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0449/02

May/June 2017

1 hour 30 minutes

Additional Materials: Insert

READ THESE INSTRUCTIONS FIRST

DO **NOT** WRITE IN ANY BARCODES.

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

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

The Insert contains Photograph A for Question 4(a).

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

This document consists of **23** printed pages, **1** blank page and **1** Insert.

Answer **three** questions.

- 1 (a) (i) Study Fig. 1 which shows the Jamuna-Brahmaputra river. In which direction does the Jamuna-Brahmaputra river flow through Bangladesh?

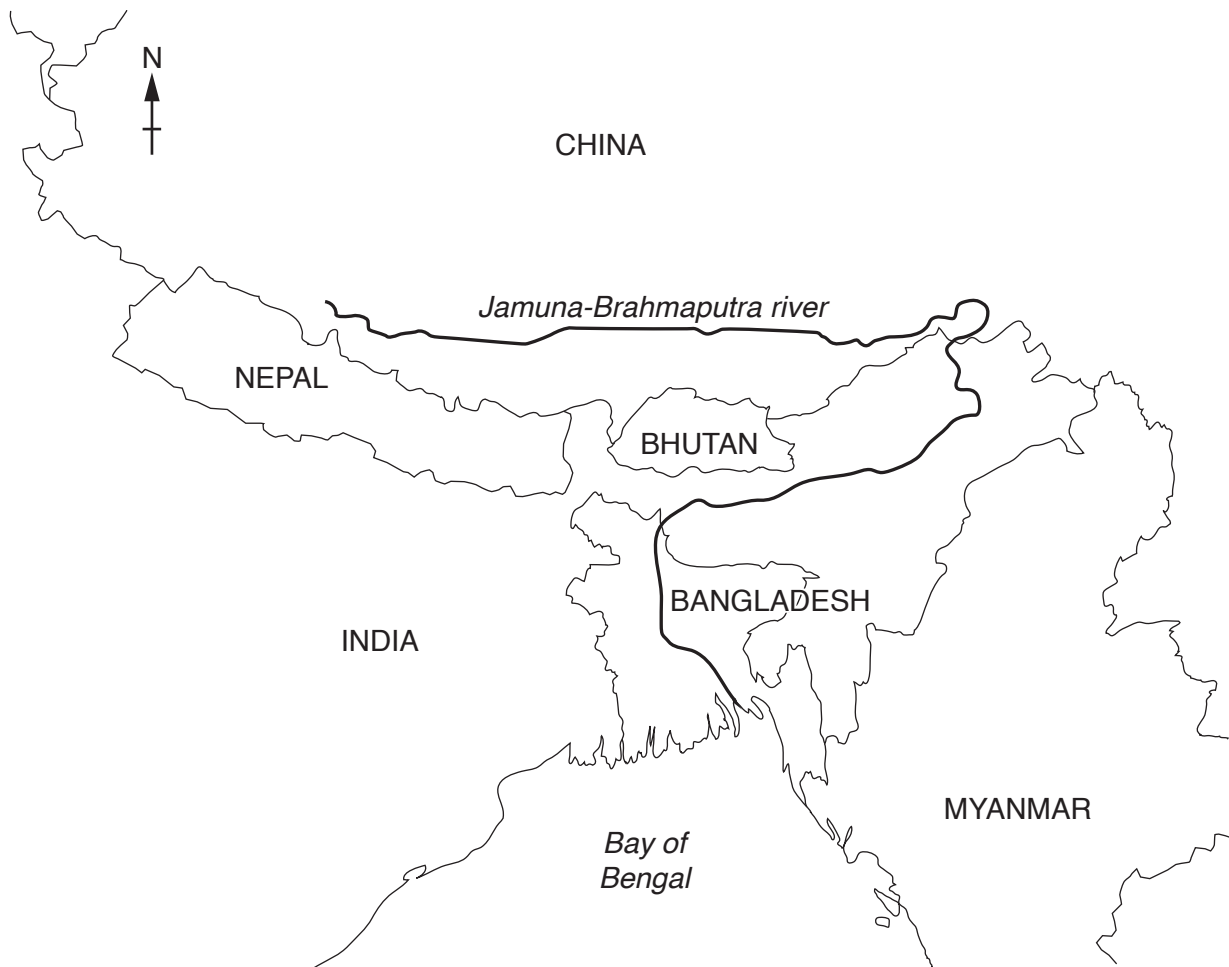


Fig. 1

.....[1]

- (ii) Fig. 2 shows the size of sediment suspended in different tributaries of the Jamuna-Brahmaputra river.

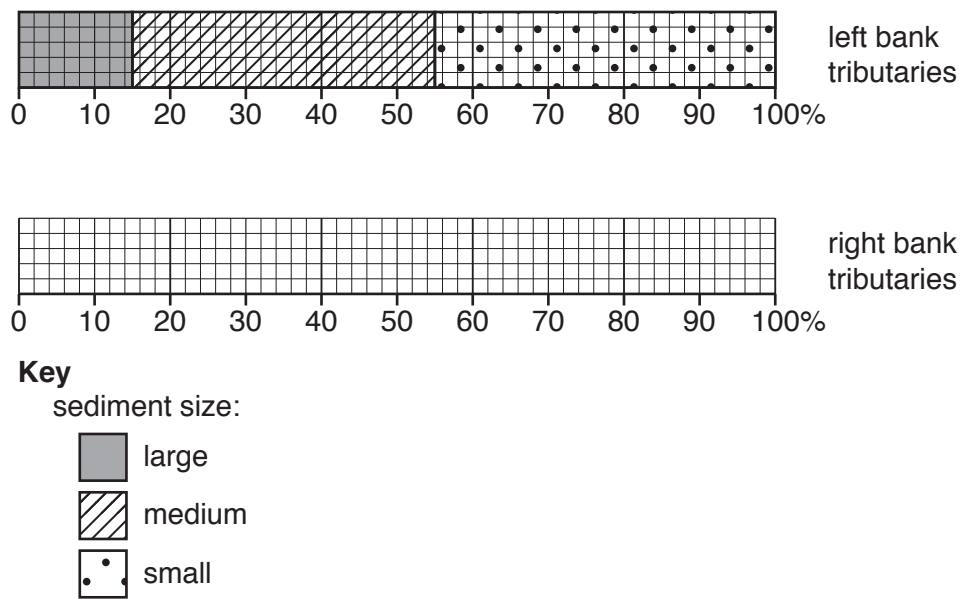


Fig. 2

Complete Fig. 2 using the following information.

right bank tributaries:

- large – 8%
- medium – 17%
- small – 75%

[3]

- (iii) Using Fig. 2 describe the differences in the size of sediment carried by the left and right bank tributaries.

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.....[3]

- (b) The deposition of sediment can lead to the formation of several river features. Describe and explain the formation of a **braided** channel. You may use a diagram to illustrate your answer.

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Space for diagram

[4]

- (c) The rivers of Bangladesh often meander.
Study Fig. 3 which shows a cross-section through a meander.

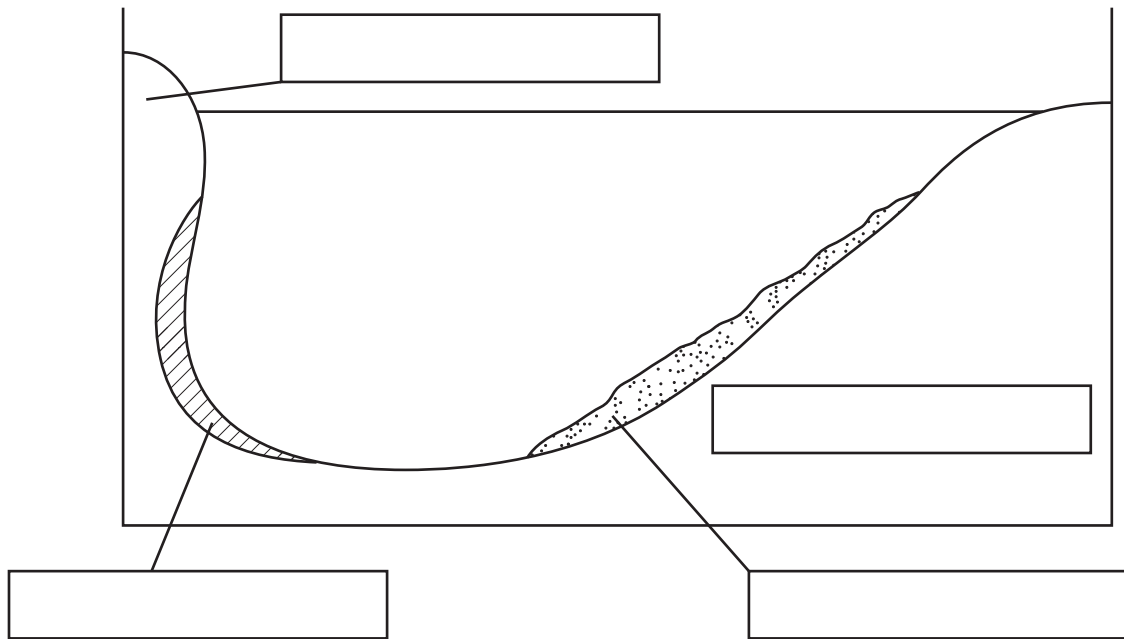


Fig. 3

Write the following words in the correct boxes on Fig. 3.

- erosion
- deposition
- river cliff
- slip-off slope

[4]

- (d) (i) The Jamuna-Brahmaputra river is managed by The Core Professional Group for the Brahmaputra, which is an NGO.

Explain what is meant by an NGO.

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.....[2]

- (ii) Describe **one** type of work which is done by NGOs in rural areas of Bangladesh.

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.....[3]

(e) Study the two statements below.

A 'Controlling the flow of the Jamuna-Brahmaputra river is not possible.'

B 'It is important to control the flow and erosion of the Jamuna-Brahmaputra river.'

(i) Give **one** piece of evidence which supports statement A.

.....
[1]

(ii) Give **one** piece of evidence which supports statement B.

.....
[1]

(iii) Which statement do you agree with most? Give reasons for your answer.

.....

[3]

[Total: 25 marks]

- 2 (a) (i) Study Fig. 4, which is a map showing the distribution of forests in Bangladesh.

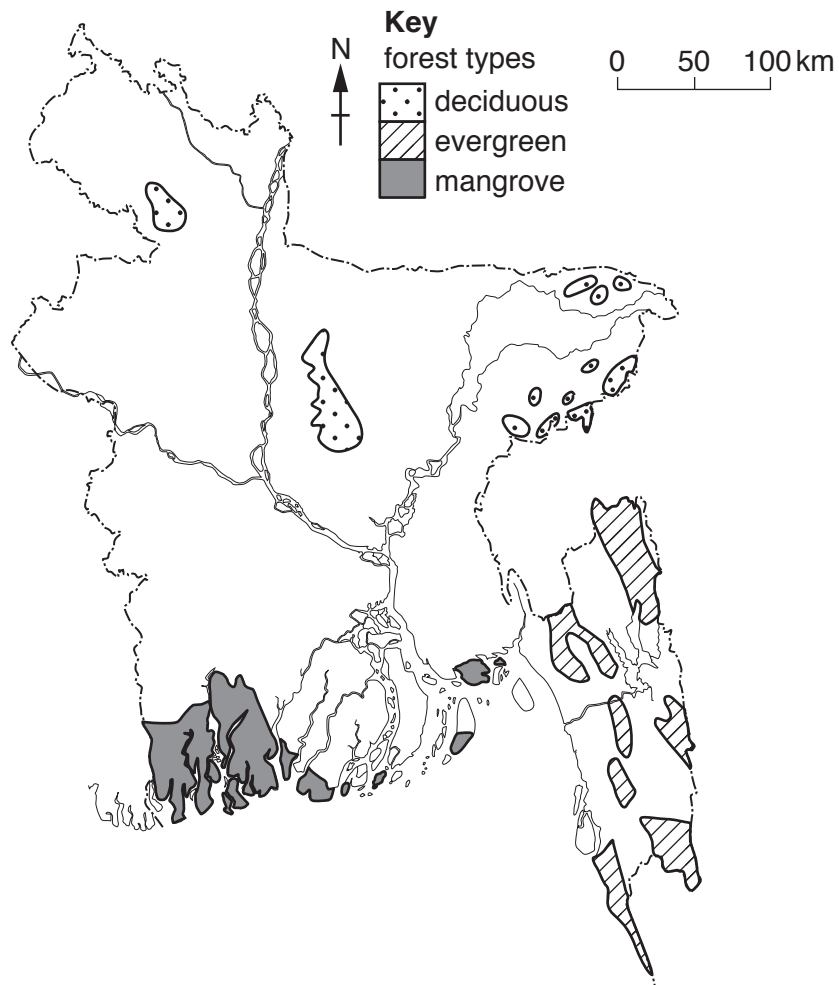


Fig. 4

Describe the distribution of deciduous forest in Bangladesh.

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.....[3]

(ii) Fig. 5 shows the land area covered by forest and the total forest lost in three countries between 2001 and 2012.

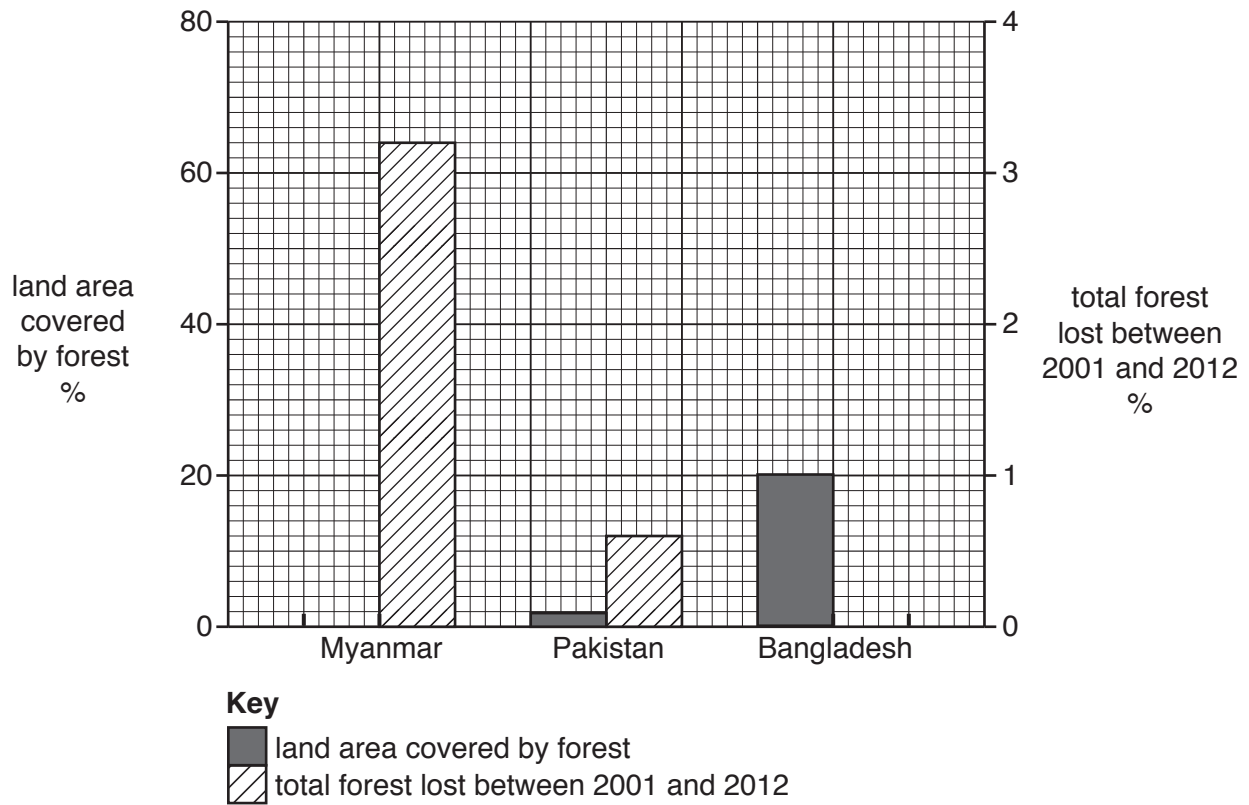


Fig. 5

Complete Fig. 5 using the following figures.

- land area covered by forest – Myanmar 68%
- total forest lost between 2001 and 2012 – Bangladesh 2%

[2]

(iii) Why is deforestation taking place in Bangladesh?

.....[4]

(b) Describe the challenges created by deforestation for:

(i) farming

.....

.....

.....

.....[2]

(ii) climate

.....

.....

.....

.....[2]

(iii) urban areas

.....

.....

.....

.....[2]

(c) (i) Why are mangrove forests found in coastal areas?

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.....[2]

(ii) Using examples explain how forests are important to the wildlife in Bangladesh.

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.....[3]

- (d) Air pollution and water pollution are two growing challenges in Bangladesh and also globally.

Study the two statements below.

A 'Environmental laws are the only way to control pollution.'

B 'Education and monitoring are the only sustainable ways to control pollution.'

- (i) Give **one** piece of evidence which supports statement A.

.....
[1]

- (ii) Give **one** piece of evidence which supports statement B.

.....
[1]

- (iii) Which statement do you agree with most? Give reasons for your answer.

.....

[3]

[Total: 25 marks]

- 3 Study Fig. 6 which shows the birth rate and death rate in three countries in 2013.

country	birth rate (per 1000)	death rate (per 1000)
Bangladesh	20	6
India	20	8
Myanmar	17	9

Fig. 6

- (a) (i) Using Fig. 6 calculate the rate of natural growth for each country. Use the figures to complete the table below.

Country with highest rate of growth	1
	2
Country with lowest rate of growth	3

[3]

- (ii) Suggest why some families in Bangladesh may have a large number of children.

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.....[2]

(b) (i) Study Fig. 7 which shows infant mortality rates from 2010 to 2013.

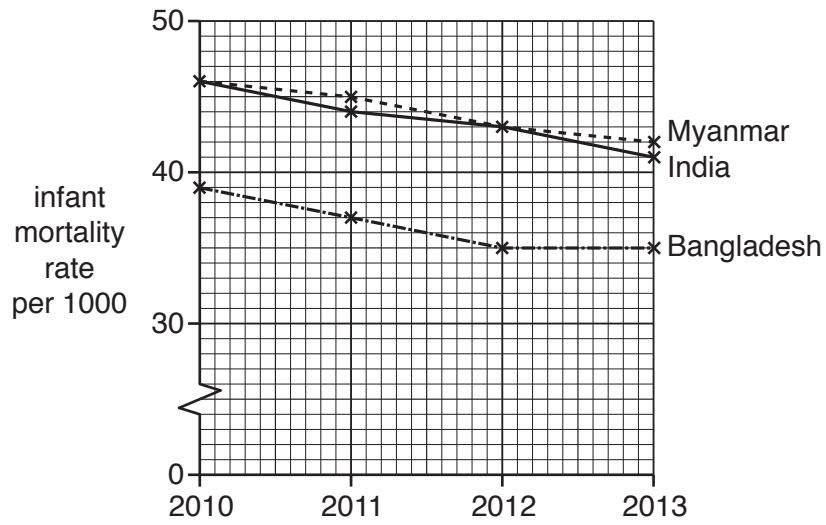


Fig. 7

Using information from Fig. 7 describe what progress is being made towards reducing infant mortality rates.

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.....[3]

(ii) How is Bangladesh reducing its infant mortality rate?

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.....[2]

(c) (i) What is meant by urbanisation?

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[1]

(ii) Study Fig. 8 which shows the rate of growth of urbanisation and the percentage of people living in urban areas in 2015.

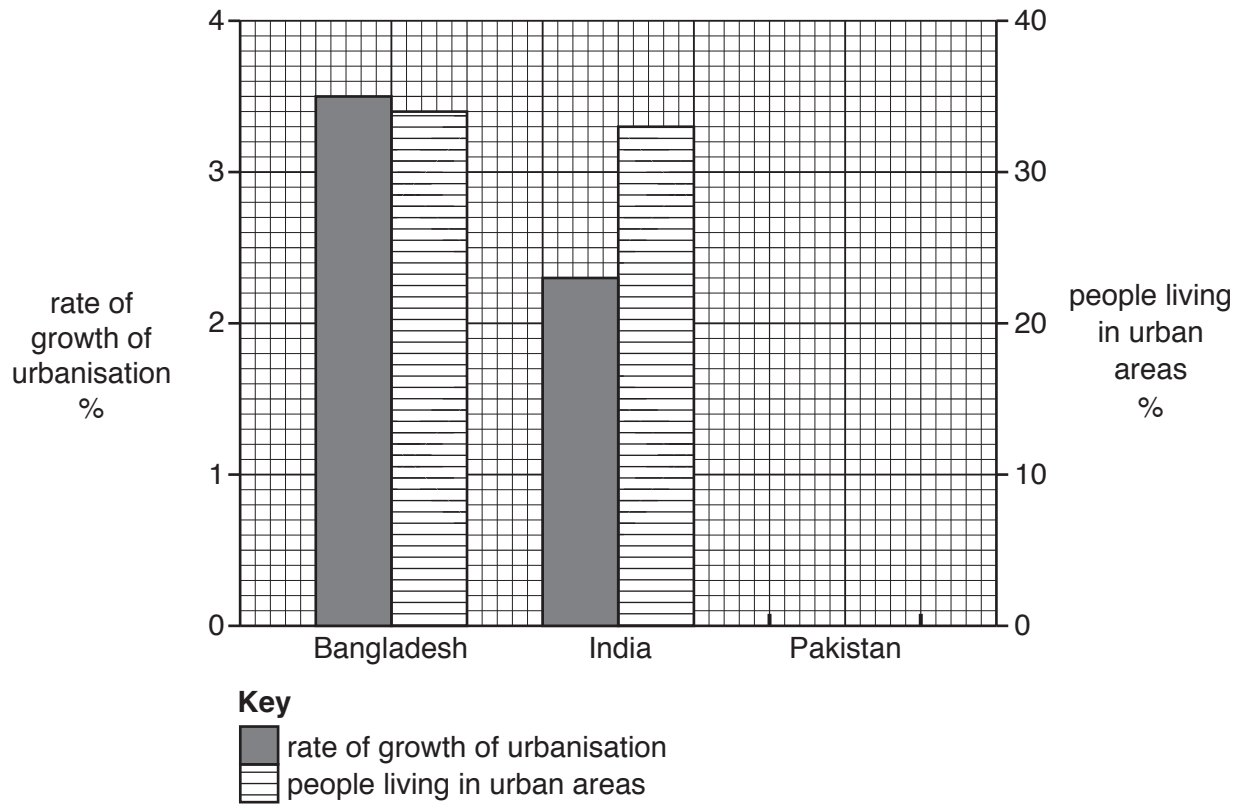


Fig. 8

Complete the graph for Pakistan using the following figures.

- rate of urbanisation – 2.8%
 - people living in urban areas – 39%
- [2]

(iii) Give **three** reasons for the high rate of urbanisation in Bangladesh.

.....

[3]

(d) (i) What is meant by industrialisation?

.....
[1]

(ii) Describe how the state can support industrialisation.

.....

[3]

(e) Study the two statements below.

A 'Urbanisation creates many challenges in Bangladesh and could be controlled further.'

B 'The movement of people to cities is a natural part of the country's development and is to be encouraged.'

(i) Give **one** piece of evidence which supports statement A.

.....
[1]

(ii) Give **one** piece of evidence which supports statement B.

.....
[1]

(iii) Which statement do you agree with most? Give reasons for your answer.

.....

[3]

[Total: 25 marks]

- 4 (a) Study Photograph A (Insert) which shows subsistence farming in Bangladesh. Describe the types of food production shown in Photograph A.

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.....[4]

- (b) How can the state help to protect its farmers from the effects of cyclones?

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- (c) (i) Study Fig. 9 which shows the changing use of fertiliser in Bangladesh between 2002 and 2009.

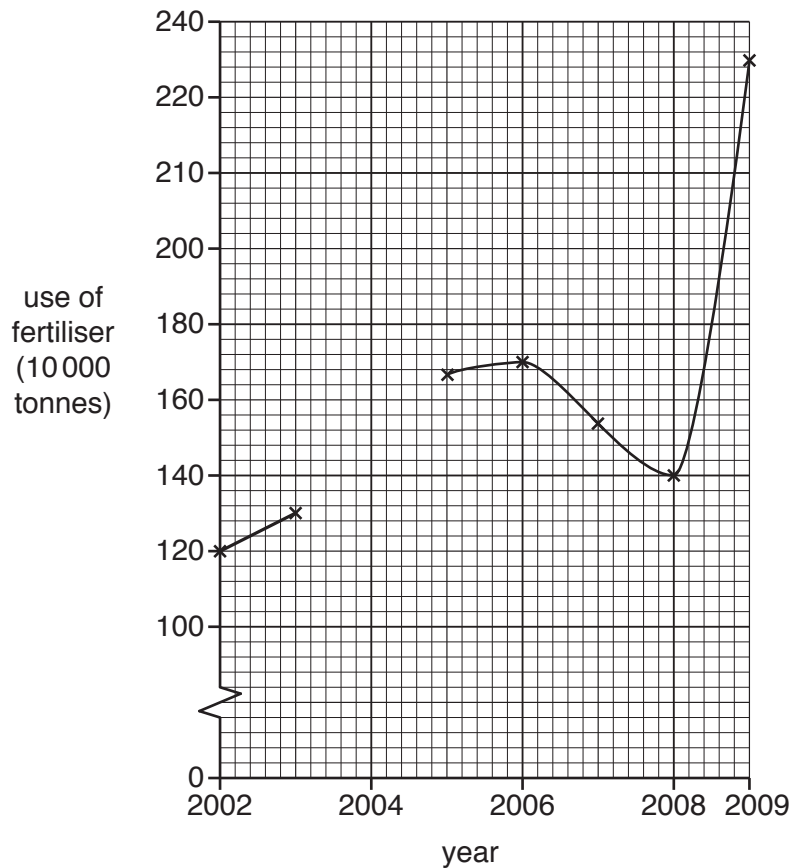


Fig. 9

Complete Fig. 9 using the following figure.

- 2004 – 1 400 000 tonnes

[1]

- (ii) Using Fig. 9, describe how the use of fertiliser has changed between 2002 and 2009.

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.....[3]

- (iii) Suggest reasons for the changes in the use of fertiliser between 2002 and 2009.

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- (d) (i) Fig. 10 shows a diagram for a commercial farm.

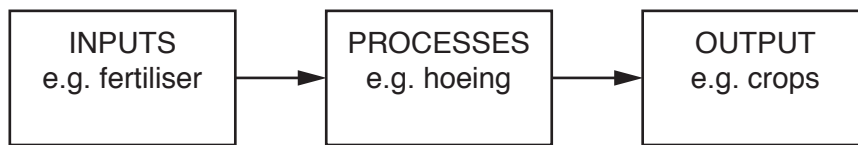


Fig. 10

Suggest **two** other inputs and **one** other output for a farm growing cash crops.

Inputs: and

Output: [3]

- (ii) Why is it difficult to increase the production of cash crops?

.....

.....

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.....

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.....[3]

(e) Study the two statements below.

A 'The Green Revolution is key to Bangladesh increasing its food supply.'

B 'The Green Revolution does not benefit all farmers.'

(i) Give **one** piece of evidence which supports statement A.

.....
[1]

(ii) Give **one** piece of evidence which supports statement B.

.....
[1]

(iii) Which statement do you agree with most? Give reasons for your answer.

.....

[3]

[Total: 25 marks]

- 5 (a) (i) Fig. 11 shows the population pyramid for Bangladesh in 2015.

age groups

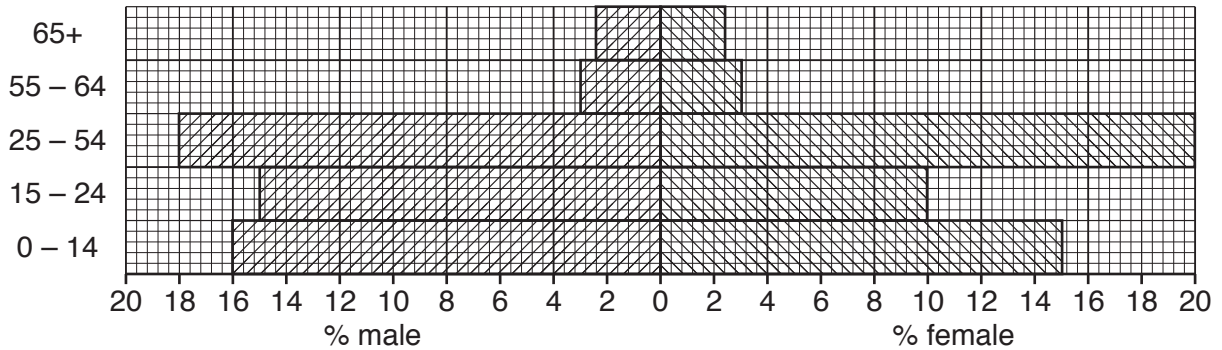


Fig. 11

Describe how the population of Bangladesh varies by age group.

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.....[3]

- (ii) Increasing life expectancy results in an ageing population. What challenges might this create for Bangladesh?

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.....[4]

- (iii) International emigration from Bangladesh is increasing. What challenges might this create for Bangladesh?

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.....[2]



Complete Fig. 12 for Bangladesh using the following figures.

- 2010 – 46%
- 2012 – 48%

[2]

- (ii) Describe how the percentage of children attending secondary school in Bangladesh has changed compared to Pakistan and Myanmar.

.....[3]

- (iii) In Bangladesh the percentage of children in primary school is 95%. Suggest reasons why a smaller percentage attend secondary school.

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.....[3]

- (iv) The adult literacy rate in Bangladesh in 2013 was 60%. How can the Government improve the adult literacy rate in Bangladesh further?

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.....[3]

(c) Study the statements below.

A 'Improvements to tertiary education are vital to improve the economy of Bangladesh.'

B 'Occupational and professional skills are key to improving the economy of Bangladesh.'

(i) Give **one** piece of evidence which supports statement A.

.....
[1]

(ii) Give **one** piece of evidence which supports statement B.

.....
[1]

(iii) Which statement do you agree with most? Give reasons for your answer.

.....

[3]

[Total: 25 marks]

Additional Page

If you use the following lined page to complete the answer(s) to any question(s), the question number(s) must be clearly shown.

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