Cambridge
IGCSE

CANDIDATE
NAME

CENTRE
NUMBER

CANDIDATE
NUMBER

DEVELOPMENT STUDIES **0453/02**

Paper 2 **October/November 2017**

2 hours

Candidates answer on the Question Paper.

Additional Materials: Ruler

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, graphs or rough working.
Do not use staples, paper clips, glue or correction fluid.
DO **NOT** WRITE IN ANY BARCODES.

Answer **all** the questions.
You may not need all the answer lines for your answer.

You should read and study the sources **before** answering the questions.
The Insert contains Fig. 4 for Question 2(a) and Fig. 5 for Question 2(b).

The Insert is **not** required by the Examiner. It can be kept by the Centre and used as a teaching resource.

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.

CAMBRIDGE
International Examinations

[Turn over

1 (a) Study Fig. 1, which shows information about a sample of countries in Africa.

	GDP per person (US $)	Literacy (percentage)	Life expectancy (years)	Use of energy resources per person (kg oil equivalent)	HDI rank
Algeria	14 300	80	77	1204	93
Botswana	16 000	89	54	1080	109
Cameroon	3000	58	75	322	152
Egypt	10 900	74	74	969	110
Namibia	10 800	82	52	716	127
Tunisia	11 300	82	76	918	90
Zambia	4 100	63	52	645	141

Fig. 1

(i) What do the initials HDI represent?

H .... D .... I .... [1]

(ii) Identify from Fig. 1 the country where:

- people live the longest on average   ....

- the lowest percentage of the population can read and write.

.... [2]

(iii) What is meant by the following statement?

Cameroon has a GDP per person of US $3000.

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.... [2]

(iv) Using the data in Fig. 1 only, suggest which country has the highest level of development. Give reasons for your choice.

Name of country ....

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.... [3]

(b) Study Fig. 2, which shows information about the employment structure in Australia and India.
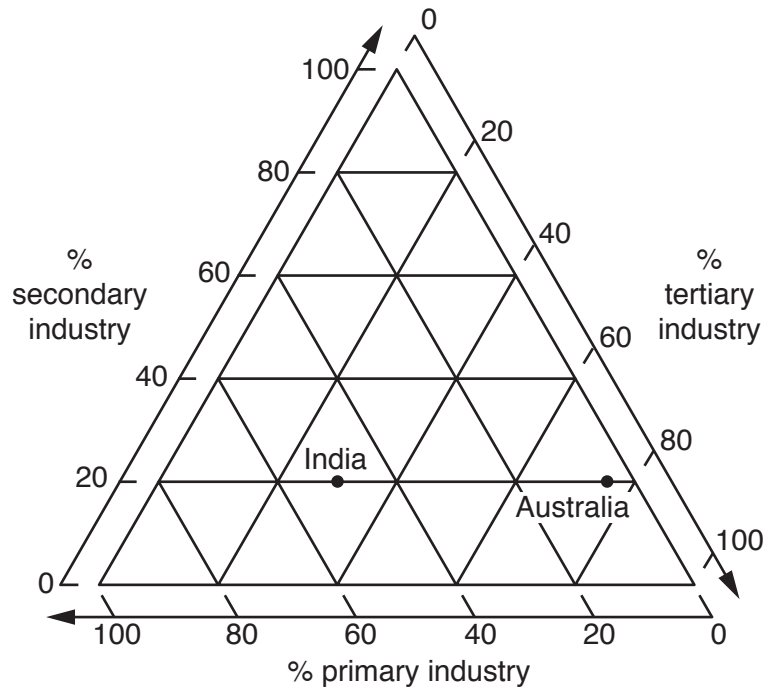
Fig. 2

(i) Plot a cross on Fig. 2 to show the following information about the employment structure of Zimbabwe:

Primary   65%
Secondary   10%
Tertiary   25%   [1]

(ii) Using Fig. 2, compare the employment structure of Australia and India.

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.... [3]

(c) Study Fig. 3, which shows changes in the employment structure of South Korea between 1963 and 2010.
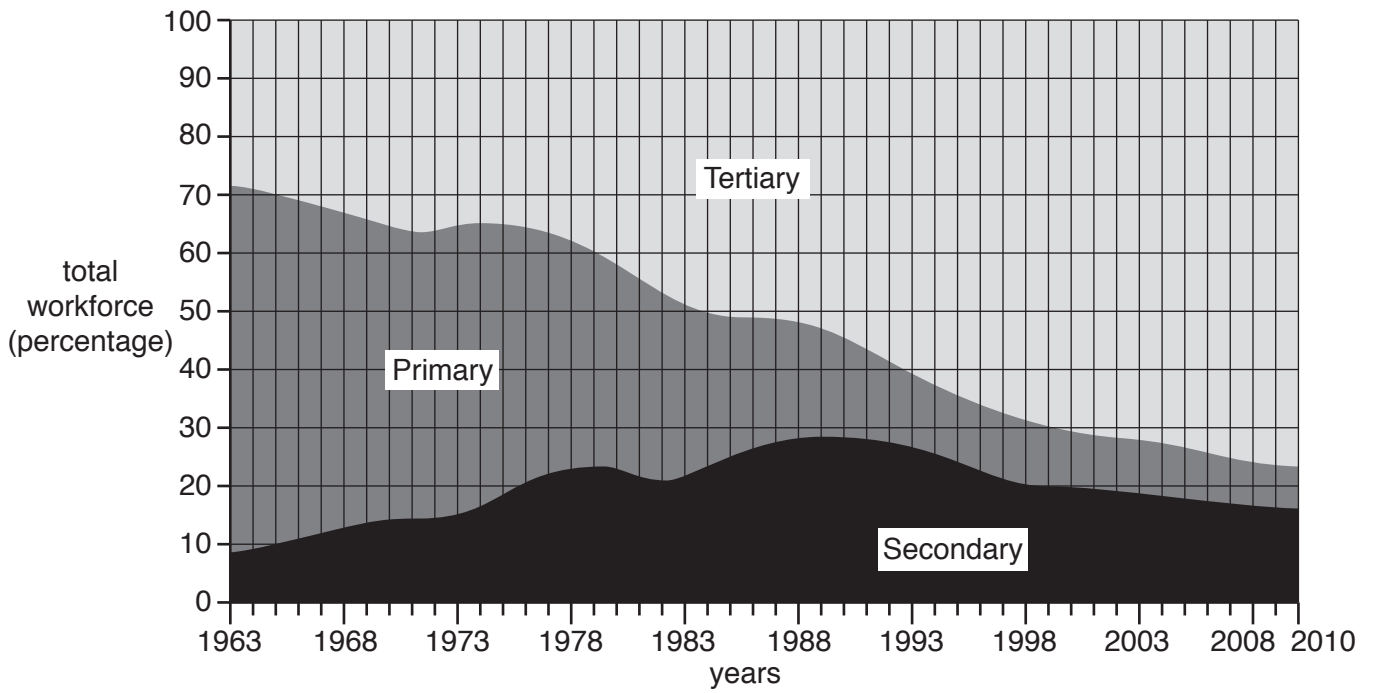
Fig. 3

(i) Using Fig. 3, identify the changes which have taken place between 1963 and 2010 in:

- primary industry;

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  ....

- secondary industry;

  ....

  ....

- tertiary industry.

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  .... [3]

(ii) Explain why the employment structure of a country changes as it develops.

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.... [4]

[Total: 19 marks]

2 (a) Study Fig. 4 (Insert), which shows the value of exports and imports between different parts of the world in 2013.

(i) What was the value of exports from Asia to North America in 2013?

Tick your answer from the list in the table below.

	Tick (✓)
over US $500 billion	
US $250 to 500 billion	
US $100 to 249 billion	
below US $100 billion	

[1]

(ii) Complete the table by inserting the names of the three parts of the world below. The parts of the world should be arranged in rank order of their total value of trade.

Asia   European Union   Sub-Saharan Africa

Largest total value of trade

....

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....

Smallest total value of trade

[1]

(iii) Explain how trade benefits a country.

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.... [5]

(b) Study Fig. 5 (Insert), showing information about a multinational chain of coffee shops (cafés), which has its headquarters in the USA.

Explain why this company is a good example of globalisation.

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.... [3]
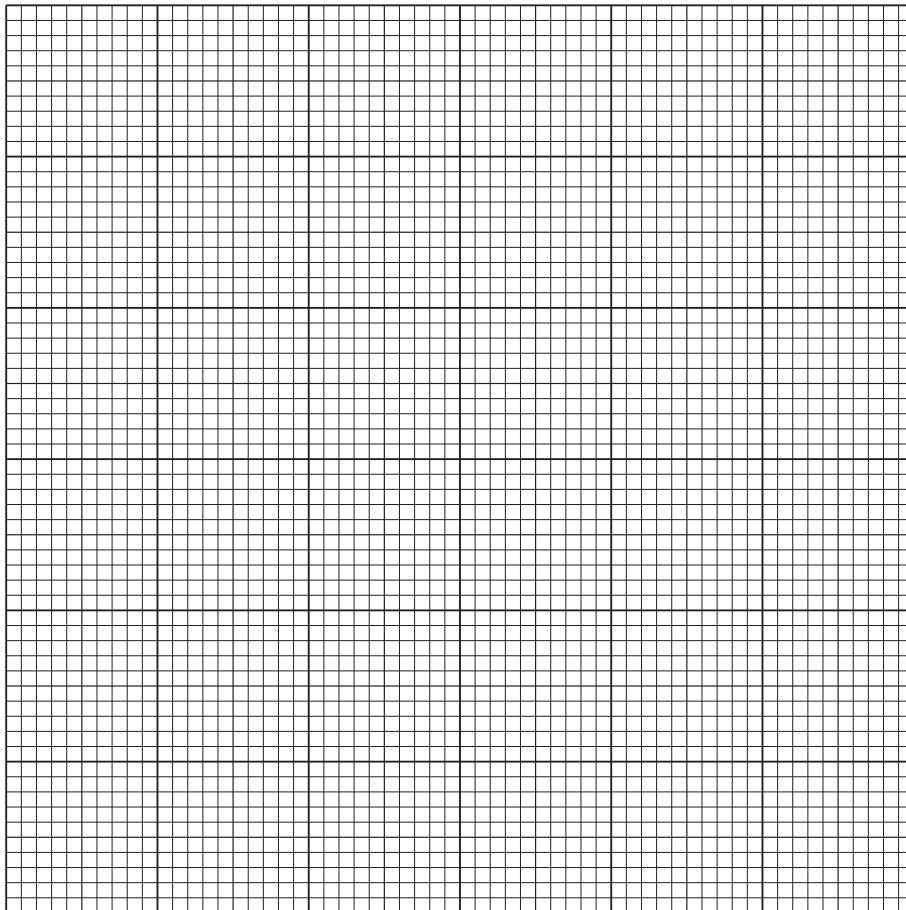
(c) Study Fig. 6, which shows information about a multinational chain of restaurants.

Country	Number of restaurants
Canada	350
China	100
Germany	180
Japan	560
UK	150
USA	950

Fig. 6

(i) Draw a bar graph below which shows the information in Fig. 6.

[4]

(ii) Suggest reasons why these restaurants are located in many different countries.

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.... [4]

(iii) This company has opened many restaurants in developing countries. These provide employment in the formal sector.

Describe **four** characteristics of employment in the formal sector.

1 ....

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2 ....

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4 ....

.... [4]

[Total: 22 marks]

 [Turn over

3 **(a)** Study Fig. 7, a diagram which shows some of the problems which are caused by rapid industrialisation in a developing country.
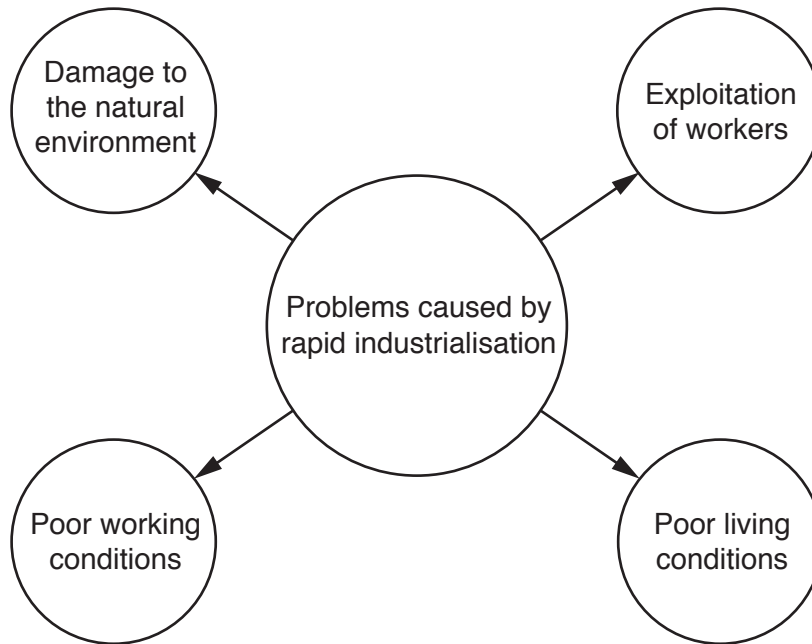
```
     ( Damage to                          ( Exploitation
       the natural                          of workers )
       environment )
              ↖                      ↗
              ( Problems caused by
                rapid industrialisation )
              ↙                      ↘
     ( Poor working                       ( Poor living
       conditions )                         conditions )
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Fig. 7

   (i) State **two** different types of damage to the natural environment that may occur during rapid industrialisation.

1 ....

2 .... [2]

   (ii) From Fig. 7, explain **two** different problems which may be faced by workers in a country experiencing rapid industrialisation.

1 ....

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2 ....

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.... [4]

(b) Study Fig. 8, an extract about the impacts of a new cement factory in Pakistan.

Residents of Kamalpur staged a protest against a local cement factory on Tuesday.

Villagers accused the factory of polluting the environment and causing health problems for children at a nearby school. The villagers protested in front of the factory gates, blocking traffic for two hours.

A representative of the villagers accused the factory management of using old machines. These released dust and cement particles into the air which caused breathing difficulties and eye diseases.

He added that the dust had reduced the fertility of their land.

The protestors stated that the Kamalpur Primary School has been affected by the factory, adding that the children were not able to concentrate due to the noise.

They also said that large trucks carrying stones and other materials have damaged the roads and held up traffic.

Fig. 8

Identify **three** different problems which the cement factory has caused for people in the area.

1 ....

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2 ....

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3 ....

.... [3]

(c) A researcher wanted to find out how worried local people were about the cement factory and other industries in Kamalpur. She gave 50 people a questionnaire to fill in, shown in Fig. 9.

Questionnaire for residents of Kamalpur

Tick your answers

How old are you?   Under 16 ....
                    16 to 25 ....
                    25 to 40 ....
                    40 to 60 ....
                    over 60   ....

What is your gender?   Male .... Female ....

In which of the following ways do you think industry causes problems in Kamalpur?

For each problem which you tick give a score using a scale of 1 to 5
(1 = Low level of concern   5 = High level of concern)

Problem	Is it a problem? (✓ or ✗)	Level of concern (1 to 5)
Air pollution	....	....
Noise	....	....
Dangerous traffic	....	....
Looks ugly	....	....
Trees are chopped down	....	....
Other problems (please state)		
....	....	....
....	....	....

Fig. 9

(i) The 50 people who were selected to fill in the questionnaire were chosen using a random sample.

Describe how this sample could have been selected.

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.... [2]

(ii) The researcher wanted to find out how worried people were about each impact of industry in the area. Use your own words to explain how she did this.

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.... [2]

(iii) Do you think this was a good questionnaire? Give reasons for your opinion.

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.... [3]

(iv) Suggest reasons why some people in Kamalpur will be more worried than others about the impacts of industry in the area.

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.... [3]

(d) Study Fig. 10, which shows the researcher's recommendations for reducing the negative impacts of industry in Kamalpur.

Method A
Make laws to reduce the amount of air pollution from factories.

Method B
Give grants and low interest loans to factory owners to update their machinery and processes.

Method C
Close down the industries which cause pollution and do not allow any new industries to be built in Kamalpur.

Method D
Enlarge the clinics in Kamalpur and employ specialist doctors and nurses to treat breathing difficulties and eye diseases.

Fig. 10

Choose the method listed in Fig. 10 which you think will be **most** likely to reduce the negative impacts of industry in Kamalpur.

Justify your choice by referring to the advantages of the method you have chosen and the disadvantages of the methods which you have rejected.

Method chosen ....

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.... [6]

[Total: 25 marks]

4   Study Fig. 11 which shows three students of Development Studies who are planning research on pollution of the environment in their home areas.
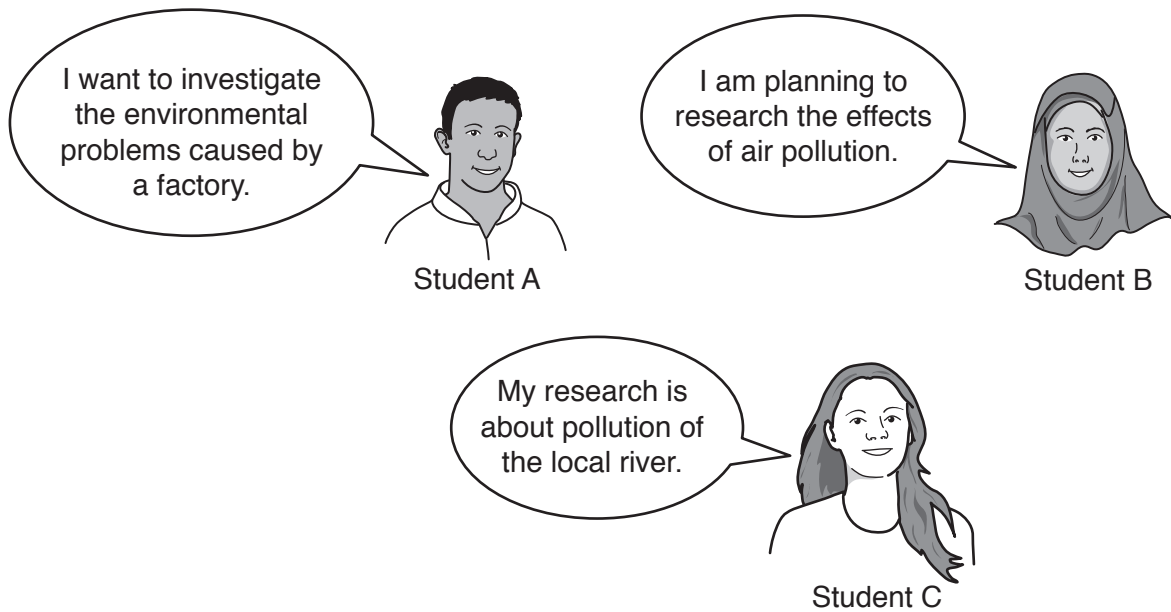

I want to investigate the environmental problems caused by a factory.

Student A

I am planning to research the effects of air pollution.

Student B

My research is about pollution of the local river.

Student C

Fig. 11

Fig. 12 shows a sequence which is a useful way to organise research.

Identify a research question or hypothesis

Decide what data is needed and how it should be obtained

Carry out a pilot study

Collect and record data

Present and analyse the data
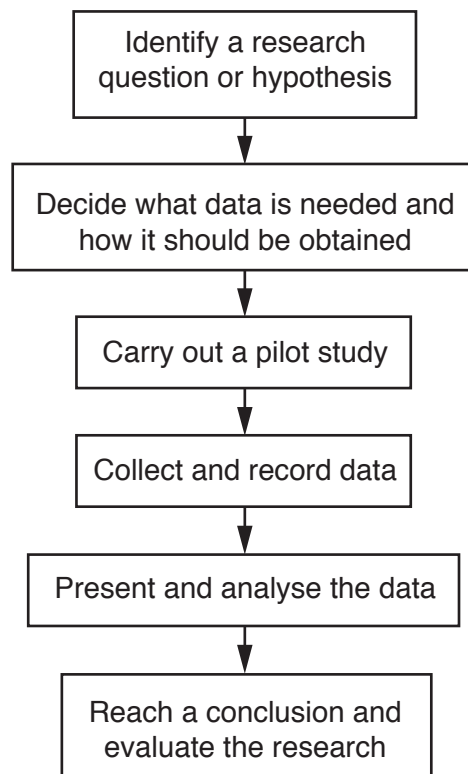
Reach a conclusion and evaluate the research

Fig. 12

(a) Choose **one** of the students from Fig. 11, A, B or C, and write down the letter of that student.

Describe how the student could carry out the research. Use the ideas in Fig. 12 to organise your answer.

Letter of student chosen ....

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(b) Describe any difficulties the student might have carrying out the chosen research.

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.... [5]

[Total: 14 marks]

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