

Cambridge International Examinations

Cambridge International General Certificate of Secondary Education

Paper 2		October/November 2	2016
ENVIRONMEN [®]	TAL MANAGEMENT	0680)/23
CENTRE NUMBER		CANDIDATE NUMBER	
CANDIDATE NAME			

October/November 2016

1 hour 45 minutes

Candidates answer on the Question Paper.

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams or graphs.

Do not use staples, paper clips, glue or correction fluid.

DO NOT WRITE IN ANY BARCODES.

Answer **both** questions.

Electronic calculators may be used.

You may lose marks if you do not show your working or if you do not use appropriate units.

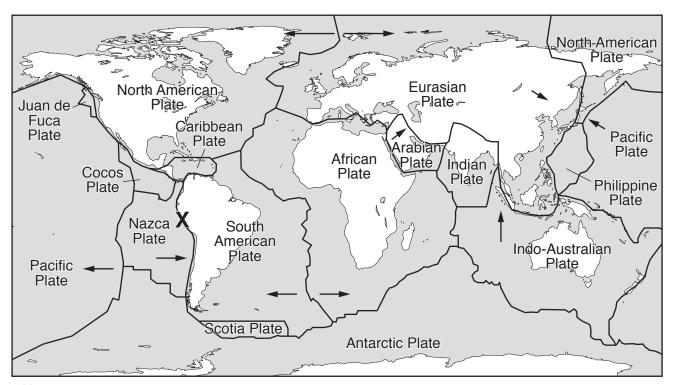
At the end of the examination, fasten all your work securely together.

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



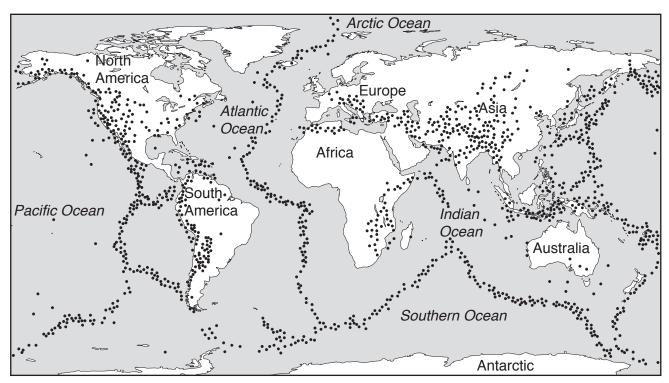


1	(a) (i)	State what is meant by the term earthquake.
		[1]
	(ii)	Look at the maps opposite.
		Describe the global distribution of earthquakes.
		[3]
	(iii)	Look at the map, which shows plate boundaries. Explain how earthquakes are formed at location ${\bf X}$.



Key

- plate boundary
- direction of plate movement



Key

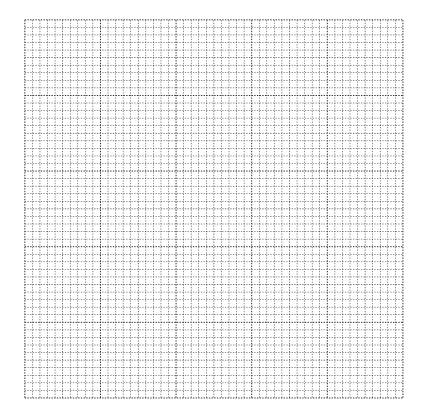
.: earthquake zones

(b) Look at the table below, which gives information about the magnitude (strength) of some earthquakes in different parts of the world and the number of deaths that they caused.

location of earthquake	magnitude	deaths
Indonesia	9.1	228 000
United States of America	7.8	3000
China	7.5	243 000
Italy	7.2	72000

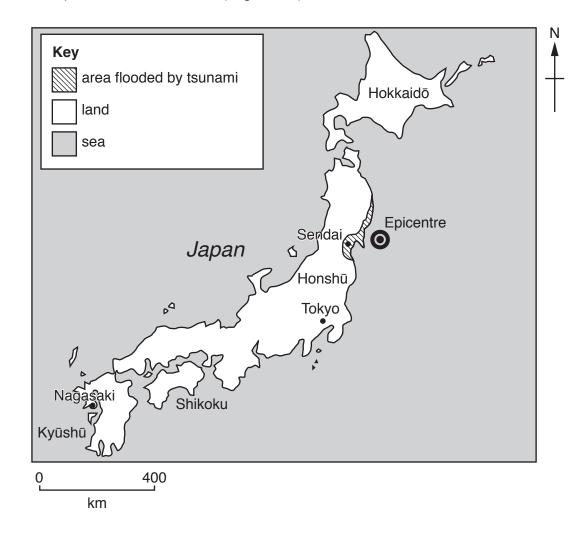
(i) Draw a bar graph to show the information about **magnitude** from the table.

[4]



(ii)	Rewrite the locations of the earthquakes in rank order for the number of deaths in the space provided below. [2]
	highest
	1
	2
	3
	4
	lowest
(iii)	Look again at the table. State what is unusual about the information for the United States of America.
	[1]
(iv)	Describe strategies that countries can use to manage the impacts of earthquakes.
	[4]

(c) Look at the map below, which shows information about a recent earthquake in Japan. The earthquake caused a tsunami (huge wave).



Suggest why Sendai was more affected by this earthquake (and resulting tsunami) the Nagasaki.	ır
1	3

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(i)

(ii) Look at the photographs below, which show the impact of the earthquake (and resulting tsunami) in Japan.





Suggest ways in which earthquakes impact upon people both immediately after the disaster and in the months that follow.

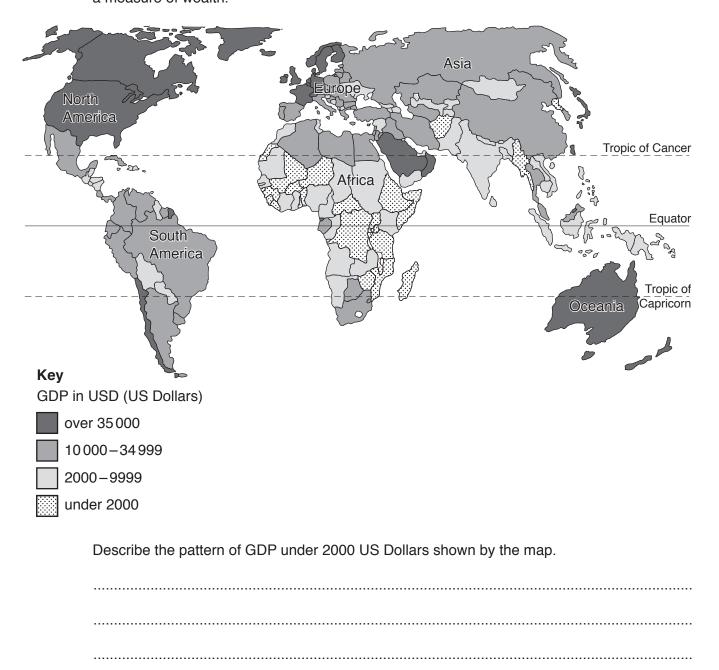
(d) (i) Read the information below about river flooding in the United States of America.

In April and May 2011 the Mississippi River flooded. This was caused by storms with very heavy rainfall in the area around the Mississippi River. The heavy rainfall came at the same time as the spring snow-melt. Thousands of homes had to be evacuated. A large channel was opened allowing water to flow from the river onto the surrounding land, flooding 12000 square kilometres. This strategy meant that cities close to the Mississippi River were saved from the worst of the flooding.

	Complete the table below with one ex	xample of each.	[3]		
	river	Mississippi			
	cause of flooding				
	impact				
	how managed				
	date	April and May 2011			
	country	United States of America			
(i	(ii) Explain how deforestation can increase the risk of river flooding.				

(e)	Suggest strategies that can be used to limit the negative impacts of flooding.
	91

2 (a) Look at the map below, which shows world gross domestic product (GDP) per person. GDP is a measure of wealth.



(b) Look at the table below, which shows information for some countries. Use the information to complete the questions that follow.

country	GDP per person/USD	birth rate per 1000
Brazil	11 173	15
Japan	38 468	8
Mali	646	45
Niger	443	48
United Kingdom	39372	13
United States of America	53001	13

(i)	State the country with the second lowest GDP.
	[1]
(ii)	Calculate the difference in GDP per person between Niger and Japan.
	Space for working.
	USD [1]
(iii)	Calculate how many times greater the birth rate is in Niger than in Japan.
	Space for working.
	times [1]
(iv)	Look again at the table. Describe the relationship between GDP per person and birth rate. Use information from the table to support your answer.
	[3]
	1-1

	(v)		th country in the table is	the most developed. Giv	e a reason for your ans	wer.
		-				
						[2]
(c)	(i)	Infant mortali	ty rates are higher in de	veloping countries. Sug	gest reasons for this.	
						[4]
	(ii)			t mortality are all ways	of measuring poverty. S	tate
		three other w	ays in which poverty ca	n be measured.		
						[3]
(d)	Rea	nd the informat	ion about trade below.			
	a lov	value. They	, , , , , , , , , , , , , , , , , , ,	s, such as timber or mi ls, such as cars, which ts.	•	
	low v	alue. They do		s, such as cocoa or iron rom their exports and oft	· ·	
	prod	uct.				
	(i)	Complete the	table.			[2]
	C	ountry	type of exports	example	value	
de	velope	ed	manufactured goods			
				cocoa	low	

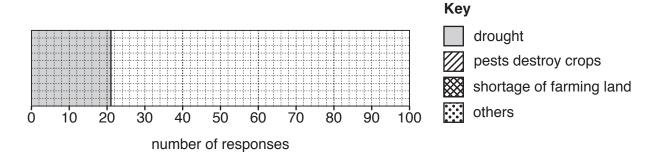
Suggest why developing countries might have problems if they rely on one main export
[1
One way to reduce poverty in developing countries is to make trade fairer. Describ strategies that could be used to reduce poverty by making trade fairer.
[2

(e) People often move as a result of poverty. The table below shows the results of a questionnaire given to people in Belo Horizonte, a city in Brazil. They had all moved to the city from rural areas in north east Brazil. In the questionnaire 100 people were asked to choose a reason for leaving the rural area.

reason for leaving rural areas	number of responses
drought	21
pests destroy crops	25
shortage of farming land	24
others	30

(i) Use the information in the table to complete the divided bar graph below.

[3]



(ii) Look at the photographs, which show two different cities.

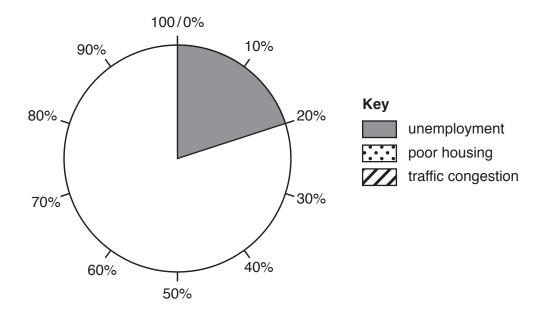




Using the photographs and your own knowledge, describe the pull factors of cities.	
,	' 1

(iii) The table below shows information about the main problem that some people report when they move to the city. Use the information in the table to complete the pie graph below. [2]

problem	percentage of people
unemployment	20
poor housing	35
traffic congestion	45



(iv)	State two problems, other than those listed in (iii) , that people might arrive in the city.	nave when they
		[2]

(f)	'Food supply should be increased to reduce poverty even though this puts the environment at risk.' Explain why some people will agree with this statement but others will disagree.
	[6]

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