



**HWA CHONG INSTITUTION**  
**JC2 Preliminary Examinations**  
**Higher 1**

**CANDIDATE  
NAME**

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**CT GROUP**

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**CENTRE  
NUMBER**

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**INDEX  
NUMBER**

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**GEOGRAPHY**

**8812/01**

Paper 1

**13 September 2016**

Additional Materials: Answer Paper

**3 hours**

1 Insert

World outline map

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**READ THESE INSTRUCTIONS FIRST**

Write your name and CT class clearly 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, 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 all the Figures referred to in the question paper.

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 an answer.

At the end of the test, 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 and Question 4 carries 14 marks.

You should allocate your time accordingly.

#### Lithospheric Processes, Hazards and Management

- 1 Fig. 1 shows a map of the world's main tectonic plates and plate boundaries. The arrows indicate the direction of plate movements.
- (a) Using Fig. 1, identify and describe the following at the zones marked X and Y:
- (i) type of plate boundary;
  - (ii) resultant tectonic landform. [4]
- (b) With the aid of annotated diagrams, describe the tectonic processes occurring at zones X and Y. [4]
- (c) Explain how the knowledge of the internal structure of the Earth can aid our understanding of the Plate Tectonics Theory. [4]

#### The Globalisation of Economic Activity

- 2 Fig. 2 shows the flows of foreign direct investments (FDI) for selected economies in the sub-regions of East, South and Southeast Asia, 2006. Table 1 shows the list of countries according to their sub-regions.
- (a) Define the term 'foreign direct investments (FDI). [2]
- (b) Describe the pattern of FDI flows within and between the sub-regions of East, South and Southeast Asia as shown in Fig. 2. [4]
- (c) Using Fig. 2,
- (i) Identify the country with the highest volume of inward FDI;
  - (ii) Suggest possible reasons for your answer in (i). [6]

#### Hydrologic Processes, Hazards and Management

- 3 EITHER Figs. 3A and 3B show structures that are built along the course of rivers.
- (a) Identify the structures A and B shown in Figs. 3A and 3B respectively. [2]
- (b) Explain the functions and limitations of the structures identified in (a). [6]
- (c) Suggest **two** ways in which channel flow can be managed without the use of structures. [4]

### Urban Issues and Challenges

**3 OR** Fig. 4A shows London's (UK) Index of Multiple Deprivation in 2015. The areas with the darkest shade are the most deprived. Fig. 4B shows the London Boroughs (note the location of the City of London no.4).

- (a) With reference to Figs. 4A and 4B, describe the location of the most deprived areas. **[4]**
- (b) Suggest reasons for the location of the most deprived areas described in (a). **[4]**
- (c) Explain the socio-economic impacts of such deprivation in urban areas. **[4]**

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

**4 EITHER** Fig. 5A shows areas affected by pyroclastic flows and lahar deposition in the southwest sector of Mount Pinatubo, Philippines 1991. Fig. 5B shows monthly precipitation and lahar frequency for Mt Pinatubo in 1991.

- (a) Define the terms 'lahar' and 'pyroclastic flow' and explain their relationship with volcanic eruptions such as that of Mt Pinatubo 1991 shown in Fig. 5A. **[6]**
- (b) With reference to Fig. 5B, describe and explain the relationship between lahars and monthly precipitation. **[4]**
- (c) Explain how hazards associated with earthquakes in volcanic areas may be mapped. **[4]**

### The Globalisation of Economic Activity and Urban Issues and Challenges

**4 OR** Fig. 6 shows information on the Amritsar-Kolkata Industrial Link in Northern India.

- (a) Describe the influence of such developments shown in Fig. 6 in urban land use patterns. **[4]**
- (b) Suggest possible reasons for the development of the industrial link. **[6]**
- (c) Describe the steps you would take to conduct a survey to determine the impact of TNCs in the Amritsar-Kolkata Industrial Link. **[4]**

**Section B Physical Geography**

Answer **one** question from this section.

**Lithospheric Processes, Hazards and Management**

- 5 EITHER**    **(a)** Differentiate between the Richter Scale and the Modified Mercalli Scale and describe the limitations of their use in measuring earthquakes. **[9]**
- (b)** To what extent is immediate response important in the mitigation of the negative impacts of earthquakes? Discuss with reference to areas you have studied. **[16]**
- 5 OR**        **(a)** Explain the role of plate tectonics in the rock cycle. **[9]**
- (b)** Explain the relative importance of the stripping of regolith in the formation of inselbergs found in the tropics. **[16]**

**Hydrologic Processes, Hazards and Management**

- 6 EITHER**    **(a)** Explain the influence of turbulent flow on channel pattern. **[9]**
- (b)** Discuss the value of studying short and long term variations in river discharge. **[16]**
- 6 OR**        **(a)** Explain how drainage density and bifurcation ratio affect the efficiency of a drainage basin. **[9]**
- (b)** Conflicts of interest in drainage basins may not be trans-border in nature. Discuss the validity of this statement. **[16]**

### Section C Human Geography

Answer **one** question from this section.

#### The Globalisation of Economic Activity

- 7 EITHER**
- (a) Explain how the processes of globalisation are related to the spatial division of the global economy. **[9]**
  - (b) Evaluate the role of the government in the economic development of Newly Industrialised Economies (NIEs) and Less developed countries (LDCs). **[16]**
- 7 OR**
- (a) Explain the occurrence of the development gap on a national scale. **[9]**
  - (b) Discuss the extent to which the development gap may have an impact on the spatial organization and structure of transnational corporations (TNCs). **[16]**

#### Urban Issues and Challenges

- 8 EITHER**
- (a) Compare the characteristics and functions of global cities and primate cities. **[9]**
  - (b) To what extent is the process of decentralisation the main factor influencing urban structure? **[16]**
- 8 OR**
- (a) Describe and explain recent changes to the central city (CBD and inner city). **[9]**
  - (b) To what extent is urban regeneration led by public initiatives? **[16]**