



GCE AS/A level

1201/01



S15-1201-01

GEOGRAPHY – G1
Changing Physical Environments

A.M. TUESDAY, 12 May 2015

1 hour 30 minutes

ADDITIONAL MATERIALS

In addition to this examination paper, you will need **one** 12 page answer book.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.

Answer **all** questions.

Write your answers in the separate answer book provided.

Write your name, centre number and candidate number in the spaces at the top of the answer book.

INFORMATION FOR CANDIDATES

Each question carries **25** marks.

The number of marks is given in brackets at the end of each question or part-question.

You are reminded that assessment will take into account the quality of written communication used in your answers.

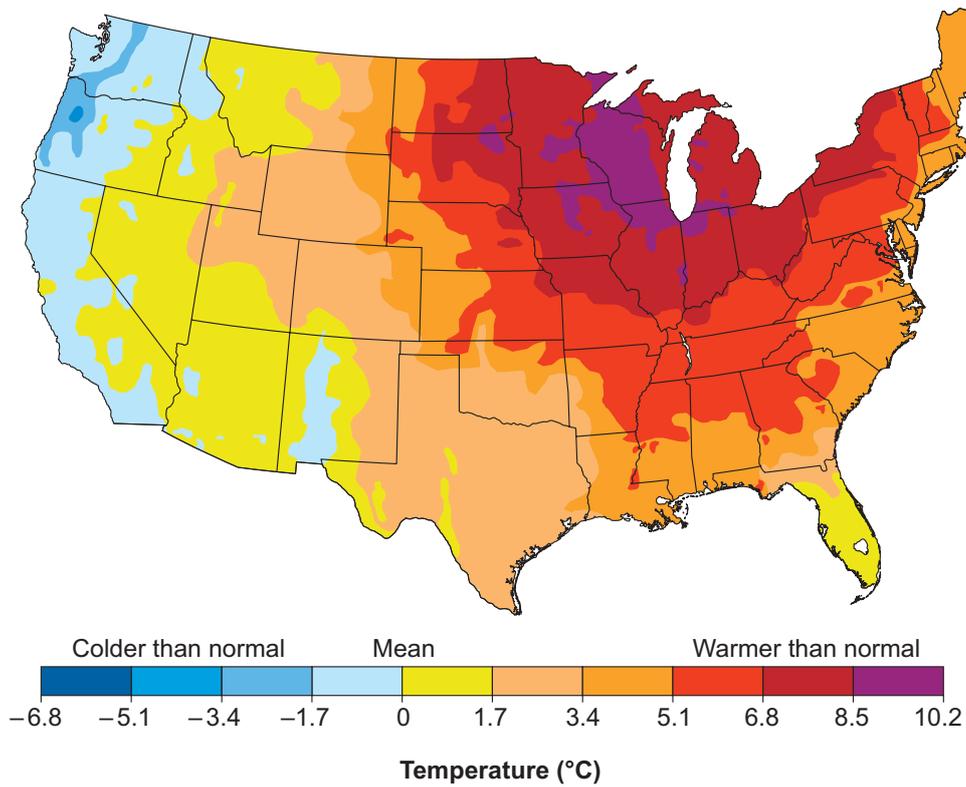
THIS PAPER REQUIRES THAT YOU MAKE THE FULLEST POSSIBLE USE OF APPROPRIATE EXAMPLES IN SUPPORT OF YOUR ANSWERS. SKETCH-MAPS AND DIAGRAMS SHOULD BE INCLUDED WHERE RELEVANT.

G1 – CHANGING PHYSICAL ENVIRONMENTS

Answer all questions.

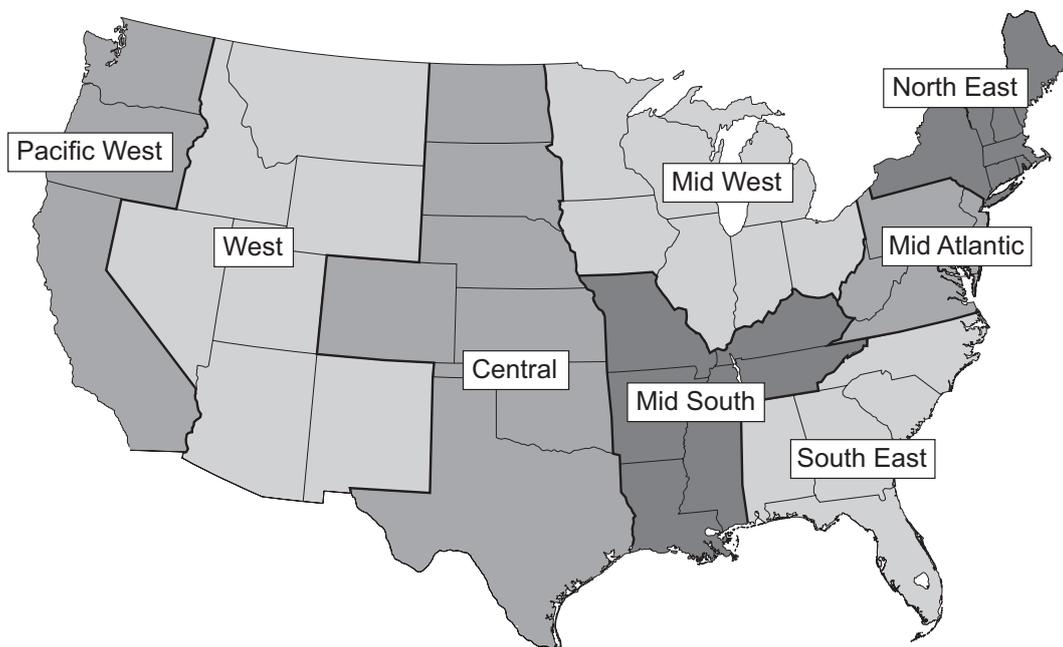
Make the fullest possible use of examples in support of your answers.

Figure 1a: Temperature deviations from the mean in the USA, March 2012



Source: adapted from <http://www.ncdc.noaa.gov>

Figure 1b: Major regions of the USA



1. (a) Describe the pattern of temperature deviations shown in **Figure 1a**. [5]
- (b) Outline the effects on human activities of **one or more** extreme weather events. [10]
- (c) Discuss the success of strategies used by pressure groups and/or individuals to address climate change. [10]

Figure 2: Loss scores from earthquakes in eastern Turkey

Year	Province	Loss score	Relative impact of indicator
2011	Van	0.55	
1975	Lice	0.39	
1983	Narman-Horasan	0.24	
2003	Bingol	0.12	

Indicators  Deaths  Homeless  Buildings uninhabitable  Injured

A loss score is a measure of the overall impact of an earthquake which takes into account the relative importance of different indicators.

A score of 1 shows the greatest disaster impact and a score of 0 the least.

Source: adapted from <http://earthquake-report.com>

2. (a) Compare the loss scores from earthquakes shown in **Figure 2**. [5]
- (b) Outline the tectonic processes operating at constructive plate margins and conservative plate margins. [10]
- (c) Outline the social and economic impacts of **one or more** tectonic events. [10]

Figure 3: Computer model of flood risk of the River Wansbeck, Northumberland



Discharge: 150–225 m³/s
 Rainfall intensity: 3–4.5 mm/hr



Key

 Predicted flood zone

Figure 3a: Recurrence interval 5–25 years



Discharge: 270–300 m³/s
 Rainfall intensity: 5.5–6.5 mm/hr



Key

 Predicted flood zone

Figure 3b: Recurrence interval 40–50 years



Discharge: 325–345 m³/s
 Rainfall intensity: 7–7.5 mm/hr



Key

 Predicted flood zone

Figure 3c: Recurrence interval 75–137 years

Source: <http://www.morpethfloodaction.org.uk>

3. (a) Describe the variations in flood risk shown in **Figure 3**. [7]
- (b) Describe how you would collect information on people's views of the **economic** impacts of flooding. [8]
- (c) Discuss the strengths and weaknesses of **two** methods used to present information for an investigation into a changing physical environment that you have completed. [10]

You should state clearly the question that you have investigated.

END OF PAPER