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0453/02

October/November 2015

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 Photographs A and B for Question 3(a).

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.

This document consists of **19** printed pages, **1** blank page and **1** Insert.

- 1 (a) Study Fig. 1 which shows information about natural population change.

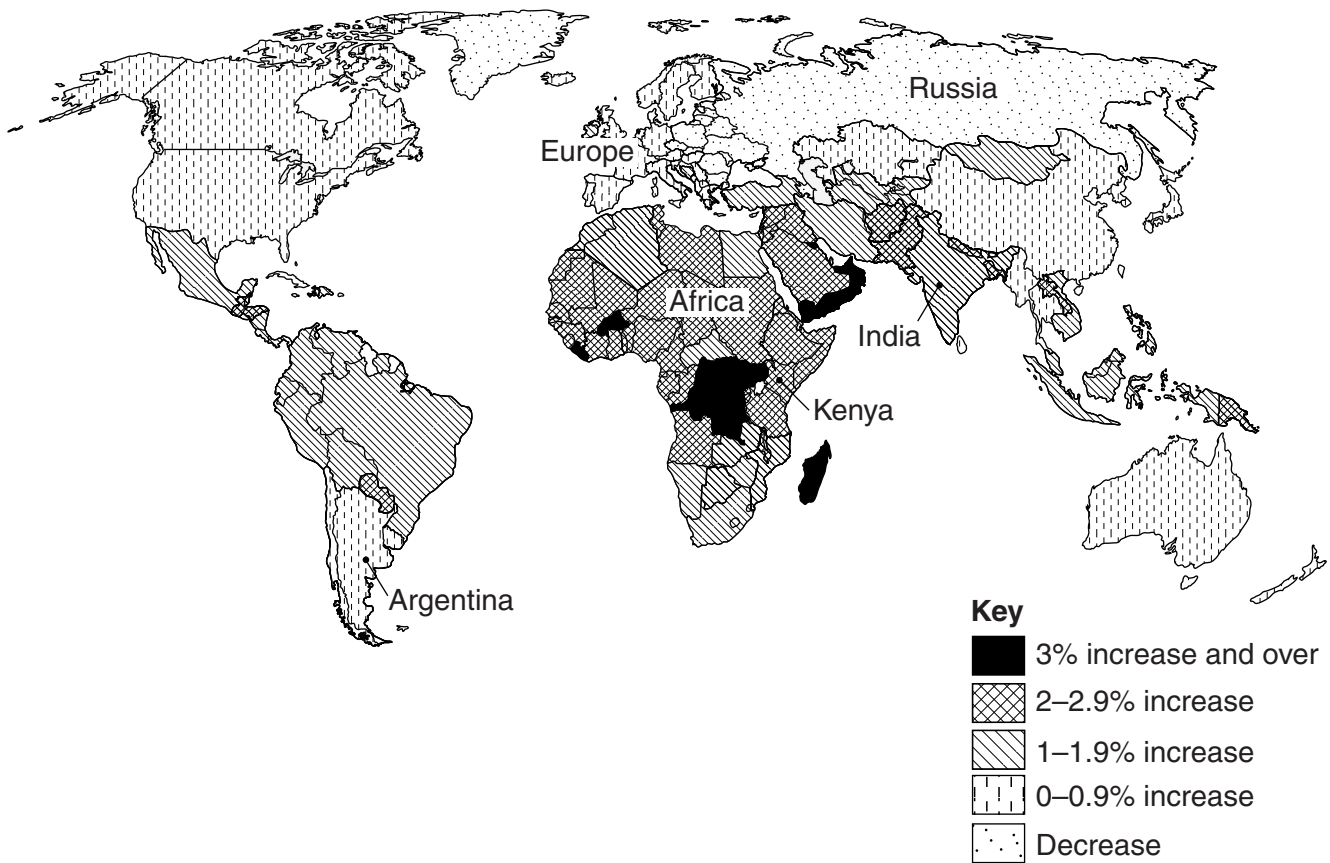


Fig. 1

- (i) Using Fig. 1, put the following countries in rank order according to their rates of population change. You should rank the countries from highest to lowest.

Argentina

India

Kenya

Russia

.....	Highest
.....	
.....	
.....	Lowest

[2]

- (ii) Compare the rates of natural population change in Africa and Europe. You should use statistics in your answer.

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..... [3]

- (b) Study Fig. 2 which shows information about India's population in 2012.

Total population	1.2 billion
Birth rate	20.6 per 1000
Death rate	7.4 per 1000
Infant mortality	46.1 per 1000
Life expectancy	67.1 years

Fig. 2

Calculate the natural population growth rate for India. You should show your calculations.

..... *per 1000*

[2]

- (c) Study Fig. 3 which shows information about changes in the birth and death rates of India, a developing country in Asia.

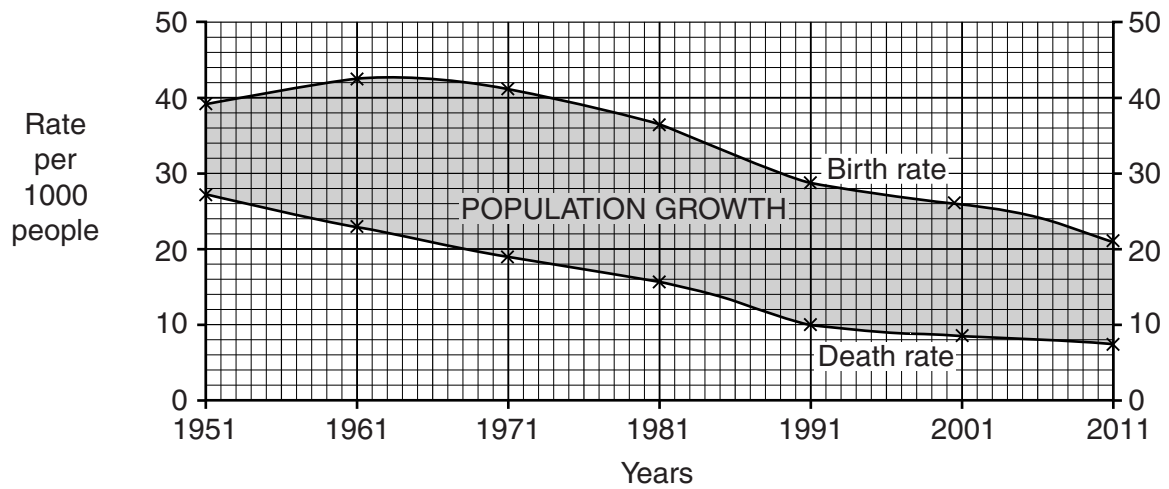


Fig. 3

- (i) Use data from Fig. 3 to explain how differences between birth rates and death rates have caused natural population growth in India between 1951 and 2011.

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..... [3]

- (ii) Suggest reasons for the changes in birth rates and death rates which are shown on Fig. 3.

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..... [6]

[Total: 16 marks]

2 Study Fig. 4 which shows information about five districts in the Indian state of Uttar Pradesh.

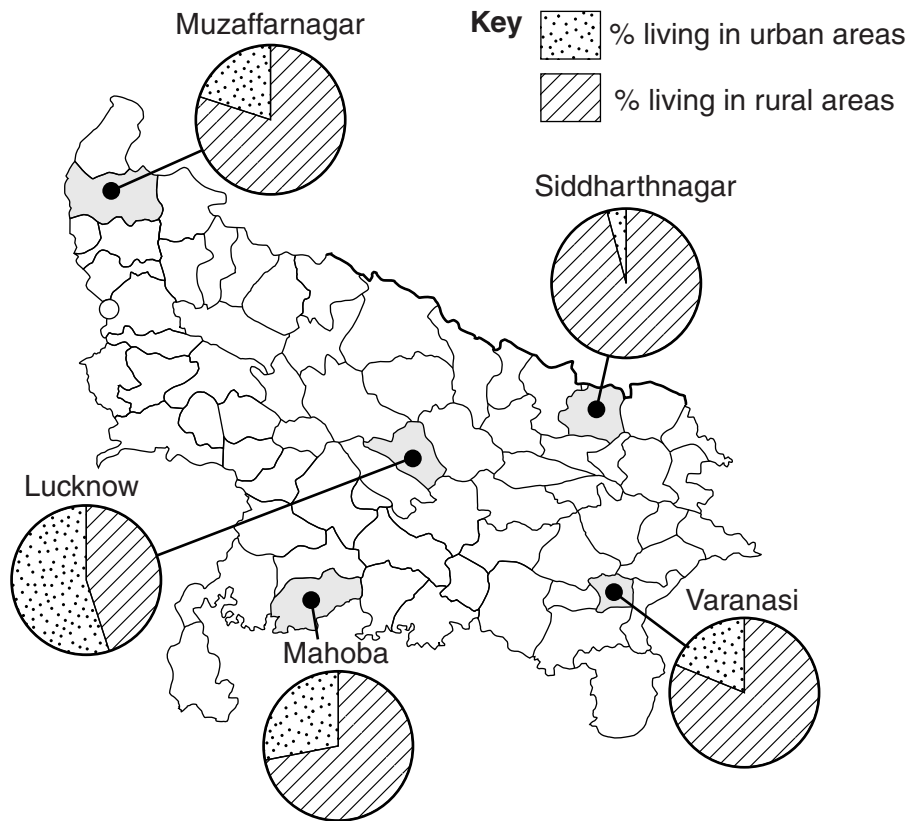


Fig. 4

(a) Identify the district which has:

- the highest percentage of the population living in urban areas
- the highest percentage of the population living in rural areas [2]

(b) Study Fig. 5 which shows information about birth rates, death rates and infant mortality rates in the five selected districts of Uttar Pradesh.

District	Birth rate (per 1000 people)		Death rate (per 1000 people)		Infant mortality rate (per 1000 live births)	
	Urban	Rural	Urban	Rural	Urban	Rural
Muzaffarnagar	22.1	25.0	7.5	9.6	37.2	59.6
Lucknow	16.4	22.1	5.8	8.3	32.9	57.0
Mahoba	25.6	25.7	6.9	7.7	38.7	53.2
Varanasi	17.6	21.7	7.4	8.5	69.8	83.1
Siddharthnagar	28.5	38.4	9.3	11.5	87.6	90.7

Fig. 5

- (i) What is meant by the term *infant mortality rate*?

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..... [1]

- (ii) Identify the main difference between the death rates in urban and rural areas in all five selected districts.

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..... [1]

- (iii) Suggest reasons to explain why infant mortality rates are high in some rural areas in Uttar Pradesh.

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..... [4]

- (iv) Compare the birth rates of Mahoba and Varanasi.

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..... [2]

- (c) Study Fig. 6, a scatter graph which shows the percentage of the population who live in rural areas and the average birth rates of the selected districts of Uttar Pradesh.

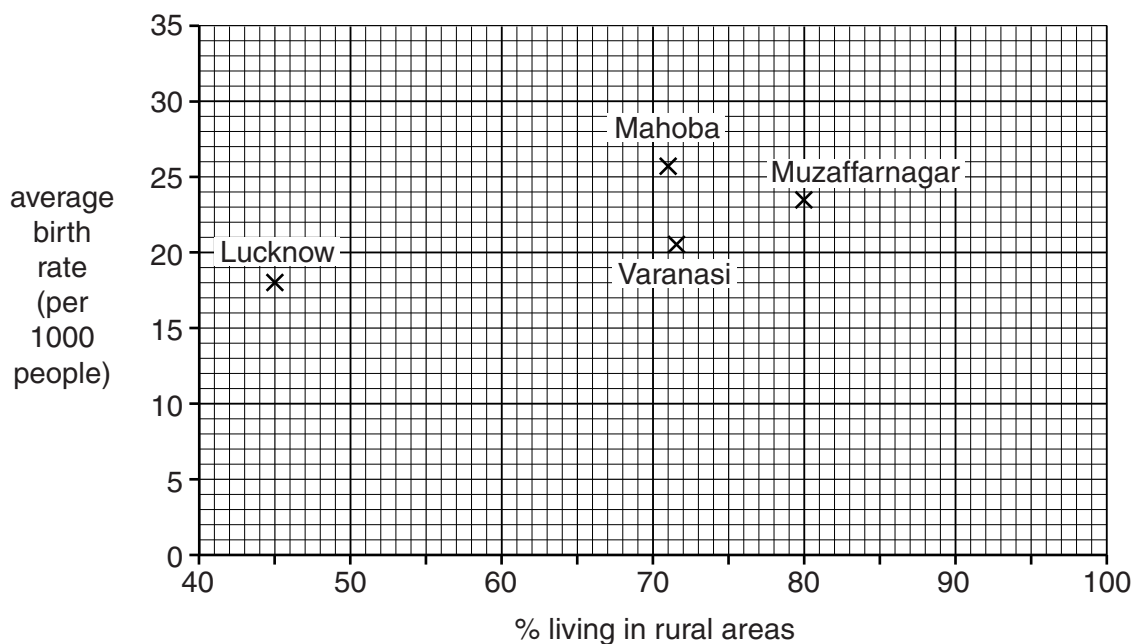


Fig. 6

- (i) Complete the scatter graph by plotting the following information for Siddharthnagar:

Population who live in rural areas = 96%

Average birth rate = 35 per 1000

[1]

- (ii) Draw a best fit line on Fig. 6.

[1]

- (iii) Use information from Fig. 6 to show that there is a positive relationship between the average birth rates and the percentage of the population who live in rural areas.

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..... [2]

- (iv) Explain why birth rates are high in many rural areas of developing countries.

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- (ii) Explain why it is important to use several methods together to reduce birth rates, rather than using only one method.

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..... [2]

[Total: 26 marks]

- 3 A research investigation was carried out with women in an urban area in India to find out information about their health and the health of their families.

(a) Study Photographs A and B which show parts of the area which was chosen to carry out the research.

- (i) Write an introduction to the investigation which describes the characteristics of the area where the study was carried out.
Your introduction should be based on observations from Photographs A and B.

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..... [4]

- (ii) Use your observations to explain **three** likely risks to the health of people living in the area.

1

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2

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3

..... [3]

- (b) Study Fig. 7, which describes the research, and Fig. 8, which is a letter given to the people chosen to take part in the investigation.

As we were dealing with sensitive issues it was necessary to build a relationship with the women who took part in our study. This was done by holding meetings with the women and making contact with local organisations. In addition we circulated leaflets in Marathi and Hindi with details about our investigation (Fig. 8). These leaflets were distributed widely among all members of the community, especially women. For those who could not read the leaflet, it was either read out or explained. Our address and telephone numbers were important considerations in building trust and faith in the community.

Female investigators were used to interview women. All these investigators were aged between 18 and 25 and could speak and write in Marathi and Hindi. They were fully trained before the investigation started.

Both quantitative and qualitative data were collected. Interviews were used with a large sample of people, both residents and health workers, and supporting data obtained.

Fig. 7

Centre For Enquiry into Health and Allied Themes (CEHAT)

519, Prabhu Darshan, 31, S.S. Nagar, Amboli, Andheri (W) 400 068

Phone: 625 0363

Dear Sister,

We are conducting a study on women's health.

Our organisation has a special interest in health issues. It is a secular, non governmental organisation. It is five years old and is run by its staff. It is governed by Anusandhan Trust (Reg. No. E 13480). We have conducted many research studies in different parts of Maharashtra. This study aims to find out what illnesses people, especially women, suffer from, where do they go for help and how much time is spent on seeking care. For this reason, we want to know from women about themselves and their family members' health. We also want information about events – births, pregnancies, abortions and deaths – which have occurred in the past year in the household. At the end of the study, a detailed report will be written based on the information collected. No individual's name will be printed in this report.

We have selected the sample of households carefully, so that all kinds of people can be included in the study. However, you have a right to refuse to give the interview and also to refuse to answer specific questions. CEHAT and the people who have signed this letter promise you that this information will not be given to anyone else.

If you have any doubts, questions or suggestions, please call us, meet us or write to us.

Researchers

Roopashri Sinha

Neha Madhiwalla

Sunil Nandraj

Amar Jesani (*Co-ordinator*)

(*Note: This pamphlet has been translated from Marathi.*)

Fig. 8

- (i) The data collected in the investigation was primary data. What is meant by primary data?

.....
 [1]

- (ii) Explain why the letter (Fig. 8) was given to the people taking part in the investigation.

.....

 [3]

- (iii) The data gathered in the investigation was both qualitative and quantitative.

Define the terms:

qualitative data

 quantitative data
 [2]

- (iv) Name and describe a method which could be used to choose a representative sample of households for the interviews.
 Explain why you think this type of sample would be representative.

Type of sample
 Description

 Explanation

 [3]

- (v) Describe the advantages and disadvantages of interviews as a method of data collection.

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(c) Study Fig. 9 which shows data collected in the investigation about the health facilities used.

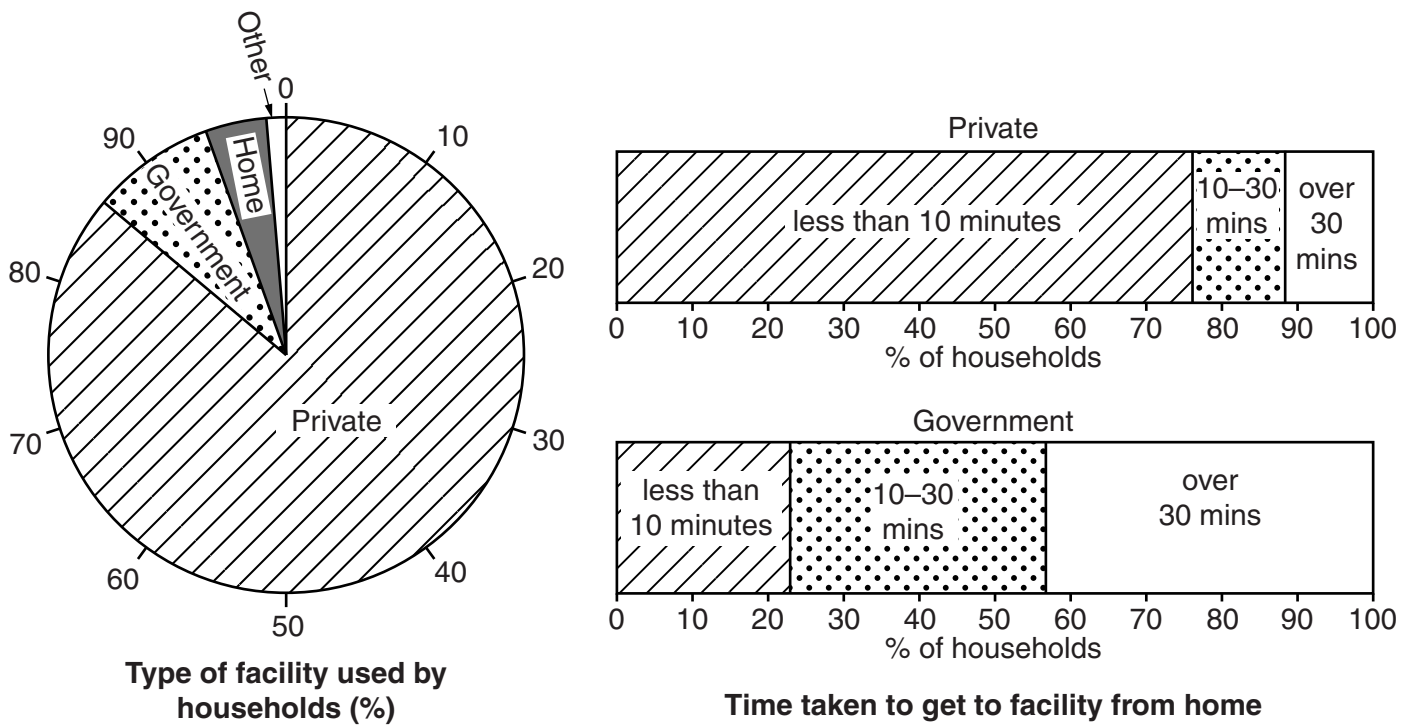


Fig. 9

What conclusions can be made from these data? Refer to statistics in your answer.

[6]

- (d) Study Fig. 10 which shows data collected in the investigation about treatment and health care providers.

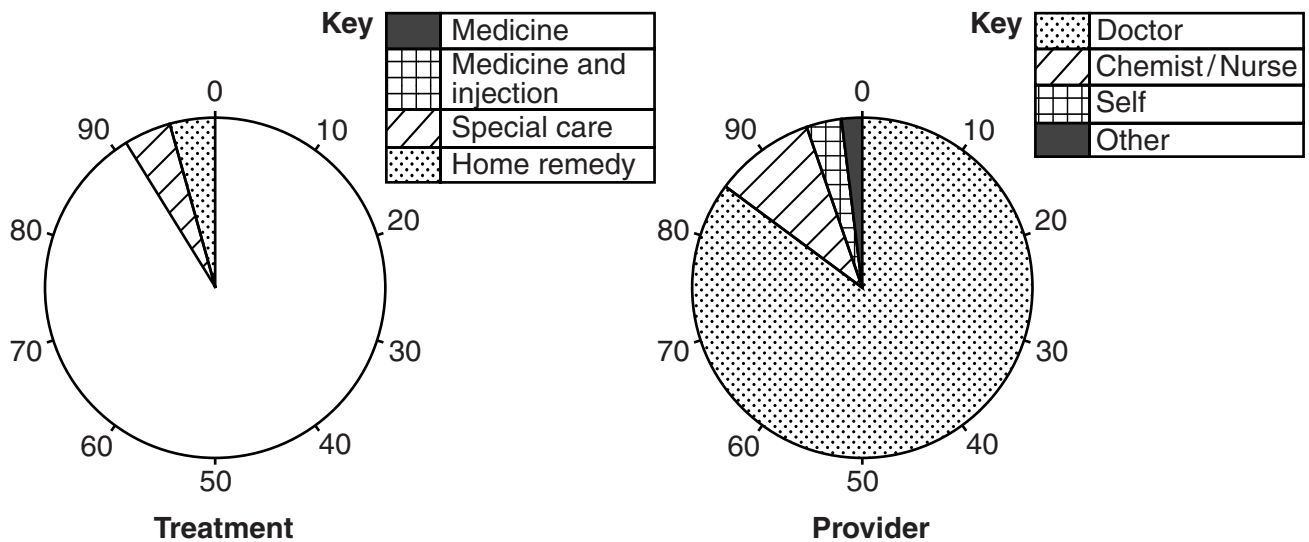


Fig. 10

- (i) Use the following information to complete the pie chart in Fig. 10 which shows the type of treatment:

Medicine 63%
 Medicine and injection 28%

[2]

- (ii) State the percentage of households whose treatment was provided by a doctor.

.....%

[1]

(e) Study Fig. 11 which shows reasons why people sometimes did not treat illnesses.

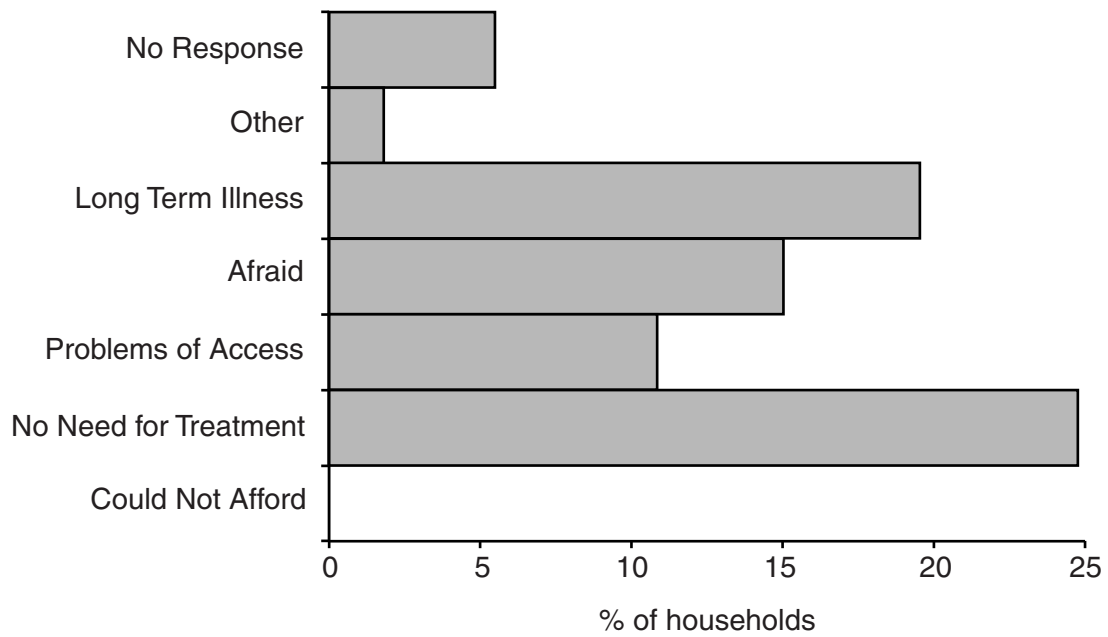


Fig. 11

(i) Complete Fig. 11 by showing the following information:

22% did not treat their illness because they could not afford to.

[1]

- (ii) Suggest possible solutions to the problem of non-treatment of illness in the area. Justify your suggestions.

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..... [6]

[Total: 38 marks]

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