



**SERANGOON JUNIOR COLLEGE**  
**JC2 PRELIMINARY EXAMINATIONS 2014**  
**Higher 1**

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**GEOGRAPHY**

**8812/01**

**Wednesday**  
**20 Aug 2014**  
**3 hours**

Additional materials: Writing Paper  
1 Insert

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**READ THESE INSTRUCTIONS FIRST**

Write your name and civics group 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, paper clips, highlighter, glue or correction fluid.

**Section A**

Answer **all** questions.

**Section B**

Answer **one** question in this section.

**Section C**

Answer **one** question in this section.

The Insert contains all the Figures referred to in the question paper.  
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.  
The number of marks is given in brackets [ ] at the end of each question or part question.

## Section A

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

### Lithospheric Processes, Hazards and Management

- 1 Fig. 1 shows the rock cycle.
- (a) What is meant by the *rock cycle*? [2]
  - (b) With reference to Fig. 1, compare the way in which igneous and metamorphic rocks are formed. [4]
  - (c) Briefly describe the role of *plate tectonics* in the *rock cycle*. [6]

### Globalisation of Economic Activity

- 2 Fig. 2 shows the changes in the rankings of the Global Services Location Index (GSLI) for selected countries from 2007 to 2009. The Global Services Location Index (GSLI) ranks the top 50 countries for providing outsourcing activities.
- (a) With reference to Fig. 2,
    - (i) Describe the key features in the changes in the rankings of the Global Services Location Index (GSLI). [4]
    - (ii) Account for the changes in Singapore's ranking from 2007 to 2009. [4]
  - (b) With reference to specific examples, examine the extent to which outsourcing can contribute to the rise of hub status in Newly Industrialising Economies (NIEs). [4]

### Hydrologic Processes, Hazards and Management

- 3 **Either** Fig. 3 features the varying regime of the River Rhone. The River Rhone runs from Switzerland to France and it is one of the major rivers in Europe.
- (a) (i) Define the term *regime*. [2]
  - (b) (ii) Describe the changes in the regime of the River Rhone catchment. [3]
  - (c) Suggest why the shapes of the two graphs at Lyons are different. [4]
  - (d) Briefly outline two ways in which human activities can alter the regime of a river. [3]

### Urban Issues and Challenges

- 3 Or** Photograph A features a section of Camden City, UK. Fig. 4 shows the poverty profile for Camden City (2013).
- (a)** With reference to Photograph A, cite evidence to show that the area is in decline. **[3]**
  - (b)** Using information from Fig. 4, suggest what governments can do to address the problems associated with inner city decline in Camden City. **[5]**
  - (c)** Suggest ways in which urban residential segregation can reinforce socio-economic polarity. **[4]**

### Lithospheric and Hydrologic Processes, Hazards and Management

- 4 Either** Fig. 5A shows the landslide susceptibility map for Saint Lucia. Saint Lucia is an island country in the eastern Caribbean Sea. The location and tectonic setting of Saint Lucia is featured in Fig. 5B.
- (a)** Citing evidence from Figs 5A and 5B, suggest reasons for the occurrence of mass movements in Saint Lucia. **[4]**
  - (b)** Suggest the effects of mass movements on channel flow and morphology. **[5]**
  - (c)** Imagine that you are a government official working for Saint Lucia's Seismic Research Center. Discuss how you would map an earthquake hazard map for Saint Lucia. **[5]**

### Globalisation of Economic activity and Urban Issues and Challenges

- 4 Or** Fig. 6 shows the Global Technology map in 2014.
- (a)** Assess the extent to which the Global Technology map reflects a north-south divide. **[4]**
  - (b)** Suggest how a country's extent of urbanization influences its levels of research and development spending. **[5]**
  - (c)** Discuss how you would map global variations in economic wealth. **[5]**

## Section B

Answer **one** question from this section. Each question carries 25 marks.

### Lithospheric Processes, Hazards and Management

#### 5 EITHER

- (a) Describe and explain the key characteristics of earthquakes. [9]

- (b) “While the intensity (of a tectonic event) is important, of equal or greater importance is the presence of a population whose demographic or socioeconomic characteristics may place its members at greater risk of harm before, during, and after a disaster.” Population Reference Bureau 2011 [16]

With reference to examples, explain why many people continue to live in areas at risk from tectonic hazards and suggest how governments can mediate that risk.

#### 5 OR

- (a) Compare the key properties of granite and limestone. [9]

- (b) “Surface processes are more important than sub-surface processes in the development of landforms”. [16]

With reference to landforms that you have studied, discuss the validity of the statement.

### Hydrologic Processes, Hazards and Management

#### 6 EITHER

- (a) With the aid of a diagram, describe and explain how sub-surface flows and stores may contribute to surface flows and stores. [9]

- (b) With reference to one or more examples, identify the factors that impede the sustainable management of drainage basins and suggest ways to overcome these challenges. [16]

#### 6 OR

- (a) Define each of the following terms: *drainage density*, *stream ordering* and *bifurcation ratio*. Explain how they be used to describe the characteristics of a drainage basin. [9]

- (b) To what extent can meandering channels be considered as stable channel patterns? [16]

### Section C

Answer **one** question from this section. Each question carries 25 marks.

#### Globalisation of Economic activity

##### 7 EITHER

- (a) With the help of examples, describe the character of Export Processing zones (EPZs) and outline why governments may develop them. [9]
- (b) To what extent can governments accurately measure the development of a country over time? [16]

##### 7 OR

- (a) With reference to **one** specific TNC, explain how its spatial organisation reflects New International Division of Labour (NIDL). [9]
- (b) What opportunities and constraints exist for transnational corporations (TNCs) in an increasingly globalising world? [16]

#### Urban Issues and Challenges

##### 8 EITHER

- (a) With reference to one or more urban areas, describe how state planning has influenced contemporary urban structure. [9]
- (b) To what extent do you agree that urbanisation is a past process, rather than a current one? [16]

##### 8 OR

- (a) Outline and explain the growth of mega-cities and primate cities. [9]
- (b) Using located examples, discuss the challenges that urban planners in mega-cities face. [16]

**End of Paper**