



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
International General Certificate of Secondary Education

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**DEVELOPMENT STUDIES**

**0453/04**

Paper 4 Alternative to Coursework

**October/November 2007**

**1 hour 30 minutes**

Additional Materials:      Answer Booklet/Paper  
   Graph Paper  
   Ruler

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**READ THESE INSTRUCTIONS FIRST**

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.  
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 a soft pencil for any diagrams, graphs or rough working.  
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.  
The Insert contains Figures 2 and 4 for Question 1.

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.

This document consists of **4** printed pages and **1** Insert.



- 1 A student is carrying out an investigation into the health of the population, as part of a Health Studies course.

(a) Study Fig. 1, which the student has found on the Internet.

### Indonesia battles dengue fever

Indonesia is trying to contain an outbreak of dengue fever, which has killed 91 people in six provinces since the start of the year.

Health officials say around 4500 people have been taken to hospital with the disease - twice as many as in last year's outbreak.

Dengue fever is carried by mosquitoes, which bite and infect about 100 million people worldwide each year.

Java island has been the worst hit, with at least 38 people reported dead in East Java province and 17 others in the capital, Jakarta. Symptoms of the disease include fever, body-ache and in the most serious cases, internal bleeding.

Officials in Jakarta have said that the increased number of cases could be to do with heavy rains and pools of stagnant water in the city, which serve as a breeding ground for mosquitoes.

Workers in Jakarta have been spraying neighbourhoods with insecticide to try to prevent the disease from spreading.



**Fig. 1**

- (i) How many people were killed in Indonesia by dengue fever since the start of the year? [1]
- (ii) Use your own words to explain the causes of dengue fever. [2]
- (b) Study Fig. 2 (Insert), which shows information about dengue fever in different parts of Indonesia between 1 January and 27 March 2004.
- (i) Suggest a reason why this type of information is shown on a map rather than a graph. [1]
- (ii) How do the numbers of people (per 1000) with dengue fever in Sulawesi differ from those in Sumatra? [2]

- (c) Study Fig. 3, which shows the number of cases of dengue fever in Jakarta, Indonesia, between 1996 and 2004.

Year	Number of cases (to nearest thousand)
1996	7000
1997	5000
1998	15000
1999	4000
2000	9000
2001	9000
2002	6000
2003	14000
2004	18000

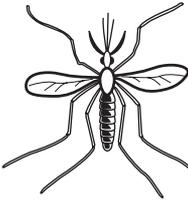
**Fig. 3**

- (i) Use a suitable method to present the information shown in Fig. 3. You may use graph paper for your answer. [4]
- (ii) Describe how the number of cases of dengue fever has changed between 1996 and 2004. Refer to years and statistics in your answer. [3]
- (d) Study Fig. 4 (Insert).
- (i) Explain why interviews are a useful investigative method when collecting information. [2]
- (ii) Give **two** reasons why care must be taken when using information from interviews, such as those in Fig. 4. [2]
- (iii) Describe **four** things which should be done by a researcher when preparing for and carrying out an interview. [4]

**[Total : 21 marks]**

- 2 Study Fig. 5, an extract from a newspaper about attempts to stop the spread of dengue fever in Jakarta.

**PLANS TO STOP THE SPREAD OF DENGUE FEVER**



To stop the spread of the disease, the Health Agency in Jakarta will run a campaign in February and March on the prevention of dengue fever. The campaign will stress that the best way of preventing the disease, which is spread by the *Aedes aegypti* mosquito, is to make sure that pools of still water around houses are drained or covered so that mosquitoes cannot lay their eggs there.

The Agency also plans to use groups of local people, working together, to spray the streets with insecticide.

**Fig. 5**

- (a) The Health Agency is planning a campaign, using posters, newspapers and radio broadcasts, to advise the local people how to prevent the spread of dengue fever.
- (i) Explain why posters are often used in clinics to inform people about health issues. [3]
  - (ii) Design a poster which could be displayed in each local clinic in Jakarta. Your poster should inform people about what they can do around their homes to prevent dengue fever. [4]
  - (iii) Suggest reasons why some local people will not act on the advice of the Health Agency. [3]
- (b) The Health Agency is planning that the local people should work together to spray the streets with insecticide.
- Describe how you think this work should be organised and financed. [4]

**[Total : 14 marks]**

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*Copyright Acknowledgements:*

Question 1 Fig. 1 © [www.bbc.co.uk](http://www.bbc.co.uk)

Question 1 (d) Fig. 4 © [http://www.wsws.org/articles/2004/apr2004/deng-a19\\_prn.shtml](http://www.wsws.org/articles/2004/apr2004/deng-a19_prn.shtml), 05/09/05.

Question 2 Fig. 5 © *Jakarta Post*, 16/02/04.

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