

Section A

Answer **four** questions from this section.

Lithospheric Processes, Hazards and Management

1 Fig. 1 shows the Peltier model.

- (a) Describe the relationship between climate and type of weathering as shown in Fig. 1. [4]
- (b) With reference to Fig. 1 and your own well-labelled diagrams, explain how freeze-thaw weathering can occur in the area with moderate chemical weathering. [6]
- (c) Explain **one** anthropogenic factor that can affect the rate of weathering. [2]

The Globalisation of Economic Activity

2 Fig. 2A shows the global spatial organisation of McDonald's. Fig. 2B shows the Millward Brown ranking of selected brands.

- (a) (i) With reference to Fig. 2A, identify the type of data shown and explain one limitation. [3]
- (ii) Describe the spatial distribution of McDonald's restaurant as shown in Fig. 2A. [4]
- (b) With reference to Fig. 2A and 2B, explain why certain brands are more popular than others. [5]

Hydrologic Processes, Hazards and Management

3 EITHER Fig. 3 shows the trends of construction of large dams in selected countries.

- (a) With reference to Fig. 3, describe the trends of construction of large dams. [3]
- (b) Suggest why governments would choose to construct dams in their countries. [3]
- (c) Explain how the construction of dams can lead to conflicts between countries in transborder river basins. [6]

Urban Issues and Challenges

3 OR Fig. 4 shows a Cultural Quarter at Stoke-on-Trend City Centre.

- (a) Describe the term *cultural quarters* and explain how the strategy can be used to re-image cities, such as the one shown in Fig. 4A. [7]
- (b) Evaluate why cities may want to carry out re-imaging strategies. [5]

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

4 EITHER Fig. 5 shows the global hydrologic system.

- (a) Identify the features **A**, **B** and **C**. [3]
- (b) Distinguish between the global hydrologic system and the basin hydrologic system. [3]
- (c) Explain how the physical characteristics of limestone would have an impact on surface runoff and drainage density in a drainage basin. [4]
- (d) Describe the techniques you would use in order to determine different rock types. [4]

The Globalisation of Economic Activity and Urban Issues and Challenges

4 OR Tables 2A and 2B show Toyota Motor Corporation's production and sales by region.

- (a) Compare the key features of Toyota's production and sales by region as shown in Tables 2A and 2B. [6]
- (b) Describe the implications for Toyota as a result of the change in its volume of sales in Japan as shown in Table 2B. [4]
- (c) Explain how you would investigate the changing nature of industrial areas in a city like Singapore. [4]

Section B Physical Geography

Answer **one** question from this section.

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

- (a) With reference to the *rock cycle*, explain the differences between igneous, sedimentary and metamorphic rocks. [9]
- (b) To what extent is the removal of weathered materials essential to the development of granite landforms? [16]

5 OR

- (a) Explain how changes in *shear strength* and *shear stress* can contribute to the processes of mass movement. [9]
- (b) To what extent is geology the main factor in the formation of limestone landforms? [16]

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

- (a) Distinguish between each of the following pairs of terms:
 - i. Saturation overland flow and infiltration excess overland flow
 - ii. Hydraulic radius and Bifurcation Ratio. [9]
- (b) To what extent is geology the principal factor in influencing the hydrologic cycle at the basin scale? [16]

6 OR

- (a) Explain the processes of infiltration and percolation and describe the factors that affect the rates at which these processes occur. [9]
- (b) To what extent are treaties the most successful strategy to resolving the conflict of interests within and between upstream and downstream riparian states in the management of transborder river basins? [16]

Section C Human Geography

[Turn Over]

Answer **one** question from this section.

The Globalisation of Economic Activity

7 EITHER

(a) Compare and contrast the following:

- i. Job specialisation and Flexible production
- ii. Techno parks and Export Processing zones. [9]

(b) To what extent are the contributions of a supranational body economically positive? [16]

7 OR

(a) Compare and contrast the following:

- i. Quaternary and Quinary Sectors
- ii. Inward and Outward Investment. [9]

(b) Assess the impact of a TNC on its home and host economies. [16]

Urban Issues and Challenges

8 EITHER

(a) Explain the factors that cause the segregation of social groups in the urban areas. [9]

(b) To what extent is state planning primary in influencing land use patterns in different urban areas? [16]

8 OR

(a) Compare the urbanisation trends between DCs and LDCs. [9]

(b) To what extent has the growth of primate cities led to extreme social problems? [16]