Cambridge Assessment International Education

Cambridge International AS & A Level

ECONOMICS **9708/31**

Paper 3 Multiple Choice **October/November 2022**

1 hour 15 minutes

You must answer on the multiple choice answer sheet.

You will need: Multiple choice answer sheet
Soft clean eraser
Soft pencil (type B or HB is recommended)

INSTRUCTIONS

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- 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 multiple choice answer sheet.
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INFORMATION

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1 In an economy, no-one can be made better off without making someone else worse off.

What can be deduced from this?

A Individuals are the best judges of their own well-being.

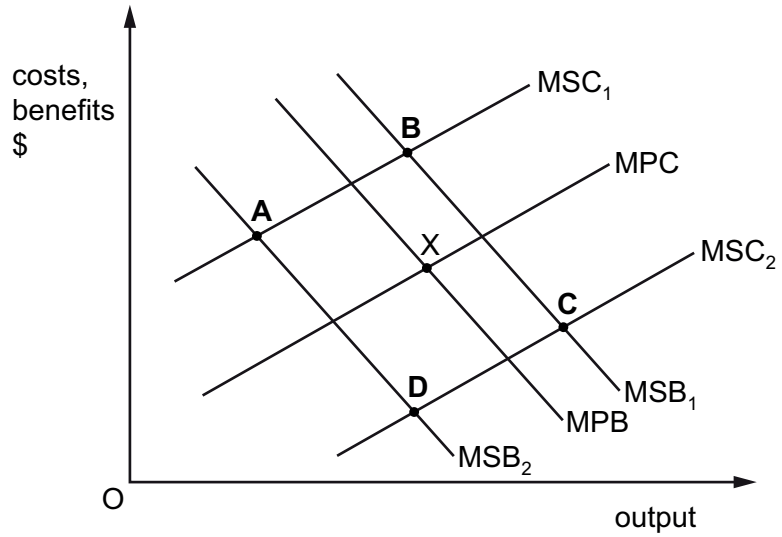
B Individuals can be relied upon to behave rationally.

C The distribution of income is socially optimal.

D The economy's resources are allocated efficiently.

2 The diagram shows the costs and benefits of producing a good. The good has negative externalities in production and positive externalities in consumption. The free market equilibrium is at point X.

What is the new equilibrium point when the externalities are taken into consideration?



3 The Airports Commission in the UK recommended an expansion of airport X rather than airport Y.

In considering the social costs and benefits of this decision, what would be taken into account when calculating the external cost?

A the additional noise pollution suffered by residents local to airport X

B the financial loss suffered by airlines operating at airport Y

C the increase in profits of the firm operating airport X

D the monetary cost of the construction to expand airport X

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4 What is a correct statement of the equi-marginal utility rule?

A The marginal utility of X must equal the marginal utility of Y.

B The marginal utility of X divided by the price of X must equal the marginal utility of Y divided by the price of Y.

C The marginal utility of X divided by the price of Y must equal the marginal utility of Y divided by the price of Y.

D The price of X must equal the price of Y.

5 Which statement is correct?

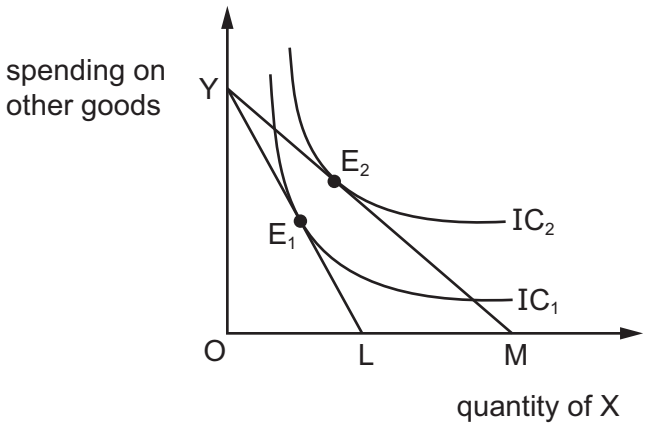
A A budget line shows the combinations of two goods which can be bought with a given income.

B A budget line shows the combinations of two goods which a consumer wants to buy.

C A budget line shows the difference between income and expenditure.

D A budget line shows the maximum potential output of two goods with given resources.

6 In the diagram, YL and YM show two budget lines for a consumer of a product, X, when its price changes. IC_1 and IC_2 are two indifference curves, representing the consumer's preferences between product X and spending on other goods.



What is **not** a valid statement?

A Product X must be a Giffen good, since the consumer spends more on other goods after the price change.

B The consumer has greater satisfaction at E_2 than at E_1.

C The prices of other goods are assumed to be held constant when drawing the budget lines.

D The shift from YL to YM represents a fall in the price of product X.

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7 The list provides characteristics of the market in which firm X operates.

- Firms in the market spend a lot of money on advertising.
- Firms in the market experience a high level of uncertainty.
- Start-up costs for new firms entering the market are relatively high.
- The largest five firms in the market control 85% of total sales.

In which market structure is firm X operating?

A monopoly

B monopolistic competition

C oligopoly

D perfect competition

8 What explains why, in long-run equilibrium in monopolistic competition, firms make only normal profits?

A consumer resistance

B decreasing returns to scale

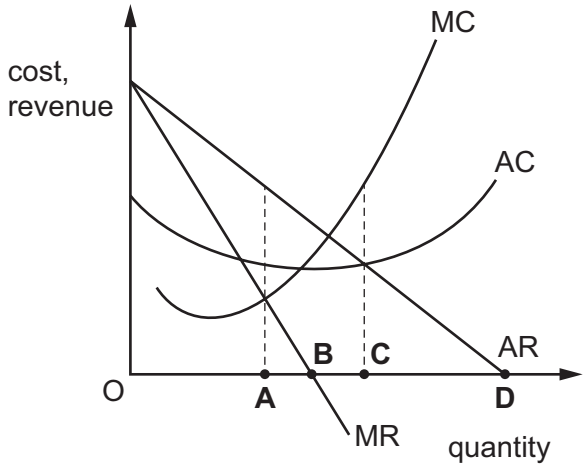
C differentiated products

D freedom of entry and exit

9 The diagram shows four possible output levels of a firm.

At its current level of output, the firm's product has a price elasticity of demand of exactly –1.

Which output is the firm selling?



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10 Which conditions enable price discrimination?

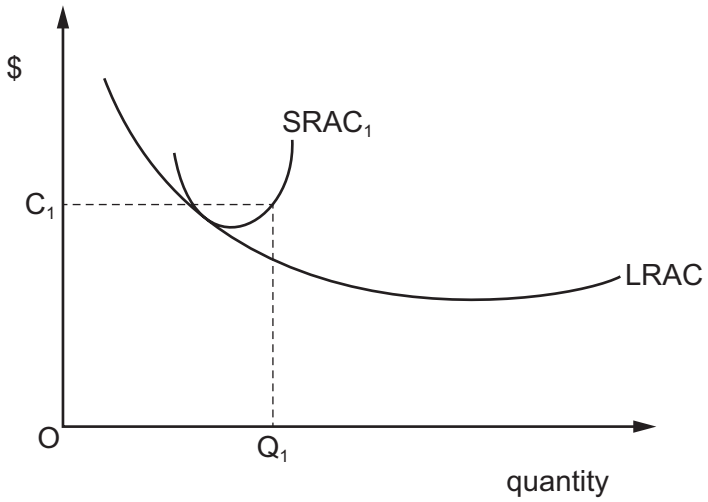
1 The firm can separate the total market into different sub-markets.

2 There are different price elasticities of demand (PED) in each separate sub-market.

3 The marginal revenue curve is the same in each separate market.

A 1 and 2 only **B** 1 and 3 only **C** 2 and 3 only **D** 1, 2 and 3

11 The diagram shows a firm producing at Q_1 on short-run average cost $SRAC_1$.



Which strategy will achieve the greatest reduction in average costs at this output?

A increasing its fixed factors of production only

B increasing its fixed and variable factors of production

C reducing its fixed factors of production only

D reducing its fixed and variable factors of production

12 Which change would make it easier for a cartel to operate effectively?

A an increase in competition from closely related industries

B an increase in the number of firms in the industry

C an increase in the range of products made by cartel members

D an increase in the stability of the market for its products

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13 Some workers in a low-paid job decide to work longer hours to increase their disposable income. However, this decision reduces state-provided benefits, leaving them worse off.

What does this describe?

A debt trap

B liquidity trap

C poverty trap

D unemployment trap

14 What indicates that nationalisation has taken place?

A a firm buys supplies locally rather than from international sources

B a firm moves from private ownership to state ownership

C a firm restricts ownership of its shares to citizens of its own country

D a firm switches sales to the domestic market from the international market

15 Too many flights in the airline industry cause unnecessary damage to the environment.

Which measure is **most** likely to result in the socially optimal number of flights?

A a complete ban on flights removing all private and external costs

B greater deregulation of the global airline industry

C publishing information to highlight the negative effects of flying on the environment

D the payment of a subsidy per passenger equal to the difference between the private and social benefit

16 A government is worried about the increasing monopsony power of employers in the wage bargaining process.

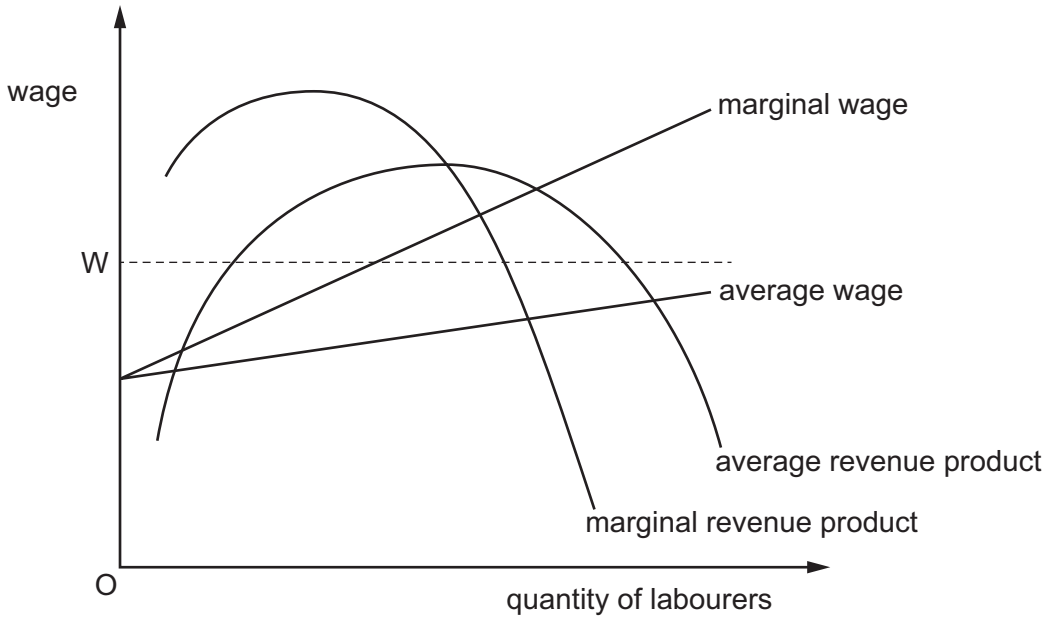
Which policy combination is **most** likely to improve the wages and employment prospects of workers?

	trade union powers	immigration controls	national minimum wage
A	strengthen	relax	cut
B	strengthen	strengthen	raise
C	weaken	relax	cut
D	weaken	strengthen	raise

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17 The diagram shows the labour market for fruit pickers in country X.



If the market was originally in equilibrium, what would happen to wages and employment if a minimum wage of W were imposed?

	wages	employment
A	fall	fall
B	fall	rise
C	rise	fall
D	rise	rise

18 What would **not** be regarded as an example of a possible negative impact of rapid economic growth?

A Greater production could result in greater atmospheric pollution.

B A higher level of income could cause a higher balance of trade deficit.

C Increased AD could cause domestic inflation to increase.

D Increased GDP could generate greater tax receipts.

19 How can GDP at market prices be calculated if GDP at factor cost is known?

A add taxes, add subsidies

B add taxes, subtract subsidies

C subtract taxes, add subsidies

D subtract taxes, subtract subsidies

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20 Which combination indicates that GDP per capita is likely to be an accurate indicator of living standards in a country over time?

	income distribution	hidden economy as % of GDP	quality of goods and services produced
A	equal	large	constant
B	unequal	large	improving
C	equal	small	improving
D	unequal	small	constant

21 Which statement about unemployment is correct?

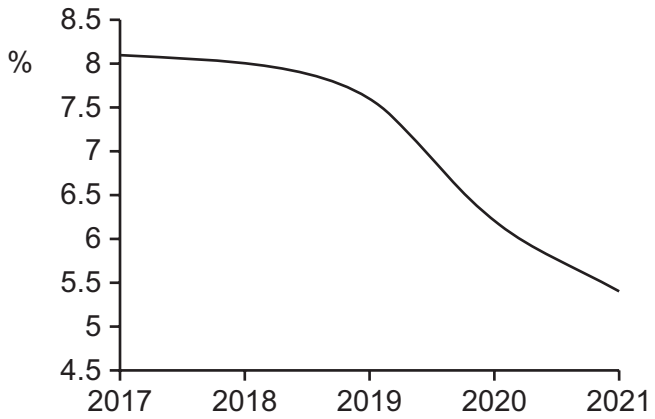
A Cyclical unemployment is caused by the occupational immobility of labour.

B Frictional unemployment is caused by a lack of information on jobs in the labour market.

C Structural unemployment is caused by a deficiency in aggregate demand.

D Voluntary unemployment is caused by variations in the demand for labour in the year.

22 The graph shows the percentage unemployed in a country for the period 2017–2021.



What is the **most** likely cause of the change in unemployment?

A a reduction in government expenditure

B a reduction in interest rates

C a reduction in investment by firms

D a slowdown in growth in the global economy

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23 What is the definition of liquidity?

A the ability of the foreign exchange market to buy foreign currency

B the support a central bank provides for commercial banks

C the ease with which an asset can be converted into cash

D the reaction of governments to a global financial crisis

24 What will decrease if an open economy experiences a positive output gap?

A general price level

B import spending

C spare capacity

D wage rates

25 Which statement does **not** correctly characterise the Monetarist view of the way in which the economy operates?

A Inflation is always caused by increases in the money supply in the long run.

B The long-run aggregate supply curve is vertical in shape.

C The velocity of circulation of money is highly unstable.

D Wages are flexible both upwards and downwards.

26 In an economy, the marginal propensity to consume is 0.2, the marginal propensity to save is 0.3, the marginal propensity to tax is 0.3 and the marginal propensity to import is 0.2 at all levels of income.

What would be the most likely consequence of an increase in government expenditure of $1000m?

A Import expenditure would increase by $200m.

B Import expenditure would increase by $1000m.

C Tax revenues would increase by $75m.

D Tax revenues would increase by $375m.

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27 A developing (low-income) economy is heavily dependent on the production of primary products. A multinational car manufacturing company invests in the country and builds a new factory.

What will **not** be a long lasting benefit of the company's investment in the developing economy?

A The company introduces new technology to the economy.

B The company provides diversification of production for the economy.

C The company provides skills training for local workers.

D The company purchases non-renewable local construction materials for the factory.

28 An economy adopts an expansionary monetary policy to boost employment. A result of this policy is that the consumer price index rises at an accelerating rate.

Which curve could represent this?

A Kuznets curve

B Laffer curve

C Lorenz curve

D Phillips curve

29 A government wishes to increase economic efficiency in the country. It raises the rate of income tax which leads to the emigration of high-earning skilled workers that the country needs.

How would this outcome be described?

	government failure	market failure	negative externality
A	no	no	yes
B	no	yes	no
C	yes	yes	no
D	yes	no	no

30 An economy is operating at full employment.

Which policy is **most** likely to lead to an increase in real national output without an increase in the rate of inflation in the short term?

A additional spending on subsidies to increase export earnings

B the central bank introduces quantitative easing

C labour market reforms result in increased output per hour worked

D the government reduces income tax rates

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Surname	StemUp Model Solution
Answer booklet	Write the question number in the left-hand margin at the start of each answer.

Question number

Paper 9708/31: Multiple choice answers

1	D	This is Pareto efficiency: resources are allocated efficiently. It says nothing about whether the distribution is fair.
2	B	With both externalities counted, the social optimum is where MSC1 (above MPC) cuts MSB1 (above MPB): point B.
3	A	Noise suffered by local residents is a cost to third parties; the others are private costs or transfers.
4	B	Equi-marginal principle: utility is maximised when MUx ÷ Px = MUy ÷ Py.
5	A	A budget line shows all the combinations of two goods that can be bought with a given income and given prices.
6	A	Not valid: at E2 the consumer buys more X after its price falls, so X is not a Giffen good.
7	C	Heavy advertising, uncertainty (interdependence), high entry costs and a 5-firm ratio of 85%: oligopoly.
8	D	Supernormal profit attracts new firms, which take demand away until P = AC: only normal profit remains.
9	B	PED = −1 where total revenue is maximised, which is where MR = 0: output B.
10	A	The firm must be able to separate the markets and they must have different PEDs; MR is equated, not the same curve.
11	B	At Q1 the firm is above the LRAC, so it should expand all its factors (a bigger plant) to move down to the LRAC.
12	D	A stable market makes it easier to agree quotas and prices and to spot cheating, so the cartel holds together.

Question number		
13	C	Earning more leads to lost benefits and higher tax, so the worker gains little or loses out: the poverty trap.
14	B	Nationalisation is the transfer of a firm from private ownership to state ownership.
15	C	Information corrects the information failure, so consumers fly less, moving output towards MSC = MSB.
16	B	Stronger unions counter monopsony power; tighter immigration limits labour supply; a higher minimum wage lifts pay.
17	D	In monopsony a minimum wage at W makes the marginal wage flat at W, so both wage and employment rise.
18	D	Higher tax receipts are a benefit of growth, not a negative impact.
19	B	GDP at market prices = GDP at factor cost + indirect taxes − subsidies.
20	C	Equal distribution, a small hidden economy and improving quality mean GDP per head tracks living standards well.
21	B	Frictional unemployment arises while people search for jobs because of imperfect information about vacancies.
22	B	Unemployment fell from about 8% to 5.4%; lower interest rates raise consumption and investment, so AD and jobs rise.
23	C	Liquidity is the ease and speed with which an asset can be turned into cash without loss of value.
24	C	Actual output is above potential output, so spare capacity is used up; prices, imports and wages tend to rise.
25	C	Monetarists assume the velocity of circulation is stable (constant), not highly unstable.
26	D	Multiplier = 1 ÷ (0.3 + 0.3 + 0.2) = 1.25, so ΔY = $1250m; tax = 0.3 × 1250 = $375m (imports up $250m).
27	D	Buying non-renewable materials for construction is a one-off purchase that uses up resources, so it does not last.

Question number		
28	D	The Phillips curve shows the trade-off: lower unemployment comes with a higher rate of inflation.
29	D	A government policy made allocation less efficient (loss of skilled workers): government failure, not market failure.
30	C	Higher output per hour shifts LRAS right, so real output rises without extra inflation; the others raise AD at full employment.

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1 What is **most** likely to improve the allocative efficiency of a market?

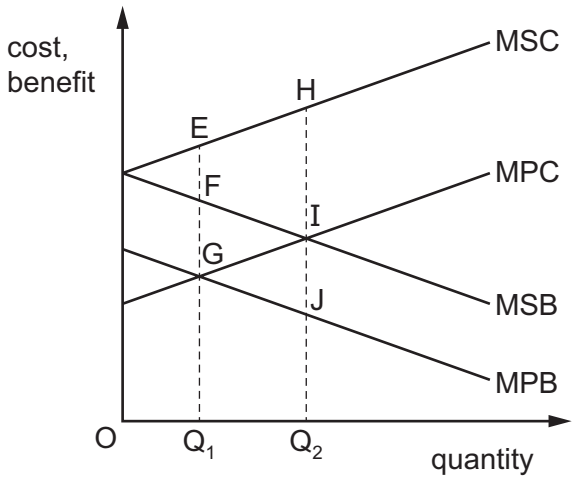
A a higher market concentration ratio

B collusion between firms in the market

C entry of new firms into the market

D mergers of firms in the market

2 The diagram shows a market in which there are negative externalities of production and positive externalities of consumption.



What is the marginal external cost at the free market equilibrium level of output?

A EG **B** EF **C** FG **D** HI

3 What could be included in a cost-benefit analysis of a project to build a road bridge connecting an island community to the mainland?

	a fall in employment for ferry services	an increase in carbon emissions	a reduction in travel time for work	an increase in incomes for the community
A	yes	no	no	yes
B	yes	yes	no	no
C	yes	yes	yes	yes
D	no	no	yes	yes

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4 The table shows the levels of total and average utility at different levels of a consumer's weekly consumption of a product.

number consumed per week	total utility	average utility
1	4	4.0
2	9	4.5
3	15	5.0
4	20	5.0
5	24	4.8
6	27	4.5

After which level of weekly consumption does the diminishing marginal utility first occur?

A 3 **B** 4 **C** 5 **D** 6

5 Which statement about a budget line in consumer behaviour theory is correct?

A It illustrates consumer preference between two goods.

B It illustrates combinations of two goods that consumers are able to purchase with a given income.

C It illustrates the least cost combination of goods that yield the same level of utility.

D It illustrates the income effect of a price change.

6 When the price of a good increases, which statement is correct according to the analysis that uses budget lines and indifference curves?

A The income and substitution effects of the price increase will work in opposite directions in the case of a Giffen good.

B The income effect of the price increase will result in reduced consumption for all goods.

C The new equilibrium position will be where the new budget line meets the original indifference curve.

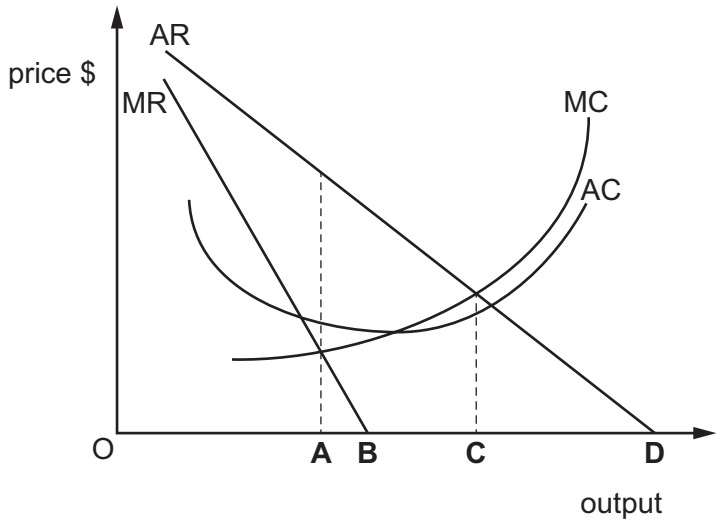
D The price rise will be represented by a parallel shift inwards of the original budget line.

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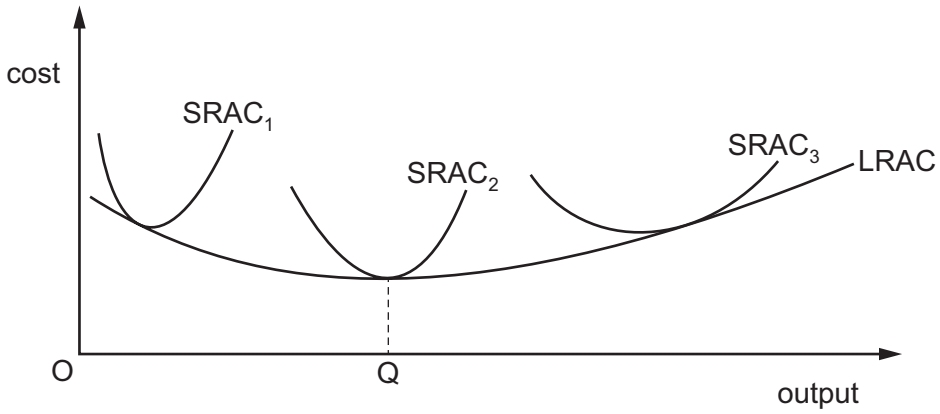
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7 The diagram shows a firm in an imperfectly competitive market.

Which level of output would maximise total revenue?



8 The diagram shows short-run average cost curves (SRAC) and the long-run average cost curve (LRAC) for a firm.



Which statement is correct?

A When each of the three SRAC curves is U-shaped it shows the existence of economies of scale.

B When the LRAC curve is upward-sloping beyond output OQ it shows the existence of diseconomies of scale.

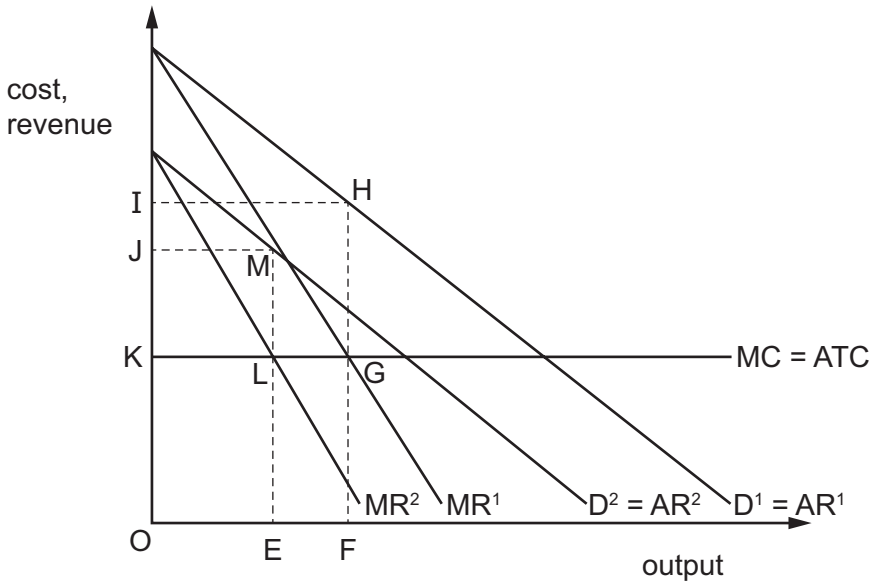
C When the minimum point of $SRAC_2$ is below that of $SRAC_1$ it shows the existence of the law of variable proportions.

D When the minimum point of $SRAC_2$ is below that of $SRAC_3$ it shows the existence of economies of scale.

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9 The diagram shows a decrease in demand for the product of a profit maximising monopolist.



Which area shows the change in the monopolist's supernormal profit as a consequence of this decrease in demand?

A IHGK **B** JMLK **C** IHGLMJ **D** IHFEMJ

10 The table shows the estimated costs for operating a new factory at the end of its first year.

costs	$m
building the factory	20
raw materials including fuel	5
machinery and delivery vehicles	4
wages for workers	1

Assuming the short run is one year, what are the total variable costs?

A $1m **B** $6m **C** $10m **D** $30m

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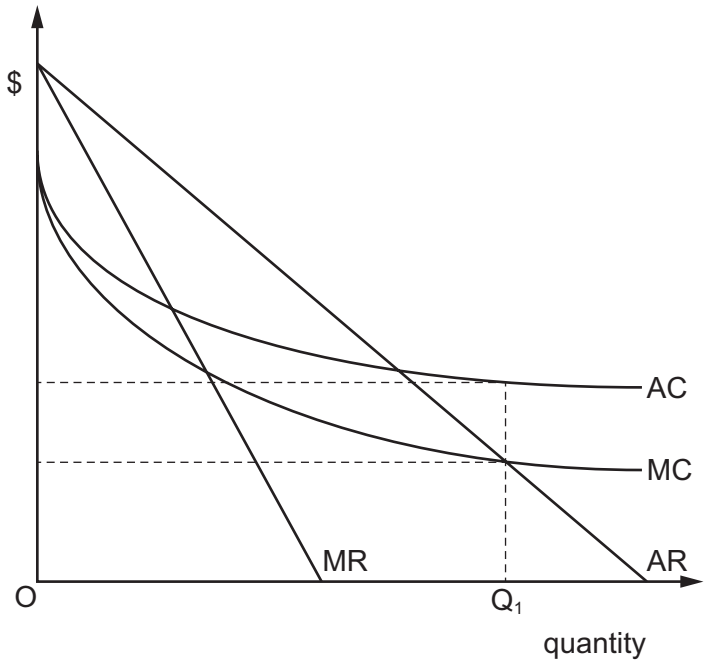
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11 A manufacturing company merged with two companies. One of these was company X that produced a substitute product. The other was company Y that supplied its raw materials.

Which combination shows the types of merger that the manufacturing company has undertaken?

	merger with company X	merger with company Y
A	horizontal	horizontal
B	horizontal	vertical
C	vertical	horizontal
D	vertical	vertical

12 Which phrase best describes the market structure illustrated by the diagram if the firm produces at output Q_1?



A a monopolistic firm in short-run equilibrium

B a monopoly making supernormal profits

C an oligopoly engaged in a price war

D a non-profit maximising state monopoly

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13 The government wants to regulate the consumption of a demerit good in order to increase society's net welfare.

In which situation will society's net welfare increase?

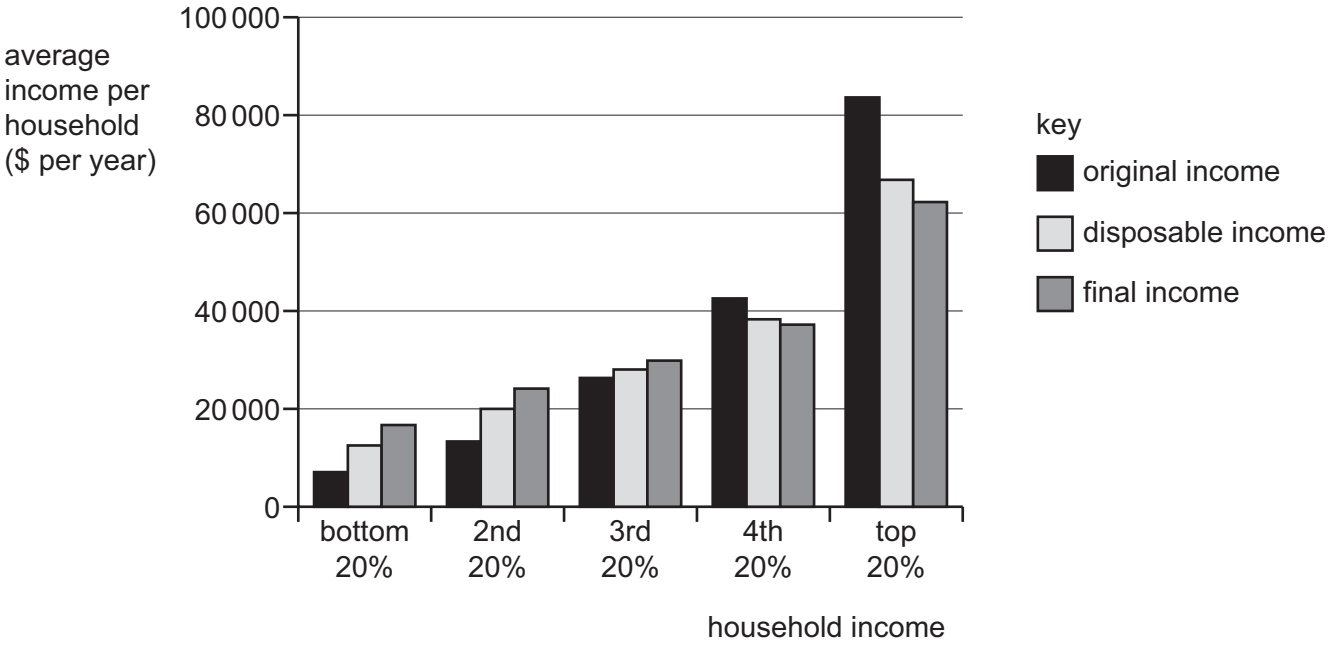
A The fall in the marginal social benefit is greater than the fall in the marginal social cost.

B The fall in the marginal external cost is greater than the fall in the marginal external benefit.

C The fall in the total social benefit is greater than the fall in the total social cost.

D The fall in the total social cost is greater than the fall in the total social benefit.

14 Governments often aim to reduce income inequalities. The diagram shows the effects of using taxation and benefits to try to achieve this aim.



What can be concluded from the diagram about the effects of taxes and benefits?

A All income groups are better off except those originally earning more than $40 000 per year.

B Benefits paid to the lower income groups are not a burden because they are not paid out of tax revenues.

C The average final income of the top 20% exceeds the combined final incomes of the other groups.

D The progressive taxation system still favours the top 20% over the bottom 20% of households.

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15 Which policy is likely to be the **least** effective means of producing a more equal distribution of income amongst households?

A the imposition of minimum wage levels below the levels produced by the market

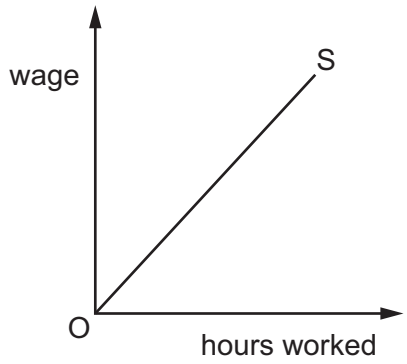
B the introduction of progressive personal income taxes

C the payment of benefits to low income households

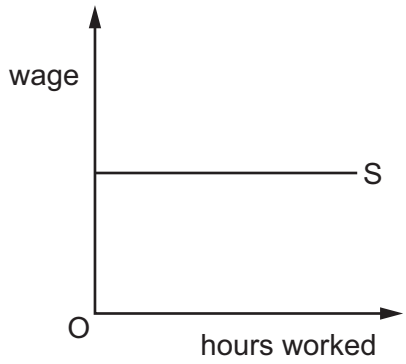
D the removal of sales taxes on food consumed by lower income households

16 Which supply curve (S) indicates that eventually an individual will choose to spend more time on leisure rather than continue working for increased wages?

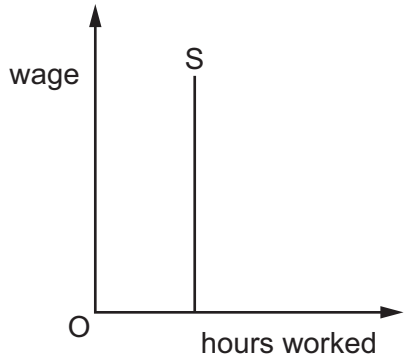
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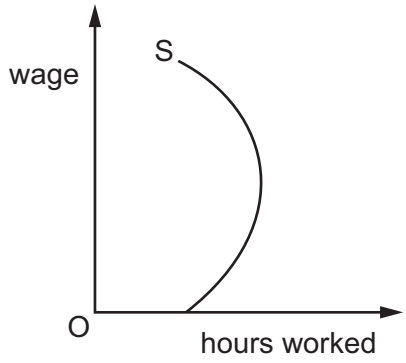
B



C



D



17 When is a trade union **less** likely to gain a large pay rise for its workers?

A It represents a large proportion of the workforce in the company.

B It represents a workforce that has an elastic demand for its labour.

C It represents a workforce that is increasing its labour productivity.

D It represents a workforce that works for a highly profitable monopoly firm.

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18 Which statement does **not** support the view that extraction of mineral resources by a foreign company will make it more difficult for a developing economy to achieve future economic growth?

A Exports of these mineral resources will result in an appreciation of the exchange rate.

B Reduced tax rates aimed at encouraging the foreign company to invest in the country will increase inflation.

C The foreign company will raise the skill levels of the local population through training schemes.

D The foreign company will send profits back to its own country.

19 Growth rates can be calculated using changes in the value of GDP from year to year.

Why is real GDP considered to be a better indicator than nominal GDP for this calculation?

A Real GDP adjusts for price changes by using a base year.

B Real GDP ignores the effects of fluctuations in exchange rates on purchasing power.

C Real GDP includes changes in the size of the population.

D Real GDP measures GDP at factor cost rather than market prices.

20 Why is disaster relief money sent by non-governmental organisations to a South American country **not** classified as official foreign aid?

A It does not finance a long-term investment programme.

B It does not incur payment of interest.

C It is not supplied by a government.

D Only countries in Asia and Africa are classified as developing.

21 What is a cause of seasonal unemployment?

A a general decrease in the demand for goods and services

B a lack of necessary skills in the workforce

C a temporary change in the pattern of consumers' expenditure

D an unwillingness of workers to move to other parts of the country where there is work

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22 A firm initially employs 50 workers, each working 40 hours a week, and produces a total output of 18 000 units. It then employs an additional 10 workers, again each working 40 hours, and total output rises to 19 200 units.

Which effect does this rise in employment have on labour productivity per hour?

A decreases it by 1 unit

B decreases it by 40 units

C increases it by 120 units

D increases it by 1200 units

23 According to Keynesian theory, when will an increase in the money supply leave the level of output unchanged?

A when there is a liquidity trap

B when the money supply increase was not anticipated

C when there is a floating exchange rate

D when there is an immediate adjustment to expectations about future price levels

24 An economy is experiencing a negative output gap.

What is **most** likely to happen to the inflation rate and unemployment in this economy?

	inflation rate	unemployment
A	decreases	decreases
B	decreases	increases
C	increases	decreases
D	increases	increases

25 What do Monetarists believe?

A Economies are naturally unstable.

B Policy makers should follow set rules targeting the money supply.

C The aggregate supply curve has a slight slope.

D Wage movements are ‘sticky’ downwards.

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26 Which combination of changes over time in an economy would definitely represent increased economic growth per capita?

	average price level	total output	total population	Gini coefficient
A	falls	rises	falls	rises
B	falls	rises	no change	falls
C	rises	falls	falls	rises
D	rises	rises	rises	rises

27 Under which circumstances will the future burden of the national debt on a country increase the most?

	increase in the budget deficit	change in GDP	price of government bonds
A	+2% of GDP	+4%	decreasing
B	+2% of GDP	+4%	increasing
C	+4% of GDP	+2%	decreasing
D	+4% of GDP	+2%	increasing

28 Country X has a low rate of inflation and a stable currency and unemployed resources. It attracts $25 billion of direct foreign investment.

What is **most** likely to be a positive benefit of the inflow of this foreign direct investment for country X?

A Aggregate demand will be boosted through the investment multiplier.

B Country X will have to use its foreign reserves to eliminate any trade deficit.

C The balance of payments will be affected with the outflow of profits to foreigners.

D The rate of inflation will increase if country X tries to increase capacity.

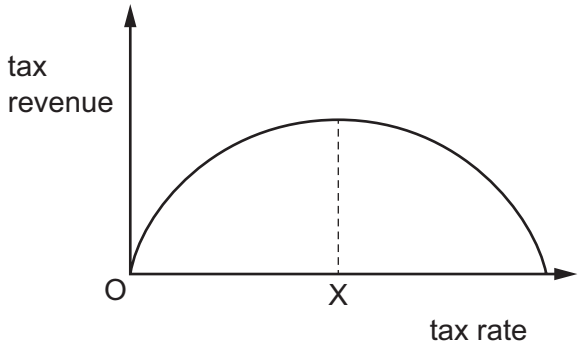
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29 A country with an income tax rate X decides to increase its tax rate.

The diagram shows tax revenue will fall.



Why would this happen?

A Fewer goods will be produced.

B People will work fewer hours to maintain incomes.

C Prices will rise.

D There will be an increase in tax avoidance.

30 What are the labels on the axes of a Phillips curve diagram?

	vertical axis	horizontal axis
A	inflation rate	unemployment level
B	inflation rate	unemployment rate
C	price level	unemployment level
D	price level	unemployment rate

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Answer booklet	Write the question number in the left-hand margin at the start of each answer.

Question number

Paper 9708/32: Multiple choice answers

1	C	New entrants increase competition and push price down towards marginal cost, so allocative efficiency improves.
2	A	Free market output is Q1 where MPC = MPB (at G); marginal external cost = MSC − MPC at Q1 = EG.
3	C	A full CBA counts private and external costs and benefits: lost ferry jobs, emissions, time saved and higher incomes.
4	A	MU = 4, 5, 6, 5, 4, 3. MU rises up to the 3rd unit and first falls for the 4th, so after 3 units.
5	B	A budget line shows the combinations of two goods a consumer can afford with a given income and prices.
6	A	For a Giffen good the income effect works in the opposite direction to the substitution effect and outweighs it.
7	B	Total revenue is maximised where MR = 0, which is output B.
8	B	Beyond OQ the LRAC rises, so long-run average cost increases with scale: diseconomies of scale.
9	C	Old supernormal profit IHGK minus new profit JMLK leaves the fall in profit, area IHGLMJ.
10	B	Variable costs change with output: raw materials $5m + wages $1m = $6m.
11	B	X makes a substitute at the same stage of production (horizontal); Y supplies raw materials (backward vertical).
12	D	At Q1, P = MC with AC falling and above AR, so the firm makes a loss: a natural monopoly run by the state, not for profit.
13	D	Net welfare rises only if the total social cost saved is greater than the total

Question number		
		social benefit given up.
14	A	Final income is above original income for the bottom three groups; only the 4th and top 20% (over $40 000) lose.
15	A	A minimum wage below the market wage is ineffective: it does not raise anyone's pay.
16	D	A backward-bending supply curve: at high wages the income effect dominates, so more leisure is chosen.
17	B	With elastic demand for labour, a large pay rise would cause a large fall in employment, so the union is weaker.
18	C	Training raises local skills and human capital, which helps growth, so it does not support the view.
19	A	Real GDP removes the effect of price changes (inflation) by valuing output at base-year prices.
20	C	Official aid (ODA) is given by governments; money from NGOs is private, voluntary aid.
21	C	Seasonal unemployment comes from regular, temporary changes in demand, eg tourism or harvest seasons.
22	A	Before: 18 000 ÷ (50 × 40) = 9 units per hour. After: 19 200 ÷ (60 × 40) = 8 units per hour, so down 1.
23	A	In a liquidity trap extra money is simply held (interest rates cannot fall further), so output does not change.
24	B	Output is below potential, so there is spare capacity and low AD: inflation falls and unemployment rises.
25	B	Monetarists favour fixed rules, eg target money supply growth in line with output growth.
26	A	Lower prices and higher output mean real output rises, and with fewer people output per head definitely rises.
27	C	A bigger deficit, slower GDP growth and falling bond prices (higher yields, so

Question number		
		higher interest costs) raise the burden most.
28	A	With spare resources and low inflation, the FDI injection raises AD by a multiple through the multiplier.
29	D	Beyond the peak of the Laffer curve, higher rates give a greater incentive to avoid (and evade) tax, so revenue falls.
30	B	The Phillips curve plots the inflation rate (vertical) against the unemployment rate (horizontal).

Cambridge Assessment International Education

Cambridge International AS & A Level

ECONOMICS **9708/33**

Paper 3 Multiple Choice **October/November 2022**

1 hour 15 minutes

You must answer on the multiple choice answer sheet.

You will need: Multiple choice answer sheet
Soft clean eraser
Soft pencil (type B or HB is recommended)

INSTRUCTIONS

- 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 multiple choice answer sheet.
- Follow the instructions on the multiple choice answer sheet.
- Write in soft pencil.
- Write your name, centre number and candidate number on the multiple choice answer sheet in the spaces provided unless this has been done for you.
- Do **not** use correction fluid.
- Do **not** write on any bar codes.
- You may use a calculator.

INFORMATION

- The total mark for this paper is 30.
- Each correct answer will score one mark.
- Any rough working should be done on this question paper.

This document has **12** pages.

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1 When is Pareto efficiency achieved?

A at a level of output that is productively and allocatively efficient

B when everyone has equal amounts of goods and services

C when social benefits are greater than private benefits

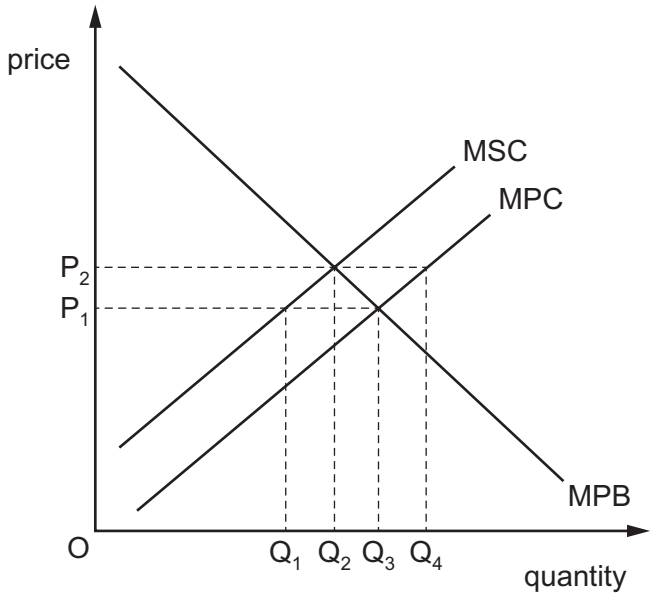
D when social marginal benefit is greater than social marginal cost

2 The transport authority in a city is considering building an underground railway to reduce traffic congestion on the roads.

Which combination would represent an external cost and an external benefit of the use of this railway?

	external cost	external benefit
A	compensation is paid to businesses displaced by construction work	foreign tourists pay to use the railway
B	nearby residents suffer noise from passing trains	there are fewer admissions to hospital as air quality improves
C	overtime payments are made to workers to finish building the railway on time	productivity increases as employees arrive at work more punctually
D	reduced traffic means there are fewer road improvements needed	motorists spend less on fuel

3 The diagram shows the marginal private benefit (MPB), the marginal private cost (MPC) and the marginal social cost (MSC) of a firm producing chemicals. In a free market, price is at P_1.



Which quantity measures the overproduction of chemicals resulting in the negative production externality?

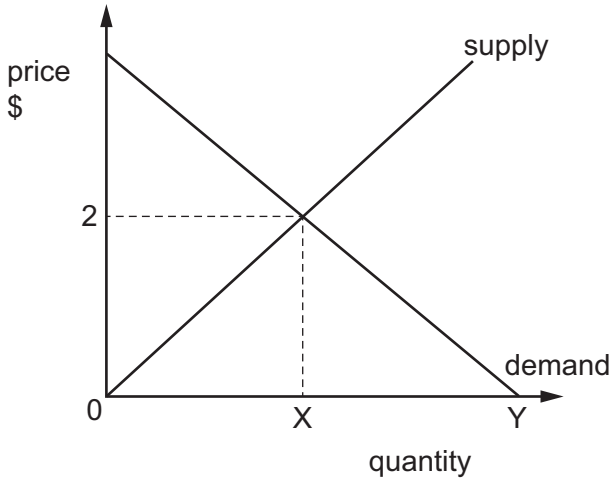
A Q_1,Q_2 **B** Q_1,Q_3 **C** Q_2,Q_3 **D** Q_3,Q_4

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4 The diagram shows the market price and equilibrium quantity of coffee consumed by an individual, Jo.

Jo buys X cups of coffee at $2 per cup when she visits her favourite café.



When she is there, the café owner says it is offering unlimited free refills.

How is her consumption **most** likely to change?

A Jo's demand for coffee will increase from X to Y where her total utility for coffee is zero.

B Jo's demand for coffee will increase from X to Y where her marginal utility for coffee is zero.

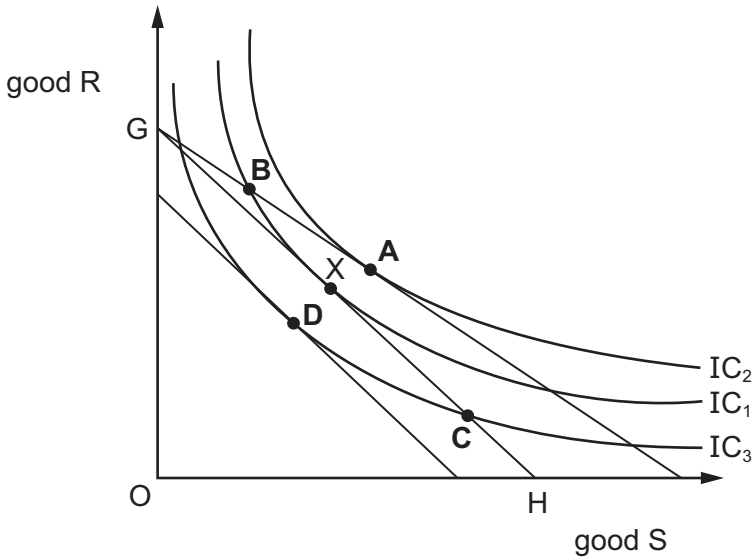
C Jo will not drink extra coffee because its marginal utility is less than $2.

D Jo will not drink extra coffee because her total utility will fall.

5 The diagram shows a consumer's initial budget line is GH and a set of indifference curves IC_1, IC_2 and IC_3 for goods R and S. The original equilibrium for the consumer is point X.

The inflation rate is rising faster than money incomes.

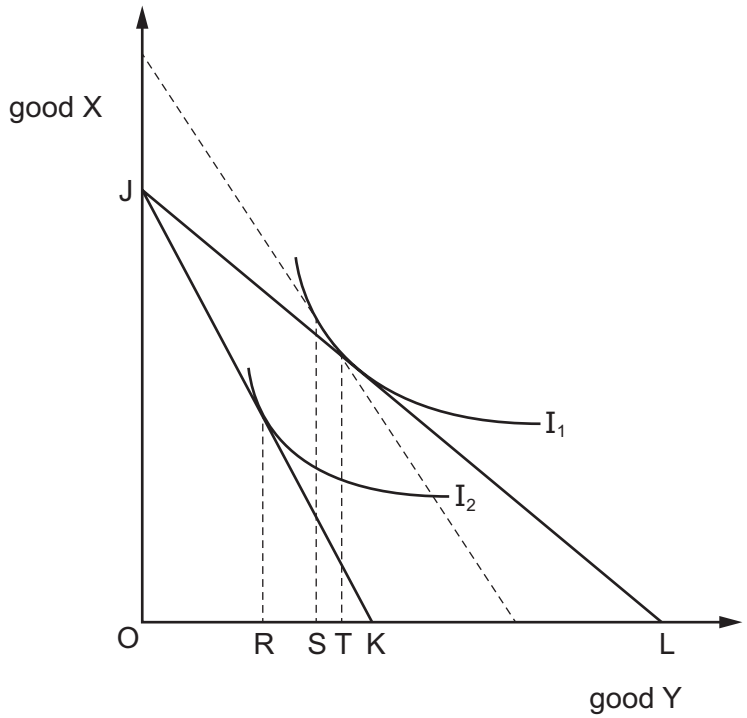
What will be the **most** likely new equilibrium for the consumer if all real income is spent?



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6 The diagram shows an individual's budget lines and indifference curves.

The initial budget line is JL. There is then an increase in the price of good Y.



Which distance represents the substitution effect of the increase in price of good Y?

A LK **B** SR **C** TS **D** TR

7 In which type of market structure are commercial banks usually found?

A perfect competition, because they all link their interest rates to that of the central bank

B perfect competition, because they offer identical products and services

C monopolistic competition, because a competitive market prevents them making excess profits

D oligopoly, because they are affected by the actions of other banks

8 The manufacture of some sports equipment is dominated by very large firms but there are also smaller firms in the industry.

What enables a small firm to exist in such an industry?

A high concentration ratio that reduces competition

B high start-up costs that occur in a contestable market

C decreasing average cost as a large firm expands

D a requirement for personalised equipment

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9 The marginal cost curve of a firm passes through the lowest point of the firm's

A average fixed cost curve.

B average variable cost curve.

C marginal revenue curve.

D total cost curve.

10 What would definitely be abnormal profits?

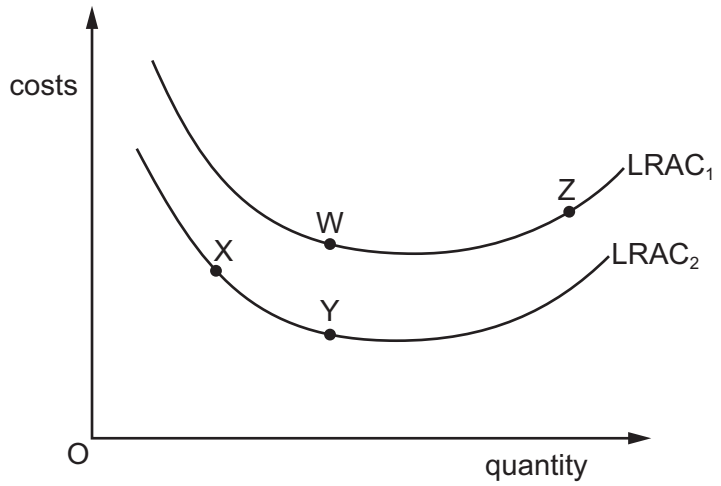
A the extra revenue received from the sale of a farmer's land to a house-building firm

B the extra revenue received by a firm from an unexpectedly large increase in demand

C the total revenue from the sale of a firm's products in excess of the total variable costs of the firm

D the total revenue in excess of total costs of the firm above the minimum needed to keep the firm in business in the long run

11 The diagram shows the long-run average cost curves (LRAC) for a firm.

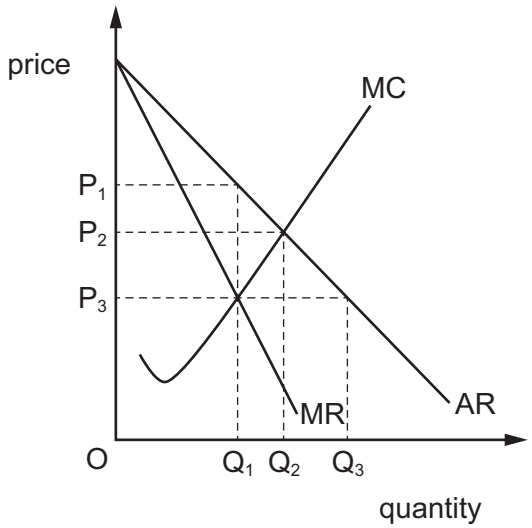


Which combination of movements correctly describes each type of economy or diseconomy of scale?

	internal economies of scale	internal diseconomies of scale	external economies of scale
A	W to Y	X to W	Z to W
B	W to Y	Y to W	Z to W
C	X to Y	W to Z	W to Y
D	X to Y	Y to X	W to Y

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12 The diagram shows the cost and revenue curves for a monopoly market structure.



A monopoly was producing at P_1Q_1 but changed its aim and now produces at P_2Q_2.

What would **not** have caused this change?

A It has stock it wants to sell.

B It is concerned about new entrants.

C It wants to benefit from greater economies of scale.

D It wants to maximise profits.

13 A government regards fresh fruit and vegetables as merit goods, and subsidises agriculture to boost their production.

What could be a government failure arising from these subsidies?

A cheaper fresh fruit and vegetables

B land clearance reducing wildlife

C lower spending on treating dietary illnesses

D more jobs picking fruit and vegetables

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14 The table shows a firm that has four possible methods of production. Each method has a different cost and causes a different amount of pollution.

The government decides that polluting firms must buy pollution permits that cost $90 each. Each permit allows the firm to emit 1 tonne of pollution. No pollution can be emitted without a permit.

Which method of production has **least** total cost?

	cost of production ($ per day)	pollution caused (tonnes per day)
A	320	3
B	380	2
C	480	1
D	700	0

15 The table shows the average incomes of the richest 20% of households and the poorest 20% of households in the UK (2015–2016), and the effects of government taxation and benefits on average income.

	average income (£) of richest 20%	average income (£) of poorest 20%
before taxes and benefits	85 000	7 000
after direct taxes and cash benefits	68 000	13 000
after all taxes (direct and indirect) and all benefits	63 000	17 000

What can be concluded from the information in the table?

A The effects of direct taxation have affected the rich less than the poor.

B The government's policy achieved income equality across households.

C The government redistributed all income taken from the rich to the poor.

D The government's policy reduced the income inequality between the poor and the rich.

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16 A fashion model is paid $500 000 a year.

If the next best paid job he could get is as a teacher at $100 000 a year, what are his transfer earnings and his economic rent?

	transfer earnings $	economic rent $
A	zero	400 000
B	100 000	400 000
C	400 000	zero
D	400 000	100 000

17 What would be the **most** likely effect of the imposition of a national maximum wage below the market equilibrium on the labour market for famous television celebrities?

A a reduction in the number of jobs for television celebrities

B an increase in other methods of rewarding television celebrities

C greater movement of celebrities between television channels

D increased employment of foreign television celebrities

18 Which government measure is **most** likely to encourage faster and more sustainable economic growth in a country?

A subsidies to firms using recycled materials in production

B grants for the exploration and exploitation of new oil deposits

C increased spending on environmental education in schools

D tougher legislative controls on emissions of air and water pollution

19 Which statement about National Income accounting is correct when Gross Domestic Product (GDP) is converted into Net National Income (NNI)?

A An allowance for depreciation has to be made, because the NNI does not include output that replaces capital that has been used up.

B Both GDP and NNI have to be calculated by the incomes method, because that is what NNI is measuring.

C Double counting is not a problem if the conversion uses the output method, but it is when using the expenditure method.

D The value of exports needs to be added, because exports generate income for citizens.

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20 Real GNP per capita is often used when comparisons of living standards are made between a developed and a developing country.

What is **not** a good reason to question the accuracy of this comparison of living standards?

A It is not possible to use price indices accurately when computing real figures because spending patterns are different.

B People in developed countries enjoy very different amounts of leisure time to people in developing countries.

C The extent of the unrecorded economy is very different in the two countries.

D The purchasing power parity theory has been used to make comparisons.

21 Based on the International Labour Office definition of unemployment, which individual is **most** likely to be classified as unemployed?

A a single parent who would like to work but cannot afford to pay for child-care facilities

B a teacher who has decided to retire permanently

C a redundant steel worker who is not actively seeking alternative work

D a student who is desperately seeking any weekend job to supplement his income

22 What is **most** likely to lead to an increase in labour productivity?

A encouraging women to enter the workforce

B increasing automation

C raising the retirement age

D reducing the division of labour

23 Which components of the Quantity Theory of Money are considered constant and which are considered variable?

	money supply	velocity of circulation	price level	transactions
A	constant	variable	constant	variable
B	constant	constant	variable	constant
C	variable	constant	variable	constant
D	variable	variable	constant	variable

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24 Four students are asked to complete a table showing the aggregate demand equation and the multiplier formula for a closed economy without a government.

Which student is correct?

	aggregate demand	multiplier
A	$C + I$	$\frac{1}{\text{marginal propensity to consume}}$
B	$C + I$	$\frac{1}{\text{marginal propensity to save}}$
C	$C + I - S$	$\frac{1}{\text{marginal propensity to consume}}$
D	$C + I - S$	$\frac{1}{\text{marginal propensity to save}}$

25 Keynesian and Monetarist economists believe different things about the way the economy works.

Which combination is correct?

	Keynesian	Monetarist
A	decreasing AD will always lead to an increase in economic growth	economic growth is achieved using fiscal policy
B	increasing AD brings the economy out of recession	the economy always tends to full employment in the long run
C	increasing AD will always lead to increased employment	economic growth is achieved by cutting taxation
D	increasing AS brings the economy out of recession	full employment will always be achieved in the long run

26 The table shows real GDP and unemployment for an economy.

economic indicators	2019	2021
real GDP ($ billions)	40 000	38 000
unemployment (millions)	2	3

What can be concluded from the data?

A Demand-pull inflation is likely to increase.

B Potential output is likely to increase.

C The balance of payments deficit is likely to increase.

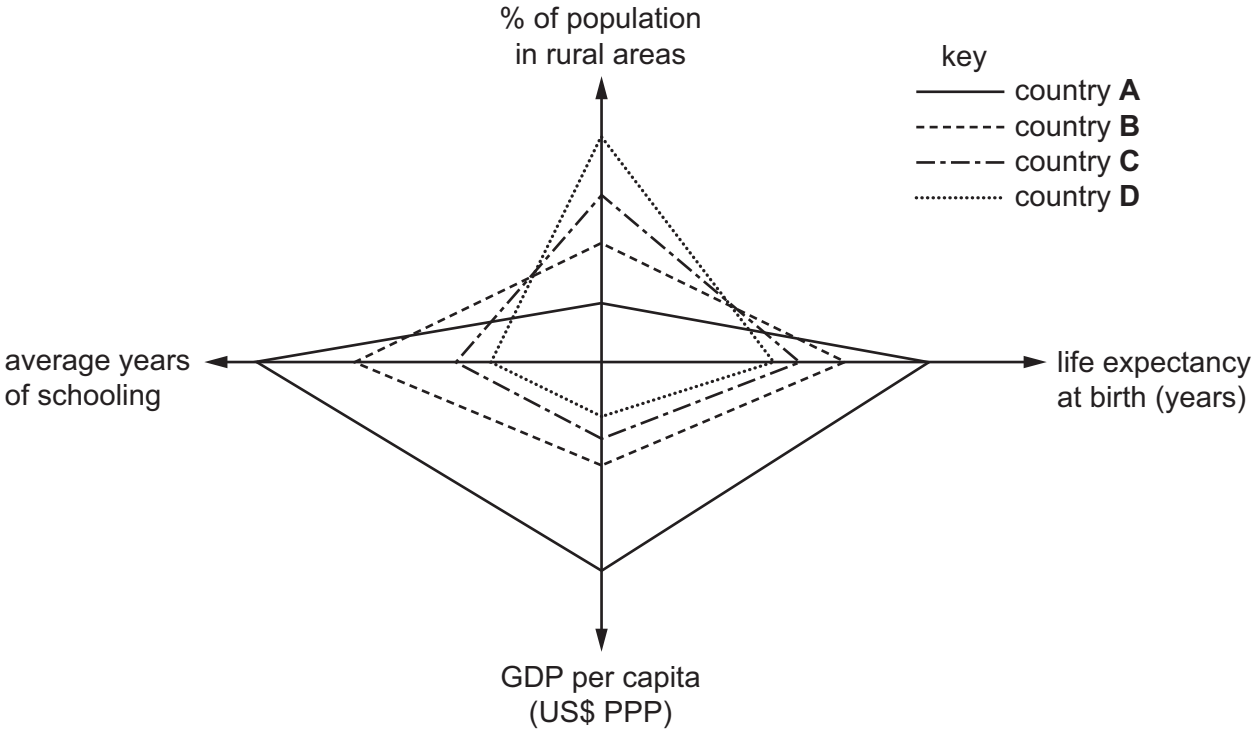
D The budget deficit is likely to increase.

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27 The diagram shows data on various aspects of four countries.

Which country is likely to be most developed?



28 What is illustrated by the Laffer curve?

A As income increases, fewer hours will be worked.

B As income increases, tax revenue will increase.

C As the tax rate increases, tax revenue always increases.

D As the tax rate increases, tax revenue will eventually fall.

29 A government decides to increase direct taxation.

Which combination would describe the impact of this policy on unemployment, growth and balance of payments?

	unemployment	growth	balance of payments
A	improves	improves	improves
B	improves	improves	worsens
C	worsens	worsens	improves
D	worsens	worsens	worsens

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30 How will inflation and unemployment **most** likely be affected by a rise in the rate of income tax if government expenditure does **not** change?

	inflation	unemployment
A	falls	rises
B	falls	falls
C	rises	rises
D	rises	falls

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Answer booklet	Write the question number in the left-hand margin at the start of each answer.

Question number

Paper 9708/33: Multiple choice answers

1	A	Pareto efficiency needs both productive efficiency (minimum cost) and allocative efficiency (P = MC).
2	B	Noise for residents is a cost to third parties; fewer hospital admissions from cleaner air is a third-party benefit.
3	C	Free market output is Q3 (MPB = MPC); the social optimum is Q2 (MPB = MSC), so overproduction is Q2 to Q3.
4	B	With a zero price Jo consumes until marginal utility is zero, at Y.
5	D	Real income falls, so the budget line shifts inwards parallel to GH; the new tangency is D on the lower curve IC3.
6	C	Holding utility on I1 at the new relative prices (dashed line) moves the optimum from T to S; S to R is the income effect.
7	D	A few large banks dominate and are interdependent, reacting to each other's actions: oligopoly.
8	D	Personalised equipment cannot be mass-produced, so small firms serve that niche.
9	B	MC cuts both AVC and ATC at their minimum points.
10	D	Abnormal (supernormal) profit is revenue over total costs above normal profit, the minimum needed to stay in business.
11	C	Internal economies: down the curve X to Y; internal diseconomies: up the curve W to Z; external: curve shifts down, W to Y.
12	D	P2Q2 is where P = MC (allocative efficiency), not MC = MR, so it cannot be explained by profit maximisation.
13	B	Clearing land for farming destroys wildlife habitats, an unintended negative

Question number		
		effect of the subsidy: government failure.
14	B	Total cost: A 320 + 3 × 90 = $590; B 380 + 2 × 90 = $560; C 480 + 90 = $570; D $700. B is cheapest.
15	D	The rich:poor ratio falls from 85 000 ÷ 7 000 ≈ 12.1 to 63 000 ÷ 17 000 ≈ 3.7, so inequality is reduced.
16	B	Transfer earnings = $100 000 (next best job); economic rent = 500 000 − 100 000 = $400 000.
17	B	A capped wage below equilibrium means employers compete in other ways, eg bonuses, perks and share deals.
18	A	Recycling subsidies raise output while conserving resources for the future: faster and more sustainable growth.
19	A	NNI = GNI − depreciation, because output that replaces worn-out capital is not available for use.
20	D	Using PPP improves the accuracy of the comparison, so it is not a reason to question it.
21	D	ILO unemployed: without work, available and actively seeking work. The student is actively looking.
22	B	More automation gives each worker more capital to work with, so output per worker rises.
23	C	MV = PT: V and T are assumed constant, so changes in M (variable) cause changes in P (variable).
24	B	Closed economy, no government: AD = C + I; the multiplier = 1 ÷ MPS.
25	B	Keynesians: raise AD to escape recession. Monetarists: the economy returns to full employment in the long run.
26	D	Real GDP fell and unemployment rose, so tax revenue falls and benefit spending rises: a bigger budget deficit.
27	A	Country A has the most schooling, highest life expectancy, highest GDP per head and smallest rural population.

Question number		
28	D	The Laffer curve: as the tax rate rises, revenue rises at first but eventually falls.
29	C	Higher direct tax cuts disposable income and AD, so unemployment and growth worsen, but imports fall so the BoP improves.
30	A	Higher income tax cuts disposable income, consumption and AD, so inflation falls but unemployment rises.