Workbook answers

32 Living standards

1 **Correct answer: A** high cost of living

Those suffering from poverty suffer from high death rates (Option B), homelessness and poor housing (Option C), and hunger (Option D), so these are measures of poverty. Inflation is found in most economies, with many high-income countries experiencing a high cost of living. Hence, a high cost of living is not an indicator of poverty.

2 **Correct answer: D** It does not reflect the distribution of income and wealth.

Real national income accounts for inflationary effects (Option A) and income earned in each industry (Option B), whilst per capita income accounts for the size of the population (Option C). However, it does not account for the fact that the 'average' person is potentially highly unrepresentative due to inequalities in the distribution of income and wealth. A minority of the population is likely to earn a significant proportion of the country's national income.

3 **Correct answer: B** environmental issues

Education, healthcare and income are the three indicators used to compile the HDI. The lack of consideration for environmental issues (Option B) is one of the main criticisms of using the HDI to measure standards of living.

4 **Correct answer: D** Country D

Economists use real GDP per capita as a key indicator of standards of living. This is calculated by dividing the GDP figure by the country's population:

Country	GDP ($ billion)	Population (million)	GDP per capita ($)
A	129.7	18.5	7010.81
B	153.6	150.0	1024.00
C	43.2	15.2	2842.10
D	89.9	9.2	9771.74

Country D has the largest GDP per capita (by quite a significant margin compared to Countries B and C).

5 **Correct answer: D** The definitions of economic development and standards of living are subjective.

Although the statement is correct (that the nature of development and living standards are both subjective), this is not a criticism of using the HDI itself — the statement applies to other measures too, such as GDP per capita. Options A, B and C are direct criticisms of the HDI.

6 Explanations might include:

- Large wage differentials (1) (the difference between the highest and lowest income earners in a country) will result in differences in income distribution, as income is not distributed equally (1).
- Ownership of land and capital (1) by the highest income earners will cause an unequal distribution of income and wealth as high-income earners will earn the majority of the income (1).

- Differences in levels of education (1) will affect income levels as those with higher educational attainment may earn more than those with low educational attainment.
- There may be unequal distribution of income between genders (1) and minority groups within an economy (1).

7 Explanations might include:

- The limited access to and availability of goods and services in Dhaka (1), which may lead to low living standards (1).
- High crime rates and issues to do with personal safety (1), which may lead to low standards of living (1).
- Poor infrastructure (1). This may make transport and the movement of people and goods and services difficult (1). Sanitation may be poor and power sources unreliable (1).

8 Explanations might include:

- An increase in real GDP per capita may not result in a rise in living standards because the increase may be earned by those on higher incomes (1) and therefore increase the income gap (1).
- The increase may be due to the production of weapons (1), which will not result in an increase in living standards (1).
- The increase may have caused an increase in pollution (1) and therefore damage to the environment (1), which will not improve living standards.

9 a Living standards refer to the social and economic wellbeing of individuals (1) in a country at a particular point in time. In economics, this is often based on real GDP per capita (1), indicating the amount of income with which the average person can consume goods and services over a period of time (1).

b Analysis might include:

- Lower rates of income tax/expenditure taxes (1). This would increase disposable income (1), and people would be able to spend more on goods and services (1).
- Lower interest rates should encourage more spending (1) because borrowing is cheaper (1) and people may be paying less on existing loan repayments (1). This will enable people to consume more goods and services (1).
- Increased government spending on merit goods and public goods (1) will mean that there is an improvement (1) in the provision of, for example, healthcare, education and housing (1), which would improve living standards.

c Use the table below to assign marks.

Level	Description	Mark
3	A detailed discussion, substantiated by information provided, which demonstrates clear understanding of the question and of appropriate economic ideas and theories. There is insightful use of appropriate economic vocabulary and effective analysis of issues under discussion. Both sides of the argument are developed but not necessarily equally. There is effective evaluation, with a judgement and/or conclusion. There may be discussion of other options and strategies with their associated limitations.	6–8
2	A discussion, substantiated by information provided, which demonstrates understanding of the question and of appropriate economic ideas and theories. There is use of appropriate economic vocabulary and theories with analysis of the issues under discussion. The discussion may lack balance and only one side of the argument is presented or it may not be fully reasoned or may lack detail.	3–5
1	Some basic knowledge of economic theory relevant to the question is demonstrated, with some use of appropriate economic vocabulary.	1–2
0	Limited response with no understanding of the question demonstrated.	0

In general, economic growth in a country results in higher living standards for its people. Reasons include:

- higher real GDP per capita
- provision of education, healthcare and housing
- education enabling people to escape poverty

However, other considerations linked to living standards include:

- what type of goods and services are being produced, e.g. healthcare products or arms and weapons
- whether longer working hours caused the increase in national income
- whether working conditions and terms of employment (such as women's rights in the workplace) are improving
- whether the size of the informal sector has increased
- how the extra national income is distributed
- whether higher economic growth is causing greater levels of pollution and other forms of environmental damage
- how much of the additional national income is spent or saved

10 Use the table below to assign marks.

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Living standards refer to the social and economic wellbeing of individuals in a country at a point in time. Various indicators can be used to measure the standards of living in a country. These include:

- GDP per capita. Both countries have low GDP per capita figures; Guineans live on a basic \$1.39 per day, whereas Sierra Leoneans live on just over \$1.36 per day, so there is virtually no difference in their living standards based on GDP per capita.
- Life expectancy. Guineans live 8 years longer on average. This suggests the country has a higher living standard, perhaps through better healthcare provision and/or healthier diets.
- Adult literacy rate. Sierra Leone has higher expected years of schooling and mean years of schooling, suggesting higher living standards, mainly due to better access to an education system. The difference, however, is fairly minimal as there is only 0.5 years' difference in expected years of schooling and 0.7 years' difference in mean years of schooling.

It is difficult to be definitive about which country has the lowest living standards, given the limited data.

There is no reference to the number of people in the population or income distribution within each country.

It is also difficult to collect accurate data, especially in less economically developed countries, so the data may be inaccurate.

Workbook answers

33 Poverty

1 **Correct answer: D** unemployment

Unemployment is not necessarily an indicator of poverty, but can be a cause of poverty. Poverty exists when people lack adequate income (Option C) and wealth to sustain a basic standard of living (Options A and B).

2 **Correct answer: A** absolute poverty

In measuring extreme poverty, the most common income threshold, set by the World Bank, is \$1.25 a day.

3 **Correct answer: D** relative poverty

Relative poverty measures the extent to which a person's financial resources fall below the average income for the population.

4 **Correct answer: B** reduce, reuse, recycle

The UN's Sustainable Development Goals (SDGs) consist of 17 international development goals to end poverty by 2030. Option B (reduce, reuse, recycle) is not one of these SDGs, but is a possible strategy to achieve the goals.

5 **Correct answer: B** high rates of tax

High rates of tax tend to be used to redistribute income and wealth, rather than causing poverty.

6 Relative poverty is a comparative measure of poverty (1), referring to those who have a lower standard of living in comparison to the average member of society (1), e.g. on low incomes, earning the national minimum wage (1).

7 a Tax A is progressive (1):

- At \$10,000 the tax paid = \$1,000 (10%).
- At \$15,000 the tax paid = \$1,650 (11%).
- At \$20,000 the tax paid = \$2,400 (12%).
- At \$25,000 the tax paid = \$3,250 (13%). (1)

b Tax C is proportional (1).

At all levels of incomes, 5% tax is charged (1).

c Tax B is regressive (1) as the same \$650 tax is charged, irrespective of the income level.

- At \$10,000 the tax paid = \$650 (6.5%).
- At \$15,000 the tax paid = \$650 (4.33%).
- At \$20,000 the tax paid = \$650 (3.25%).
- At \$25,000 the tax paid = \$650 (2.6%).

By contrast, a proportional tax charges all income earners the same percentage tax rate (1), i.e. 5% in the case of Tax C.

8 Explanations might include:

- People lack adequate income and wealth (1) to sustain a basic standard of living (1).
- Poverty creates social hardship (1), e.g. the economic costs of poor health such as malnutrition and famine (1), and crime (1).

- Poverty creates huge economic costs (1), e.g. mass unemployment due to a lack of economic activity (1).
- There is potentially a large economic cost due to the government's welfare provision (1).
- Lower national output, or GDP, (1) makes the economy less competitive (1).

9 Explanations might include:

- Low wages (1) — GDP per capita is used to find the average income level in a country, and the lower the GDP, the poorer the country tends to be (1).
- Unemployment (1) — people in poverty are likely to be unemployed, perhaps due to the combination of low literacy, lack of skills and poor health (1).
- Illness (1) — illnesses caused by malnutrition and a lack of healthcare reduce life expectancy in a country (1). The lower the life expectancy, the poorer the country tends to be and so the greater the degree of poverty in the country (1).
- Age (1) — for example, child labour in many parts of the world is caused by extreme poverty, which forces parents to allow their children to work (1).
- Poor healthcare (1) — a lack of investment in health services hinders the ability of a country to develop and get out of poverty (1).
- Low literacy rates (1) — this has major consequences for employment, production and productivity (1), thus negatively impacting on GDP and making it extremely difficult to eradicate poverty (1).
- High population growth (1) — sharing a limited amount of resources among a growing population hinders the country's ability to lift itself out of poverty (1).
- Poor infrastructure (1) — a lack of investment in infrastructure such as transportation and communication links hinder the development of an economy (1), making it difficult to get out of poverty (1).
- Low foreign direct investment (FDI) — a lack of capital resources also limits the ability of a country to create income and wealth, which keeps them stuck in poverty (1).
- High public debt (1) — the repayment of public debt can become increasingly unsustainable for LEDCs (1), leading to further borrowing, ever-increasing debts and widespread poverty (1).

10 Explanations might include:

- Promoting economic growth (1) — lower taxes or interest rates (1) can encourage consumer spending and investment in the economy (1), which in the long run will help to create more jobs and alleviate poverty (1).
- Improving education and training (1) — access to education can increase a person's level of earnings (1) and therefore raise their standard of living (1). In the long run, improved education and training increases the productive capacity of the country (1), creating economic growth and lowering poverty (1).
- The use of progressive taxation (1) — higher-income workers are taxed at a higher rate (1) and the government can use these tax revenues to support lower-income workers or those without any income (1).
- Introducing (or increasing) a national minimum wage (1) — this can improve the standard of living for low-income households (1), which helps to alleviate poverty (1).

Workbook answers

34 Population

1 **Correct answer: C** improved health technologies

Improved health technologies mean that people live longer on average, thereby raising the average age of the population.

2 **Correct answer: C** higher fertility rates

Fertility rates measure the average number of children born per woman, thus indicating the potential for population change in a country. The other options are likely to reduce the birth rate in the country.

3 **Correct answer: D** number of immigrants − number of emigrants

The net migration rate measures the difference between the number of people entering (immigrants) and leaving (emigrants) a country per 1000 of the population in a year.

4 **Correct answer: A** Low-income countries generally have a lower average age than high-income countries.

In low-income countries, the population distribution can be shown using a traditional population pyramid with far more young people than elderly people.

5 **Correct answer: D** It has an ageing population.

An ageing population occurs when the average age of a population increases. It is not possible to infer the other three options from the data given about the median age of the UK population.

6 The dependency ratio is a comparison of the number of people who are not in the labour force (1) with the number of people in active paid employment (1). The higher the dependency ratio, the greater the burden on taxpayers to support the dependent population (1).

7 Explanations might include:

- Birth rate (1) — the number of live births per thousand of the population in a year (1). The higher a country's birth rate, the greater its population growth will tend to be (1).
- Death rate (1) — the number of deaths per thousand of the population in a year (1). The lower a country's death rate, the greater its population growth will tend to be (1).
- Fertility rate (1) — the average number of children born per woman (1). Fertility rates tend to fall as an economy develops due to the higher opportunity costs of raising children (1).
- Net migration rate (1) — the difference between the number of people entering and leaving a country per 1000 of the population in a year (1).

8 Underpopulation occurs when a country does not have sufficient labour to make the best use of its resources (1). The population is likely to be declining and the economy is operating below its potential and may be in decline (1).

In contrast, overpopulation occurs when the population is too large (1) given the available resources of the country (1).

9 a Mexico's population has increased steadily (1) from 2006 to 2016 by approximately 1 million people each year (1).

b Explanations might include:

- Mexico may be experiencing increasing birth rates and longer life expectancy (1). This means that the tax revenue collected from the working population has to support a greater number of people aged below 14 and above 65 (1), and this increases the burden on the working population (1).
- The government needs to spend more on education (1) and healthcare (1) because of the increase in population.
- An increased population may lead to an increase in housing shortages (1) and will increase demands on other resources (1) such as healthcare, food and schools (1).

c Use the table below to assign marks.

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Reasons why a growing population may not bring about negative consequences for the government and natural environment:

- The government is able to collect more tax revenues from a larger workforce.
- Higher tax revenues can enable the government to provide more merit and public goods for the population.
- A larger workforce can lead to a more productive economy, which leads to economic growth and higher incomes and living standards for the population.
- The impact of a population increase on the natural environment can be minimised by putting policies in place, e.g. subsidising renewable sources of energy.

Reasons why a growing population may bring about negative consequences for the government:

- Increased population may increase demands on the government to provide merit and public goods for its citizens.
- The government will have to provide housing, healthcare and education for people as well as emergency services.
- Continual population growth puts more pressure on an economy's scarce resources. This can lead to inflationary pressures or an increase in the demand for imports if the country cannot produce enough to meet the needs and wants of the population.

- Increased population may cause land prices to increase. This may make housing and office and factory space more expensive, which may decrease living standards and deter foreign firms from locating in the country.

Reasons why a growing population may bring about negative consequences for the natural environment:

- Non-renewable resources are depleted in the production process and the increased level of production also puts strain on the natural environment.
- There may be an increase in air and water pollution caused by an increase in waste products and production.
- An increase in the use of cars may lead to traffic congestion and air and noise pollution.

10 a An ageing population has a growing number of elderly people (1) aged 65 years and above (1).

b An optimum population exists when the output of goods and services per head of the population (1) is maximised (1).

c Analysis might include:

- A high median age of 46.7 years suggests that Japan has an ageing population (1), which means that there is an increasing proportion of people aged 65 and above (1).
- The replacement fertility rate is the number of children that the average woman must have to replace the existing population (1) in order to maintain a stable population size (1). Japan may be facing a decreasing population because the fertility rate is 1.42 children per female (1) and is below the replacement rate of population growth (1).
- A decreasing birth rate may lead to a decrease in the number of people aged between 16 and 65 (1). This will lead to a decreasing number of people of working age (1) and the dependency ratio will increase (1).

d Analysis might include:

- The dependency ratio refers to the number of dependants (children, the unemployed and the elderly) (1) expressed as a ratio or percentage of the total population (1).
- The low median age in Indonesia suggests that a large proportion of the population is young (1) because 28.3 years is the middle of the age range of the population (1).
- The low median age suggests that the dependency ratio is high (1) and the higher the dependency ratio, the greater the burden on taxpayers to support the dependent population (1).
- If birth rates become stable or fall in the future (1), the dependency ratio may decrease (1) when the existing young people get older and enter the workforce (1).

Workbook answers

35 Differences in economic development between countries

1 **Correct answer: A** economic development

Economic development refers to an improvement in the economic wellbeing and standard of living for the average person in a country.

2 **Correct answer: A** exchange rate fluctuations

Exchange rate fluctuations do not directly affect the economic development of countries. These fluctuations can occur on a daily basis, based on the demand for and supply of different foreign currencies — usually for international trade purposes.

3 **Correct answer: C** higher interest rates

Higher interest rates are used to influence the level of economic activity, rather than as a measure or indicator of development.

4 **Correct answer: A** primary

As an economy develops, people tend to shift away from working in the primary industry and toward the manufacturing or tertiary industry.

5 **Current answer: B** productivity

Attracting FDI should help a country to achieve higher levels of productivity and output.

6 Economic development refers to an increase in the standard of living (1) within a country. It is an intangible concept that considers both quantitative and qualitative variables (1), such as income levels (1) and political freedom (1).

7 Savings are required to enable banks to have sufficient funds (1) to lend to firms for investment purposes (1). Hence, more savings and investments can directly contribute to economic development (1). However, most people in LEDCs are unable to have any savings (1) as they barely have enough money to meet their basic needs (1).

8 LEDCs have a low national income per head (1), which limits their ability to develop as a country (1). This is partly due to their relatively large population (1) and rapid population growth rate (1), which can limit any increase in real GDP (1) as it reduces their GDP per capita (1).

9 In general, countries with a low GDP per capita are at their early stages of economic development (1), so most people work in the primary sector (1), such as traditional farming or fishing (1). As these countries advance, the majority of their GDP is generated from the secondary sector (1). In MEDCs, the tertiary sector accounts for the largest share of employment and the country's GDP (1) due to the greater reliance on tertiary output (1).

10 Analysis might include:

- The quality of a country's healthcare can be measured by life expectancy at birth (1) or its annual expenditure on healthcare as a percentage of its GDP (1). The better the quality of healthcare, the greater the country's social and economic wellbeing tends to be (1) as people's standard of living will be improved (1).

- The level of education is measured by adult literacy rates (1) or the mean average years of schooling (1) in a country. In general, the greater the level of education in a country, the higher its standard of living tends to be (1) as people are able to secure employment (1).