

Surname	Centre Number	Candidate Number
Other Names		0

GCSE – NEW



C112U20-1



GEOGRAPHY B – Component 2
Problem Solving Geography

TUESDAY, 5 JUNE 2018 – AFTERNOON

1 hour 30 minutes

For Examiner's use only		
	Maximum Mark	Mark Awarded
Part A	39	
Part B	21	
Part C	12	
SPaG	4	
Total	76	

ADDITIONAL MATERIALS

In addition to this paper you may use a calculator and a ruler if required.

INSTRUCTIONS TO CANDIDATES

Answer **all** of the questions in this examination.

Use black ink or black ball-point pen. Do not use gel pen. Do not use correction fluid.

Write your name, centre number and candidate number in the spaces at the top of this page.

Write your answers in the spaces provided in this booklet.

If additional space is required you should use the lined page(s) at the end of this booklet. The question number(s) should be clearly shown.

INFORMATION FOR CANDIDATES

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 your ability to spell, punctuate and use grammar and specialist terminology accurately in your answer to Part C.



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Hurricanes are extreme weather events. In some parts of the world hurricanes are called typhoons or cyclones. One of the areas in the USA affected by hurricanes is the state of Florida.

Part A:	gives information about the cause and impacts of hurricanes.	39 marks
Part B:	gives information about ways that the hurricane hazard can be reduced.	21 marks
Part C:	asks you to choose a combination of three ideas which would work well together to reduce the impacts of hurricanes in the state of Florida, USA.	16 marks
		Total 76 marks

Part A – The cause and impacts of hurricanes

You are advised to spend about 40 minutes on this part.

- (a) Describe how hurricanes are formed. Complete the sentences that follow by selecting words or numbers from the box below. [5]

temperate	moist	tropical	37	high	27
stable	low	spinning	17	dry	unstable

Hurricanes form above seas when sea temperatures reach °C. This warmth is transferred to the air above. The air becomes and rises rapidly resulting in air pressure. The rising air is replaced by warm, air, moving in from the surrounding area.

- (b) Study Figure 1 on page 2 of the Resource Folder.

Describe the location of hurricanes, cyclones and typhoons on Figure 1.

Use map evidence **only**.

[4]

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- (c) Study Figure 2 on page 2 of the Resource Folder. It shows the track of Hurricane Matthew. Describe the track of Hurricane Matthew from the 28th September to the 9th October. [4]

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- (d) Many countries sent aid to places damaged by Hurricane Matthew. Read the ‘heads and tails’ definitions below.

Heads – Geographical term

Tails – Definition

A	Donor country
B	Recipient country
C	Emergency aid
D	Development aid

1	This type of aid quickly delivers help such as medical supplies and drinking water.
2	This type of aid aims to help the country recover in the longer term.
3	This is when countries work together to provide aid for long and short-term projects.
4	This is the country that sends aid in the form of money, materials or people.
5	This is the country that receives the aid to help it recover.

- (i) Add the number of the correct tail to the boxes below. One of the definitions is incorrect and should not be used. [4]

A	
B	
C	
D	



(ii) Explain **one** way that countries **giving** aid can benefit from doing so. [3]

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(e) Study the data in the table below. It shows the number of hurricanes that directly affected the USA in each month from 1851 to 2016.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Number of hurricanes	0	0	0	0	0	19	25	77	107	53	5	0	286

(i) How long is the hurricane season in the USA? months. [1]

(ii) What percentage (%) of the total number of hurricanes occurred in the three peak months of August, September and October?
Show your working. Give your answer to two decimal places. [3]

Answer: %



(iii) Give **two** reasons why hurricanes are seasonal.

[4]

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(iv) Give **one** reason why hurricanes eventually lose their power.

[2]

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(f) Study Figure 3 on page 3 of the Resource Folder. Suggest **one** way that this hurricane may have affected tourists. [3]

Use evidence from the photograph.

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(g) Figure 4 on page 3 of the Resource Folder shows other impacts of Hurricane Matthew.

Explain why short-term **and** long-term measures are needed to respond to hurricane damage. [6]

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End of Part A



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Part B – Ways of reducing the hurricane hazard

You are advised to spend about 25 minutes on this section.

The fact box below gives reasons why Florida needs to decide on ways to reduce the hurricane hazard.

Facts about Florida

- The population is rising fast.
- The number of tourists visiting Florida is rising each year.
- The main growth areas of Florida are found along the coast.
- Scientists predict that climate change will increase the strength and the frequency of hurricanes and cause sea levels to rise.
- The coastal area of Florida is mostly low-lying.

Read pages 4 and 5 of the Resource Folder.

- (a) One way of reducing the hurricane hazard is for the state of Florida to build more sea walls.

- (i) Tick (✓) the correct statement. Sea walls are an example of: [1]

	Tick (✓)
Managed realignment	
Soft engineering	
Hard engineering	

- (ii) Sea walls will reduce the threat from sea level rise.
Give **two** effects of global warming that cause sea levels to rise. [2]

1.

2.



(b) Identify **two** groups of people who may not benefit from building evacuation routes. For each group give **one** reason why they may not benefit. [4]

1st Group:

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2nd Group:

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(c) Give **one** reason why building several small storm shelters in an area may be better than building one large storm shelter. [2]

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(d) Some homeowners take out insurance against hurricane damage. Some politicians think that this should be made compulsory for all homeowners in areas affected by hurricanes.

Do you agree with these politicians?
Circle **one** of the following. Explain your choice. [5]

YES

NO

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(e) Explain **two** limitations of using social media to respond to natural hazards. [4]

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(f) The National Hurricane Centre (NHC) says it needs funding to do more research to improve hurricane forecasts.

Explain why this funding should be the responsibility of the national government of the USA and not of individual states. [3]

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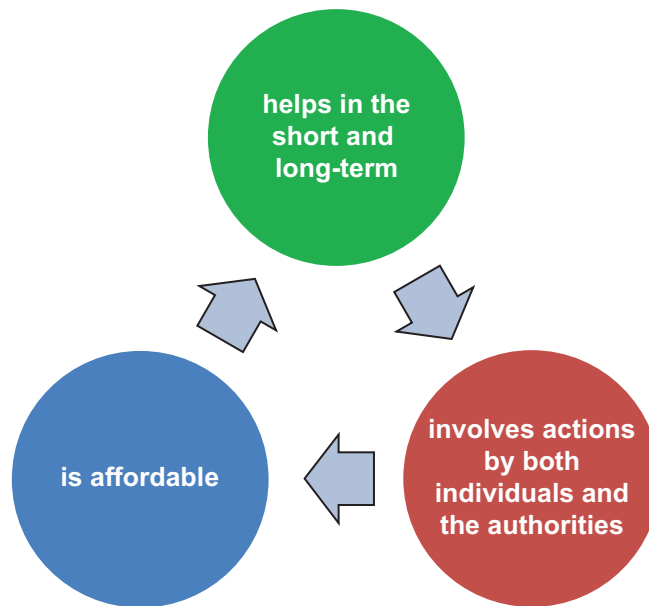
End of Part B



Part C

You are advised to spend about 25 minutes on this part.

Surveys in the State of Florida show that the residents want the authorities to come up with a clear plan for the future. They want **three** ways of reducing the impacts of hurricanes in a plan that:



You **may** use the space above to help organise your ideas. Your report should start on the next page.



Examiner only

Use information in this examination paper and Resource Folder to help you select **three** ways that would work well together and would satisfy the residents. Justify your ideas. [12]

Your ability to spell, punctuate and use grammar and specialist terminology accurately will be assessed in your answer. [4]

I think the combination of these **three** ways would work well together to help reduce the effect of hurricanes:

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I think the residents of Florida would be satisfied with this combination because:

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Examiner
only

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Area for handwritten answers, consisting of 18 horizontal dotted lines.

End of Part C

END OF PAPER



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