

Workbook answers

15 Mixed economic system

1 Correct answer: D mixed economy

As the name suggests, the mixed economy is an economic system that combines elements of both the planned economy and the market economy.

2 Correct answer: D minimum price

A minimum price is one that is set above the market equilibrium price. This helps to create an incentive for firms to supply this product because the price is set higher than it would be in a market economy.

3 Correct answer: D planned economy

In a planned economy, the government oversees production decisions (what, how and for whom production should take place).

4 Correct answer: C maximum price

Price controls are used to ensure that market prices do not escalate beyond control, which would prevent the majority of people from accessing the good or service. Hence, the price is set at a maximum, i.e. firms cannot charge more than the maximum price.

5 Correct answer: C subsidies

The provision of government subsidies helps to reduce the costs of production. The subsidies help firms to supply more of these goods and services, and to charge a lower price.

6 Privatisation is the transfer of ownership of assets from the public sector to the private sector (1). Examples could include utilities boards (1), public-sector housing (1) and state-owned enterprises, such as the Post Office or a broadcasting station (1), all being sold off to the private sector.

7 Features of a planned economic system include the following:

- Production decisions are made by the government (1), i.e. the state decides on what, how and for whom production should take place (1).
- Production schedules are devised on a long-term basis (1) to ensure output of products deemed to be necessary by the government (1).
- Wage differentials are minimal (1), meaning there is greater equality in income and wealth (1).
- The economy prefers to be self-sufficient (1) rather than rely on trade negotiations with other countries (1).

8 a A mixed economy is a combination of both planned economies (1) and market economies (1).

b Analysis might include:

- There may be a misallocation of resources in a free market economy (1), such as the under-provision of merit goods (1) and public goods (1), and negative externalities such as pollution (1).

- There is a need for government intervention in the economy (1) for numerous reasons, such as environmental protection (1) and to redistribute income and wealth using the tax system (1).
 - Government intervention is also required to regulate and control the activities of private sector firms in mixed economies (1). For example, government intervention is required to enforce employment rights (1) and prevent anti-competitive business activities (1).
- 9 A planned economic system ensures basic needs (1) are met for everyone in the economy (1). This helps to achieve greater equality in income and wealth distribution (1). By contrast, in market economies, production is disproportionately geared towards those with high incomes and wealth (1), i.e. those with the ability and willingness to pay higher prices.
- 10 Use the table below to assign marks.

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

Arguments in favour of the (free) market economy include:

- greater efficiency and productivity, which can lead to more economic growth, job creation and economic prosperity for many people
- freedom of choice, such as customers being able to choose between different types of smartphone, or people being able to choose their own career paths
- more competition, which can benefit the public as the rivalry between firms is likely to improve customer service and generate better-quality products
- incentives to work hard, due to the limitless economic opportunities available

Possible disadvantages of a (free) market system include:

- environmental issues and concerns about the depletion of the earth's scarce resources, and the intensity of consumption and economic activity
- income and wealth inequalities, which result in the rich getting richer and the poor getting poorer

- social hardships for those who are unable to secure well-paid jobs or those who are unable to work, such as unskilled or uneducated people or those with physical disabilities
- the existence of unregulated monopolies, which are able to exploit customers by restricting output and/or charging higher prices

Workbook answers

16 Money and banking

1 Correct answer: A durability

Durability is a characteristic of money, not a function of money. The four functions of money are: unit of account, store of value, medium of exchange and standard for deferred payment.

2 Correct answer: D the need for trade and exchange

Bartering (swapping) enables trade and exchange to take place in the absence of money. Options A, B and C are problems associated with bartering.

3 Correct answer: A the facilitation of company growth

The central bank is not involved with commercial lending of money to facilitate the growth of companies — this is the role of commercial banks.

4 Correct answer: D offering internet banking

The other options are primary functions of commercial banks.

5 Correct answer: C lender of the last resort and bankers' bank

Options A, B and D are all functions of a commercial bank. Option C is a function of a central bank.

6 Money is any commodity (1) that can be used as a medium of exchange that is accepted for the purchase of goods and services (1). It must therefore be acceptable (1), durable (1), divisible (1) and recognisable (1).

7 Explanations might include:

- Banknotes and coins are durable (1) — made of paper and metal, they are long-lasting and easily replaceable if worn (1). Modern-day banknotes are made from polymer rather than paper and are significantly more durable (1).
- They are portable (1) — they weigh very little and people can carry them conveniently (1).
- They are scarce (1) — the supply of money, including banknotes and coins is regulated by a country's central bank (1) so that the money retains its value over time by being relatively scarce (1).
- They are acceptable (as legal tender) (1) — money is widely recognised and accepted as a medium of payment for goods and services (1).
- They are divisible (1) — as money is a measure of the value of goods and services, it must be divisible (1). Banknotes and coins are divisible unlike previous forms of money such as cattle (1).
- They are uniform (1) — for money to be easily recognisable there must be uniformity, for example all \$50 banknotes will look identical in terms of shape, size and design (1).

8 Explanations might include:

- A central bank is the sole issuer of bank notes and coins in the country (1). This helps to bring uniformity to and improves public confidence in the country's monetary system (1).

- It acts as the government's bank (1) by maintaining the bank accounts of the central government (1) such as receiving deposits from government (1), making short-term loans to the government (1) and making payments for items of government expenditure (1).
- It acts as the bankers' bank (1), for example overseeing the cash reserves of the commercial banks enabling them to function more efficiently (1).
- It has responsibility for overseeing the country's monetary policies (1), such as managing the public sector debt (1) and representing the government in international financial markets such as foreign exchange (1).
- It is the lender of last resort (1). For example, if a commercial bank faces temporary financial difficulties, it can seek financial assistance from the central bank (1). This helps to ensure the commercial bank does not collapse (1), protects jobs and safeguards the nation's banking system and economic welfare (1).

9 Explanations might include:

- Commercial banks accept banks deposits of money and savings from their customers (1), which can be used to earn interest (1) or for a customer's convenience in their own financial operations such as paying suppliers or employees (1).
- They make advances, i.e. provide personal and commercial loans to their customers (1), which include overdrafts and mortgages (1).
- They are involved in credit creation (1), the process by which banks increase the money supply in an economy by making money available to borrowers (1). This includes providing overdraft facilities and credit card facilities (1).
- They provide financial services to their customers (1), such as:
 - collecting and clearing cheques (1)
 - providing financial advice, e.g. tax, savings and retirement plans (1)
 - helping customers to buy and sell shares (1)
 - providing bureau de change facilities for foreign exchange (1)
 - storing valuables in safe deposit boxes in bank vaults (1)
 - internet banking facilities (1)

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Why payment apps are a new form of money:

- Payment apps transfer money from buyers to the sellers in return for a good or service and therefore perform the same function as a credit card, debit card or cheque. The apps connect to a buyer's debit or credit card and payment is made, and therefore they act as a medium of exchange.

Why payment apps are not a new form of money:

- Payment apps cannot carry out the four functions of money. They can act as a medium of exchange but are not accepted by all sellers. Some apps act as a store of value and have a digital wallet; others do not and therefore all apps do not act as a store of value. Payment apps are not a method of deferred payment or a unit of account.
- The payment apps do not have all the characteristics of money. Apps are durable and portable because they exist on a smartphone. Uniformity, divisibility and scarcity are not characteristics of the app. They are acceptable to some sellers.

The number of sellers that accept payment by apps will probably increase in the future. Payment apps may become more widespread in the future.

Workbook answers

17 Households

1 Correct answer: D wages and salaries

Most people supply their labour services in return for income in the form of wages and salaries.

2 Correct answer: A disposable income

Disposable income refers to earnings after income tax and other charges. This is the income at an individual's disposal that can be spent.

3 Correct answer: C current expenditure

Current expenditure refers to the spending on goods and services within the next 12 months (the current year).

4 Correct answer: B conspicuous consumption

Conspicuous consumption is the spending on expensive, luxury goods and services due to the desire to have greater social status.

5 Correct answer: D trade policies

Trade policies are likely to be concerned with which goods and services are allowed to be sold in the country, so are unlikely to influence directly the level of spending, savings and borrowing in the economy.

6 The wealth of an individual is measured by the amount of assets they own (1) minus their liabilities (the amount they owe) (1). Wealth is accumulated over time (1).

7 Possible factors include:

- interest rates (1)
- consumer confidence levels (1)
- the rate of inflation (1)
- the age of a person (1)
- the size of households (1)

8 Explanations might include:

- to fund the purchase of expensive products (1), such as a foreign holiday, a sports car (1) or university education (1)
- to purchase property or land (1), either for production purposes (1) or as an investment (1)
- to start up a new business (1) as the owner does not have enough savings of his/her own (1)
- to fund growth of a business (1), such as setting up production facilities in a foreign country (1)

9 In general, higher interest rates encourage people to save more (1), thereby meaning they have less money to spend (1). Higher interest rates also discourage borrowing (1), so spending is likely to fall as people do not have the funds to purchase expensive items in particular (1). The opposite would apply to a cut in interest rates.

- 10** Direct taxes are imposed on incomes and earnings (1) so high rates of income tax will reduce people's disposable incomes (1), meaning they have less money to save (1). Having less income after tax also results in less spending in the economy (1). Hence, there is a negative relationship or correlation between the rate of income tax and the amount of saving and spending in the economy (1).

Workbook answers

18 Workers

- 1 Correct answer: B** Some professional footballers have a unique set of skills and talent.

Some professional footballers are rewarded because of their superior talent and skills. Option A is also incorrect because, although football is seasonal, this is not considered when deciding upon salaries. Option C is incorrect because football is not a dangerous profession. Option D is incorrect because the relatively short working life of a footballer is not considered when deciding on their salary.

- 2 Correct answer: B** greater job security and pension

Public sector jobs tend to offer greater job security and a pension after retirement (although due to public sector budget cuts in many countries this may change in the future). Options A, C and D are all advantages of working in the private sector.

- 3 Correct answer: D** unemployed workers have a greater incentive to work

Unemployed workers may have a greater incentive to seek work, i.e. an increase in the NMW makes work more attractive. Option A is an advantage to firms, whilst Option C is an advantage for the government. Option B is a possible advantage to individual firms and to the economy in general as national output should increase.

- 4 Correct answer: A** A larger number of women work part-time or work flexible working hours.

Some women work part-time or flexible hours to fit in with childcare or to look after relatives and therefore their wages tend to be lower on average. Options B, C and D are all reasons why women can earn similar wages to men.

- 5 Correct answer: A** the production process may become dependent upon a particular worker

If a production process becomes too dependent upon a particular worker and the worker leaves the firm, or is absent from work, then the production process will slow down and productivity will fall. Options B, C and D are all advantages of specialisation of labour to a firm.

- 6** Explanations might include:

- Career prospects (1) — a job may provide opportunities for progression/advancement (1), or a person may have to change jobs to be promoted (1).
- Level of education required (1) — some jobs require only minimal education, e.g. labouring, factory work (1), while other jobs require post-graduate levels of education, e.g. university professors, architects and dentists (1).
- Length of training required (1) — jobs such as cleaning or shop work require few skills (1), while other jobs such as engineers, pilots, lawyers and accountants require many years of training (1).
- Level of danger involved (1) — some jobs involve a high degree of risk (1), e.g. the fire service, window cleaning, erecting scaffolding, while others involve little risk, e.g. office-based jobs (1).
- Level of challenge (1) — some jobs are repetitive and boring (1) with low levels of responsibility (1) while others require thinking skills and a greater level of responsibility (1).

- Personal satisfaction gained from the job (1) — the degree of job satisfaction will influence how long a person stays in a job (1), e.g. if a worker feels happy or respected for what they do, they may be motivated to work harder (1).

7 Explanations might include:

- The provision of training and education (1) for workers to increase their skills and enable them to develop new ones (1).
- The introduction of a national minimum wage (NMW) (1) or an increase in the NMW (1) to encourage more people to join the workforce (1).
- Lowering welfare payments to the unemployed (1) in order to encourage them to join the workforce instead (1).
- Increasing the retirement age (1) to increase the number of people in the workforce (1).
- Providing childcare facilities (1) to encourage more women to join the workforce (1).

8 Explanations might include:

- Earnings rise with experience (1) and therefore people aged 35–44 years typically earn significantly more than those aged 20–24 years (1), as shown in the table.
- People tend to reach the peak of their career in their mid-40s (1) and their wages tend to stay the same after that time. This might be due to lifestyle choices as younger people tend to be more ambitious (1), whereas those near retirement age do not want/need to work at such a fast, competitive pace (1).
- People tend to retire at or around 65 years old (1), so their earnings fall when they reach this age (1), as shown in the table.

9 Analysis of factors that might affect the demand for labour might include:

- The number of tourists (1) visiting Koh Lanta, as this will impact upon the number of workers required (1) to work in the hotel and tourism industries.
- Income levels in the rest of the world (1), which will impact upon the number of tourists visiting Thailand (1) — low incomes (perhaps due to a global recession) would suggest fewer overseas trips to places like Koh Lanta (1), thus negatively impacting the demand for labour (1).
- The cost of labour in Koh Lanta (1) — if the cost of labour is low compared to other capital inputs, more people will be employed in the tourism industry and vice versa (1).
- The productivity of workers (1) — as workers increase their productivity, e.g. through training (1), the demand for labour will be less as the output for each worker is greater (1).

Analysis of factors that might affect the supply of labour might include:

- The average wages and fringe benefits (1) that can be earned in the tourism industry as compared to other occupations and industries (1).
- The labour participation rate (1) in Koh Lanta or Thailand, e.g. the number of women in the workforce (1), the retirement age (1), the school leaving age (1) and the number of full- and part-time workers in the workforce (1).
- The availability of welfare benefits (1) in Koh Lanta, as it may prove more attractive for some people to claim welfare benefits rather than to work (1).
- The availability of alternative work in Koh Lanta outside of the tourism industry (1).

- The seasonal nature of the work — this might not appeal to some workers (1) because they need/want to find full-time employment rather than seasonal work in the tourism industry (1). These workers might move to other parts of Thailand to find work, thereby reducing the supply of labour in Koh Lanta (1).

10 Analysis of the advantages might include:

- Frederica becomes an expert in knitting (1) and therefore is more efficient and productive (1).
- The quality of her work may increase (1) and her expertise may gain her a reputation (1) for producing hand-knitted garments, so her work may be in great demand (1).
- Her potential earnings may increase (1) as a result of the above.

Analysis of the disadvantages might include:

- The work may become repetitive and boring (1) for Frederica and she may become demotivated, and her productivity may drop (1).
- She may become too specialised (1) and dependent on knitting, and if demand for hand-knitted garments decreases, she will earn less income (1).
- She may lose skills or be unable to develop skills in other areas (1) and lack flexibility in her work (1).

Workbook answers

19 Trade unions

- 1 Correct answer: C** there is high demand for toys produced in the factory

If there is high demand for toys produced in the factory then there will be a demand for workers to make the toys, so a pay rise may be justified. Option A is incorrect because if workers become less productive there is little justification to increase their wages. Option B is incorrect because if there are a large number of people willing to work in the factory, the labour supply is high, so there is no need to increase wages to keep people in the job. Option D is also incorrect because if inflation is low in an economy then it may be difficult for the trade union to negotiate a pay rise to cover the increased cost of living.

- 2 Correct answer: A** a higher rate of inflation

A higher rate of inflation will reduce the value of workers' wages in real terms and a trade union may ask for a wage rise to make sure that the wages increase alongside inflation. Option B suggests that there are surplus workers in the labour market willing to work; hence higher wages cannot be justified. Option C is incorrect because lower productivity would increase production costs to a firm, so higher pay would not be justified. Option D is incorrect because lower profits in an industry will not justify a wage increase.

- 3 Correct answer: D** work-to-rule

Options A, B and C are not examples of industrial action.

- 4 Correct answer: D** improve pay and working conditions for its members

Options A and B occur if negotiations do not bring about satisfactory solutions to work-related disputes and discussions. A trade union may call its members out on strike and may cause disruption to an economy, but these are not aims of a trade union. Option C is incorrect because, although action from trade unions may increase publicity for their members, it is not their main aim.

- 5 Correct answer: D** work-to-rule

In a work-to-rule, workers are working to the 'rules' of their contract. They are not committing any offences and therefore cannot face disciplinary action. Options A, B and C are all other forms of industrial action.

- 6** Collective bargaining is the process between members of a trade union (who elect a representative to meet with the management representatives of the firm or leaders of the industry) to negotiate improved terms and working conditions (1) on behalf of the members of the union (1). A collective voice is more powerful than each worker negotiating individually with an employer (1).

7 Reasons might include:

- Changes to legislation have reduced the powers of trade unions (1) so fewer people may have joined (1).
- Some people have a negative view of trade unions (1) and therefore have not become members (1).
- There has been a decline in the manufacturing industry (1), which was typically unionised (a job or trade which has a trade union to represent workers) (1).
- There has been an increase in employment in jobs that are not unionised (1) (a job or trade which has a trade union to represent workers), e.g. jobs in the retail sector (shop workers), office work, employment in small businesses (such as hairdressers) and independent shops.
- There has been an increase in part-time employment (1).
- There has been an increase in employment in professional jobs (1), which typically do not have a trade union as they are managed by professional organisations (1).
- Loss of jobs in the public sector (1), which is unionised, may have led to lower membership.

8 Explanations might include:

- More people are entering the workforce (1) so an increasing number of workers are likely to join a trade union (1).
- A large number of people are in low-paid jobs with poor working conditions (1), so union membership becomes more desirable (1).
- There are more people on flexible and part-time contracts (1) who require protection from a trade union (1).
- There is an increase in the wealth gap (the gap between rich and poor) (1), so people wish to attempt to achieve better pay and working conditions through union membership (1).

9 Functions include:

- Bargaining with employers (1) for pay rises and better terms and conditions of employment for their members (1).
- Ensuring equipment at work is safe to use (supported by health and safety legislation) (1) and that workers are given sufficient training to enable them to perform their role at work safely (1).
- Giving support to members (1) when they are made redundant (1).
- Providing financial and legal support (1) to workers who may have been unfairly dismissed or disciplined (1).
- Persuading the government to pass legislation in favour of workers (1), such as legislation covering minimum wages, maximum working hours, health and safety, pension rights and the retirement age (1).

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Benefits of trade unions to an economy include the following:

- Better pay and working conditions for workers may lead to improved efficiency and higher productivity in the economy.
- Trade unions provide a channel of communication between employees, employers and governments, and this may lead to better relationships between these parties. This helps to improve motivation and to reduce absenteeism at work, thus benefiting the whole economy.
- If trade unions negotiate a higher minimum wage then more people may be encouraged to work and the unemployment rate may fall.

Costs of trade unions to an economy include the following:

- Trade unions tend to ask for higher pay and better working conditions, which will increase costs to businesses, so fewer workers may be employed.
- Industrial action brought about by trade unions may cause disruption to the economy because of more working days lost or fewer hours worked.

Workbook answers

20 Firms

1 Correct answer: D tertiary

The tertiary sector of the economy includes firms that provide services to the general public and other firms.

2 Correct answer: A costs of production

Costs of production are not used to measure the size of a firm. In general, the larger the market share, sales revenue and number of employees, the larger the firm tends to be.

3 Correct answer: C opportunities to gain economies of scale

Only large firms have opportunities to gain economies of scale (cost savings from being able to operate on a larger scale).

4 Correct answer: D organic

When firms expand using their own resources, this is known as organic or internal growth.

5 Correct answer: A external

External economies of scale arise due to the location of the firm, so are enjoyed by all firms in the same industry. By contrast, internal economies of scale (Option C) are gained by the firm itself, rather than the industry as a whole.

6 Diseconomies of scale occur when average costs of production start to increase (1) as the size of a firm increases (1). Hence, the disadvantages of growth start to outweigh the advantages (1).

7 Examples of external economies of scale include:

- availability of skilled labour (1)
- the reputation of the geographical area (1)
- access to transportation networks (1)
- proximity to related firms (1)

8 A franchise involves a person or business buying a licence (1) to trade using another firm's name (1), logos (1), brands (1) and trademarks (1).

9 A backward vertical merger occurs when a firm merges with another firm at an earlier stage of production (1), such as when a firm from the tertiary industry merges with a firm operating in the secondary or primary sector (1).

A forward vertical merger occurs when a firm from the primary sector merges with a firm in the secondary or tertiary sector (1), or when a firm from the secondary sector of industry merges with a firm operating in the tertiary sector (1).

10 Explanations might include:

- Small firms have limited start-up capital (1), which makes it difficult to raise finance to compete (1).
- Small firms have the largest risk of business failure (1), as they face intense competition from the vast number of other small firms that exist (1).

- The presence and intensity of competition from larger and more established firms (1) often poses a huge challenge for the survival of smaller firms (1).
- Small business owners suffer high workload and stress levels (1) as they often have to do everything on their own (1).
- Small firms often suffer from a lack of continuity (1), so the running of the business can be jeopardised if the owner is not there (1), perhaps due to illness.
- Small firms have higher unit costs of production (1) as they are unable to benefit from economies of scale (1), so this limits their competitiveness and profits (1).

Workbook answers

21 Firms and production

1 Correct answer: D money

The four factors of production are land, labour, capital and enterprise. Money is an example of capital (man-made goods used to produce other goods and services). Other examples include tools, machinery, vehicles, computers, factories and roads.

2 Correct answer: C carbonated soft drinks

Labour-intensive production requires spending proportionately more on labour than any other factor of production. Options A, B and D require intensive use of labour, whereas Option C relies on capital-intensive technologies for mass production.

3 Correct answer: D productivity

Productivity measures how well resources are used in the production process, e.g. labour productivity measures the efficiency of the workforce in terms of output per worker.

4 Correct answer: C innovation

Innovations such as tablet computers and smartphones have transformed the way many people work, for example. Innovation is an important source of productivity.

5 Correct answer: B derived demand

Factors of production are demanded for their use in the production process of creating output of goods and services. The demand for these goods and services determines the demand for the factors of production needed.

6 Capital-intensive production refers to a firm using and spending proportionately more money on capital (1) than any other factor of production (1).

7 Derived demand means demand for any factor of production is dependent on the demand for the goods and services that they are used to produce (1), rather than being demanded for itself (1). For example, bakers are demanded for the bread they bake (1), not for the sake of hiring bakers.

8 Productivity is a measure of how well resources are used in the production process (1).

Investment expenditure, such as automation or more capital-intensive technologies (1), helps to improve the productivity of resources such as labour (1). For example, internet technologies have raised the productivity of workers in multiple industries that are able to use e-commerce (1).

9 a Monthly sales per worker at Morganics Cars = $\$284,850 \div 5 = \$56,970$ (1)

Monthly sales per worker at Agent Cars = $\$366,440 \div 8 = \$45,805$ (1)

b The sales team at Morganics Cars is more productive (1) as the average sales person sells an extra \$11,165 worth of cars (1).

c Although Morganics Cars has higher productivity as measured by monthly sales per worker (1), Agent Cars might be considered to be more productive as each sales person sold a greater number of cars (1) in the same time period:

- Morganics Cars sold an average of 3 cars per worker (15 cars sold between 5 sales staff) (1).

- Agent Cars sold an average of around 3.75 cars in the same time period (30 cars sold between 8 sales staff) (1).

Hence Agent Cars sold more cars per worker.

Also, the data do not provide any information on the typical price of the cars being sold, e.g. Morganics Cars have an average price of \$18,990 ($\$284,850 \div 15$) compared to Agent Cars' average price of \$12,214.67 ($366,440 \div 30$), which might explain Morganics' higher sales revenue per worker (1).

Thus, the choice of measurement of productivity (1) can determine how efficient these firms are interpreted to be.

10 Explanations might include:

- A lack of productivity causes average costs to rise (1) and thus reduces the competitiveness (1), profitability (1) and chances of survival of the firm (1).
- High productivity helps firms to achieve economies of scale (1), further improving their competitiveness (1), profitability and chances of survival (1).

Workbook answers

22 Firms' costs, revenue and objectives

1 Correct answer: C rental payments

Irrespective of the level of output, the manufacturer has to pay rent for the land and/or building in which it operates. Electricity charges, overtime pay and wages are all dependent on the level of output, so are classified as variable costs.

2 Correct answer: B fixed

Fixed costs are those that have to be paid regardless of the firm's output or sales level. See page 155 in the textbook for an explanation of fixed costs.

3 Correct answer: C total costs

Total costs consist of both fixed and variable costs. So, the total cost = fixed costs when there is no output (meaning there are no variable costs of production). Hence, the total cost line intersects the y-axis at the value of the fixed costs.

4 Correct answer: C \$15

$$AC = TC \div Q$$

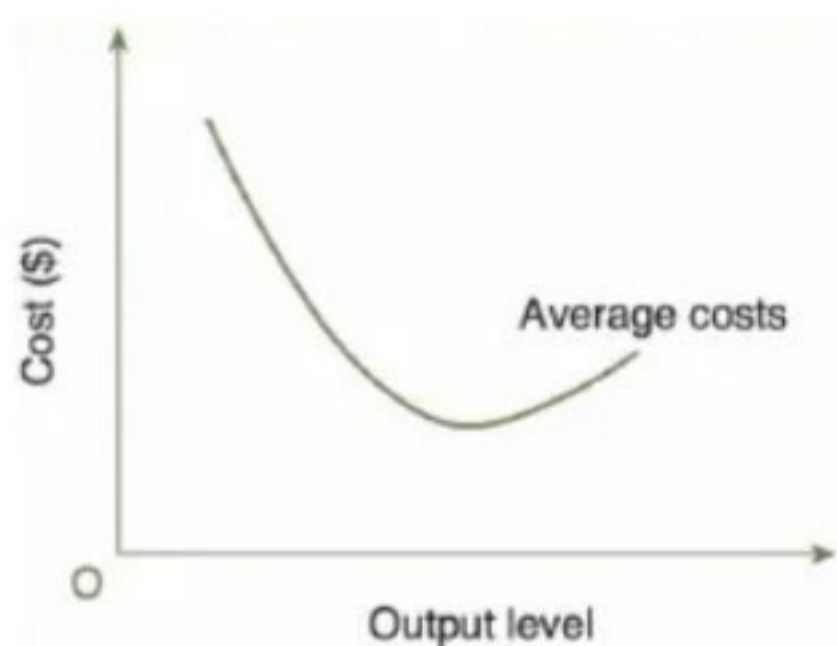
$$AC = (20,000 + 10,000) \div 2000$$

$$AC = \$15$$

5 Correct answer: B revenue

Salaries (Option C) are a form of financial payment to employees. They are a form of income (Option A), the collective term for the earnings of the four factors of production. Total costs (Option D) represent outflow of money from a business, whereas revenue (Option B) represents an inflow of money.

6



(1 mark for each correct label.)

7

Output (units)	Fixed costs (\$)	Variable costs (\$)	Total costs (\$)	Average costs (\$)
100	2000	400	2400	24.00
200	2000	760	2760	13.80
300	2000	1200	3200	10.67
400	2000	2320	4320	10.80

Hence, the output level with the lowest average costs of production is at **300 units of output**, where the average cost = \$10.67.

(1 mark for the working out and 1 mark for the correct answer.)

- 8 a Average cost is calculated by dividing the total cost by the quantity produced.

Quantity produced (units)	20	30	40	50
Total cost (\$)	200	285	360	460
Average cost (\$)	10.0	9.5	9.0	9.2

Hence the level of output required to minimise average costs is **40 units**.

(1 mark for the working out and 1 mark for the correct answer.)

- b Profit is calculated by taking away total costs from total revenue (which is calculated by multiplying the price by the quantity sold), i.e. profit = (price × quantity) – total costs.

Quantity produced (units)	20	30	40	50
Total revenue (\$)	20 × 20 = \$400	20 × 30 = \$600	20 × 40 = \$800	20 × 50 = \$1000
Total cost (\$)	200	285	360	460
Profit (\$)	200	315	440	540

Hence, the level of output required to maximise profits is **50 units**.

(1 mark for the working out and 1 mark for the correct answer.)

- 9 a The price (or average revenue) is calculated by dividing the total revenue by the level of output. For instance, \$4500 is earned from selling 300 tons, so the price is: $4500 \div 300 = \text{\$15 per ton}$.

(1 mark for the working out and 1 mark for the correct answer.)

b To calculate average costs, divide total costs by the level of output:

Output (tons)	Total cost (\$)	Average cost (\$)
0	1000	—
100	2000	20
200	2800	14
300	3600	12
400	5200	13

Hence, average costs are minimised at **300 tons of output**.

(1 mark for the working out and 1 mark for the correct answer.)

c Profit is calculated by taking away total costs from total revenue:

Output (tons)	Total cost (\$)	Total revenue (\$)	Profit (\$)
0	1000	0	(1000)
100	2000	1500	(500)
200	2800	3000	200
300	3700	4500	800
400	5200	6000	800

(1 mark for the working out and 1 mark for completing the table.)

10 a Total costs = fixed costs + variable costs = \$8000 + (\$3 × 20,500) = **\$69,500**

(1 mark for working out and 1 mark for the correct answer.)

b Average costs = total costs / output

$$AC = 69,500 / 20,500 = \mathbf{\$3.39}$$

(1 mark for working out and 1 mark for the correct answer.)

c Profit = total revenue – total costs

$$(5.5 \times 25,000) - [(\$3 \times 25,000) + 8000] = \$137,500 - \$83,000 = \mathbf{\$54,500}$$

or

$$[(\$5.5 - \$3) \times 25,000] - \$8000 = \mathbf{\$54,500}$$

(1 mark for working out and 1 mark for the correct answer.)

Workbook answers

23 Market structure

1 Correct answer: A barriers to entry

In a highly competitive market, barriers to entry will be very low and it will be relatively easy for firms to enter and leave the market. Options B, C and D are all characteristics of highly competitive markets.

2 Correct answer: C price taker

A monopolist is a price setter (or maker) because it has significant market power and controls enough of the market supply to enable it to charge higher prices. It is therefore not a price taker. Options A, B and D are all characteristics of a monopoly.

3 Correct answer: A consumer protection laws

Although consumer protection laws need to be observed, these laws apply to all publishers in the industry, not just those attempting to enter the industry. The consumer protection laws are unlikely to be a significant deterrent (barrier).

4 Correct answer: B monopoly

A monopolist is the sole supplier of a particular good or service. Monopolists are price makers, also known as price setters (Options C and D). A market leader (Option A) suggests there are other rivals in the industry. Besides, not all market leaders enjoy monopoly power.

5 Correct answer: D number of price takers and makers

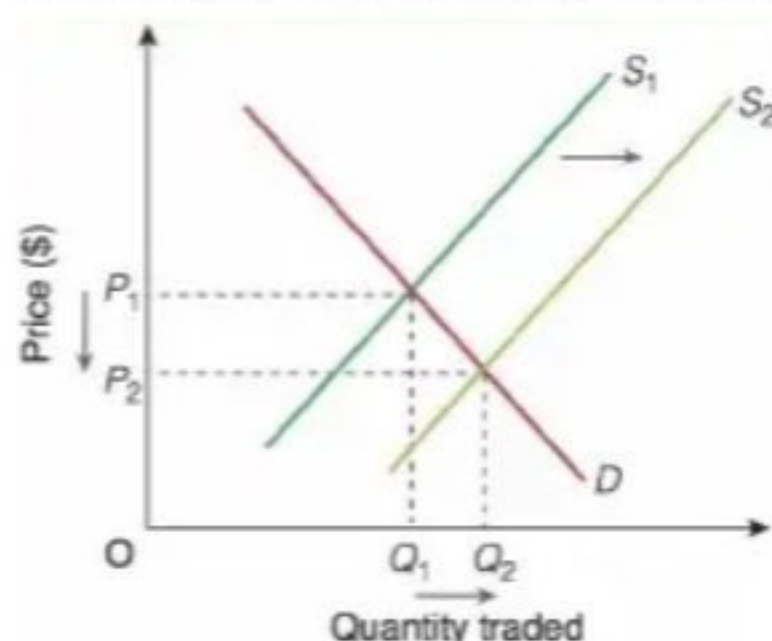
Option D is not a key characteristic of a market because a market will have firms that are either price takers or price makers. Options A, B and C are all key characteristics of a market.

6 Market structure refers to the key characteristics of a particular market (or industry) (1), such as the number and size of firms in the market (1), the degree and intensity of price and non-price competition (1), and the nature of barriers to entry (1).

7 Explanations might include:

- Monopolists can be inefficient (1) in allocating resources. In pursuit of profit they can restrict their range of products and/or charge higher prices (1), which negatively affects consumers (1).
- High barriers to entry can prevent new firms from setting up in the market (1), which reduces the degree of competition in the market (1) and allows monopolists to continue charging higher prices (1).
- Monopolists supply products with few substitutes, therefore demand is price inelastic (1). As monopolists are price makers (1), they can charge higher prices to maximise their profits from the relatively low PED (1).
- Consumers' imperfect knowledge (1) about the products and prices being charged by competitors enables monopolists to maintain market power (1).
- Monopolists have fewer incentives to innovate (1) due to the lack of competition (1).

- 8 Award up to 4 marks for a diagram that shows axes correctly labelled (1), the original demand and supply curves (1), original and new equilibrium price and quantities labelled (1) and a shift to the right of the supply curve (1).



Up to 2 marks for analysis: increased competition shifts the market supply curve outwards to the right (1) as more firms enter the market and the market supply increases (1). This causes the market price to fall from P_1 to P_2 and the equilibrium output to increase from Q_1 to Q_2 (1). The degree to which the supply curve shifts depends on the number of firms entering the market (1).

- 9 Analysis might include:

- A high degree of competition in a market tends to benefit consumers (1). This is because firms have to use non-price methods of competition to attract and retain customers. For example, customers may benefit from higher-quality products (1) and good customer service (1), and competitive firms may introduce promotional strategies, such as loyalty programmes (1), to retain customers.
- In addition, competition brings about greater choice (1) as firms try to differentiate their good or service from those of competitors, higher output (1) and more competitive prices (1).

- 10 Use the table below to assign marks.

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

Monopolies are always bad for consumers:

- Private sector monopolies may charge higher prices and produce lower output than competitive firms. In their pursuit of profit maximisation, monopolists can restrict the output of a product and/or charge a higher price for it. This creates a loss in the welfare of consumers.
- As there are no substitutes for the products supplied by monopolists, demand is price inelastic. As monopolists are price makers, they can charge higher prices to maximise profit from the relatively low PED.
- High barriers to entry prevent new firms from setting up in the market. This limits the degree of competition, so ensures monopolists can continue to charge relatively high prices.
- Customers and rival firms do not have easy access to information about the products and the prices being charged by competitors. For example, mobile phone network providers use very confusing pricing packages for their services. Similarly, banks offer a variety of interest rate charges for their various types of loan. Imperfect knowledge about prices and products means that consumers and competitors may not necessarily make rational choices.
- Monopolists may have less incentive to innovate than firms in competitive markets. The lack of competitive pressures means that monopolists can become complacent (as there is no need to be worried about competition), rather than focus on innovations to ensure their survival.
- Customer service may be poor as monopolists have no incentive to improve the level of service because they have no competition. For example, a rail company with no competition may provide an unreliable service.

Monopolies are not always bad for consumers:

- As monopolists control market supply, they operate on a very large scale and benefit from huge economies of scale, i.e. lower average costs of production as the scale of output increases. This means monopolists can supply larger quantities of output and at lower prices. Such market power can be a source of international competitiveness against foreign competitors.
- Monopolists have the financial resources to invest in research and development and as a result generate new ideas, products and production processes. Innovation can therefore act as a source of profit and improve the productive capacity of the economy. For example, Apple's innovative products such as the iPhone and iPad have made the company one of the most valuable businesses on the planet.
- Natural monopolies can eliminate wasteful competition in situations where it makes economic sense to have one monopoly supplier in the market. For example, it makes sense to have one provider of postal services in a town, state or country rather than allowing private sector firms to compete to provide such services. This is because profit-seeking firms may not have much of a financial incentive to provide services in remote areas of the country and a single provider can gain huge economies of scale. The same applies to suppliers of water pipes, railway tracks, telephone lines and electricity grids.

Workbook answers

24 The role of government

1 Correct answer: C local government

Local government collects taxes from local communities or municipalities to fund local public services, such as refuse (rubbish) collection, street lighting, local libraries and public parks.

2 Correct answer: D tariffs and excise duties

Tariffs and excise duties are sources of government revenue, rather than uses of government revenue. Tariffs are taxes on imported goods and services. Excise duties are taxes imposed on locally produced products, such as alcohol and tobacco.

3 Correct answer: D trading bloc

A trade bloc is a group of countries that form an agreement to promote free international trade and the free movement of factors of production (such as labour) between member countries.

4 Correct answer: B international government

The Paris Agreement is a treaty (agreement) signed by most governments around the world to protect the natural and ecological environment.

5 Correct answer: D supply-side policies

Supply-side policies, such as education and healthcare, are used to achieve economic growth through increasing the productive capacity of the economy in the long run.

6 Fiscal policy is the use of taxation and government spending (1) to affect macroeconomic objectives (1), such as economic growth and employment (1).

7 The main macroeconomic aims that national governments strive to achieve are:

- stable price levels, i.e. to control inflation (1)
- economic growth (1)
- employment, i.e. low unemployment (1)
- balance of payments equilibrium (1)
- reducing income and wealth inequalities (1)
- protecting the natural and ecological environment (1)

8 Explanations might include:

- To boost economic growth (1) — zero income tax rates lead to higher disposable incomes (1) and hence increased consumption (1) in the economy.
- To increase incentives to work (1) — zero income tax rates make working more attractive (1) as workers retain more of their income (1), leading to increased consumption in the economy (1).
- To encourage risk taking and entrepreneurship (1) — zero income tax rates make it easier for entrepreneurs to start up new businesses (1) as more money of their money is available to invest (1), which boosts economic growth (1).
- To encourage multinational companies to set up business in these countries (1) — MNCs will be able to hire more workers and/or pay existing workers more (1).

9 Explanations might include:

- Government facilitates international trade negotiations on behalf of the country (1), as modern economies need to trade with other countries (1).
- Government intervention might also be required to prevent the country being exploited by other nations (1). Governments can influence this through tariffs and quotas (1).
- The government can promote tourism in the country (1) in order to raise spending in the domestic economy (1), which can have a positive impact on jobs (1).
- The government can work with other governments and international agencies to develop global issues (1), such as trade relations (1), or international standards for the protection of the environment (1).

10 a Explanations might include:

- Cutting direct tax rates would boost demand/spending in the economy (1), which would actually raise more indirect tax revenues for the government (1).
- It would increase incentives to work (1), meaning that more people would be paying income tax (1).
- It would encourage more multinational companies (MNCs) to set up business in these countries (1), which would boost overall tax revenues compared with having fewer MNCs in the country (1).
- It would discourage tax avoidance (1) and/or tax evasion (1), which boosts overall tax revenues (1).

b Use the table below to assign marks.

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

Answers should acknowledge that imposing corporate taxes may discourage some MNCs, but should also consider factors why they might not, such as the following:

- Corporate taxes may still be lower than in other countries.
- Demand in the economy may be increasing, thus creating incentives for MNCs to set up in the country.

- Access to larger consumer markets may offset the impact of corporate taxes.
- There may be government grants, subsidies and other financial incentives to entice MNCs.
- Availability of cheaper and/or more productive labour can also attract MNCs.

Workbook answers

25 The macroeconomic aims of government

1 Correct answer: A economic growth

Economic growth occurs when there is an increase in a country's real GDP over a period of time.

2 Correct answer: C inflation

Inflation is calculated by measuring changes in the average price level of a representative basket of goods and services purchased by a typical household. These items are statistically weighted to form a price index, in order to measure inflation.

3 Correct answer: D inflationary pressures

With higher rates of economic growth, spending in the economy rises, hence creating inflationary pressure in the economy. It is not possible to determine whether the balance of payments will go into deficit (Option A) from the limited information. Economic growth creates employment opportunities (Option B) and the extra spending in the economy generates more tax revenues (Option C).

4 Correct answer: D provision of welfare services

Depending on the economic system in a country, not all governments strive to provide welfare services. In a free market economic system, resources are allocated based on the market forces of demand and supply with minimal government intervention.

5 Correct answer: A investment

Only the government can impose regulations and taxes on private sector firms (Options B and D), and it approves or gives subsidies (Option C) to encourage output. Both public and private sector firms can use investment expenditure to influence output. Hence, investment is not exclusive or explicit to the government.

6 Full employment means that everyone in a country who is willing and able to work (1) has a job (1), i.e. any unemployment that exists is voluntary only (1).

7 Real GDP refers to the value of national income (GDP) (1) adjusted for inflation (1) to reflect the true value of goods and services produced in a given year (1).

8 Over time, as an economy grows, the gap between the rich and poor tends to widen (1), such as earnings of top executives in the corporate world compared to low-income workers earning the minimum wage (1). This causes greater income inequalities in the economy (1), so the government intervenes to redistribute income to low-income households (1) to minimise extreme poverty (1) and raise standards of living (1).

9 Price stability refers to the control of inflation in the economy (1). Low and sustainable rates of inflation are vital in order to achieve stable economic growth (1) and social wellbeing (1). For example, inflation reduces the international competitiveness of a country (1) as its prices will be relatively higher. This will lead to lower export sales (1), thus causing potential job losses (1).

- 10 a** A subsidy is a form of government financial assistance (1) to help cut production costs of domestic firms (1), enabling them to compete against foreign producers (1).
- b** Inflation is the sustained rise in the general level of prices (1) of goods and services over time (1), as measured by a consumer price index (1).
- c** Subsidies help to reduce costs of production (1), thus enabling firms to keep their prices unchanged (1). It might even be possible for firms to pass on some of these cost savings to customers in the form of lower prices (1), thereby curtailing inflation (1).
Diagrammatically, subsidies would cause a rightwards shift of the supply curve for the given products (1), resulting in lower prices (1), and hence reduce inflation (1).

Workbook answers

26 Fiscal policy

1 Correct answer: B direct tax

Direct taxes are imposed on earnings, such as income and profits. Corporate tax (Option A) and income tax (Option C) are examples of direct tax.

2 Correct answer: C reducing taxes and raising government expenditure

To expand (boost) the economy, fiscal policy can be used by reducing taxes (to encourage consumption expenditure) and raising government spending (which fuels economic activity).

3 Correct answer: D reduce taxes and reduce interest rates

By reducing taxes, consumer demand should be encouraged as households have more disposable income. Cutting interest rates also enables households and firms with existing loans to spend more money and encourages new borrowing which also boosts national output and employment. Option A is a supply-side policy.

4 Correct answer: D Lower interest rates increase the spending ability of households and encourage firms to invest more.

Reducing interest rates can indeed create more spending power (as households with existing loans and mortgages have more disposable income), but this is monetary policy. Fiscal policy involves changes to taxes and government expenditure.

5 Correct answer: C when government revenues exceed public expenditure

The government will have a budget surplus if it spends less than the sum of its sources of revenue. Options A and B refer to the balance of payments, not the budget itself.

6 Explanations might include:

- To redistribute income and wealth (1) so that the less privileged have access to basic needs and wants (1), thus raising living standards in the economy (1).
- To reduce or alleviate poverty (1) by spending on welfare benefits for the poor (1) or providing them with basic housing and shelter (1).
- To provide public goods and services (1), such as street lighting, public libraries, schools, hospitals, national parks and affordable housing (1).
- To steer the economy out of recession (1) by increasing government spending in the domestic economy (1).

7 Explanations might include:

- To boost investment expenditure in the economy (1) as firms have more retained profit due to the zero-rate tax (1).
- To encourage multinational companies (1) to set up in these countries due to the absence of taxes on company profits (1).
- To increase incentives to work (1) as firms are able to hire more workers and/or pay existing workers more (1).
- To encourage risk taking and entrepreneurship (1), thereby improving the productive capacity of the economy (1) and enhancing the country's international competitiveness (1).

8 a

Income level (\$)	Tax rate (%)	Amount of tax paid (\$)
\$10,000	0%	First \$10,000 is tax free = \$0
\$10,001–\$50,000	12%	Next \$40,000 is taxed at 12% = \$4800
\$50,001+	17%	Remaining \$30,000 is taxed at 17% = \$5100
Total tax:		\$9900

(1 mark for the correct answer and 1 mark for showing the working out.)

b Average tax rate = total tax ÷ income

$$\$9900 \div \$80,000 = 12.37\%$$

(1 mark for the correct answer and 1 mark for showing the working out.)

9 a Supply-side policies are long-term measures to increase the productive capacity of the economy (1), leading to an outward shift of the production possibility curve (1).

b Analysis might include:

- Fiscal policy can provide incentives to work (1), e.g. lower incomes taxes and lower welfare benefits create incentives for people to work (1).
- It can encourage investment expenditure (1), e.g. lower corporate taxes enable firms to invest more, helping to improve the economy's productive capacity (1).
- Greater government spending on infrastructure (1) would help to attract foreign investment (1) and improve operational efficiency in the economy (1).
- Human capital expenditure on education and training (1) can improve labour productivity (1) and enhance the international competitiveness of the economy (1).

10 a Contractionary fiscal policy is the use of lower government spending (1) and/or higher rates of taxes (1) in order to reduce the level of economic activity (1).

b Use the table below to assign marks.

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

Reasons why raising income taxes is in the best interest of the economy include the following:

- Tax revenues are needed to improve the general welfare of the public.
- Tax revenues are needed to fund government spending on healthcare, infrastructure and national security.
- Without raising income taxes (in the cases of Andorra, Brunei Darussalam, Oman and Qatar), the government would need alternative sources of revenue and/or need to cut its overall level of spending.
- It helps to redistribute income and wealth in the economy, preventing inequalities in income and wealth from widening.

Reasons why raising income taxes is not in the best interest of the economy include the following:

- Raising income tax contracts the economy as households have less disposable income.
- It can create disincentives to work, as people have less disposable income due to the taxes.
- If spending in the economy drops, this could lead to a recession and job losses.
- It can discourage skilled workers from wanting to migrate to countries such as Andorra, Brunei Darussalam, Oman and Qatar for employment purposes.

Workbook answers

27 Monetary policy

1 Correct answer: D the money supply

The money supply refers to the amount of money in the economy at a particular point in time, consisting of coins, bank notes, bank deposits and central bank reserves.

2 Correct answer: C reducing interest rates by increasing the money supply

Increasing the money supply will tend to reduce the rate of interest due to the greater availability of money. This is an example of loose monetary policy, which is used to expand the economy by encouraging borrowing for consumption and investment expenditure.

3 Correct answer: D changes in tax rates

Changes in tax rates are an example of fiscal policy, not monetary policy. Changes in foreign exchange rates, interest rates and the money supply are all examples of monetary policy measures.

4 Correct answer: D lower interest rates

Lower interest rates discourage savings and encourage borrowing by firms and individuals. Hence, these individuals are more likely to spend more, helping to reduce unemployment in the economy.

5 Correct answer: D tight monetary policy

An increase in interest rates is an example of tight monetary policy as it constrains spending in the economy (in order to combat inflationary pressures) by making it more expensive to borrow money.

6 Monetary policy refers to the use of interest rates (1), exchange rates (1) and the money supply (1) to control macroeconomic objectives (1) and to affect the level of economic activity (1).

7 Governments might choose to reduce interest rates in order to boost economic activity (1) by expanding the money supply (1). This makes borrowing more attractive to households and firms (1) during times of high unemployment (1) or an economic recession (1).

8 Explanations might include:

- To reducing interest rates to stimulate the economy (1) during a recession (1) and to avoid high unemployment (1).
- To raise interest rates during a period of economic boom (1) in order to slow down the economy (1) or to prevent inflationary pressures (1).
- To intervene in the foreign exchange market (1) to influence GDP and economic stability (1).

9 The supply side of the economy is concerned with its long-term productive capacity (1). A cut in interest rates makes it more affordable for firms to borrow (1) in order to boost investment in the economy (1). Higher investment expenditure will, in the long run, improve the productive capacity of the economy (1).

10 Use the table below to assign marks.

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

The effectiveness of monetary policy in achieving economic growth depends on several factors, such as:

- the magnitude of the change in interest rates
- other factors affecting economic activity, which is not dependent only on interest rates
- consumer and producer confidence levels, which can make matters less certain or even destabilising for the economy
- the state of the economy, such as the degree of severity of a recession
- time lags following changes in interest rates and changes in the economy
- lower interest rates used to achieve economic growth, which can conflict with other macroeconomic goals, such as inflationary pressures

Workbook answers

28 Supply-side policy

1 Correct answer: B privatisation

Privatisation is a type of supply-side policy (Option D).

2 Correct answer: D reducing taxes and raising government expenditure

Reducing taxes and raising government expenditure are examples of fiscal policy, not supply-side policy.

3 Correct answer: A deregulation

Deregulation refers to the reduction or removal of barriers to entry in order to make markets more competitive and efficient.

4 Correct answer: C labour market reforms

Labour market reforms involve making changes to create more incentives to work, such as reforming welfare benefits or minimum wage laws.

5 Correct answer: D supply-side policies

Supply-side policies are long-term strategies of the government aimed at increasing the productive capacity of the economy by using policies to improve the quality and/or quantity of factors of production.

6 Supply-side policies are long-term strategies aimed at increasing the productive capacity of the economy (1). This helps to raise gross domestic product (1) and create employment opportunities (1). In the long term, supply-side policies also help to improve the competitiveness of the country (1) by investment in education and training, research and development, and infrastructure (1).

7 Explanations might include:

- The government could increase spending on education and training (1), to develop a more knowledgeable workforce with better skills and hence productivity (1), which is likely to improve the productive capacity of the economy (1).
- It could introduce labour market reforms (1) such as reducing or removing the power of trade unions (1), unemployment benefits (1) or minimum wages (1), to promote greater competition by having a more flexible labour market (1).
- It could lower direct taxes (1) to create more incentives to work (1), which will improve the productive capacity of the economy (1)
- It could introduce deregulation (1) to reduce or remove the barriers (1) to entry to make markets more competitive (1).
- It could provide tax incentives to stimulate firms to invest in the economy (1), in order to maximise their profits in the long run (1). Greater investment will lead to more competitive markets (1).
- It could introduce privatisation (1) where state-owned businesses are sold to the private sector so they can be run more efficiently (1), increasing the competitiveness of the economy (1).

8 Explanations might include:

- The government can increase its spending on education and training (1) or research and development (1), which improves the quality of the economy's labour force.
- It can introduce labour market reforms (1), such as deregulating labour union bureaucracies (1), which makes it more efficient for companies to operate (1).
- It could lower corporate taxes (1), which will help companies maximise their profits in the long run (1).
- It could investment in infrastructure (1), allowing firms to benefit from greater operational efficiency (1).

9 Labour market reforms involve making labour markets more flexible (1), in order to achieve greater productivity and efficiency (1). Such reforms stimulate competition (1) through the removal of rigidities and bureaucracies in labour markets (1), e.g. excessive and complex employment legislation (1) or the threat of strike action (1), which would hinder economic efficiency.

10 Use the table below to assign marks.

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

Relevant points include the following:

- Supply-side policies can be used to achieve sustainable economic growth and employment by increasing the productive capacity of the economy.
- As supply-side policies increase the productive potential of the economy, they help to prevent the general price level (inflation) from rising beyond control, thereby fostering economic stability.
- By creating incentives to work, supply-side policies can help to reduce income and wealth inequalities (to some extent at least).
- However, supply-side policies take time to reap the benefits. For example, it might take decades for a nation to get the benefits of an improved education system or infrastructure in the country, thus limiting the effectiveness of achieving macroeconomic goals in the short run.

Workbook answers

29 Economic growth

- 1 **Correct answer: C** an increase in the productive capacity of an economy

An increase in the productive capacity of the economy enables the country to boost its gross domestic product (GDP), thereby leading to economic growth.

- 2 **Correct answer: D** real GDP per capita

Economists use real GDP per capita (calculated as GDP adjusted for inflation, divided by the population size) as a measure of economic growth.

- 3 **Correct answer: C** infant mortality rates

With economic growth, standards of living in the country tend to rise, so infant mortality rates will decline. With higher national income, it is likely that the average number of years children attend school will rise, as will employment opportunities and GDP per capita.

- 4 **Correct answer: D** resource depletion

With rapid economic growth, there is huge demand for the consumption of the world's scarce resources, i.e. growth is not necessarily sustainable. Whilst costs might increase (Option A), this is not necessarily a problem (not all inflation is harmful). Higher tax revenues (Option B) can be beneficial for the economy. Increased demand for imports (Option C) might not necessarily be a concern, especially if rapid economic growth is fuelled by higher export earnings.

- 5 **Correct answer: B** lower government spending

Lowering government spending will tend to decrease economic growth. Increased spending on education (Option A) will lead to more employment opportunities in education in the short run and a more skilled workforce in the long run, both of which will contribute to economic growth. Lower income tax rates (Option C) will increase disposable income and should lead to more spending and therefore to more economic growth. Lower interest rates (Option D) will encourage borrowing, less saving and more spending, and this should also lead to more economic growth.

- 6 A recession occurs in the business cycle (1) when there is a fall in a country's gross domestic product (GDP) for two consecutive quarters (1). A recession is associated with a decline in consumption, investment and net exports (due to falling export earnings) (1).

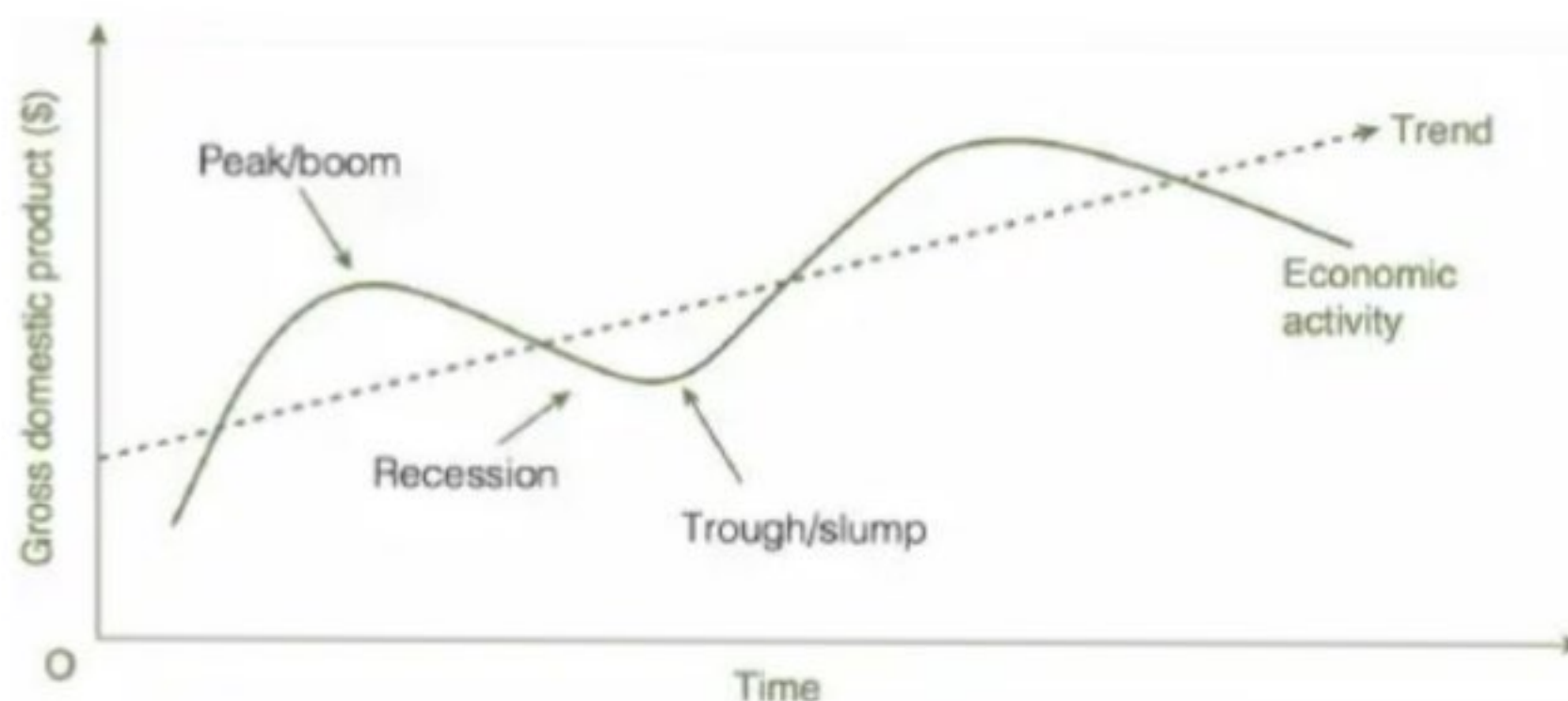
- 7 Net exports are the numerical difference between the value of a country's exports (X) and its imports (M) (1). $X - M$ (1). X measures the monetary value of all goods and services sold to foreign buyers (1), whereas M measures the monetary value of all payments for imported goods and services (1).

- 8 Explanations might include:

- Factor endowments, e.g. natural resources (1). Extraction and exploitation of natural resources will lead to employment opportunities (1) and economic growth (1).
- Size, skills and mobility of the labour force (1). The greater the size and mobility of the labour force, the more productive it is (1), which will lead to economic growth (1).

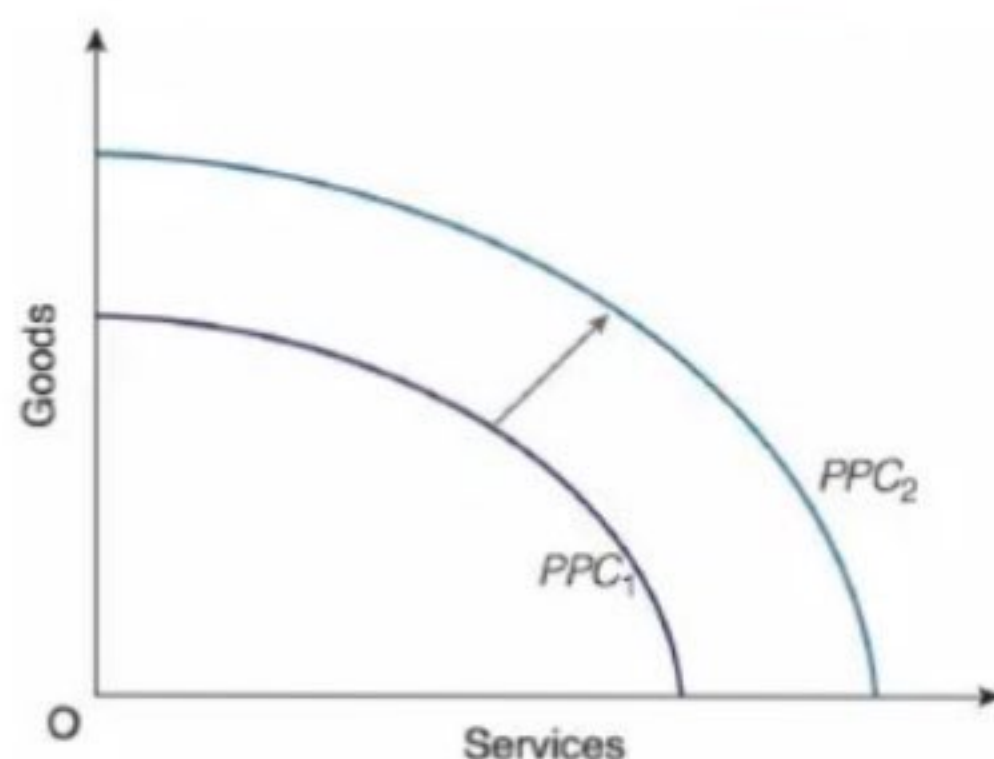
- Labour productivity (1). Higher labour productivity will lower costs for firms and enable them to grow (1). This will lead to employment opportunities and economic growth (1).
- Investment expenditure (1) by firms will lead to employment opportunities and economic growth (1).

9



(1 mark for each correct label.)

- 10 a An accurately drawn and labelled diagram (1) should show the original PPC (1), a new PPC curve (1), and an outward shift of the PPC curve (from PPC_1 to PPC_2) (1). The PPC has shifted outwards due to the introduction of the internet café (1), which has helped farmers and villagers to increase their productivity (1)



- b Explanations might include:

- Farmers can get better prices for the produce (1) because they know the market where they can get the best price for their goods (1).
- Farmers can learn new farming techniques (1) to improve yields and cut costs (1).
- Villagers can acquire funding for new and existing businesses (1) which will encourage entrepreneurship (1) and they can purchase capital equipment and machinery (1) to increase output of goods and services (1).
- The internet enables villagers to learn about energy-saving techniques (1) and they can communicate with others and gather new ideas that can lead to increased output in the village (1).

Workbook answers

30 Employment and unemployment

1 Correct answer: B unemployment

In economics, unemployment occurs when people of working age are both able and willing to work but cannot find work.

2 Correct answer: D supply-side policies

Examples of supply-side policies that can rectify labour market imperfections include: investments in education and training, reduction in labour union powers, incentives to seek employment opportunities, and reforms to welfare benefits (such as unemployment benefits).

3 Correct answer: A cyclical unemployment

Cyclical unemployment is associated with an economic recession, which typically affects every industry. Page 211 in the textbook contains a description of the different types and causes of unemployment.

4 Correct answer: A 2.66 million

Unemployment rate = 7%

Working age population = 38 million

Unemployed total = $38\text{m} \times 0.07 = 2.66$ million people

5 Correct answer: B people changing jobs

Frictional unemployment occurs when people change jobs, causing temporary unemployment due to the time delay between leaving a job and finding or starting a new job.

6 The unemployment rate is a measure of the percentage (1) of a country's workforce that is out of employment (1).

7 Unemployment rate = $2.7\text{m} / (30\text{m} + 2.7\text{m}) \times 100 = 8.25\%$

(1 mark for the correct working out and 1 mark for the right answer.)

8 Cyclical unemployment, or demand-deficient unemployment, (1) is associated with a downturn in the economy. This occurs when there is insufficient demand in the economy (1) due to a recession, which affects almost all industries (1).

9 The International Labour Organization (ILO) measures unemployment by calculating the number of people of working age (1) who are both willing and able to work but cannot find employment (1).

10 Explanations might include:

- Greater national output (GDP) (1) — more products can be produced when more people are employed (1).
- Reduced poverty (1) — more people employed means there are less people without an income (1), and more tax revenues can be raised that might be spent on measures to reduce poverty (1)

- Increased tax revenue (from income tax and expenditure taxes) (1) — increased revenues could be spent on further improving the economy (1), e.g. investment in infrastructure or reducing a budget deficit (1).
- Reduced government spending on welfare benefits (1) — a government could use the money saved in this area to increase its spending in other areas (1), or to cut tax rates (1).

Workbook answers

31 Inflation and deflation

1 Correct answer: C lower rates of interest

Lower interest rates will make borrowing cheaper and boost household disposable income (e.g. those with existing bank loans and mortgages pay less interest on their outstanding debts). Thus, consumer and producer confidence levels should rise, causing greater economic activity and an increase in the inflation rate.

2 Correct answer: A Money loses its ability to act as a store of value.

Savers place their money in the bank in an attempt to gain some interest and to keep its value, i.e. to act as a store of value. Inflation reduces the value of money, even if it is placed in a savings account. People are generally less able to save during inflationary periods as they pay higher prices for goods and services.

3 Correct answer: A Food is considered to be more important to the average household than shoes.

Economists consider 'importance' to be determined by the percentage of household income spent on particular items, i.e. spending more on food means the typical household values food more than shoes. It is not possible to determine from statistical weights how much (the quantity) households buy (Options C and D) or the price (Option B).

4 Correct answer: A 1.39%

To calculate the rate of inflation, it is necessary to work out the percentage change in the CPI:
 $(116.8 - 115.2) / 115.2 \times 100 = 1.39\%$

5 Correct answer: A Year 1

The data show an overall increase in the CPI, so there has been inflation during the period shown. Prices were lowest in Year 1 when the CPI stood at 102.2 (i.e. 2.2% inflation from the base year), whereas the CPI is higher in all subsequent years. Although the rate of inflation drops from Year 2 to Year 3 (from 104.6 to 103.9), these figures are higher than the CPI in Year 1 (102.2).

6 The inflation rate is calculated by the percentage change in the CPI:

$$[(130.2 - 135.6) / 135.6] \times 100 = -3.98\%$$

(1 mark for the correct working out and 1 mark for the right answer.)

7 Inflation rate = $(121.1 - 125.5) / 125.5 = -3.5\%$

Hence, the price of the basket = $\$1500 \times 0.965 = \1447.50

(1 mark for the correct working out and 1 mark for the right answer.)

8 Explanations might include:

- It can use the CPI as a measure of inflation (1), e.g. where low and stable inflation is a government macroeconomic objective (1).
- It can use the CPI to make international comparisons (1) of inflation rates over time (1).
- It can use the CPI as a basis for interest rate (anti-inflation) policy (1), e.g. raising interest rates when there are inflationary pressures (1).

- 9 Weightings are based on the importance of the item (1) for the average household (1). This is determined by how much of household income consumers spend on the item (1). The greater the proportion spent on an item, the higher its weighting.
- Food and furniture are given different weightings as different proportions are spent on them (1) by the average household; a higher proportion of the average household's expenditure goes on food than on furniture (1).
- 10 a A retail prices index is used to calculate the rate of inflation in a country (1). Unlike the CPI, the RPI includes the cost of housing (1), i.e. it includes mortgage interest payments and other housing costs (1). It excludes low-income pensioner households (1) and very high-income households (1), as neither are regarded as being 'average' households in the economy (1).
- b The weight for food is 30 whilst for clothing it is 15 (1), i.e. the typical household spends 30% of its income on food costs, and just 15% on clothing (1). Hence, the average household in Satcolbe spends more money on food than it does on clothing (1).

c

Item	Price index	Weight	Weighted index
Clothing	120	15	$120 \times 0.15 = 18$
Food	130	30	$130 \times 0.3 = 39$
Housing	140	40	$140 \times 0.4 = 56$
Others	125	15	$125 \times 0.15 = 18.75$
Weighted RPI		100	131.75

(1 mark for the correct working out and 1 mark for the right answer.)