the Columbia River in a year. [4]
- (c) Using Fig. 5B, identify the mass movement and state evidence to support your answer. [3]
- (d) Explain how a mass movement event could have affected the river found at the base of the cliff. [2]

The Globalisation of Economic Activity & Urban Issues & Challenges

4 Or

Fig. 6 shows most globalised countries in the world according to AT Kearney Globalisation Index in 2007.

- (a) Name the country in Fig. 6 which was ranked highest for personal contact. [1]
- (b) Explain why Singapore was jointly ranked as the most globalised country in the world in 2007. [5]
- (c) Suggest why technological connectivity as shown is an important determinant of global cities. [6]

Section B Physical Geography

Answer **one** question from this section.

Lithospheric Processes, Hazards and Management

5 Either

- (a) With the use of diagrams, describe the characteristics of the volcanic activity found along different plate margins and explain how these characteristics influence the volcanic landforms produced. [9]
- (b) Discuss how geology and climate influence the formation of a variety of limestone landforms in both temperate and tropical areas. [16]

5 Or

- (a) Discuss the nature of mass movement that makes it become hazardous. [9]
- (b) Explain the features of Strakhov's Diagram. To what extent is Strakhov's diagram able to explain the relationship between climate and type and rate of weathering? [16]

Hydrologic Processes, Hazards and Management

6 Either

- (a) Explain the conditions that lead to the formation of braided channel. [9]
- (b) With reference to example(s), discuss how conflicts of interest are caused by transborder river basin and evaluate the strategies at resolving these conflicts of interest. [16]

6 Or

- (a) Explain how management of catchment areas can often lead to adverse impacts on the natural environment. [9]
- (b) With reference to examples, assess the extent to which magnitude and frequency determine the effects of river floods. [16]

Section C Human Geography

Answer **one** question from this section.

The Globalisation of Economic Activity

7 EITHER

- (a) Explain how globalisation has affected the locational trends in producer and consumer services. [9]
- (b) 'Supranational bodies are often more beneficial to DCs.' To what extent do you agree with this statement? [16]

7 OR

- (a) Explain why the global distribution of FDI (Foreign Direct Investment) flows is often uneven. [9]
- (b) With reference to specific case studies, discuss how the spatial organization of TNCs reflects the New International Division of Labour (NIDL). [16]

Urban Issues & Challenges

8 EITHER

- (a) Outline the differences between centripetal and centrifugal forces in the city. [9]
- (b) 'Primate cities have an overwhelming dominance on the country as a whole which is detrimental to a country's development.' To what extent do you agree with this statement? [16]

8 OR

- (a) Outline the causes of homelessness and explain the resultant problems. [9]
- (b) Discuss why and how the central city experiences changes with reference to case studies. [16]

End