



NANYANG JUNIOR COLLEGE

Year 2 Preliminary Examination

H1 GEOGRAPHY

8812/01

Physical and Human Geography

14 Sep 2015

3 hours

Additional Materials: Answer Paper
Insert
World Outline Map

READ THESE INSTRUCTIONS FIRST

Write your class, index number and name 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 **all** questions.

Section B

Answer **one** question.

Section C

Answer **one** question.

The Insert contains the Photograph and 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 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.
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 the world's distribution of oceanic trenches.

- (a) Describe and explain the distribution of oceanic trenches (A to J). [6]
- (b) Identify the steps that you would undertake to determine the type of rocks in a small area. [6]

The Globalisation of Economic Activity

2 Fig. 2 shows liberalisation and growth linkages in India's service subsectors.

- (a) Describe the relationship between the growth of service subsectors and their extent of liberalisation. [2]
- (b) Describe **two** ways in which the Indian service sector can be liberalised. [2]
- (c) Suggest reasons
 - (i) why certain service subsectors grow so rapidly and
 - (ii) why certain service subsectors are non-liberalised? [4,4]

Hydrologic Processes, Hazards and Management

3 EITHER

Figs. 3A and 3B show the typical features of a meandering channel and a braided channel respectively.

- (a) Describe the differences in channel characteristics shown in Figs. 3A and 3B. [4]
- (b) Account for the differences shown between the two channels. [6]
- (c) With reference to Fig. 3A, explain **one** human activity that may modify its channel characteristics. [2]

Urban Issues and Challenges

3 OR

Fig. 3 shows a photograph of Rochinha, a slum area in Rio de Janeiro, Brazil.

- (a) Differentiate the terms *slums* and *squatter settlements*. [2]
- (b) Describe the features of the settlement as shown in the photograph. [3]
- (c) Explain why slums develop? [3]
- (d) Describe the methods you would carry out to investigate the nature of migrant population in a slum community. [4]

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

4 EITHER

Fig. 4A shows the impact of the volcanic eruption of Soufriere Hills, Monserrat in 2007 in the Caribbean.

Fig. 4B shows the plate boundary where the volcano is sited.

- (a) With reference to Fig. 4A and Fig. 4B, describe the possible impacts of the eruption on **both** the physical and the human environment. [6]
- (b) Using Fig. 4B, explain the nature of eruption that occurred at this location. [4]
- (c) Suggest **two** mitigation measures that can be taken to limit the hazardous effects of the erupted materials shown in Fig. 4B. [4]

The Globalisation of Economic Activity / Urban Issues and Challenges

4 OR

Fig. 4 shows the rates of urban expansion in China, 1989-2000.

- (a) Give the meaning of the term *urban expansion*. [1]
- (b) (i) Name the cartographic technique used to depict the information in Fig.4. [1]
- (ii) Name **one** region which experienced the highest rate of urban expansion. [1]
- (c) Describe the distribution of the areas which experienced rates of urban expansion of 11- 20% for the period. [3]
- (d) To what extent is globalisation the main factor responsible for the variation in the rate of China's urban expansion? [8]

Section B Physical Geography

Answer **one** question from this section.

Lithospheric Processes, Hazards and Management**5 EITHER**

- (a) Distinguish between flow, slide and heave as processes of mass movements. [9]
- (b) With reference to examples, discuss the factors that contribute to effective volcanic hazard management. [16]

OR

- (a) Explain how rock type and structure influence the processes of *block disintegration* and *granular disintegration*. [9]
- (b) Discuss the significance of climate and geology in the formation of karstic landforms in tropical and temperate regions. [16]

Hydrologic Processes, Hazards and Management**6 EITHER**

- (a) Explain how human activities can affect the hydrological cycle. [9]
- (b) To what extent is the shape of the storm hydrograph dependent upon the rainfall characteristics of the area? [16]

OR

- (a) Compare the conditions under which turbulent flow, laminar flow and helicoidal flow occur within river channels. [9]
- (b) "Hard engineering methods are the most effective in the management of a flood event." How far do you agree with this statement? [16]

Section C Human Geography

Answer **one** question from this section.

The Globalisation of Economic Activity**7 EITHER**

- (a) Outline the reasons for the rapid growth of transnational corporations (TNCs) in the global economy in the last 30 years. [9]
- (b) To what extent is the development gap increasing? [16]

OR

- (a) Why and where do deindustrialisation and reindustrialisation occur? [9]
- (b) With reference to a newly industrialising economy, evaluate the reasons for its economic success. [16]

Urban Issues and Challenges**8 EITHER**

- (a) With reference to one or more urban areas, describe and explain changes in the Central Business District (CBD). [9]
- (b) With reference to a large city in the developing world, discuss the causes and the social, economic and environmental impact of urbanisation. [16]

OR

- (a) Discuss the view that slums are not a source of despair but are instead, opportunities for hope. [9]
- (b) To what extent is the problem of housing shortages confined to the cities of the developing world? [16]