

Cambridge International Examinations

Cambridge International General Certificate of Secondary Education

CANDIDATE NAME			
CENTRE NUMBER		CANDIDATE NUMBER	
PAKISTAN STI	INIES		0448/02

Paper 2 The Environment of Pakistan SPECIMEN PAPER

For Examination from 2015

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Insert

READ THESE INSTRUCTIONS FIRST

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

Write in dark blue or black pen.

You may use an HB pencil for any diagrams or rough working.

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

Answer any three questions.

The Insert contains Photograph A for Question 2 and Photograph B for Question 3.

The Insert is **not** required by the Examiner.

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

This document consists of 22 printed pages and 4 blank pages.



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1 (a) Look at the list of crops below.

MAIZE PULSES MILLET OILSEEDS TOBACCO

(i)	State one way in which arable farming is different from pastoral farming.	
		[1]
(ii)	Name one crop on the list that is not a food crop.	
		[1]
(iii)	Name two crops on the list that are used mainly for animal feed.	
	1	
	2	[2]

(b) Study Fig.1.

Months when wheat is grown by the barani method

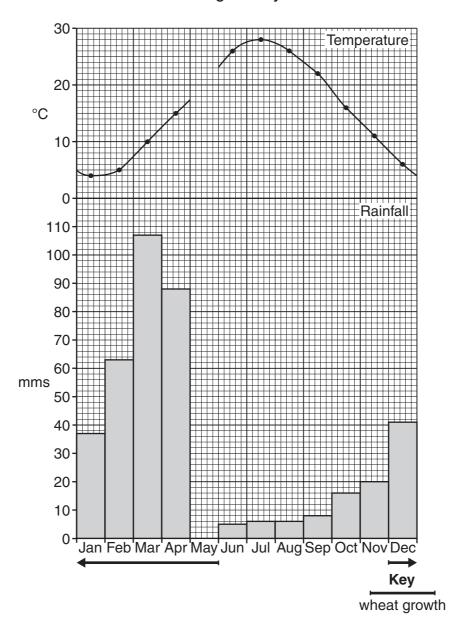


Fig. 1

(i)	What is meant by the <i>barani</i> method of growing crops?
	[1]

(ii)	Complete the climate graph (Fig. 1) using the following information: • Average temperature in May is 20°C • Average rainfall in May is 45 mm. [2]
(iii)	Describe the distribution of rainfall during the period of wheat cultivation. Refer to data and months in your answer.
	[3]
(iv)	Explain how the <i>barani</i> method of wheat cultivation relates to the temperature and rainfall shown on the graph (Fig. 1).
	Temperature
	Rainfall
	[4]
(c) (i)	State one difference between subsistence farming and commercial farming.
	[1]
(ii)	Give two reasons why crop yields may be low when subsistence farming methods are used.
	Reason 1
	Reason 2
	[4]

(d) Read	the	following	two	statements.
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A: "More agricultural training colleges are needed for young people in Pakistan"

B: "More grants, tools and seeds should be provided by the government to existing farmers in Pakistan"

Which statement do you agree with more? Give reasons for your answer and refer to places or examples you have studied in Pakistan to support your answer.
[6]

[TOTAL: 25]

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2 (a) (i) Making cement is an important industry in Pakistan. Circle below which industrial type the cement industry belongs to.

PRIMARY	SECONDARY	TERTIARY	
			[1]

(ii) Which statement below shows the two main raw materials extracted in Pakistan to make cement? Tick your answer.

Statement	Tick ✓
Limestone and chalk.	
Chalk and gypsum.	
Gypsum and limestone.	

[1]

(iii) Name two other inputs that are used in a cement factory.

1

(b) Study Fig. 2.

The distribution of cement factories in Pakistan



Fig. 2

(i)	Suggest why there are no cement factories in Balochistan.
	[1]
(ii)	Describe the distribution of cement factories in Pakistan.
	[2]
(iii)	Cement is mostly used for building in Pakistan. However, many manufactured products are exported. What is an 'Export Processing Zone' (EPZ)?
	[3]
(iv)	Explain how these Zones can increase the 'Gross National Product' (GNP) of Pakistan.
	[4]
(c) (i)	Look at Photograph A on the Insert. It shows a cement factory near Ghulamullah, in Thatta district. Apart from building the factory, suggest one other way in which human activity has changed the landscape here.
	[1]

	(ii)	Explain two ways in which this factory may be damaging the local environment.
		Way 1:
		Way 2:
		•
		[4]
		[T]
(d)	Rea	nd the following two statements.
	A.	"More industrial estates should be built on land near major cities such as Karachi in Pakistan."
	B.	"The most important use of land anywhere in Pakistan is for growing food."
		ch statement do you agree with more? Give reasons for your answer and refer to places xamples you have studied in Pakistan to support your answer.
		[6]
		[TOTAL: 25]

3 (a) Study Fig. 3.

Levels of literacy in urban and rural areas of Pakistan

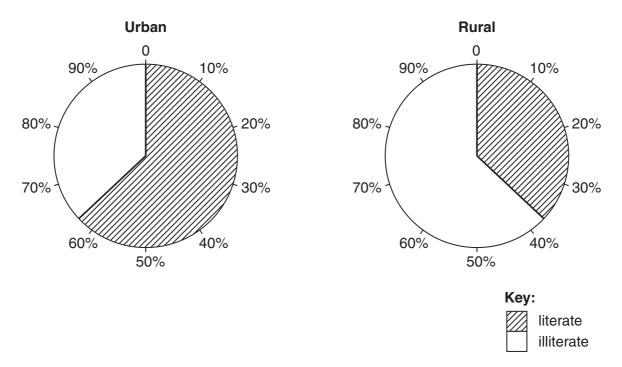


Fig. 3

(i)	State the percentage of literate people living in urban areas.
	[1]
(ii)	How much greater is this than the percentage of literate people living in rural areas?
	[1]
(iii)	Give two reasons why the percentage of literate people living in urban areas is greater than the percentage living in rural areas.
	Reason 1
	Reason 2
	[2]

(b) (i) Population totals are affected by birth and death rates. Study Fig. 4.

Birth and death rates for Pakistan in 2009

Birth rate (per 1000 of population)	Death rate (per 1000 of population)	Natural increase of population (per 1000 of population)
31.5	8.6	

Fig. 4

Complete the table by calculating the natural increase of population for 2009.

[1]

(ii) Population totals can also be affected by migration. PUSH and PULL factors cause people to migrate from rural areas to urban areas. Fig. 5 shows four of these factors:

Factor	Circle
Work in a factory	PUSH/PULL
Drought killing crops	PUSH/PULL
Safety from civil war	PUSH/PULL
Children can go to school	PUSH/PULL

Fig. 5

	Circle on the table whether you think each is a PUSH or PULL factor.	[2]
(iii)	Suggest three problems that migrants from rural areas to urban areas might face whethey arrive at the town or city they have moved to.	en
	Problem 1	
	Problem 2	
	Problem 3	
		[3]

Why do people in villages think that their quality of life will improve if they move to a town or city?		
[4]		
Study Photograph B on the Insert. Describe the housing shown at the front of the photograph.		
[1]		
With reference to Photograph B and your own knowledge, give two reasons why many people become ill in areas such as the one shown here.		
Reason 1		
Reason 2		
[4]		

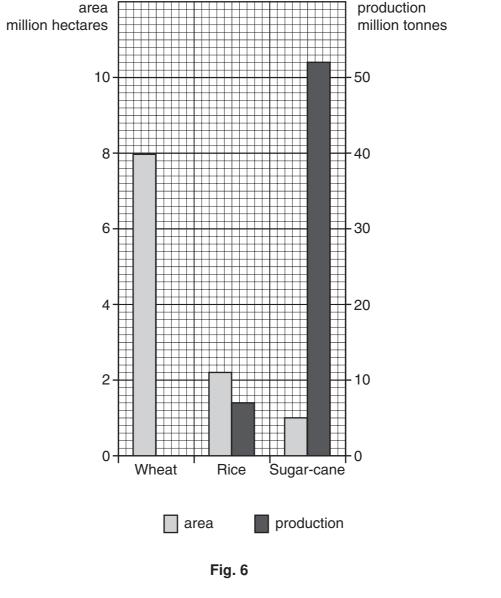
- (d) Read the following two statements.
 - **A**. "The standard of living in shanty towns and tent cities can be improved by introducing small-scale self-help schemes to the residents who live there."
 - **B**. "The standard of living in shanty towns and tent cities can only be improved by large-scale government investment in the areas."

Which statement do you agree with more? Give reasons for your answer all or examples you have studied in Pakistan to support your answer.	·
	[6

[TOTAL: 25]

4 (a) Study Fig. 6.

Area and production of three crops grown in Pakistan in 2009



(i) Plot the following information on the graph, Fig. 6.

Wheat production: 24 000 million tonnes [1]

(ii) Which crop had the lowest production in 2009?

_____[1]

(iii	i)	Sugar cane is a very productive crop. Suggest two reasons why high production is possible from quite a small area.
		Reason 1
		Reason 2
		[2]
(b) (i	i)	What is meant by the term 'fertiliser'?
		[1]
(ii	i)	Study Fig. 7.

Amount of fertiliser that was added to fields in 2009 and the amount recommended to maximize crop yields in Pakistan

Fertiliser	Actual use (kg per hectare)	Recommended use (kg per hectare)
Nitrogen	102	102
Phosphorus	22	51
Potassium	1	25

Source: Fertilisers in Pakistan - March 2011 Engro Corps.

Fig. 7

Complete the passage below by circling the correct answers.

[&]quot;The main fertilisers used in Pakistan in 2009 were Nitrogen, Phosphorus and Potassium. These are also known as NPP / NIP / NPK. The fertiliser that needed increasing in its use the most was Nitrogen / Phosphorus / Potassium. One fertiliser was being applied at just under half of its recommended use. This was Nitrogen / Phosphorus / Potassium. In 2009 only Nitrogen / Phosphorus / Potassium was being used in the amounts recommended to get the maximum yields of crops."

(iii)	fertilisers are used by farmers on their fields. Suggest three problems that using fertilisers could cause for the environment and people of Pakistan.
	Problem 1
	Problem 2
	Problem 3
	[3]
(iv)	What are the benefits of increasing fertiliser production for the people and the economy of Pakistan?
	[4]

(c) Pakistan imports some fertilisers. It also relies on other imports. Study Fig. 8.

Main types of non-food goods imported into Pakistan in 2009

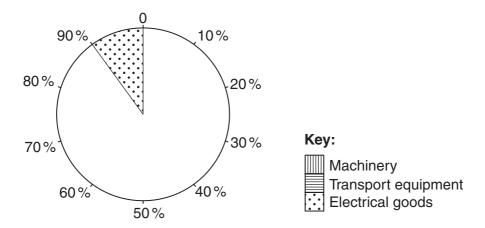


Fig. 8

(i) Complete Fig. 8, the pie chart, using the figures below and the key provided:

Machinery 65%

(ii) Much of the imported machinery is used in the craft industry. Explain the importance of mechanisation to the craft industry and other small-scale industries in Pakistan.

- (d) Study the two statements below about increasing international trade.
 - **A**. "The government of Pakistan should try to develop trade agreements with the countries of the European Union (EU)."
 - **B**. "There should be more investment in Pakistan's industries to provide goods and services for the people of Pakistan."

Which statement do you agree with more? Give reasons for your answer and refer to places or examples you have studied in Pakistan to support your answer.
[6]

[TOTAL: 25]

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5 (a) Study Fig. 9.

Average (mean) January temperatures in Pakistan

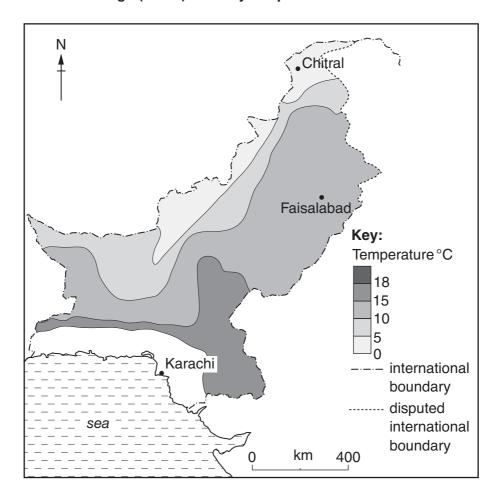


Fig. 9

(i)	Estimate the average (mean) January temperature at Faisalabad.	
	°C	[1]
(ii)	The January temperature at Karachi is 19°C. Shade the area that includes Karachi us the key.	sing [1]
(iii)	Describe the distribution of January temperatures in Pakistan.	
		•••••

(b) Study Fig. 10.

The distribution of monsoon rainfall in Pakistan

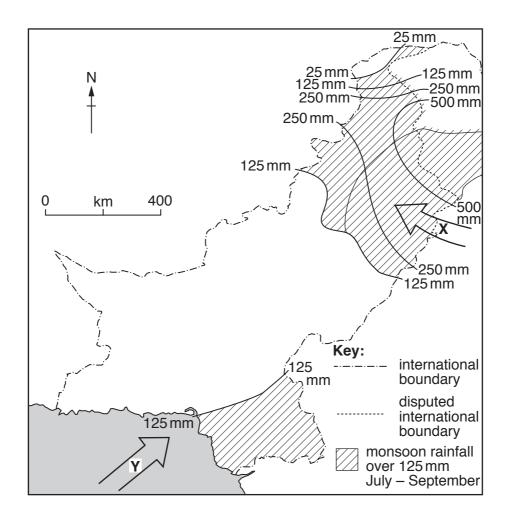


Fig. 10

(i)	What is meant by 'monsoon' rainfall?
	[1]
(ii)	Name the body of water that is the source of moisture for each of the monsoon winds ${\bf X}$ and ${\bf Y}$.
	X
	Y

(iii)	Describe the distribution of the two areas that receive over 125 m rainfall between July and September.	nillimetres of monsoo	n
			-
			-
(iv)	What problems are created for farmers in areas of high temperat rainfall such as Northern Sindh and Southern Punjab?	ture and low monsoo	n
			•
			-
		[4	-]
(c) (i)	Irrigation is required in many parts of Pakistan. Which statement 'irrigation'? Tick your answer.	below best describe	S
Descrip	tion	Tick ✓	
Dammin	g a river to create a reservoir for water supply to towns		
Adding v	vater to the land to enable farming to take place		
Removir	Removing vegetation to allow rainfall to reach the ground more quickly		

[1]

(ii) Name **one** irrigation technique that is used in Pakistan. Describe how this technique works. You may use a labelled sketch or diagram.

Space for Diagram

Name of irrigation technique	
How it works	

[4]

- (d) Read the following two statements.
 - **A**. "The government should build more large dams and canals to improve access to irrigation for farmers."
 - **B**. "Farmers should be trained to build small-scale irrigation projects and use the existing supplies of water more efficiently."

Which statement do you agree with more? Give reasons for your answer and refer to places or examples you have studied in Pakistan to support your answer.
[6]

[TOTAL: 25]

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Copyright Acknowledgements:

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Question 4, Figure 7 © Source of information for table: Fe

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