



General Certificate of Education
Advanced Level Examination
June 2010

Geography

GEOG3

Unit 3 Contemporary Geographical Issues

Monday 21 June 2010 1.30 pm to 4.00 pm

For this paper you must have:

- an AQA 12-page answer book.

Time allowed

- 2 hours 30 minutes

Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Write the information required on the front of your answer book. The **Examining Body** for this paper is AQA. The **Paper Reference** is GEOG3.
- Answer **three** options: **one** from each section. In **Section C**, you must **not** answer the same option as those chosen in **Sections A** and **B**.
- Use sketch maps, diagrams and specific examples, where appropriate.
- Do all rough work in your answer book. Cross through any work that you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 90.
- You will be marked on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

Advice

- You are advised to spend about 45 minutes on each of **Sections A** and **B** and about 60 minutes on **Section C**.

Section A

Answer **one** option from this section.

You must not answer the option that you will answer in Section C.

Option 1 Plate Tectonics and Associated Hazards**Total for this option: 25 marks****0 1**

Study **Figure 1**, a photograph of an area in northern Pakistan after a recent earthquake.

Using **Figure 1 only**, comment on the evidence that suggests that an earthquake has recently taken place. *(7 marks)*

Figure 1



Source: photograph by PROF. DAVID PETLEY, Durham University

0 2

Describe how seismic waves and earthquakes can be measured. *(8 marks)*

0 3

With reference to **two** seismic events you have studied from contrasting areas of the world, compare the ways in which earthquakes and their impacts have been managed. *(10 marks)*

Option 2 Weather and Climate and Associated Hazards**Total for this option: 25 marks****0 4**

Study **Figure 2** which shows temperatures in Dublin at 2200 hours on a November evening.

Describe and comment on the extent of the urban heat island shown. (7 marks)

Figure 2

Figure 2 is not reproduced here due to third-party copyright constraints. It had been adapted from G. O'HARE and J. SWEENEY, *Human Impact on Atmospheric Energy* (Oliver and Boyd, 1990).

0 5

Explain how urban structures and layout affect winds. (8 marks)

0 6

With reference to examples, discuss how pollution reduction policies have attempted to lessen the incidence of particulate pollution and photochemical smog. (10 marks)

Turn over ►

Option 3 Ecosystems: Change and Challenge**Total for this option: 25 marks****0 7**Study **Figure 3** which shows some characteristics of the London Plane tree.Using **Figure 3 only**, comment on the advantages and disadvantages of planting the London Plane tree alongside roads in urban areas. (7 marks)**Figure 3**

Characteristic	The London Plane tree
Aesthetic value	A tall elegant tree providing pleasant shade in summer and a pleasing winter silhouette. Flaking bark creates attractive colours on trunk.
Does it make a mess?	Leaves, fruit and bark need clearing from streets and pavements.
Pollution tolerance	Very tolerant of air pollution. Hairs on young shoots and leaves help to trap particulate pollution.
Pests and disease	Rarely affected by disease and pests (although some shoots are killed each year by fungal infection).
Soil conditions	Very tolerant of poor soil conditions including compacted soil (although some stunting of growth is caused by road salt).
Space	Grows vigorously and is very tolerant of pruning.
Safety hazards	Trees rarely blow over or shed branches. Fine hairs on young shoots, leaves and fruit may cause irritation and even allergies in some people.
Microclimate	Open canopy produces light shade. Will intercept some rain especially when in leaf.
Biodiversity	Provides valuable nesting sites for birds. Sufficient light below canopy to allow significant plant growth.

adapted from the Field Studies Council's Urban Ecosystems website
www.field-studies-council.org/urbanecol

0 8Describe and explain **two** changes that have taken place in urban ecosystems.(8 marks)**0 9**With reference to **one** example, assess the success of ecological conservation areas.(10 marks)**End of Section A**

Section B

Answer **one** option from this section.

You must not answer the option that you will answer in Section C.

Option 4 World Cities

Total for this option: 25 marks

1 0

Study **Figure 4**, a photograph of an area of a city in India.

Using **Figure 4 only**, comment on the characteristics of the urban landscape shown. Suggest how it could be improved. (7 marks)

Figure 4



Source: photograph by JONAS BENDIKSEN, Magnum Photos

1 1

Explain the process of suburbanisation and describe its effects. (8 marks)

1 2

Evaluate the success of **one** urban regeneration scheme or policy that you have studied. (10 marks)

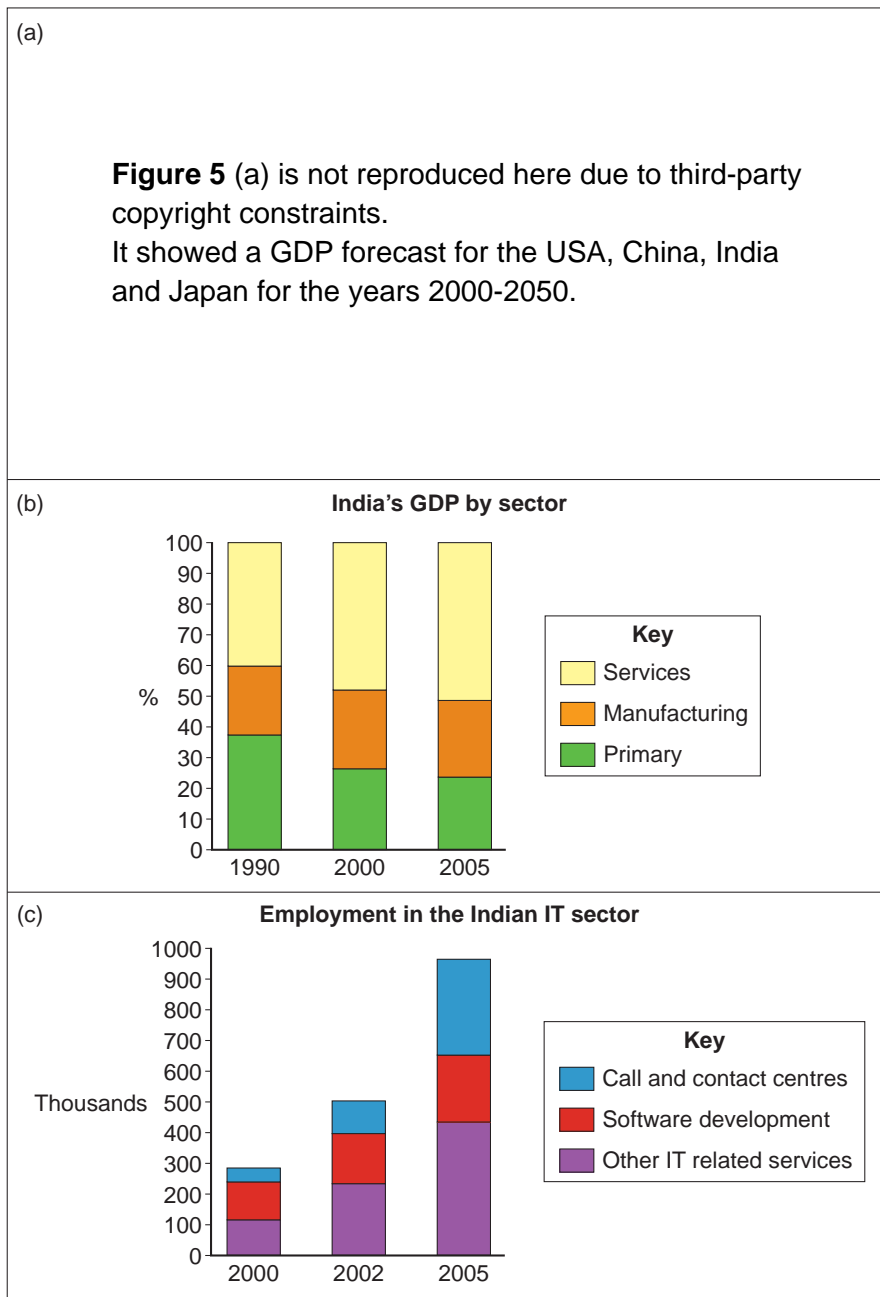
Turn over ►

Option 5 Development and Globalisation
Total for this option: 25 marks
1 3

 Study **Figure 5** which shows economic changes associated with development.

 Comment on trends shown in **Figure 5**.

(7 marks)

Figure 5

 Figure 5(a) adapted from *Global Economics Paper No: 99* (Goldman Sachs, 1 October 2003)

1 4

 For **either** China **or** India, explain the recent growth of industries in that country.

(8 marks)

1 5

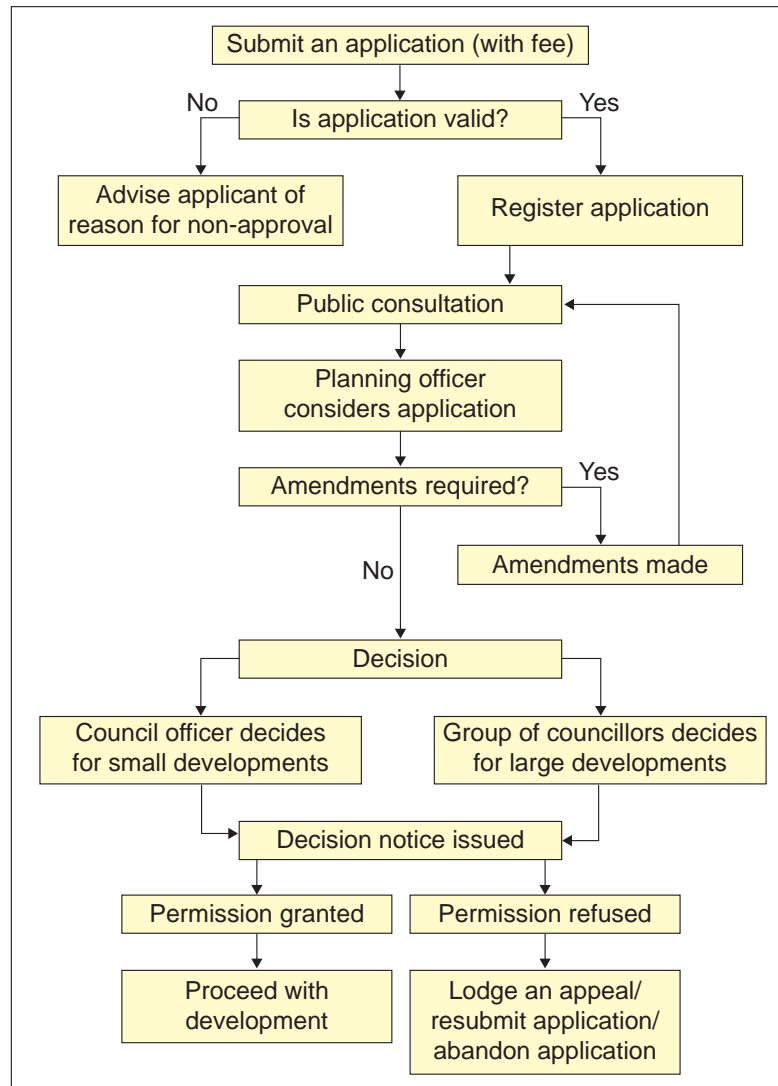
Discuss the impact of Newly Industrialised Countries (NICs) on the global economy.

(10 marks)

Option 6 Contemporary Conflicts and Challenges
Total for this option: 25 marks
1 | 6

 Study **Figure 6** which shows a planning process.

 Using **Figure 6** and your own knowledge, comment on the planning process shown.

(7 marks)
Figure 6

1 | 7

 Using **one or more** examples, outline the nature and origins of conflict. In your answer, you may refer to the influences of **one or more** of identity, ethnicity, culture, resources and ideology.

(8 marks)
1 | 8

 With reference to **one** recent major international conflict, discuss the impact of the conflict on the **economy** of the area affected.

(10 marks)
End of Section B
Turn over ►

Section C

Answer **one** option from this section.

You must not answer the option answered in either Section A or Section B.

Note to Candidate

You should bear in mind that the essay questions below are synoptic in nature. In your response to these questions you are required to show your knowledge and understanding of different aspects of geography, the connections between these different aspects and, where relevant, of human perspectives upon geographical themes and issues.

Option 1 Plate Tectonics and Associated Hazards

1 9 “The hazards presented by volcanic and seismic events have the greatest impact on the world’s poorest people.” To what extent do you agree with this view? (40 marks)

Option 2 Weather and Climate and Associated Hazards

2 0 Discuss the impacts of storm events in the British Isles and evaluate the responses to them. (40 marks)

Option 3 Ecosystems: Change and Challenge

2 1 Discuss the relative importance of physical and human factors in accounting for changes to vegetation over time within ecosystems in the British Isles. (40 marks)

Option 4 World Cities

2 2 With reference to **either** waste management in urban areas **or** transport management in urban areas, discuss the extent to which sustainability can be achieved. (40 marks)

Option 5 Development and Globalisation

2 3 “Countries at very low levels of economic development face such huge challenges that they cannot hope to address them without assistance from the rest of the world.” To what extent do you agree with this view? (40 marks)

Option 6 Contemporary Conflicts and Challenges

2 4 Analyse the reasons for separatism within and/or across national boundaries, and discuss its consequences. (40 marks)

END OF QUESTIONS

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