

Cambridge International Examinations

Cambridge International General Certificate of Secondary Education

ECONOMICS 0455/11
Paper 1 Multiple Choice May/June 2017

45 minutes

Additional Materials: Multiple Choice Answer Sheet

Soft clean eraser

Soft pencil (type B or HB is recommended)

READ THESE INSTRUCTIONS FIRST

Write in soft pencil.

Do not use staples, paper clips, glue or correction fluid.

Write your name, Centre number and candidate number on the Answer Sheet in the spaces provided unless this has been done for you.

DO NOT WRITE IN ANY BARCODES.

There are **thirty** questions on this paper. Answer **all** questions. For each question there are four possible answers **A**, **B**, **C** and **D**.

Choose the one you consider correct and record your choice in soft pencil on the separate Answer Sheet.

Read the instructions on the Answer Sheet very carefully.

Each correct answer will score one mark. A mark will not be deducted for a wrong answer. Any rough working should be done in this booklet.

- 1 Which combination of terms gives the general definition of the economic problem?
 - A bigger families, less food, starvation
 - **B** falling supply, rising demand, shortage
 - **C** higher population, fewer jobs, unemployment
 - **D** limited resources, unlimited wants, scarcity

Answer

The economic problem, also known as the basic economic problem, arises from the fact that while resources are limited, human wants are unlimited. Let's evaluate each option to determine which one best describes this concept:

- A. Bigger families, less food, starvation: This option discusses a scenario where the size of families increases but food availability decreases, leading to starvation. While this could be considered an economic issue, it doesn't accurately capture the general definition of the economic problem related to resources and wants.
- B. Falling supply, rising demand, shortage: This option highlights a situation where supply decreases and demand increases, causing a shortage. This is a specific economic issue but not the general definition of the economic problem.
- C. Higher population, fewer jobs, unemployment: This option focuses on population growth leading to fewer jobs and increased unemployment. Like the previous options, it highlights a specific issue rather than the overarching economic problem.
- D. Limited resources, unlimited wants, scarcity: This option describes the core of the economic problem.

 Resources are finite, but human desires and needs are infinite, leading to scarcity. This is the fundamental issue that economics seeks to address.

The correct answer is D: Limited resources, unlimited wants, scarcity. This combination accurately defines the economic problem, which is the central theme in the study of economics.

2 Helium is a gas that is limited in supply. It takes thousands of years to form from decaying radioactive rocks. The US government holds 35% of the world's supply and has been selling its stocks. Helium is essential in medical scanners. It is also used for party balloons which some say is a wasteful alternative use of a valuable good.

Which concepts can be applied to the above statement?

- A demand and supply, government subsidy
- **B** excess demand, resource allocation
- **C** factors of production, private monopoly
- **D** opportunity cost, public sector

Answer

Let's analyze each option in relation to the statement about helium:

A. Demand and Supply, Government Subsidy:

Demand and supply refer to the economic model that determines the price of goods in a market. In the context of helium, the finite supply and various uses (medical scanners and balloons) relate to this concept. However, the statement does not mention government subsidies, which are financial assistance to support businesses or markets. Therefore, while demand and supply are relevant, government subsidy is not mentioned, making this option partially correct.

B. Excess Demand, Resource Allocation:

 Excess demand occurs when the demand for a good exceeds its supply. Given helium's limited supply and essential uses, this could be applicable. Resource allocation refers to distributing resources in a way that maximizes efficiency or meets certain goals, which is relevant here as helium is allocated for different uses (medical vs. balloons). This option is more aligned with the statement as both concepts are applicable.

C. Factors of Production, Private Monopoly:

Factors of production are resources used to produce goods and services. Helium itself isn't a
factor of production but a product. A private monopoly occurs when a single company controls
the entire market for a product. The statement does not mention a specific company controlling
helium, so this option isn't relevant.

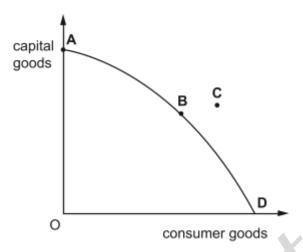
D. Opportunity Cost, Public Sector:

Opportunity cost is the loss of potential gain from other alternatives when one alternative is chosen. Using helium for balloons instead of medical scanners can be seen as an opportunity cost. The public sector involves government ownership and management, which is relevant since the US government holds a significant portion of the helium supply. This option is applicable to the statement, as both opportunity cost and public sector concepts are present.

After evaluating each option, Option D: Opportunity Cost, Public Sector aligns best with the concepts mentioned in the statement about helium.

3 The diagram shows a production possibility curve for an economy.

Which point on the diagram is the most efficient for the economy to produce both consumer goods and capital goods?



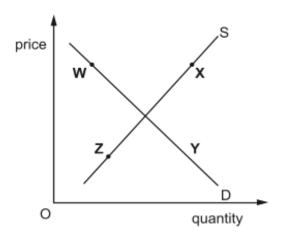
Answer

In the context of the production possibility curve provided, point B is identified as the most efficient point for the economy to produce both consumer goods and capital goods. Here's why:

- Point B: This point is on the production possibility curve, representing an efficient use of resources where the economy is maximizing its potential output.
- Points A and D: While also on the curve and efficient, point B might be more strategically
 positioned to balance the production of both consumer and capital goods according to the
 specific needs of the economy. This is why it is chosen as the most efficient point in this context.
- 3. **Point C**: This point is outside the curve and is unattainable with the current resources, so it cannot be considered efficient.

Therefore, point B is the most efficient choice for the economy to produce both types of goods effectively.

4 The diagram shows the market for a product.



Which statement about the points marked on the diagram is correct?

- **A** The distance from **W** to **X** shows a shortage of the product.
- **B** The distance from **Z** to **Y** shows a surplus of the product.
- **C** The movement from **W** to **Y** shows a fall in the quantity demanded of the product.
- **D** The movement from **X** to **Z** shows a fall in the quantity supplied of the product.

Answer

Let's analyze each statement in relation to a typical demand and supply diagram:

A. The distance from W to X shows a shortage of the product.

- In a typical demand and supply diagram, a shortage occurs when the quantity demanded exceeds the quantity supplied at a certain price level. This would be represented by the demand curve being above the supply curve. If W and X are on the same vertical level (representing the same price), and W is on the demand curve while X is on the supply curve, the distance between them could indicate a shortage.
- B. The distance from Z to Y shows a surplus of the product.
 - A surplus occurs when the quantity supplied exceeds the quantity demanded at a certain price level. If Z is on the supply curve and Y is on the demand curve at the same price level, the distance from Z to Y could indicate a surplus. However, since you mentioned that Z and Y are on

different curves, this statement may not be correct if Z is on the supply curve and Y is on the demand curve.

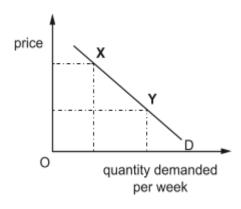
- C. The movement from W to Y shows a fall in the quantity demanded of the product.
 - If W and Y are both on the demand curve, moving from W to Y would typically indicate a change along the demand curve. If Y is to the left of W, this would indeed show a fall in the quantity demanded. However, if W and Y are on the same demand curve and W is to the left of Y, it would actually indicate an increase in the quantity demanded.
- D. The movement from X to Z shows a fall in the quantity supplied of the product.
 - If X and Z are both on the supply curve, moving from X to Z would indicate a change along the supply curve. If Z is to the left of X, this would show a fall in the quantity supplied. However, if Z is to the right of X, it would indicate an increase in the quantity supplied.

Based on your description, if W and Y are on the demand curve and X and Z are on the supply curve, let's identify the correct statement:

- If W and X are at the same price level, statement A might be true.
- If Z is further right than Y and both are at the same price level, statement B might not be true.
- Movement from W to Y on the demand curve could be interpreted based on their relative positions.
- Movement from X to Z on the supply curve could be interpreted based on their relative positions.

Given your description, statement C would be correct if W is to the right of Y (fall in quantity demanded). If that is not the case, none of the statements might be fully correct without the actual diagram.

5 The diagram shows the demand for chocolate.



What could cause the movement from point X to point Y?

- A a change in tastes
- B a fall in the price of chocolate
- **C** an increase in income
- **D** a successful advertising campaign for chocolate

Answer

When analyzing the movement from point X to point Y on a demand curve, it is important to understand that this movement represents a change in quantity demanded without a shift of the entire demand curve. This kind of movement is typically caused by a change in the price of the product itself, rather than by external factors that shift the demand curve.

Let's evaluate each option:

A. A change in tastes: This would cause a shift in the demand curve itself, either to the left or right, depending on whether tastes have become less or more favorable towards the product. It does not cause movement along the demand curve.

- B. A fall in the price of chocolate: This is the correct answer. A decrease in the price of chocolate leads to a movement along the demand curve from point X to point Y, indicating an increase in quantity demanded, assuming the demand curve is downward sloping (which is typical).
- C. An increase in income: An increase in income usually shifts the demand curve to the right (for a normal good), as consumers can afford to buy more chocolate. It does not cause movement along the existing demand curve.
- D. A successful advertising campaign for chocolate: This would also typically shift the demand curve to the right, as more people are influenced to buy chocolate due to increased awareness and perceived value. It does not cause movement along the existing demand curve.

Thus, the movement from point X to point Y on the demand curve is caused by option B, a fall in the price of chocolate, leading to an increase in the quantity demanded.

6 A football club raises all stadium seat prices by 5%. The stadium is divided into four zones. The demand for seats falls by 1% in zone W, by 3% in zone X, by 5% in zone Y and by 6% in zone Z.

In which zone is the responsiveness of demand for seats to the price change elastic?

- A zone W
- B zone X
- C zone Y
- **D** zone Z

Answer

To determine the zone in which the responsiveness of demand to the price change is elastic, we need to consider the concept of price elasticity of demand. The price elasticity of demand measures how much the quantity demanded of a good responds to a change in the price of that good. It is calculated as: Elasticity = Percentage change in quantity demanded / Percentage change in price

A demand is considered elastic if the absolute value of the elasticity is greater than 1. This means that the percentage change in quantity demanded is greater than the percentage change in price.

Let's calculate the elasticity for each zone:

- 1. Zone W:
 - Price increase: 5%
 - Demand decrease: 1%
 - Elasticity = 1% / 5% = 0.2
- 2. Zone X:
 - Price increase: 5%
 - Demand decrease: 3%
 - Elasticity = 3% / 5% = 0.6
- 3. Zone Y:
 - Price increase: 5%
 - Demand decrease: 5%
 - Elasticity = 5% / 5% = 1
- 4. Zone Z:
 - Price increase: 5%
 - Demand decrease: 6%
 - Elasticity = 6% / 5% = 1.2

Now, let's analyze the results:

- Zone W has an elasticity of 0.2, which is inelastic (less than 1).
- Zone X has an elasticity of 0.6, which is inelastic (less than 1).
- Zone Y has an elasticity of 1, which is unitary elastic.
- Zone Z has an elasticity of 1.2, which is elastic (greater than 1).

The correct answer is D, zone Z, because it is the only zone where the demand is elastic, meaning the demand responsiveness to the price change is greater than the change in price itself.

7 A project to build one of the world's biggest coal mines was planned in Australia. The project was estimated to cost \$US12.5 million. It would create employment but threaten endangered species as large coal ships would damage the Great Barrier Reef.

What effects would this project have on the following costs and benefits?

	private cost	private benefit	external cost
Α	decrease	uncertain	uncertain
В	increase	decrease	increase
С	increase	increase	increase
D	uncertain	increase	increase

Answer

To determine the correct answer, we need to consider the impact of the coal mine project on private costs, private benefits, and external costs.

- 1. **Private Cost**: This refers to the costs that the company building the mine will incur. Since the project is estimated to cost \$12.5 million, the private cost is likely to increase for the company due to construction, operation, and maintenance expenses.
- 2. **Private Benefit**: This includes the economic gains to the company, such as profits from coal sales and employment generation. The project is expected to create employment, which means that the private benefit could increase as more jobs are provided and profits are generated.
- 3. External Cost: This refers to the negative impact of the project on third parties, such as environmental damage. The project could threaten endangered species and damage the Great Barrier Reef, leading to an increase in external costs due to environmental degradation and its impact on biodiversity and tourism.

Let's analyze each option:

- Option A: Suggests a decrease in private cost, uncertain private benefit, and uncertain external
 cost. This does not align with the analysis since the private cost is more likely to increase and
 external costs are likely to increase due to environmental damage.
- Option B: Suggests an increase in private cost, decrease in private benefit, and increase in external cost. The private cost would increase, but the private benefit is unlikely to decrease since employment opportunities suggest an increase in private benefit.
- Option C: Suggests an increase in private cost, private benefit, and external cost. This aligns
 well with the analysis as the private cost increases due to project expenses, private benefit
 increases due to employment and profits, and external cost increases due to environmental
 impact.
- **Option D**: Suggests uncertain private cost, increase in private benefit, and increase in external cost. While the increase in private benefit and external cost is consistent, the private cost is not uncertain; it is expected to increase.

Based on the analysis, Option C is the correct choice: The project would likely lead to an increase in private cost, private benefit, and external cost.

- 8 What is likely to happen when the rate of interest increases?
 - A consumer spending increases
 - B firms buy fewer machines
 - C people hold more cash
 - **D** savers earn lower rewards

Answer

When the rate of interest increases, it affects various economic activities in different ways. Let's examine each option:

A. Consumer spending increases: This option is generally not true. Higher interest rates typically lead to higher borrowing costs, which can discourage consumers from spending. People are more likely to save rather than spend because they earn more from savings, and loans for big purchases like homes or cars become more expensive.

- B. Firms buy fewer machines: This option is likely to be true. When interest rates rise, borrowing costs for firms increase as well. This makes it more expensive for firms to finance investments in machinery and other capital goods. As a result, firms may delay or reduce their investments in new equipment.
- C. People hold more cash: This option is generally not true. Higher interest rates usually encourage people to deposit money in savings accounts or other financial instruments that yield interest, rather than holding cash, which does not earn interest.
- D. Savers earn lower rewards: This option is not true. When interest rates increase, savers earn higher rewards on their deposits because the return on interest-bearing accounts and investments increases.

The correct answer is B. Firms buy fewer machines. Higher interest rates increase the cost of borrowing, leading firms to reduce their investment in machinery and equipment.

- **9** In which type of work are employees most likely to earn their highest income at a relatively young age?
 - **A** manual building work
 - **B** professional legal work
 - C skilled craft work
 - **D** university teaching work

Answer

The question asks about the type of work where employees are likely to earn their highest income at a relatively young age. Let's evaluate each option:

- A. Manual building work: In manual building work, income tends to increase with experience, but it may not reach the highest levels at a young age. Typically, this field does not offer rapid income growth compared to professional fields.
- B. Professional legal work: In the legal profession, lawyers can earn high incomes relatively early in their careers, especially if they are in high-demand areas or work for prestigious firms. The legal field is known for offering lucrative salaries to young professionals who excel.
- C. Skilled craft work: Skilled craft workers often see steady income growth, but reaching the highest income levels usually requires many years of experience and mastery of specific skills. Therefore, it's less common for them to achieve the highest income at a young age.
- D. University teaching work: University teaching typically involves a gradual progression in income. Professors and lecturers may earn higher salaries later in their careers after obtaining tenure or advanced positions. It is less common for them to reach the highest income levels at a young age.

Considering these explanations, the most likely type of work where employees can earn their highest income at a relatively young age is professional legal work (Option B).

10 Individuals produced their own goods. They then decided to specialise. They formed a group and offered their skills to each other but without the use of money.

What is **not** likely to be the result for the group?

- **A** It will enjoy a rise in its material standard of living.
- **B** It will have a wider choice of goods and services.
- **C** It will need to use a system of barter.
- **D** It will save time in obtaining goods and services.

Answer

To determine which option is not likely to result from the group forming and offering their skills to each other without the use of money, let's evaluate each choice:

A. It will enjoy a rise in its material standard of living.

- Specialization typically leads to increased efficiency and productivity as individuals focus on what they are best at. This can result in a rise in the material standard of living because the overall output and quality of goods and services improve.
- B. It will have a wider choice of goods and services.
 - By forming a group and specializing, each individual contributes their unique skills, leading to a
 greater variety of goods and services available within the group. Therefore, the group is likely to
 have a wider choice.
- C. It will need to use a system of barter.
 - Since the group is exchanging skills and goods without using money, a barter system is necessary. Barter involves trading goods or services directly, which is exactly what the group is doing.
- D. It will save time in obtaining goods and services.
 - Specialization generally leads to time savings because individuals become more efficient in their specific tasks. However, without money, barter can be time-consuming due to the need to find someone who has what you want and wants what you have (double coincidence of wants).

The least likely outcome in this scenario is D, because while specialization itself can save time in production, the lack of money and reliance on barter can actually make obtaining goods and services more time-consuming.