



NANYANG JUNIOR COLLEGE

Year 2 Preliminary Examination

H1 GEOGRAPHY

8812

Physical and Human Geography

15 Sept 2016

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 Photograph A shows Spitzkoppe, a granitic landform in Namibia, Africa.
- (a) Draw an annotated sketch diagram to show the main features of the landform shown in Photograph A. [3]
- (b) With evidence from Photograph A, show how the landform could have been formed. [5]
- (c) Account for a mass movement process that could possibly take place in the vicinity of the landform in Photograph A. [4]

The Globalisation of Economic Activity

- 2 Fig. 1 shows the volume of inward and outward FDI (1995) on the various regions of the world.
- (a) (i) Name the mapping technique used to construct the figure. [1]
- (ii) Explain **one** limitation of this mapping technique, using evidence from Fig. 1 to support your answer. [2]
- (b) Explain the distribution of FDI for developing countries for both inward and outward FDI. [5]
- (c) With examples, provide reasons why DCs may invest into other DCs. [4]

Hydrologic Processes, Hazards and Management

3 EITHER

Fig. 2 shows land use changes and its impact on permeability.

- (a) Draw annotated hydrograph(s) to represent the discharge for areas A and B shown in Fig. 2. [2]
- (b) Give reasons why the hydrographs for areas A and B are different. [4]
- (c) Describe the steps you will take to determine the rates of infiltration in the field. [6]

Urban Issues & Challenges

3 OR

Fig. 3 depicts the planned layout of the central area of the city of Portland in Oregon, USA.

- (a) Compare the land use patterns on both sides of the Willamette River. [4]
- (b) At the location marked **X** on Fig. 3, disused warehouses have been converted into high-end apartments. Outline the possible advantages of such developments. [2]
- (c) Outline how you would plan and conduct a pedestrian count in the central area of Portland, to investigate pedestrian flows between 7.00am and 9.00pm. [6]

Lithospheric and Hydrologic Processes, Hazards and Management

4 EITHER

Photograph B shows a slope failure at Washington State over the Stillaguamish River.

- (a) Identify the type of slope failure and provide evidences from Photograph B. [4]
- (b) Explain **two** factors that may have resulted in the slope failure shown in Photograph B. [4]
- (c) With reference to Photograph B, explain the impact on channel processes and morphology when sediments are transported into the nearby river. [6]

Globalisation of Economic Activity and Urban Issues and Challenges

4 OR

Fig. 4 shows Bangkok, the capital city of Thailand, an LDC.

- (a) Describe and account for the distribution of the shanty towns in Fig. 4. [6]
- (b) Suggest how the lives of people in the shanty towns can be improved. [6]
- (c) Using evidence from Fig. 4 and any other relevant information, suggest why the CBD of Bangkok would be the choice location in Thailand for the regional headquarters of Transnational Corporations (TNCs). [4]

Section B Physical Geography

Answer **one** question from this section.

Lithospheric Processes, Hazards and Management

5 EITHER

- (a) Explain the usefulness and limitations of using Strakhov's diagram in explaining the weathering of granite in the tropics. [9]
- (b) "Tropical karst landforms are solely the result of chemical weathering processes." Evaluate the validity of this statement. [16]

OR

- (a) With the aid of diagrams, compare the landforms and seismic activities at convergent and divergent boundaries. [9]
- (b) "Volcanic hazards are easier to manage than earthquake hazards." Discuss. [16]

Hydrologic Processes, Hazards and Management

6 EITHER

- (a) Outline the factors that affect flows and stores within a drainage basin. [9]
- (b) "Floods are the result of anthropogenic factors and thus can be resolved by human means." Evaluate the validity of this statement. [16]

OR

- (a) Explain the differences between *Hortonian overland flow* and *Saturation overland flow* within a drainage basin. [9]
- (b) "Meandering channels are very different from braided streams in their characteristics, processes and formation." Discuss. [16]

Section C Human Geography

Answer **one** question from this section.

The Globalisation of Economic Activity

7 EITHER

- (a) Describe the causes for the emergence of the New International Division of Labour (NIDL). [9]
- (b) To what extent is the nation state still important in today's global economy? [16]

OR

- (a) With reference to an area or areas you have studied, distinguished between the terms quaternary **and** quinary sectors of economic activity and explain their growth. [9]
- (b) Discuss the view that TNCs are widely regarded to be a mixed blessing to economies in which they choose to locate their production. [16]

Urban Issues & Challenges

8 EITHER

- (a) Describe and briefly explain the theory of bid rent in relation to urban zoning. [9]
- (b) To what extent do you agree that global cities are similar in functions but greatly different in character? [16]

OR

- (a) With the use of examples, describe the processes of suburbanisation **and** counter-urbanisation. [9]
- (b) Assess the effectiveness of management strategies to reduce congestion problems in urban areas. [16]