

YISHUN JUNIOR COLLEGE JC2 PRELIMINARY EXAMINATION 2015

H1 GEOGRAPHY

8812/01

Paper 1

**19 AUGUST 2015
WEDNESDAY 0800 – 1100 HOURS**

QUESTION PAPER

Additional materials:

Answer Paper

1 Insert

World outline map



TIME 3 HOURS

READ THESE INSTRUCTIONS FIRST

Start each question on a fresh piece of paper.

Write your name and CTG on all the work you hand in.

Write in dark blue or black pen on both sides of the paper.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use staples, paperclips, 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.

The Insert contains the Table and all Figures referred to in the questions.

Diagrams and sketch maps should be drawn whenever they serve to illustrate an answer.

The World outline map may be annotated and handed in with relevant answers.

You are reminded of the need for good English and clear presentation in your answers.

At the end of the examination, fasten all your work securely together in the correct order.

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

Section A

Answer **four** questions from this section.

Lithospheric Processes, Hazards and Management

- 1 Photograph A shows the ash column that erupted from Mount Sinabung, Sumatra, Indonesia on June 19, 2015. A resident is seen standing on his cabbage field in the foreground of the photograph. Fig. 1 shows the cross-section of Sumatra. The location of Mount Sinabung is also indicated on the cross-section.
- (a) (i) Describe the nature of the ash column seen in Photograph A. [2]
- (ii) Briefly suggest two ways in which volcanic ash is hazardous to humans. [2]
- (b) Using information from Fig.1, explain the cause of the eruption. [5]
- (c) (i) Besides ash, identify one other hazard which could result from the eruption. [1]
- (ii) Describe one strategy that could be used to mitigate the hazard identified in (c)(i). [2]

The Globalisation of Economic Activity

- 2 Table 2 shows the headquarter locations and the number of passenger cars produced by the top 10 automobile manufacturers in 2008. Fig. 2 shows the transnational production geography of Volkswagen in 2008.
- (a) (i) With reference to Table 2 and Fig. 2, describe the spatial distribution of Volkswagen's automobile production. [4]
- (ii) Explain why Volkswagen continues to produce a large proportion of its automobiles in Germany. [4]
- (b) Explain **two** strategies automobile manufacturers such as Volkswagen may have taken in order to become transnational corporations. [4]

Hydrologic Processes, Hazards and Management

3 EITHER

Fig. 3 shows the flows of surface and subsurface water on a grassy hillside.

- (a) Describe the differences between the flows observed on this hillside. [4]
- (b) Explain why the graph in Fig. 3 might change if the hillside was paved over with concrete. [3]
- (c) Suggest how you might investigate how infiltration rates vary along a hillside such as the one observed in Fig. 3. [5]

Urban Issues and Challenges

3 OR

Table 3 gives information about the world's largest cities in 1995.

- (a) What urban functions, shared by some of the cities, help to explain their great size? [4]
- (b) To what extent is an understanding of the process of urbanisation helpful in explaining the variations in average annual growths rate of the cities between 1990 and 1995? [4]
- (c) Explain how you would conduct a pedestrian count in a city. [4]

Lithospheric Processes, Hazards and Management and Hydrologic Processes, Hazards and Management

4 EITHER

Photograph B shows a limestone pavement in Yorkshire Dales, Northern England, which has a temperate climate.

- (a) Name the features A and B shown in Photograph A, which forms part of the limestone pavement. [2]
- (b) Identify one **physical** and one **chemical** weathering process that are most likely to be acting on the landform shown and explain how they operate. [7]
- (c) Explain how the processes in (b) may contribute to the load of a nearby river and describe how that load may be transported. [5]

The Globalisation of Economic Activity and Urban Issues and Challenges

4 OR

Fig. 4 shows a model of the post-industrial global city.

- (a) Describe the location of the low income residential of the low income residential areas shown in Fig. 4. [3]
- (b) Give **two** ways that the central city (CBD) may function as a 'Global Command Centre'. [2]
- (c) Suggest reasons for the decentralisation of the global city in Fig. 4. [7]

Section B Physical Geography

Answer **one** question from this section.

Lithospheric Processes, Hazards and Management

5 EITHER

- (a) Distinguish between igneous and sedimentary rocks. [9]
- (b) 'The chemical composition and the structure of rocks are major factors in influencing weathering.' Discuss this statement. [16]

5 OR

- (a) Distinguish between the following terms:
- (i) Heave and flow
 - (ii) Translational slide and rotational slide [9]
- (b) Discuss the effectiveness of the strategies taken to manage earthquake hazards. [16]

Hydrologic Processes, Hazards and Management

6 EITHER

- (a) With the aid of diagrams, distinguish between the characteristics of meandering and braided channel patterns. [9]
- (b) To what extent does a river's discharge influence its channel pattern? [16]

6 OR

- (a) With reference to examples, explain why some drainage basins experience water shortages. [9]
- (b) Assess the effectiveness of hard-engineering strategies in managing the impacts of flooding. [16]

Section C Human Geography

Answer **one** question from this section.

The Globalisation of Economic Activity

7 EITHER

- (a) With reference to **one** country, describe the economic impacts of joining a trading bloc. [9]
- (b) 'Engaging in economic competition is the most important role that states play for economic development.' Discuss. [16]

7 OR

- (a) Describe the processes that have contributed to globalisation. [9]
- (b) To what extent do you agree that globalisation has brought about more benefits than problems? [16]

Urban Issues and Challenges

8 EITHER

- (a) Outline the problems that result from traffic congestion in cities. [9]
- (b) Assess the extent to which improvement in public transport systems is the key to successful management of transport in urban areas. Use examples from Developed Countries (DCs) and Less Developed Countries (LDCs) to illustrate your answer. [16]

8 OR

- (a) Describe the factors that may contribute to social segregation within cities. [9]
- (b) Discuss the nature and extent of social problems found in cities in both Developed Countries (DCs) and Less Developed Countries (LDCs). [16]