Past-paper walk-through

Production possibility curve (PPC) diagrams ▪ 1.4

eXercise

Questions in this set

- 0455/11 N25 Q3 ▪ 1 mark
- 0455/11 N25 Q21 ▪ 1 mark
- 0455/12 N25 Q3 ▪ 1 mark
- 0455/11 J25 Q3 ▪ 1 mark
- 0455/12 J25 Q3 ▪ 1 mark
- 0455/22 J25 Q3 ▪ 20 marks
- 0455/12 M25 Q3 ▪ 1 mark
- 0455/22 N24 Q2 ▪ 20 marks

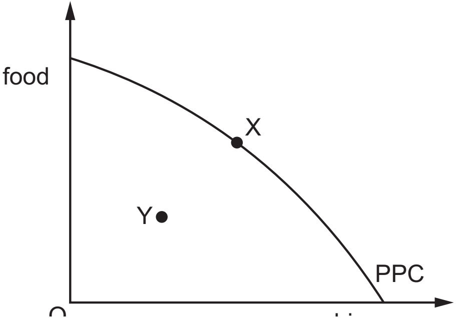
Reading the mark scheme

- **B1** a mark that stands on its own – the point is either made or not.
- **M1** a *method* mark: the right approach, even if the number is wrong.
- **A1** an *answer* mark, and it usually needs its M mark first.
- **C1** a working mark on the way to the answer.
- // separates answers the examiner accepts equally.
- **ecf** = error carried forward: a later part is marked on your own earlier answer.
- **owtte** = "or words to that effect" – the wording need not match.

Question 3

0455/11 N25 ▪ Q3 ▪ 1 mark

3 The diagram shows a country's production possibility curve (PPC).



Question 3

machines

What would cause a movement from point X to point Y?

A decrease in productivity

B decrease in unemployment

C increase in capital investment

D increase in economic growth

Solution 3

Answer: **A**

Why

- A movement *along* the PPC means producing more of one good and less of the other.
- It happens when resources are switched between the two uses.
- A shift of the whole curve would need more resources or better technology.

Question 21

0455/11 N25 ▪ Q21 ▪ 1 mark

21 An economy operating on its production possibility curve (PPC) enters a recession that causes unemployment. As the recession gets worse some unemployed workers emigrate in search of jobs overseas.

How are these effects of the recession shown on a diagram of the economy's PPC in the short-term and the long-term?

	short-term effect on the PPC diagram	long-term effect on the PPC diagram
A	movement to a point inside the PPC	movement to a point inside the PPC
B	movement to a point inside the PPC	shift of PPC to the left
C	shift of PPC to the left	movement to a point inside the PPC

Question 21

D	shift of PPC to the left	shift of PPC to the left

Solution 21

Answer: **B**

Why

- An economy on its PPC is using all its resources.
- A recession leaves resources idle, so production moves to a point *inside* the curve.
- If workers permanently lose their skills, the curve itself shifts inwards – capacity is lost.

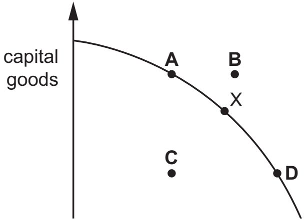
Question 3

0455/12 N25 ▪ Q3 ▪ 1 mark

3 A country is producing at point X on its production possibility curve (PPC) which shows how it can allocate its production between capital goods and consumer goods.

A period of recession then causes some of its factories to close.

Which point could represent the country's new position?



Question 3

Solution 3

Answer: **C**

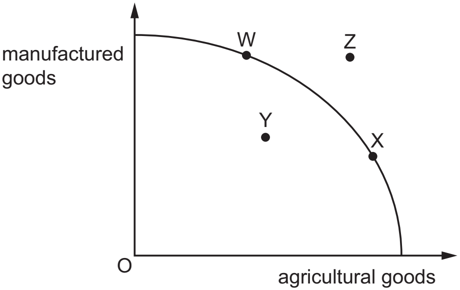
Why

- A point on the PPC uses all resources, so more of one good means less of the other.
- Capital goods add to future productive capacity; consumer goods do not.
- So choosing more capital goods now means less consumption now but faster growth later.

Question 3

0455/11 J25 ▪ Q3 ▪ 1 mark

3 The diagram shows a production possibility curve (PPC). The economy is using all of its available resources.



Question 3

A government decides to encourage more production of manufactured goods instead of agricultural goods.

Which movement shows this policy change?

A W to X **B** W to Y **C** X to W **D** Z to X

Solution 3

Answer: **C**

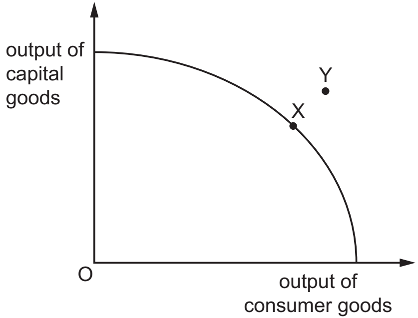
Why

- A point *on* the PPC means all resources are being used.
- Producing more of one good therefore requires producing less of the other.
- That trade-off along the curve is the opportunity cost.

Question 3

0455/12 J25 ▪ Q3 ▪ 1 mark

3 The diagram shows the production possibility curve (PPC) for an economy that is at point X.



Question 3

Which change in the economy's labour market will allow it to reach point Y?

A employed workers become more productive

B unemployed workers find new jobs

C workers emigrate for higher wages

D workers retire at younger ages

Solution 3

Answer: **A**

Why

- A point *inside* the PPC means resources are unemployed or used inefficiently.
- A point *on* it means full and efficient use.
- A point *outside* is unattainable with current resources and technology.

Question 3

0455/22 J25 ▪ Q3 ▪ 20 marks

3 In 2022, Paraguay's production possibility curve (PPC) shifted to the right. Paraguay has a mixed economic system. Its government provides merit goods and public goods. The country's private sector is a major producer of shampoo. The firms in the shampoo industry make use of division of labour. There are several firms in the industry, but the number is declining. There is a possibility that soon there may be just one firm in the industry.

(a) Identify what is measured on the axes of a production possibility curve. [2]

(b) Explain, with an example of each, the difference between a merit good and a public good. [4]

(c) Analyse how division of labour can benefit firms. [6]

(d) Discuss whether or not consumers would benefit from only one firm producing shampoo. [8]

Question 3

(a) (a) Identify what is measured on the axes of a production possibility curve. [2] **[2]**
(b) (b) Explain, with an example of each, the difference between a merit good and a public good. [4] **[4]**
(c) (c) Analyse how division of labour can benefit firms. [6] **[6]**
(d) (d) Discuss whether or not consumers would benefit from only one firm producing shampoo. [8] **[8]**

Solution 3

(a) Mark scheme

- Identify what is measured on the axes of a production
- possibility curve.
- (Output of) two types of product (2).
- Output (1) one type of product (1) another type of product
- (1).
- 2 Two types of products may be shown on the axes on a PPC
- diagram for two marks.
- If more than two items are given, consider the first three.

Solution 3

(b) Mark scheme

- Explain, with an example of each, the difference
- between a merit good and a public good.
- Logical explanation which might include:
- A merit good is under-consumed / underproduced /
- consumers do not appreciate its full value / has external
- benefits / can be produced by the private sector / can be
- produced by the private sector and the public sector / is a
- private good / is rival and excludable (1) e.g. education /

Solution 3

- healthcare / fruit (1).
- A public good would not be produced by the private sector /
- is (usually) supplied / produced by the government / funded
- by the government (1) non-excludable / non-rival (1) e.g.
- street lighting / defence / flood control (1).
- 4 One mark for an explanation of a merit good and one mark
- for an example of a merit good.
- One mark for an explanation of a public good and one mark
- for an example of a public good.
- Accept but do not expect reference to non-rejectable / zero

Solution 3

- cost of producing an extra unit for a public good.
- Allow public park.
- No mark for roads unless qualified by e.g. uncrowded roads
- with many entry and exit points.
- 0455/22
- May/June 2025
- Mark
- Guidance

Solution 3

(c) Mark scheme

- Analyse how division of labour can benefit firms.
- Coherent analysis which might include:
- ▪
- Workers can specialise (1) in what they are best at
- producing (1) save time / speed up production 1
- reduce waste (1) reduce mistakes (1) increase
- productivity /skill / efficiency (1) increase output / supply
- (1) lower (average) cost (1).

Solution 3

- ▪
- Increase quality (1) lower prices (1) raise demand /
- increase sales (1) increase revenue (1) increase profits
- (1).
- ▪
- Make it easier to mechanise production (1) reduce
- labour required (1).
- ▪
- Reduce training / training costs (1) as reduce tasks
- undertaken / division of labour involves breaking

Solution 3

- production down into different tasks (1).
- 6
- 0455/22
- May/June 2025
- Mark
- Guidance

Solution 3

(d) Mark scheme

- Discuss whether or not consumers would benefit from
- only one firm producing shampoo.
- In assessing each answer, use the table opposite.
- Why they might:
- ▪
- one firm may be able to benefit from economies of scale
- ▪
- lower average cost may lead to lower prices

Solution 3

- ▪
- firm may spend a large amount on research and
- development due to high profits and security
- ▪
- quality of product may be high
- ▪
- less time / less effort choosing shampoo.
- Why they might not:
- ▪
- lack of competition may drive up prices

Solution 3

- ▪
- lack of choice
- ▪
- if quality is poor, cannot switch to substitutes
- ▪
- firm may experience diseconomies of scale.
- 8
- Level
- Description
- 3

Solution 3

- A reasoned discussion which accurately
- examines both sides of the economic
- argument, making use of economic
- information and clear and logical
- analysis to evaluate economic issues
- and situations. One side of the argument
- may have more depth than the other, but
- overall both sides of the argument are
- considered and developed. There is
- thoughtful evaluation of economic

Solution 3

- concepts, terminology, information
- and/or data appropriate to the question.
- The discussion may also point out the
- possible uncertainties of alternative
- decisions and outcomes.
- 6–8
- 2
- A reasoned discussion which makes use
- of economic information and clear
- analysis to evaluate economic issues

Solution 3

- and situations. The answer may lack
- some depth and development may be
- one-sided. There is relevant use of
- economic concepts, terminology,
- information and data appropriate to the
- question.
- 3–5
- 0455/22
- May/June 2025
- Mark

Solution 3

- Guidance
- Level
- Description
- 1
- There is a simple attempt at using
- economic definitions and terminology.
- Some reference may be made to
- economic theory, with occasional
- understanding.
- 1–2

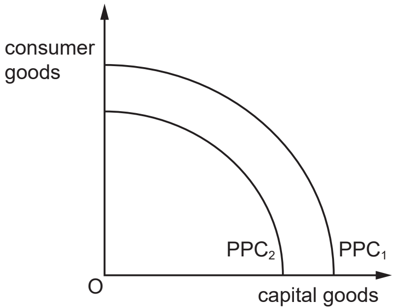
Solution 3

- 0
- A mark of zero should be awarded for no
- creditable content.
- 0
- 0455/22
- May/June 2025
- Mark
- Guidance

Question 3

0455/12 M25 ▪ Q3 ▪ 1 mark

3 The diagram shows an initial production possibility curve of PPC_1.



Question 3

What is likely to have caused the movement of the production possibility curve PPC_1 to PPC_2?

A a decline in non-renewable resources

B a decline in the opportunity cost of consumer goods

C an increase in investment

D an increase in unemployment

Solution 3

Answer: **A**

Why

- An outward shift of the PPC means more of both goods can be produced.
- That needs more resources, better technology or a more skilled workforce.
- A movement *along* the curve would just be a change in the mix of the two goods.

Question 2

0455/22 N24 ▪ Q2 ▪ 20 marks

2 In 2021, the production point on the UK's production possibility curve (PPC) changed. Average wages increased. The average annual wage of a waiter was $23, 580$*whilethatofachiefexecutiveofalargecommercialbankwas*1,617,000. A rise in wages enables people to eat in restaurants more often. Some of the food sold in UK restaurants is imported. In 2021, the UK government signed free trade agreements, removing import restrictions, with a number of countries.

(a) Identify two places where a production point could be located on a PPC diagram. [2]

(b) Explain two reasons why someone may switch from eating in one restaurant to eating in another restaurant. [4]

(c) Analyse why the wage of a chief executive of a large commercial bank is higher than that of a waiter. [6]

Question 2

(d) Discuss whether or not free trade will increase economic growth. [8]

(a) (a) Identify two places where a production point could be located on a PPC diagram. [2] **[2]**

(b) (b) Explain two reasons why someone may switch from eating in one restaurant to eating in another restaurant. [4] **[4]**

(c) (c) Analyse why the wage of a chief executive of a large commercial bank is higher than that of a waiter. [6] **[6]**

(d) (d) Discuss whether or not free trade will increase economic growth. [8] **[8]**

Solution 2

(a) Mark scheme

- Identify two places where a production point could be
- located on a PPC diagram.
- Two from:
- ▪
- point inside the curve / left of the curve
- ▪
- point on the curve / along the curve
- ▪

Solution 2

- point outside the curve / right of the curve
- 2 The points may be identified on a diagram.
- Accept below the curve and above the curve.

Solution 2

(b) Mark scheme

- Explain two reasons why someone may switch from
- eating in one restaurant to eating in another restaurant.
- Logical explanation which might include:
- (Change in) prices (1) lower price making it more affordable
- / substitutes / save money (1).
- (Change in) quality (1) better ingredients / better cleanliness
- / quicker service / new menu / more satisfaction / better
- taste / change in staff (1).

Solution 2

- (Change in) convenience (1) e.g. longer opening hours / /
- better location 1
- (Change in) facilities (1) e.g. better restrooms (1).
- (Change in) income (1) enabling some to eat in more
- expensive restaurants (1).
- (Change in) consumer tastes (1) switch to e.g. vegan
- restaurant 1
- Advertising (1) may attract/persuade customers / increase
- attractiveness (1).
- (Change in) quantity provided (1) lower quantity may

Solution 2

- represent lower value for money (1).
- 4 One mark each for each of two reasons identified and one
- mark for each of two explanations.
- 0455/22
- October/November 2024
- Guidance

Solution 2

(c) Mark scheme

- Analyse why the wage of a chief executive of a large
- commercial bank is higher than that of a waiter.
- Coherent analysis which might include:
- Chief executive may be more qualified / more educated 1
- received more training (1) more skilled / talented (1) more
- productive (1) more experienced (1) higher level of
- responsibility / higher level of stress / more demanding job
- (1) in shorter supply / harder to replace (1) more inelastic

Solution 2

- supply (1).
- Chief executive may be in higher demand (1) more inelastic
- demand (1).
- Chief executive may have stronger bargaining power 1
- may be more likely to be in a trade union / professional body
- (1).
- May be less likely to be in a group that is discriminated
- against (1) e.g. migrant workers (1).
- Chief executive may work longer hours (1).
- 6 Note: may also be answered from the point of view why the

Solution 2

- wage of a waiter may be lower than that of a chief executive.
- No marks here for banks may be more profitable than
- restaurants as e.g. a cleaner in a bank may have a lower
- wage than a waiter.
- 0455/22
- October/November 2024
- Guidance

Solution 2

(d) Mark scheme

- Discuss whether or not free trade will increase
- economic growth.
- In assessing each answer, use the table opposite.
- Why it might:
- ▪
- may enable countries to specialise on what they are
- best at producing
- ▪

Solution 2

- higher competition may increase productivity and lower
- costs of production, increasing demand for their
- products
- ▪
- may enable firms to buy raw materials and capital
- goods at a lower price
- ▪
- may give firms access to larger markets, enabling them
- to expand output.
- Why it might not:

Solution 2

- ▪
- may prevent infant industry from growing
- ▪
- may speed up the closure of declining industries
- ▪
- may replace domestic output with imports
- ▪
- may reduce tax revenue
- ▪
- firms may gain monopoly power and may restrict output

Solution 2

- ▪
- firms may engage in unfair competition e.g. dumping.
- 8
- Level
- Description
- 3
- A reasoned discussion which
- accurately examines both sides of the
- economic argument, making use of
- economic information and clear and

Solution 2

- logical analysis to evaluate economic
- issues and situations. One side of the
- argument may have more depth than
- the other, but overall both sides of the
- argument are considered and
- developed. There is thoughtful
- evaluation of economic concepts,
- terminology, information and/or data
- appropriate to the question. The
- discussion may also point out the

Solution 2

- possible uncertainties of alternative
- decisions and outcomes.
- 6–8
- 2
- A reasoned discussion which makes
- use of economic information and clear
- analysis to evaluate economic issues
- and situations. The answer may lack
- some depth and development may be
- one-sided. There is relevant use of

Solution 2

- economic concepts, terminology,
- information and data appropriate to
- the question.
- 3–5
- 1
- There is a simple attempt at using
- economic definitions and terminology.
- Some reference may be made to
- economic theory, with occasional
- understanding.

Solution 2

- 1–2
- 0
- A mark of zero should be awarded for
- no creditable content.
- 0
- 0455/22
- October/November 2024
- Guidance