4 **(a)** This information is about an informal (shanty) settlement in an African country.

> At the edge of the city 9000 people live on just one square kilometre of very steep land. There is a mixture of semi-permanent and temporary housing, built by migrants who hope to find work in the city. Most of the housing lacks services. Many families grow crops on small plots and keep animals for food. They sell any surplus crops and animals. A main road goes through the centre of the settlement. Other roads are made of earth and are eroded and unsuitable for vehicles. There are many of these settlements because the country's population has grown very rapidly.

(i) Circle the word that describes the density of population in this settlement.

sparse   low   medium   high [1]

(ii) Give **two** reasons why diseases spread quickly in this settlement.
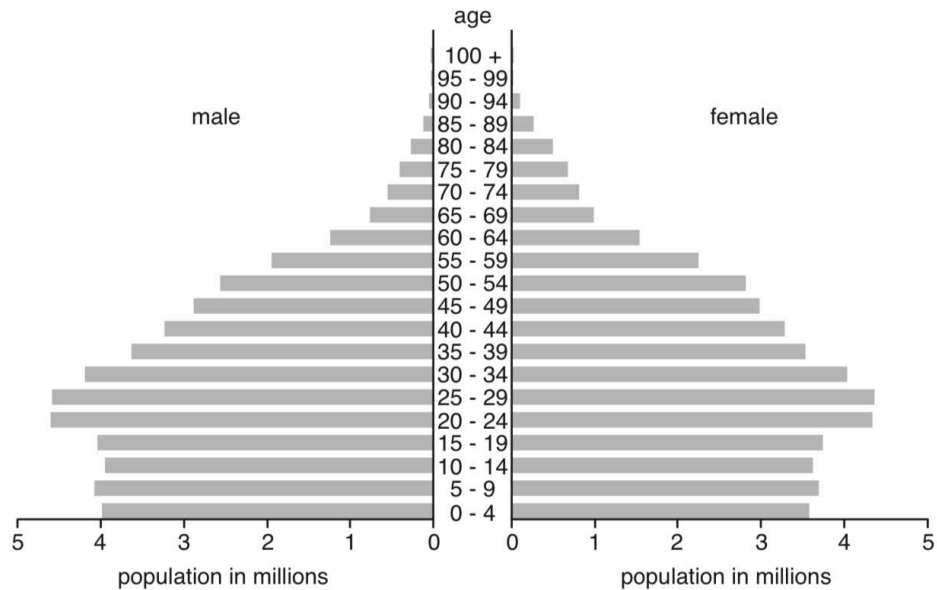
....

....

....

....[2]

(b) State **four** pull factors, other than jobs, that attract migrants to cities in developing countries.

....

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....

....[4]

(c) Suggest why it is difficult for city authorities to improve living conditions in informal (shanty) settlements.

....

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....

....[3]

4 **(a)** The graph shows the population pyramid for Vietnam in 2014.

(i) State the number of females aged 30 to 34 in Vietnam in 2014.

....[1]

(ii) The government of Vietnam started a policy to reduce the birth rate. Approximately how many years before 2014 was this policy started? Circle your answer.

        10   **20**   **30**   **40**   [1]

(iii) Explain why the government of Vietnam decided a birth control policy was needed at this time.

....

....[1]

(b) Describe ways in which some governments encourage their populations to have fewer children.

....

....

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....[4]

(c) The number of people aged 60 and over in Vietnam is likely to increase over the next 40 years.

Suggest why.

....

....

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....

....[3]
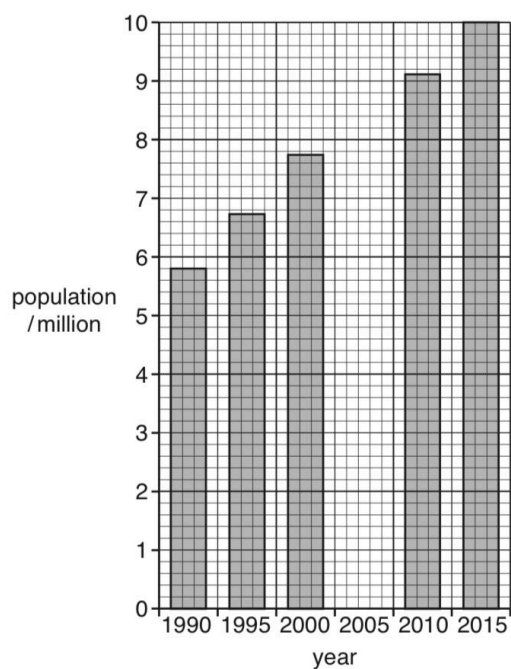
4 (a) The graph shows changes in the population of Lima, the capital city of Peru, between 1990 and 2015.

(i) Use the information in the table to complete the graph.

year	2005
population	8 500 000

[1]

(ii) Calculate the growth in Lima's population between 1990 and 2015.

Space for working.

....[1]

(iii) The population of Peru in 2015 was nearly 31 million.

Circle the approximate percentage of Peru's population that lived in Lima in 2015.

10% 20% 30% 40% [1]

(b) (i) Explain why many rural areas in developing countries have high levels of poverty.

....

....

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....[3]

(ii) Suggest how people could be encouraged to remain in rural areas instead of moving to cities.

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....[4]
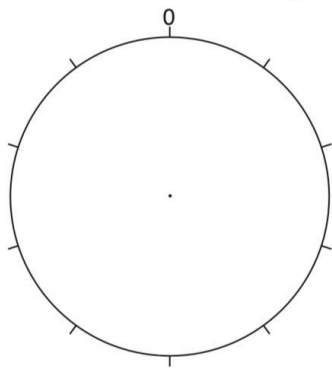
Section B

5 (a) The table shows the population structure for two countries in 2015.

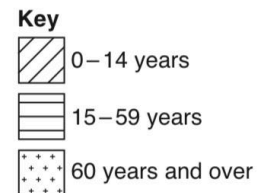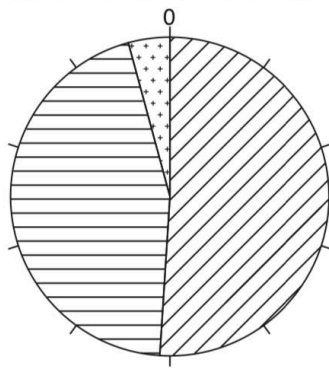| country	population structure (percentage in each age group)		
	0–14 years	15–59 years	60 years and over
Japan	13	54	33
Niger	51	45	4

(i) Complete the pie chart to show the population structure of Japan.
Use the key provided.

population structure of Japan   **population structure of Niger**

Key
0–14 years
15–59 years
60 years and over

[3]

(ii) Suggest **two** problems that Japan may have as a result of its population structure.

1 ....

....

2 ....

....
[2]

(iii) Explain why Niger's population structure means its population may increase rapidly.

....

....

....

.... [2]

(iv) Suggest **two** problems that Niger may have as a result of a rapid population increase.

1 ....

....

2 ....

....
[2]

(v) Describe **two** strategies that the government of Niger could use to control the rate of population increase.

1 ....

....

2 ....

....
[2]

(b) Can a less economically developed country (LEDC), such as Niger, feed its increasing population sustainably?

Give reasons for your answer.

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.... [4]

[Total: 15]

Section A

1 The divided bar chart shows percentage of greenhouse gas emissions and percentage population in 2012.
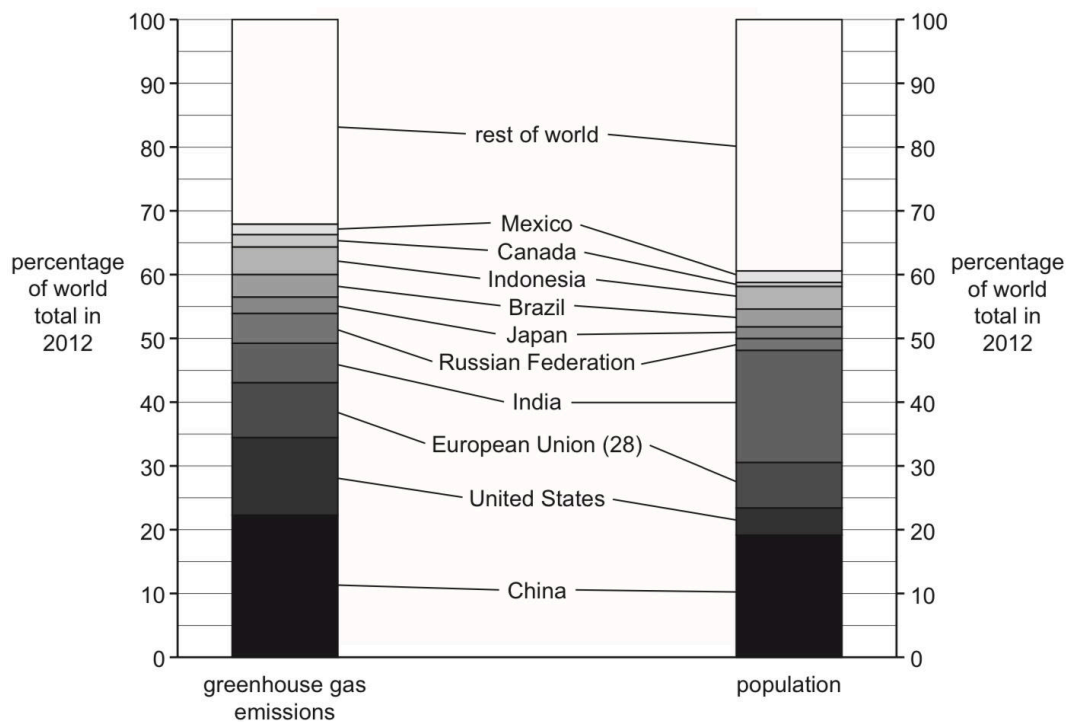
(a) State the percentage of greenhouse gas emissions from the rest of the world in 2012.

....% [1]

(b) Identify the country that produced the most greenhouse gas emissions in 2012 **and** state the percentage of greenhouse gas emissions it produced.

country ....

percentage of greenhouse gas emissions ....

[1]

(c) State the name of **two** greenhouse gases.

1 ....

2 ....

[2]

(d) India contains nearly 19% of the world's population, but contributes only 6% of the world's greenhouse gases.

Suggest reasons why.

....

....

....

....

....

.... [3]

[Total: 7]

 [Turn over

Section B

4 (a) The graph shows the world population from 1950 to 2015 and the predicted world population from 2016 to 2100.
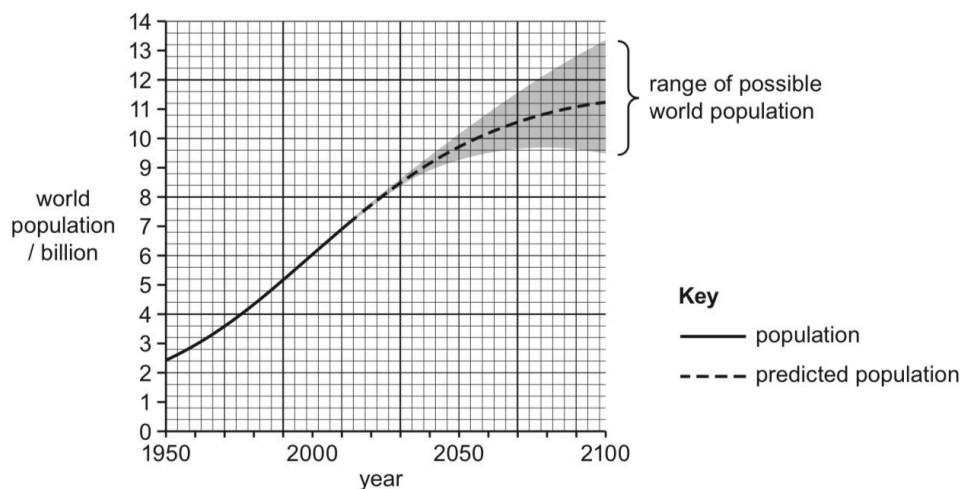
(i) Calculate the increase in world population from 1950 to 2015.

.... [1]

(ii) Describe how the predicted rate of population growth changes after 2050.

....

.... [1]

(iii) Explain why there is a range of possible world population figures between 2050 and 2100.

....

....

....

.... [2]

(b) The table shows the populations of the continents in 2015 and their predicted populations in 2100.

continent	population in 2015 /million	predicted population in 2100 /million
Africa	1186	4387
Asia	4393	4889
Europe	738	664
Oceania	39	71
North America	358	500
South America	634	721

(i) Place the continents in rank order of their predicted populations in 2100, starting with the largest.

largest ....

....

....

....

....

smallest ....

[2]

(ii) State which continent is predicted to have a smaller population in 2100 than in 2015.

.... [1]

(iii) Calculate the predicted percentage increase in population for Oceania from 2015 to 2100.

....% [2]

(iv) Explain the reasons for rapid population growth in some parts of the world.

....

....

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....

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....

....

.... [4]

(v) Migration affects population size.

State **two** factors that cause migration.

1 ....

2 ....
[2]

(vi) 'Education is the best strategy for managing human population size.'

To what extent do you agree with this statement? Give reasons for your answer.

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.... [6]

[Total: 21]

9 (a) The map shows changes to the population in Australia between 2015 and 2016.

N

Key

	population increase >1.5%
	population increase 0.5 – 1.5%
	population increase <0.5%
	population decrease

0   1000
km
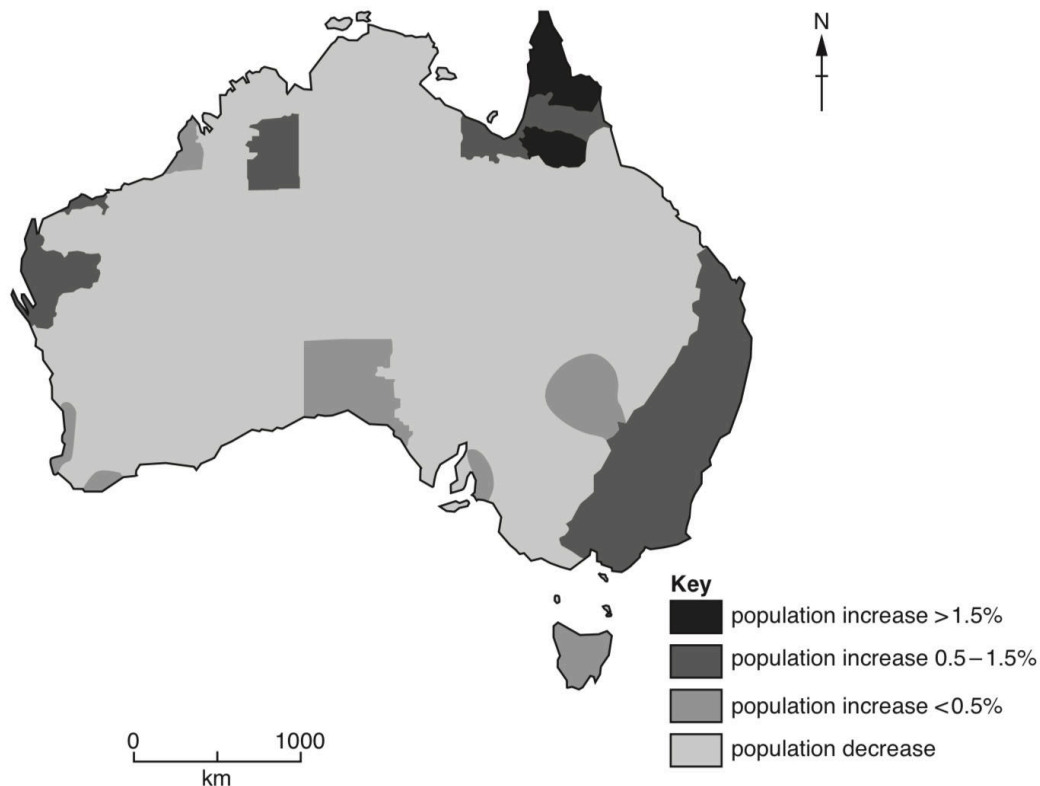
(i) Describe the changes to the population in Australia between 2015 and 2016.

....

....

....

....

....

.... [3]

(ii) Suggest reasons for the changes to the population in Australia between 2015 and 2016.

....

....

....

.... [2]

(b) State **three** ways a country can manage the growth of its population.

1 ....

....

2 ....

....

3 ....

....

[3]

(c) 'A growing population is good for the environment and the economy of a country.'

How far do you agree with this statement? Give reasons for your answer.

....

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.... [6]

[Total: 14]

2 The graph shows a typical growth curve for a population.
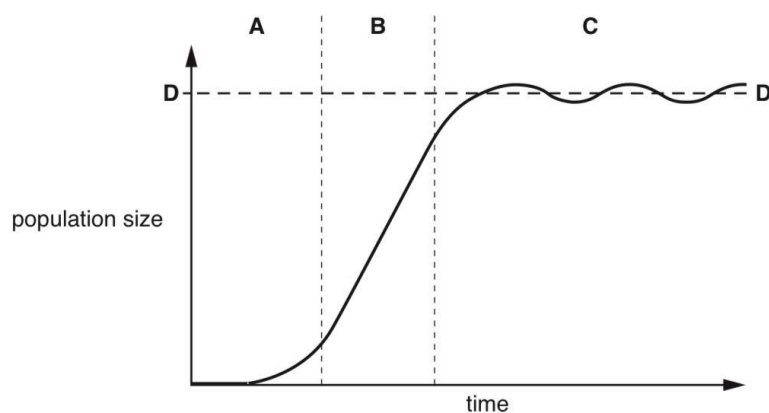
(a) State the name of each part of the graph, labelled **A**, **B**, **C** and **D**.

part	name of part
A	....
B	....
C	....
D	....

[3]

(b) Describe **two** ways a country could control its birth rate.

1 ....

....

2 ....

....

[2]

[Total: 5]

8   Bulgaria is a country in Europe.

The graph shows the population of Bulgaria between 1890 and 2015. The graph is incomplete.
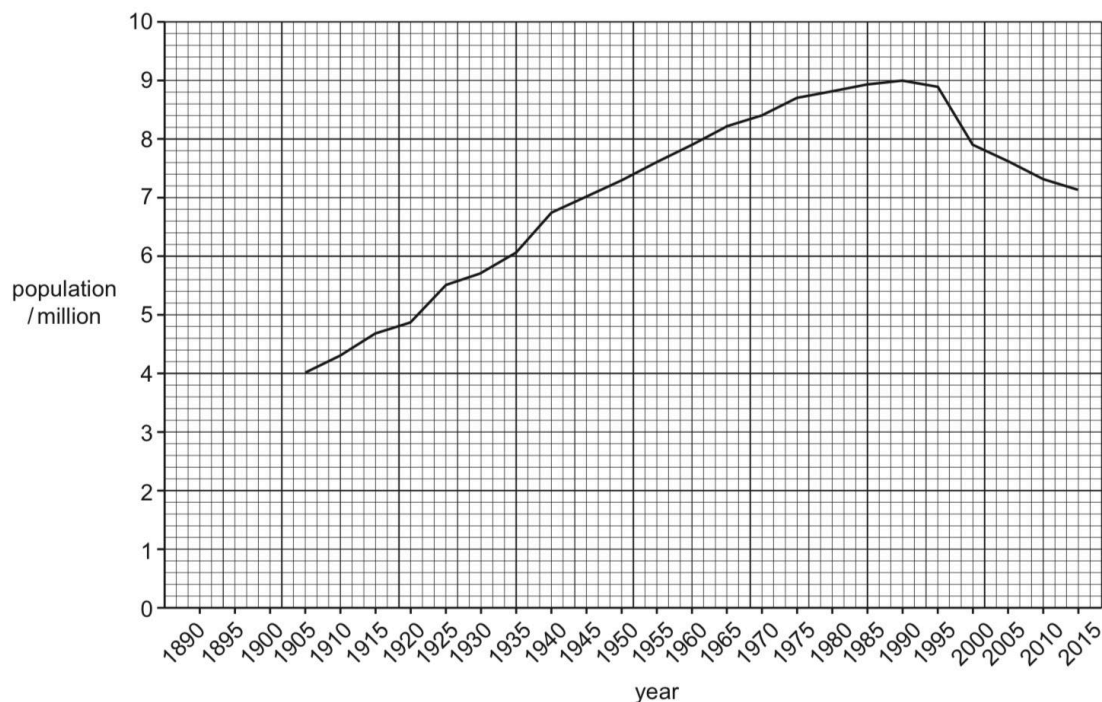
(a) (i)   Complete the graph using the information in the table.

year	population / million
1890	3.15
1895	3.30
1900	3.75

[2]

(ii)   Describe the trends in the population of Bulgaria between 1890 and 2015.

....

....

....

.... [2]

(b) Bulgaria is a more economically developed country (MEDC).

Which population pyramid, **A**, **B** or **C**, best represents the population of Bulgaria in 2016?

A

age
group

male   female

population

B

age
group

male   female

population

C

age
group

male   female
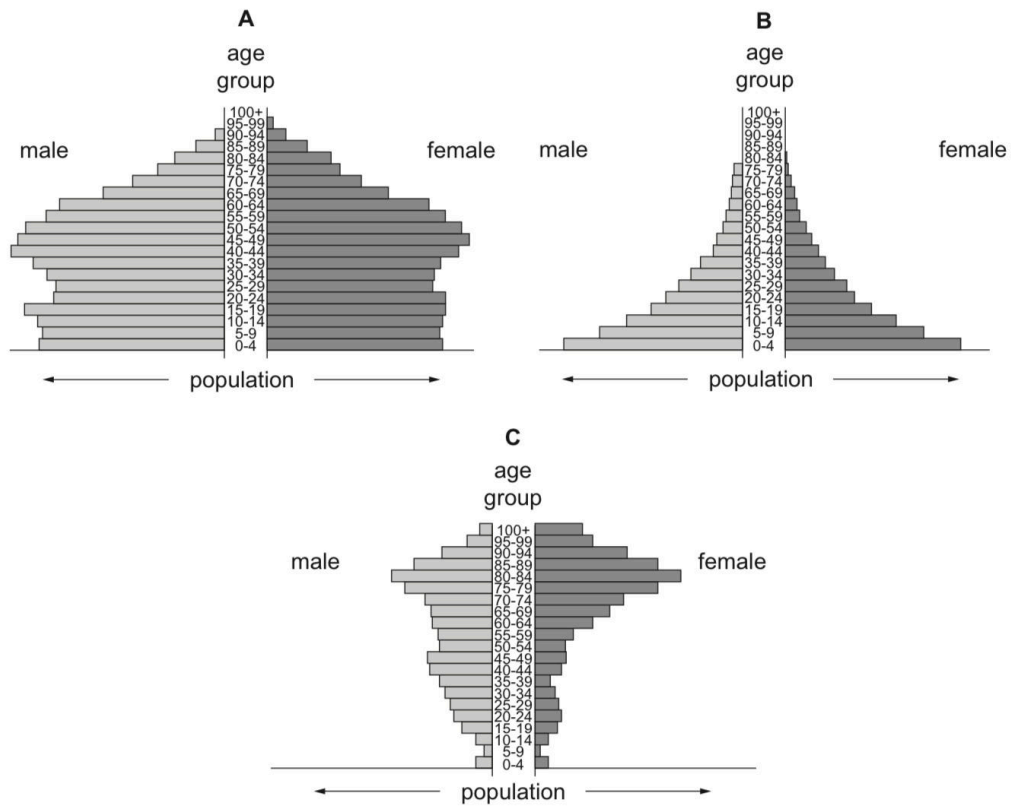
population

population pyramid .... [1]

PLEASE TURN OVER FOR QUESTION 8(c)

(c) 'Improved health and education are the best ways to manage the population size of a country.'

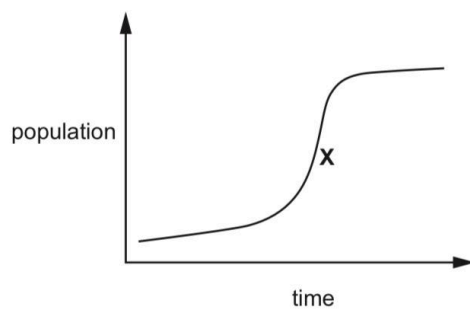How far do you agree with this statement? Use examples to support your answer.

....

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....

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.... [6]

[Total: 11]

3   The graph shows a typical population growth curve.

population

X

time

(a) Name the part of the population growth curve labelled **X**.

.... [1]

(b) Describe strategies for managing human population size.

....

....

....

....

....

.... [3]

[Total: 4]

Section A

1   The diagram shows a population pyramid for a more economically developed country (MEDC).

age group

male   female

5   4   3   2   1   0   0   1   2   3   4   5
percentage of   percentage of
total population   total population
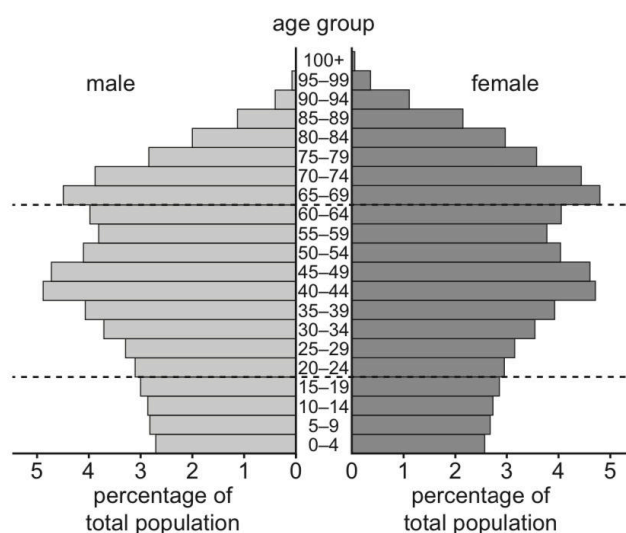
(a) Identify the age group with the highest percentage of males.

.... [1]

(b) Describe the population structure of the MEDC shown in the diagram.

....

....

....

....

....

.... [3]

(c) State **three** reasons why people migrate from a country.

1 ....

2 ....

3 ....
[3]

[Total: 7]

4 The photograph shows an area of high population density in a city.

(a) Suggest **two** reasons for high population density in a city.

1 ....

....

2 ....

....

[2]

(b) State **two** strategies for managing the population size of a country.

1 ....

....

2 ....

....

[2]

[Total: 4]

4 The map of Africa shows average life expectancy by country.

Key
- 70+ years
- 60–70 years
- 50–60 years

N

Tropic of
Cancer

Equator

Tropic of
Capricorn
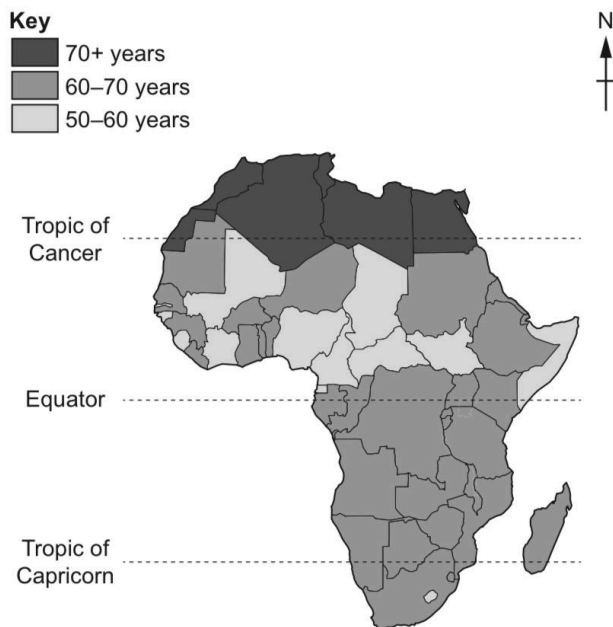
(a) Describe the distribution of average life expectancy in Africa.

....

....

....

.... [2]

(b) Suggest why average life expectancy might change in the future.

....

....

....

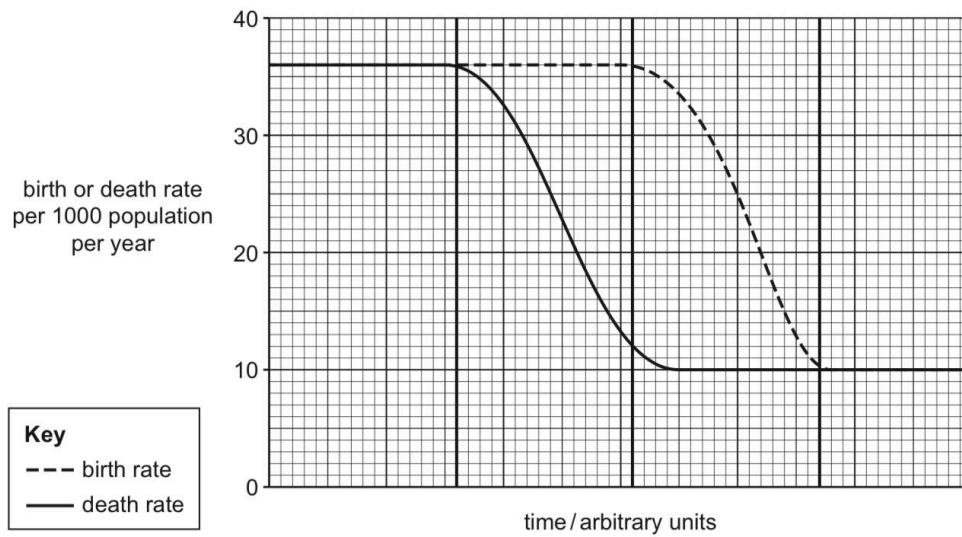.. [2]
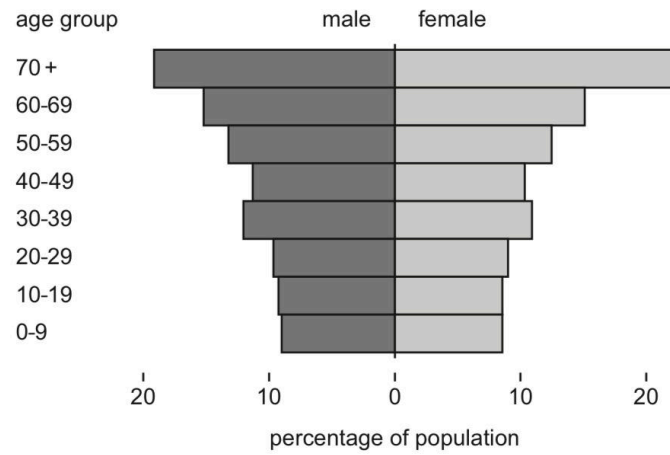
[Total: 4]

7 The graph shows the birth rate and death rate of a population.

(a) (i)   State the maximum birth rate shown on the graph.

.... per 1000 population [1]

(ii)   Shade an area on the graph to show when the population is increasing.   [1]

(iii) On the graph, draw an **X** to show when the population is at its maximum.   [1]

(b) Suggest reasons why the death rate of a population decreases.

....

....

....

.... [2]

(c) State **three** pronatalist policies.

1 ....

2 ....

3 ....
[3]

(d) A country has the population pyramid shown.

Suggest the problems this causes for the country.

....

....

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....

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....

....

.... [4]
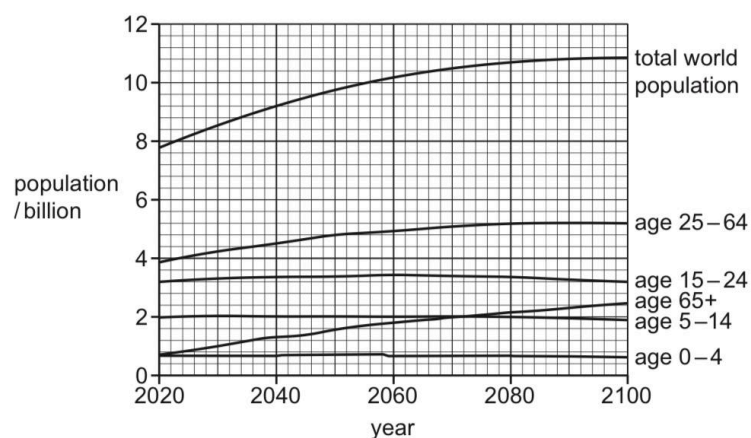
[Total: 12]

4 The graph shows predicted world population from 2020 to 2100.

(a) State the year in which the total world population is predicted to reach 10 billion.

.... [1]

(b) Suggest why the 65+ age group is predicted to increase between 2020 and 2100.

....

....

....

.... [2]

(c) State **two** strategies a country can use to limit the size of the national population.

1 ....

....

2 ....

....
[2]

[Total: 5]

5 The map shows the percentage increase in population by country between 1950 and 2021.

Key
- ■ more than 1000%
- ■ 250–1000%
- ■ 100–249%
- ▨ 0–99%
- ▨ less than 0%

Tropic of Cancer

Equator

Tropic of Capricorn
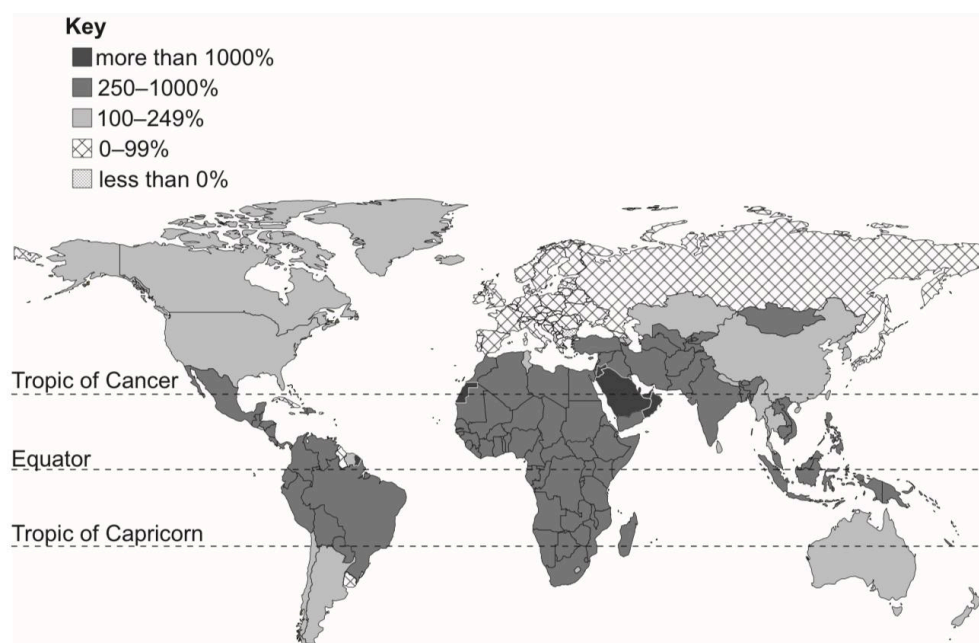
(a) Describe the distribution of population growth between 1950 and 2021.

....

....

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....

....

....

....

.... [4]

(b) Suggest the impacts on natural resources for countries with an increase in population of more than 1000%.

Give reasons for your answer.

....

....

....

....

....

.... [3]

(c) A country with a low population growth introduces a pronatalist strategy to encourage families to have more children.

   (i) State **one** example of a pronatalist strategy.

   .... [1]

   (ii) Suggest **one** negative impact of this strategy on the economy of a country.

   .... [1]

[Total: 9]