2.4 Demographic Change: Birth Rates, Death Rates and the Ageing Population

AQA 7192 · about 60 minutes · Write-in edition

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Use full sentences for questions worth 4 marks or more and for Question 5. Allocate your time so you can complete the 12-mark evaluation in approximately 20 minutes.

1 Describe one social consequence for families of an ageing population, using the beanpole family idea.

(Total for Question 1 is 4 marks)

2 Outline and explain two consequences of an ageing population for the labour market in a developed country context.

(Total for Question 2 is 6 marks)

3 Describe two policy responses governments might adopt to address the pressures of an ageing population: one response concerning pensions and one concerning social care.

(Total for Question 3 is 4 marks)

4 Outline two ways the changing economic role of women has been used to explain falling birth rates in developed societies.

(Total for Question 4 is 4 marks)

5 Using Item A and Item B and your knowledge, evaluate sociological explanations for the long-term decline in the birth rate.

(Total for Question 5 is 12 marks)

6 Define what sociologists mean by the 'dependency ratio' when discussing an ageing population in a national context.

(Total for Question 6 is 2 marks)

7 Explain one reason why the rising average age of mothers at first birth contributes to a lower birth rate in a society.

(Total for Question 7 is 2 marks)

8 Define the sociological meaning of 'beanpole family' as used when discussing the effects of an ageing population.

(Total for Question 8 is 2 marks)

9 Item A: Demographic snapshot for the fictitious country Northford in 2025. Crude birth rate 9 births per 1000 population. Crude death rate 11 deaths per 1000 population. Median age 45 years. Percentage of population aged 65 and over 22%. Net migration is slightly positive at +2 per 1000. Using Item A, explain what the median age and the percentage aged 65 and over show about Northford's age structure in 2025, and one limitation of using this snapshot to claim that its population is ageing.

(Total for Question 9 is 4 marks)

10 Explain one reason why a falling crude birth rate does not immediately reduce the size of the elderly population.

(Total for Question 10 is 2 marks)

11 Give two ways an ageing population can increase pressure on public spending in a country like the UK.

(Total for Question 11 is 4 marks)

Mark scheme · 2.4 Demographic Change: Birth Rates, Death Rates and the Ageing Population

Question 1

identifies a social consequence linked to beanpole families, e.g. more generations alive at once with fewer children in each generation	**B1**
development, e.g. family responsibilities shift, with adult children more likely to care for elderly parents	**B1**
further development, e.g. emotional and financial support may flow up the generations, increasing intergenerational dependency	**B1**
links consequence explicitly to ageing population context	**B1**

Answer: An ageing population leads to beanpole families with more living generations but fewer children per generation; adult children become more likely to care for elderly parents, increasing emotional and financial responsibilities and intergenerational dependency.

Question 2

first consequence identified, e.g. labour shortages in some sectors as a larger share retires	**B1**
first consequence explained through a causal link, e.g. retiring cohorts reduce the supply of workers available to fill vacancies	**B1**
first consequence developed further, e.g. employers competing for fewer available workers may offer higher wages to recruit staff	**B1**
second distinct consequence identified, e.g. increasing demand for jobs in health and social care	**B1**
second consequence explained through a causal link, e.g. greater care needs increase demand for care workers	**B1**
second consequence developed further, e.g. shortages of suitably skilled care workers create a need for training or recruitment. Award three marks for each of two developed consequences; accept other valid consequences and linked explanations, without requiring a third consequence	**B1**

Answer: First, retirement can cause labour shortages: as workers retire, fewer workers may be available to fill vacancies, so employers competing for staff may offer higher wages. Second, greater care needs can increase demand for health and social care jobs. If suitably skilled workers are in short supply, this creates a need for training or recruitment.

Question 3

identifies a pension response, e.g. raising the state pension age or offering incentives for private pension saving	**B1**
describes the pension mechanism, e.g. a higher state pension age delays eligibility and may keep people contributing for longer; incentives for private pensions encourage saving for retirement income	**B1**
identifies a distinct social care response, e.g. increasing tax-funded social care provision	**B1**
describes the care mechanism, e.g. additional tax revenue can pay for community care staff and services to meet care needs; incentives for private pensions alone do not fund social care provision	**B1**

Answer: Governments can raise the state pension age, delaying eligibility for state pensions and potentially keeping people in work and contributing for longer. Separately, they can allocate additional tax revenue to social care, paying for community care staff and services to meet care needs. Incentives for private pensions are an alternative pension response that encourages saving for retirement income; they are not themselves funding for social care provision.

Question 4

first way identified, e.g. increased female labour-force participation leads to delayed childbearing	**B1**
development of first way, e.g. career and education priorities reduce fertility or mean couples have fewer children	**B1**
second way identified, e.g. greater education and empowerment reduces economic reliance on having many children	**B1**
development of second way, e.g. women choose smaller families because they have more control over fertility and life choices	**B1**

Answer: Examples: more women in education and paid work delay childbearing and may have fewer children because of career and family timing; greater female education and empowerment reduce economic reliance on large families and give women greater control to choose smaller families.

Question 5

Level 1 Basic statements that identify one or two reasons for falling birth rates with little or no application to the Items and limited development. **1-3**

Level 2 Some development and organisation; outlines a couple of sociological explanations such as contraception, changing role of women, economic costs, with some use of the Items to illustrate points. **4-6**

Level 3 Clear explanation of several sociological explanations, including application to Item A and Item B, and some evaluation, for example considering strengths, limits or evidence for each explanation. **7-9**

Level 4 Detailed evaluation including competing perspectives and a supported conclusion; well integrated use of Item A and Item B to support and challenge explanations, addressing issues such as class, policy, cultural variation and the role of migration. **10-12**

Indicative content:

- AO1 points: explanations for falling birth rate including increased use of contraception and family planning, changing economic role and status of women (education, employment), rising costs of childrearing and housing, later average age of first birth, cultural shifts towards individualisation and smaller families.
- AO2 application: Item A gives a crude birth rate of 9 per 1000, a median age of 45 and 22% aged 65+. This single-year snapshot describes current rates and age structure, but supplies no benchmark for calling the birth rate low or the median age high, and cannot establish a historical fertility decline or delayed childbearing. Item B identifies unpaid family care as the main source for a majority of its specified respondents; it supports conditional discussion of how care responsibilities might affect decisions about having children, not evidence that family size or care pressures have changed.
- AO3 evaluation: consider strengths and limits of each explanation, for example contraception explains control over fertility but may not explain why couples choose fewer children; the changing role of women explains delay and fewer births but class and cultural factors mean the effect varies; economic explanations highlight costs and housing but policies such as family benefits or childcare provision can mitigate these; migration can affect birth rates and age structure, but Item A gives no migrant age profile, so net migration alone cannot establish its effect on age structure or whether it offsets ageing; consider evidence quality and whether explanations are complementary rather than mutually exclusive.
- Conclusion: reach a balanced judgement, for example that no single explanation fully accounts for the decline, and that a combination of contraception, women's changing roles and economic pressures, shaped by policy context and migration patterns, best explains long-term falls in birth rates.

Question 6

identifies dependency ratio as the relationship between dependents and working-age population, oe **B1**

development, e.g. number of children and elderly compared with those aged roughly 16-64, expressed as a ratio or percentage **B1**

Answer: The dependency ratio is the relationship between dependents and the working-age population, for example the number of children and elderly compared with those aged about 16-64, often shown as a ratio or percentage.

Question 7

identifies that later childbearing shortens the window of fertility or leaves less time for multiple children **B1**

development, e.g. couples who delay starting a family often have fewer children overall because of biological and life-stage constraints **B1**

Answer: Later childbearing shortens the time available for having children or having multiple children; couples who delay starting a family often end up having fewer children overall because of biological and life-stage constraints.

Question 8

identifies beanpole family as a long, thin family structure with more generations but fewer people in each generation, oe **B1**

development, e.g. several living generations but smaller family size per generation **B1**

Answer: A beanpole family is a long, thin family structure with more living generations but fewer people in each generation, meaning several generations are alive but each generation has fewer members.

Question 9

identifies the median age of 45 years from Item A **B1**

explains that median age divides the population into two equal halves: half are aged 45 or above and half 45 or below **B1**

interprets 22% aged 65 and over as the proportion of the population in that older age group in 2025 **B1**

explains that a single-year snapshot cannot establish population ageing over time: comparable earlier age-structure data are needed; no benchmark is supplied to show an above-average median age **B1**

Answer: The median age is 45 years, meaning half the population is aged 45 or above and half 45 or below. In 2025, 22% of the population is aged 65 and over. These describe the age structure at that date, but cannot show that the population is ageing over time without comparable earlier age-structure data. No benchmark is supplied to establish whether the median age is above average.

Question 10

identifies that those who are elderly now were born decades earlier, so current low birth rates do not affect their numbers **B1**

development, e.g. population momentum means age structure changes slowly because of past higher births **B1**

Answer: The current elderly were born decades earlier, so recent falling birth rates do not immediately change their numbers; population momentum means age-structure shifts happen slowly due to past higher birth cohorts.

Question 11

first way, e.g. increased spending on pensions as more people reach retirement age	**B1**
development of first way, e.g. longer life expectancy raises total pension costs	**B1**
second way, e.g. greater demand for health and social care services for elderly people	**B1**
development of second way, e.g. higher per-person health costs and need for long-term care create budget pressure	**B1**

Answer: Examples: more spending on pensions as more people retire and live longer, and greater demand for health and social care services for older people which raises per-person costs and long-term care spending.