

General Certificate of Education Advanced Level Examination January 2012

# Geography

**GEOG3** 

# Unit 3 Contemporary Geographical Issues

Monday 30 January 2012 1.30 pm to 4.00 pm

#### For this paper you must have:

• an AQA 12-page answer book.

You may use a calculator.

#### 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.

H/Jan12/GEOG3 GEOG3

#### 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** which shows the relationship between shaking intensity (measured by the Mercalli Scale) and different types of building structure.

Describe and comment on the information provided.

(7 marks)

Figure 1

	MERCALLI SCALE				
Type of building structure	VI (Strong)	VII (Very Strong)	VIII (Destructive)	IX (Ruinous)	X (Disastrous)
Adobe (baked mud and clay)	8	22	50	100	100
Unreinforced masonry	3.5	14	40	80	100
Reinforced masonry (non-seismic design)	1.5	5.5	16	38	66
Steel framed buildings	0.4	2	7	20	40
Reinforced masonry (seismic design)	0.3	1.5	5	13	25

Source: US Geological Survey

The numbers are the percentages of buildings damaged or collapsed.

0 2 Outline the features of seismic waves.

(8 marks)

**O** 3 Evaluate the management strategies adopted following **one** earthquake that you have studied. (10 marks)

### Option 2 Weather and Climate and Associated Hazards

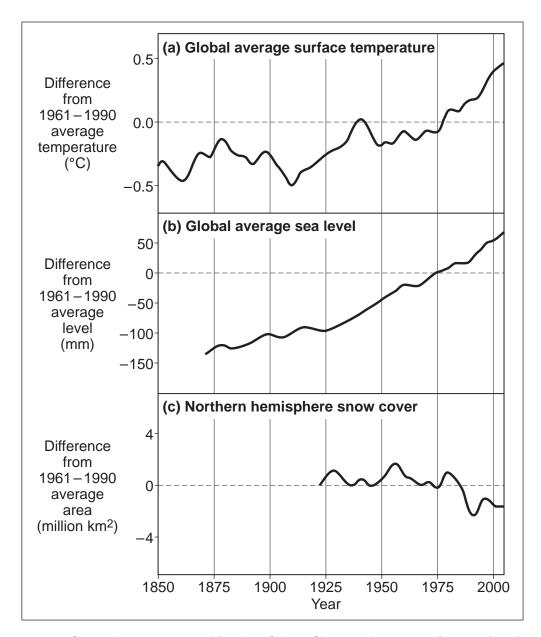
Total for this option: 25 marks

Study **Figure 2** which shows changes, compared with 1961–1990 averages, in temperature, sea level and northern hemisphere snow cover. This information came from the Intergovernmental Panel on Climate Change (IPCC) in 2007.

Describe and comment on the changes shown.

(7 marks)

Figure 2



Source: Intergovernmental Panel on Climate Change – Assessment Report 4 (2007)

- **0 5** Describe the possible effects of global warming on a tropical region that you have studied. (8 marks)
- 0 6 Discuss the responses to global warming on an international scale. (10 marks)

Turn over ▶

# Option 3 Ecosystems: Change and Challenge

# Total for this option: 25 marks

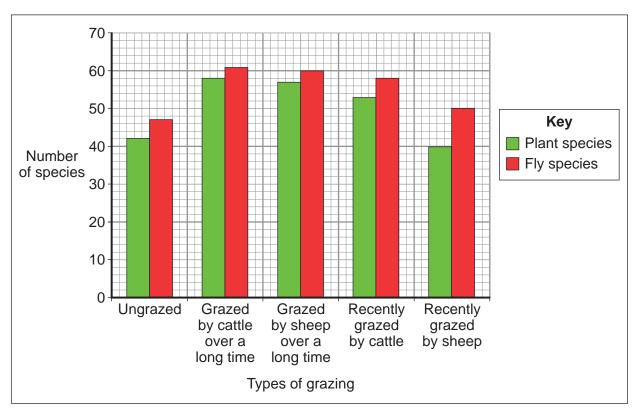
0 7

Study **Figure 3** which shows variations in plant and fly species in different grazing areas on Salisbury Plain, a grassland area in southern England. Much of this area is used by livestock farmers.

Describe and comment on the variations shown.

(7 marks)

Figure 3



Source: Topic Eye: Ecosystems and Biodiversity; publisher - Cross Academe Limited

0 8 Outline the characteristics of the temperate deciduous woodland biome. (8 marks)

0 9 Assess the extent to which **one** local scale ecological conservation area that you have studied has been successful. (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

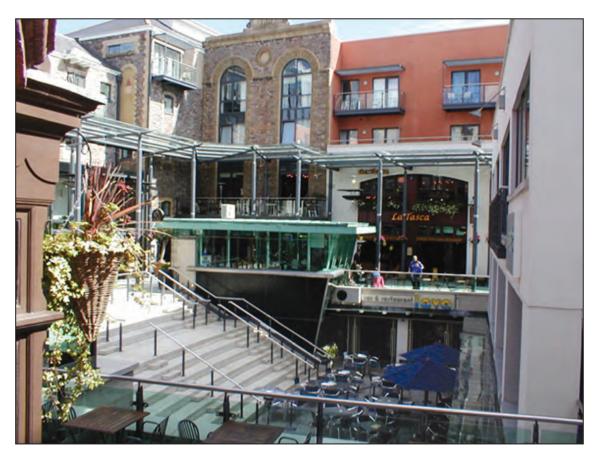
Total for this option: 25 marks

1 0 Study **Figure 4**, a photograph of a central urban area that has recently undergone redevelopment.

Comment on the features of the area shown.

(7 marks)





Source: © Cameron Dunn

- 1 1 Outline the process of counter-urbanisation and describe its effects. (8 marks)
- Discuss the planning and management issues that have arisen in areas that have undergone urbanisation in recent years. (10 marks)

# Option 5 Development and Globalisation

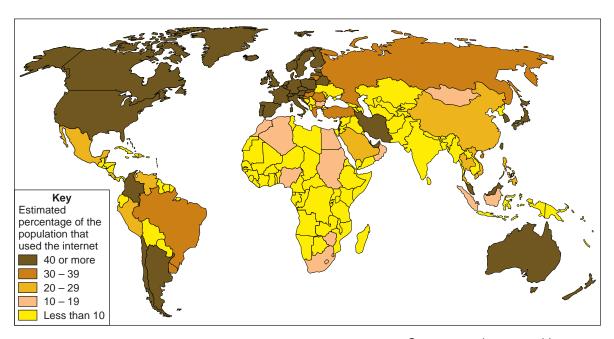
# **Total for this option: 25 marks**

1 3 Study **Figure 5** which shows the estimated percentage of population by country that used the internet in 2009.

Comment on the extent to which it supports the concept of the North/South divide.

(7 marks)

Figure 5



Source: www.internetworldstats.com

1 4 Outline reasons for the growth of social and/or economic groupings of nations.

(8 marks)

1 5 Discuss the consequences of groupings of nations. (10 marks)

# **Option 6 Contemporary Conflicts and Challenges**

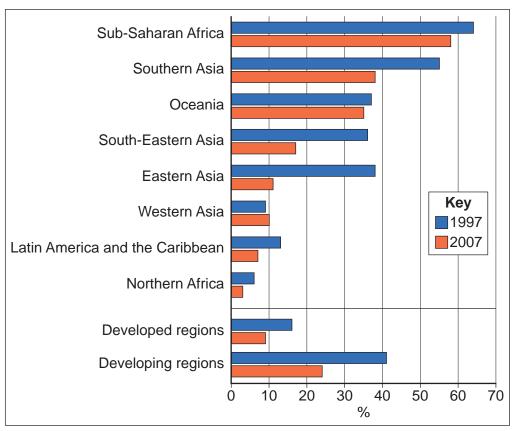
# Total for this option: 25 marks

Study **Figure 6** which shows the percentage of employed people living on less than US \$1.25 a day in each of 1997 and 2007 for selected regions.

Comment on the information shown.

(7 marks)

Figure 6



Source: © United Nations 2009 - United Nations: Millennium Development Report 2009

1 7 Suggest reasons for the existence of global poverty. (8 marks)

1 8 Discuss how poverty can be addressed on a global scale. (10 marks)

**End of Section B** 

#### 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 To what extent can preparedness and planning mitigate the effects of volcanic hazards?

(40 marks)

# Option 2 Weather and Climate and Associated Hazards

2 0 To what extent can preparedness and planning mitigate the effects of tropical revolving storms? (40 marks)

# Option 3 Ecosystems: Change and Challenge

2 1 'The characteristics of the vegetation of tropical biomes are more the outcome of continued human activity than a response to the climatic conditions.'

With reference to **one** tropical biome, discuss the extent to which you agree with this view. (40 marks)

#### **Option 4 World Cities**

2 2 To what extent can urban areas be sustainable?

(40 marks)

#### Option 5 Development and Globalisation

2 3 To what extent can development be sustainable?

(40 marks)

### Option 6 Contemporary Conflicts and Challenges

With reference to a conflict over the use of a local resource that you have studied, discuss the extent to which all interest groups involved can be satisfied with its outcome.

(40 marks)

#### **END OF QUESTIONS**

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