



General Certificate of Education  
Advanced Level Examination  
June 2015

## Geography

## GEOG3

### Unit 3 Contemporary Geographical Issues

Monday 15 June 2015 9.00 am to 11.30 am

**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 **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**.

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## Section A

Answer **one** option from this section.

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

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### Option 1 Plate Tectonics and Associated Hazards

Total for this option: 25 marks

0 1

**Figure 1** shows the impacts of an ongoing volcanic eruption from Mount Merapi, Indonesia, in October 2010.

Describe and comment on impacts of the eruption shown in **Figure 1**.

[7 marks]

**Figure 1**



0 2

Describe the landforms associated with constructive plate margins and explain their formation.

[8 marks]

0 3

With reference to examples, discuss the ways in which volcanic hazards can be managed.

[10 marks]

## Option 2 Weather and Climate and Associated Hazards

Total for this option: 25 marks

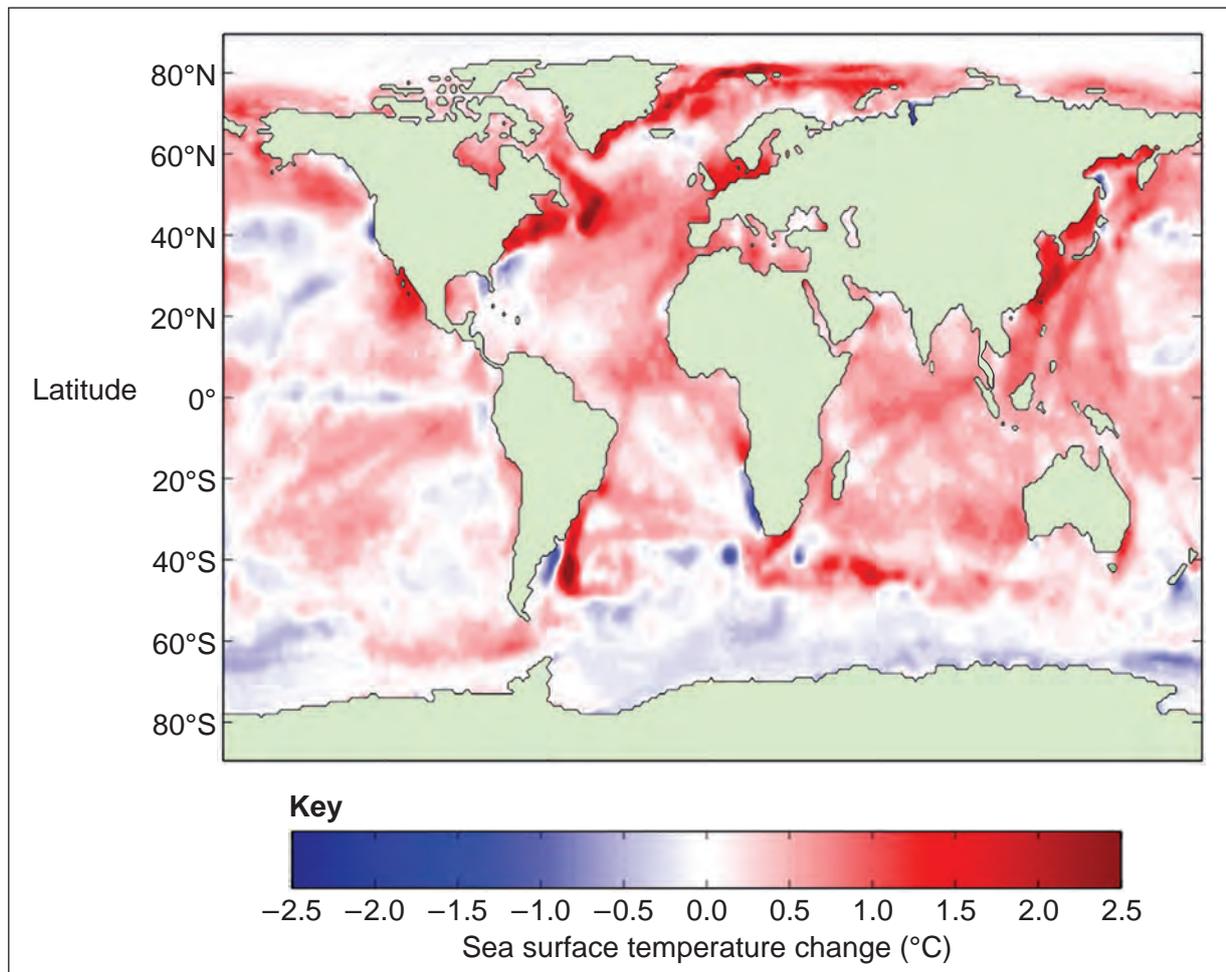
0 4

**Figure 2** shows changes in sea surface temperature between 1959 and 2008.

Describe and comment on the changes shown in **Figure 2**.

[7 marks]

**Figure 2**



0 5

Describe the possible effects of global warming on the British Isles.

[8 marks]

0 6

Discuss responses to global warming at international and national scales.

[10 marks]

Turn over ►

**Option 3 Ecosystems: Change and Challenge****Total for this option: 25 marks****0 7**

**Figure 3** is an adaptation of an extract from the Network Rail website. Network Rail is responsible for maintaining the UK rail network.

Comment on the issues resulting from the management of this type of routeway ecology.

**[7 marks]****Figure 3****Plants, trees and animals**

We manage the plants, trees and animals on our land so that we can keep the railway safe. We aim to balance this with our environmental obligations.

**Keeping the railway safe**

Trees and plants can cover up signals, fall on to the tracks and overhead power lines and prevent workers from getting to places of safety when trains are passing. We keep the area between the rails completely clear so that we can run a safe and reliable railway for passengers and allow efficient maintenance.

**Autumn leaves**

Leaf mulch forms a teflon-like coating on the rails, causing trains to slip and slide. This delays the trains and can damage both track and trains. Train delays caused by autumn leaf fall have been significantly reduced in the last two years. We have done this mainly by removing trees that are too close to the track.

**Invasive plants (weeds)**

Japanese knotweed, giant hogweed, common ragwort and other invasive plants cause serious problems. We work hard to control these weeds on our land. We dispose of the waste responsibly so that we do not accidentally spread these invasive plants to new sites.

**Birds, animals and habitats**

There are over 30 000 hectares of line-side vegetation along 32 200 kilometres of track. Before we clear vegetation, we carry out a risk assessment of the area to see whether any nesting birds or protected species may be present. For example, if a nest is found, we identify and mark an exclusion zone of at least two metres around the nest.

**0 8**

Explain the processes by which wasteland may be colonised by vegetation.

**[8 marks]****0 9**

Referring to **at least one** plagioclimax within the British Isles, discuss how human activity affects plant succession.

**[10 marks]**

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**Turn over for Section B**

**Turn over ►**

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**Section B**

Answer **one** option from this section.

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

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**Option 4 World Cities**

**Total for this option: 25 marks**

**1 0**

**Figures 4a and 4b** show some information about UK retailing.

Describe and comment on the information shown in **Figures 4a and 4b**.

**[7 marks]**

**Figure 4a and Figure 4b**

Figure 4a and 4b cannot be reproduced here due to third-party copyright constraints.

Figure 4a consisted of two pie charts showing the spending by location in 2000 and 2014. Locations represented were: Town centre sales; Out of town shopping centres; Neighbourhood sales and Internet sales.

Figure 4b was a line graph showing the rise of e-Retail and m-Commerce from 2000 to 2014.

1	1
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Outline the process of gentrification and describe its effects.

**[8 marks]**

1	2
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With reference to **one or more** urban centre(s), assess the impact of redevelopment on retailing and other services.

**[10 marks]**

**Turn over for the next option**

**Turn over ►**

**Option 5 Development and Globalisation**

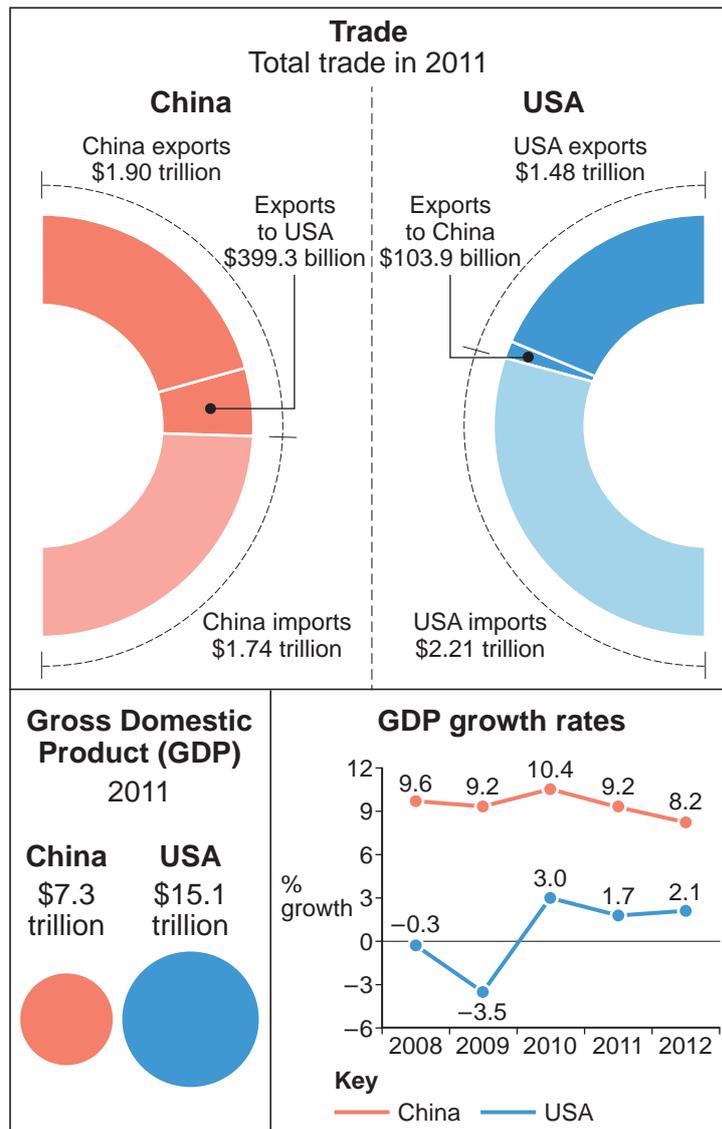
**Total for this option: 25 marks**

**1 3** **Figure 5** compares key economic data for China and the USA.

Describe and comment on the information shown in **Figure 5**.

**[7 marks]**

**Figure 5**



**1 4** Explain how the globalisation of the service sector has affected India.

**[8 marks]**

**1 5** Assess the relative impacts of trade and aid on economic development.

**[10 marks]**

## Option 6 Contemporary Conflicts and Challenges

Total for this option: 25 marks

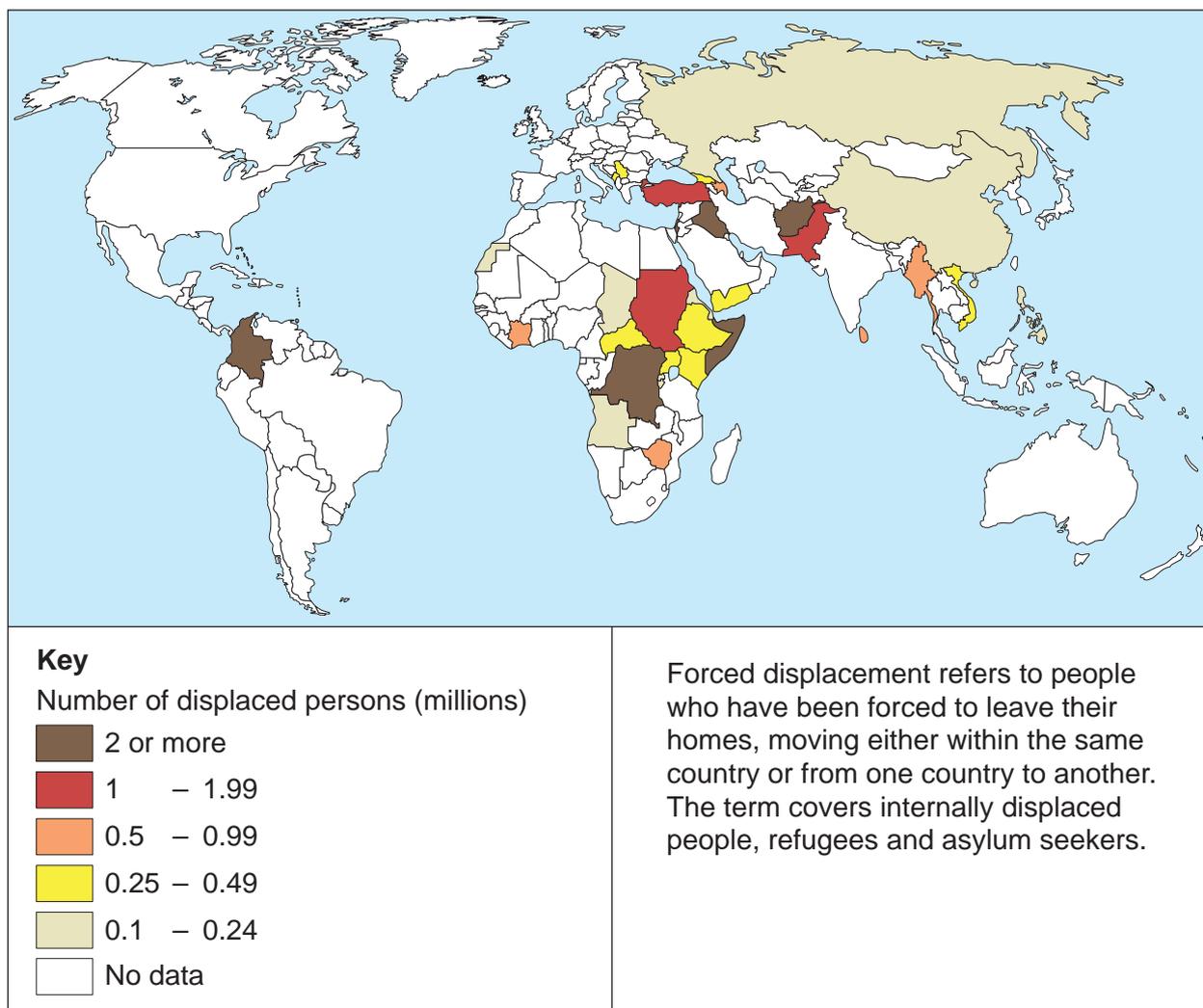
1 | 6

Figure 6 shows levels of forced displacement by country in 2009.

Describe and comment on the information shown in Figure 6.

[7 marks]

Figure 6



1 | 7

Describe **one** way in which international agencies (such as the United Nations) are addressing poverty on a global scale.

[8 marks]

1 | 8

Discuss the social issues associated with **one** major international conflict.

[10 marks]

Turn over for Section C

Turn over ►

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**Section C**

Answer **one** option from this section.

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

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**Note to Candidate**

The essay questions below are synoptic. In your response 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
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'Systems of prediction, preparation and prevention are so well developed, catastrophe is avoidable.'

In the context of volcanic hazards, discuss the extent to which you agree with this view.

**[40 marks]**

**Option 2 Weather and Climate and Associated Hazards**

2	0
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'There is no realistic defence against storms wherever they occur.'

How far do you agree with this view?

**[40 marks]**

**Option 3 Ecosystems: Change and Challenge**

2	1
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'Our fate is bound up with that of the natural world and we've really got to get on with protecting the environment while we can, even in times of economic uncertainty.'  
(Hilary Benn, MP)

To what extent do you agree with this view?

**[40 marks]**

**Option 4 World Cities**

2	2
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Assess the extent to which regeneration schemes have been effective in improving urban areas.

**[40 marks]**

**Option 5 Development and Globalisation**

2	3
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To what extent have the social and economic groupings of nations benefited their populations?

**[40 marks]**

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**Option 6 Contemporary Conflicts and Challenges**

2	4
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'Whenever there is conflict, there can only be winners and losers.'

How far do you agree with this view?

**[40 marks]**

**END OF QUESTIONS**

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**There are no questions printed on this page**

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Figure 2: Provided by Alex Sen Gupta (UNSW CCRC) from *The Copenhagen Diagnosis, 2009: Updating the World on the Latest Climate Science*. I.Allison, N.L. Bindoff, R.A. Bindschadler, P.M. Cox, N. de Noblet, M.H. England, J.E. Francis, N. Gruber, A.M. Haywood, D.J. Karoly, G. Kaser, C. Le Quéré, T.M. Lenton, M.E. Mann, B.I. McNeil, A.J. Pitman, S. Rahmstorf, E. Rignot, H.J. Schellnhuber, S.H. Schneider, S.C. Sherwood, R.C.J. Somerville, K. Steffen, E.J. Steig, M. Visbeck, A.J. Weaver. The University of South Wales Climate Change Research Centre (CCRC), Sydney, Australia, 60pp.  
Figure 3: © Network Rail 2014  
Figure 4a & 4b: The Portas Review: An independent review into the future of our high streets, Mary Portas, December 2011. Figures for 2011 to 2014 estimated.  
Figure 5: © Thomson Reuters, 30 April 2012.  
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