



ECONOMICS

0455/22

Paper 2 Structured Questions

May/June 2017

MARK SCHEME

Maximum Mark: 90

Published

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Question	Answer	Marks	Guidance
1(a)	Identify, using information from the extract, two reasons why a foreign diamond company may set up in Botswana. 1 mark each for each of two reasons identified: • supply of diamonds / largest producer of diamonds • cheap diamonds • educated labour force / developed education system • free healthcare • good infrastructure e.g. transport system • government encouragement • supporting (ancillary) industries e.g. diamond cutting	2	Do not accept subsidies.

Question	Answer	Marks	Guidance
1(b)	Explain two benefits that a country may gain from the presence of a foreign multinational company. 1 mark each for each of two benefits identified: • higher output / economic growth • higher employment • contribution to current account position • higher tax revenue • new technology introduced • encourage other MNCs to invest • increase competition • increase variety of products produced • train workers in new skills 1 mark each for each of two explanations given: • MNCs' output will count in the country's GDP / raise living standards • MNCs may employ workers from the country • MNCs may export products from the country • MNCs profits will be taxed / tax revenue can be spent on e.g. education • MNCs may use more advanced capital equipment • more MNCs can increase employment • increased competition may make domestic firms more efficient/more productive / lower prices • a greater variety of products will increase consumer satisfaction • more skilled workers will be more productive	4	Maximum of 2 marks for a list of benefits.
1(c)(i)	Calculate, using information from the extract, the value of diamonds produced in Botswana in 2015. \$6 billion (2). Correct method i.e. 33% of US\$18 billion (1).	2	Correct answer and \$ sign and billion/bn/b required for 2 marks. 6 + >000s = 1 mark

Question	Answer	Marks	Guidance
1(c)(ii)	Calculate, using information from the extract, the average price of a 1.5 carat diamond in 2015. \$10 000 (2). Correct method: \$8000 + 25% (1). OR \$10 875 (2). Correct method: \$8 700 + 25% (1). OR \$10 667 (\$10 666.66) (2) Correct method: \$8000 × 100 / 75.	2	
1(d)	Analyse why a country could have lower production costs for a particular good than another country. • It may have a more educated/skilled labour force (1) higher productivity/greater efficiency (1) lower wastage (1). • It may have more capital goods (1) may use more advanced technology (1) lower capital costs (1). • Its firms may be producing on a larger scale (1) taking greater advantages of economies of scale (1) example (1). • The government may subsidise the product (1) or tax the product less (1). • It may specialise in the product (1). • It may have easier access to raw materials / natural resources (1) and so raw materials/natural resources may be cheaper (1). • It may have a large supply of labour (1) with low wage rates (1). • It may have low transport costs (1) due to good infrastructure (1). • It may have a more favourable climate (1). • It may have a lower inflation rate than other countries (1). • It may have lower minimum wage (1) lowering wages cost (1). • It may have weaker trade unions (1) reducing bargaining power (1). • It may have a stronger currency (1) causing lower cost of importing raw materials (1).	5	Accept but do not expect reference to comparative/absolute advantage. Maximum of 3 marks for a list-like approach.

Question	Answer	Marks	Guidance
1(e)	Discuss whether Botswana should mine all its diamonds and sell them as quickly as possible. Up to 3 marks for why it should: • Increase income (1) and employment (1) and living standards now (1). • Increase government tax revenue (1) enabling government to spend more on e.g. infrastructure (1). • Increase export revenue (1) improving the current account position (1). • Demand may be high now (1) causing price to be high (1) causing greater incentive to supply now (1). • Demand may fall in the future (1) lowering prices (1) so income earned in the future may be lower in the future (1). • Higher output now may result in improved economies of scale (1) lowering costs (1). • Higher output may enable greater advantage to be taken of economies of scale (1) lowering average cost (1). Up to 3 marks for why it should not: • Will deplete stocks of diamonds (1) preventing diamond production in the future (1) there is a finite supply of diamonds (1). • Global demand may be low now (1) demand may be higher in the future (1). • Increase in supply may lower prices (1) which may reduce revenue (1). • Risk of relying on one product / one export / being too dependent on diamonds (1). • Advances in technology (1) may reduce costs of mining in the future (1). • May increase the risk of pollution (1) causing environmental damage (1). • In the long run employment (1) and GDP may be higher (1).	5	Reverse arguments may be awarded if justified by reference to short and long run. A response may develop a mixture of relevant points to achieve up to 3 marks on either side. Maximum of 2 marks for a list-like approach.
1(f)	Explain, using information from the extract and Fig. 1, what happened to the market for diamond rings in 2015. The diagram shows: • Demand increasing (1) price rising (1) • Supply extending/rising/higher quantity/more diamond rings (1) due to higher income or other valid reasons (1) • Demand is inelastic (1) • Supply is inelastic (1)	4	No marks for just stating the demand curve has shifted to the right or supply is unchanged.

Question	Answer	Marks	Guidance
1(g)	Discuss the economic arguments for and against providing free hospital treatment to patients. Up to 4 marks for why it should: • It may increase health (1) increase life expectancy/reduce death rate (1) improve living standards/economic development (1) • It would provide access to the poor (1) reduce poverty/provide a necessity (1) • The social benefit of hospital treatment is greater than the private benefit (1) provides external benefits (1) e.g. better quality/higher output/economic growth (1) higher labour productivity (1) may be under-consumed/under-produced (1) if left to market forces (1) people may not appreciate private benefits/benefits to themselves of hospital treatment (1) • People will have more money to spend on other items (1) Up to 4 marks for why it should not: • May increase government spending (1) opportunity cost (1) government spending on e.g. education could be higher (1) taxes may be higher (1) leading to demand-pull inflation (1) • Some of those treated could afford to pay (1) in this case not a good use of government funds (1) • May result in over-consumption (1) people seeking treatment who do not need it (1). • May reduce the work incentive of potential consumers (1) as people will need less income to pay for healthcare (1) • The quality of healthcare may fall (1) loss of profit motive (1) may reduce e.g. innovation (1) • May encourage people to take greater risks (1) e.g. eat less healthily (1). • Government could charge for healthcare/allow private sector to charge for healthcare to get more tax revenue (1) to spend on e.g. education (1) taxes could be lower (1)	6	A response may develop a mixture of relevant points to achieve up to 4 marks on either side. Maximum of 3 marks for a list-like approach.

Question	Answer	Marks	Guidance
2(a)	Identify the two human factors of production. Labour (1) entrepreneur/enterprise (1).	2	
2(b)	Explain two economic concepts shown by a production possibility curve diagram. 1 mark each for each of two concepts identified: - opportunity cost - scarcity/economic problem/unlimited wants and limited resources - choice - efficiency/full employment - specialisation - economic growth/the difference between actual and potential economic growth 1 mark each for each of two explanations given: - The curve shows that if more of one type of product is produced, less of another product can be made - The curve shows that there is a limit to the amount that can be produced with existing resources/maximum output of two products - The curve shows that more than one production point cannot be selected - Any point on the curve is efficient/any point inside the curve is inefficient - The curve shows the maximum amount of a product that can be produced if all resources are devoted to one good - Economic growth is shown by a shift to the right of the curve/actual growth is shown by a movement towards the curve and potential growth by a shift to the right	4	Maximum of 2 marks for a list-like approach. Only reward the use of a diagram if the concepts are clearly shown and linked to an explanation. Accept limited resources as an alternative to scarcity.

Question	Answer	Marks	Guidance
2(c)	Analyse why demand for a product may become more elastic over time. • More substitutes may be available for the product (1) due to more firms/more competition/more innovation/improved versions (1) which means people are more willing to switch to and from the product (1) • The product may be seen to be more of a luxury (1) and less of a necessity (1) • Demand becomes more price sensitive the higher the price (1) as the product becomes less affordable (1) • The product may become less habit forming (1) addictive products have price inelastic demand (1) • It may become easier to postpone purchasing the product (1) so a rise in price may result in more consumers delaying its purchase (1) • The product may take up a higher proportion of income (1) change in price would become more significant (1) • Demand will become more price sensitive as the price of complements rises (1) as the two products combined become less affordable (1)	6	Maximum of 3 marks for a <i>static</i> approach e.g. demand is elastic when there are substitutes.

Question	Answer	Marks	Guidance
2(d)	Discuss whether small firms can compete successfully against large firms. Up to 5 marks for why they might: • May provide a personal service (1) operate in a niche market (1) may be more in touch with consumers (1) may be more adaptable/flexible in response to changes in consumer demand (1) • May be subsidised by the government (1) which would reduce costs of production (1) allowing small firms to charge lower prices (1) • May be operating in an industry where economies of scale are not significant (1) or there are diseconomies of scale (1) raising average cost (1) example (max 2) • May be able to take advantage of external economies of scale (1) reducing average cost (1) example (max 2) Up to 5 marks for why they might not: • Large firms may benefit from economies of scale (1) enjoy lower average costs (1) example (max 2) • Large firms may take over small firms (1) may drive small firms out of business by charging lower prices (1) • Large firms may have more market power (1) use barriers to entry (1) drive firms out of the industry by e.g. using predatory pricing (1) • Large firms may be better known (1) have brand loyalty (1) • Large firms may have more finance (1) which may enable them to purchase more efficient capital/machinery/technology (1) spend more on advertising (1)	8	A response may develop a mixture of relevant points to achieve up to 5 marks on either side. Do not credit references to just 'costs' in relation to EoS/DoS. 1 mark may be awarded for small firms and large firms are able to charge lower prices, if explained separately. Maximum of 2 marks on each side of the discussion for a list-like approach.

Question	Answer	Marks	Guidance
3(a)	Identify two ways a commercial bank differs from a central bank. Features of a central bank include: • owned by the government • objective is to create price stability • only one in a country • issues note and coins • operates monetary policy/sets the rate of interest (base rate) • intervenes in foreign exchange markets to influence the exchange rate • lender of last resort to governments • owned by the government • supervises and regulates the financial system Features of a commercial bank include: • owned by shareholders/privately owned • objective is to make a profit • there are usually many commercial banks in a country • exchanges foreign currency • accepts deposits from households and firms • lends to households and firms • provides insurance services to households and firms	2	Up to 2 marks for two features of a central bank, or of a commercial bank, or a combination of both.
3(b)	Explain the connection between opportunity cost and the purchase of shares. The (next) best alternative (1) forgone/sacrificed (1). Instead of buying shares people may buy something else (1) example of what the money may be used for instead e.g. putting money in a bank/buying other goods and services (1).	4	

Question	Answer	Marks	Guidance
3(c)	Analyse how a fall in the rate of interest may affect a country's exchange rate. A fall in the rate of interest may increase demand/spending (1) increasing the demand for imports (1) the higher demand may result in products being diverted from the export market to the domestic market (1) increased spending on imports will increase the supply of the domestic currency (1) lower revenue from exports will reduce the demand for the domestic currency (1) price of currency will fall (1). A fall in the rate of interest may discourage foreigners from putting money into the country's banks (1) this will reduce demand for currency (1) some domestic residents may decide to move funds abroad (1) this will increase the supply of the currency (1) the price of the currency will fall (1). A fall in the rate of interest may encourage firms to invest/attract foreign firms to invest in the country (1) spend more on capital goods (1) increase efficiency (1) increase exports (1) increase demand for the currency (1) raise exchange rate (1).	6	The focus is on <i>how the exchange rate is affected</i> , not the effects of a change in the exchange rate.

Question	Answer	Marks	Guidance
3(d)	Discuss whether an increase in spending on capital goods will help to achieve the aims of government policies. Up to 5 marks for why it might: Higher spending on capital goods/investment: • may increase total demand (1) raise productivity (1) and increase total supply/productive potential/output (1) resulting in economic growth (1) • may reduce costs of production (1) introduce new technology (1) may improve the quality of products (1) may make products more internationally competitive (1) increasing exports (1) improving the current account position (1) • may mean firms will need more workers e.g. to operate machinery (1) reducing unemployment (1) • may raise productivity (1) reducing unit costs of production (1) which may lead to a reduction in the average price level (1) leading to lower inflation (1) • may increase tax revenue (1) which could enable the government to re-distribute income from the rich to the poor (1) Up to 5 marks for why it might not: • Capital goods may not be used (1) leaving output unchanged (1) • Capital goods may replace workers (1) causing unemployment (1) • Other countries may spend more on capital goods (1) making the country less internationally competitive (1) increasing a current account deficit (1) • In the short run, higher spending on capital goods may increase total demand (1) causing inflation (1) • In the short run, producing more capital goods may be achieved with an opportunity cost (1) of fewer consumer goods (1)	8	A response may develop a mixture of relevant points to achieve up to 5 marks on either side. Maximum of 2 marks on each side of the discussion for a list-like approach.

Question	Answer	Marks	Guidance
4(a)	What is meant by ‘redistribution of income’? Taking income from one group e.g. from the rich (1) and giving it to another e.g. to the poor (1). Creating greater equality/reducing inequality/reducing gap between rich and poor (1). May be achieved by using progressive taxation/state benefits (1).	2	No marks for ‘distribute income equally’.
4(b)	Explain two reasons why the rich spend more in total than the poor. - greater income (1) means the rich have more purchasing power (1) - greater wealth/savings (1) which generates income to spend/ e.g. interest, dividends, capital gains (1) - greater ability to borrow (1) because banks are more willing to lend to the rich/the rich have more collateral (1) - more confidence (1) because the rich may expect that their purchasing power will continue to be high (1)	4	Vice versa is acceptable. 1 mark each for each of two reasons identified (×2) 1 mark each for each of two explanations given (×2) Maximum of 2 marks for a list-like approach.
4(c)	Analyse why the elimination of absolute poverty would not solve the economic problem. - Absolute poverty is lack of access to basic necessities (1) example e.g. food/living below a certain income level e.g. \$1.25 (1) - The economic problem is unlimited wants (1) exceeding finite resources/scarce resources/scarcity (1) - Even if everyone had access to basic necessities, people would still want more products (1) e.g. better quality food (1) there would not be enough resources to meet people’s increasing wants (1) relative poverty will still exist/rich will still be able to spend more than the poor (1) - Over time what is considered to be absolute poverty is likely to change (1)	6	

Question	Answer	Marks	Guidance
4(d)	Discuss whether GDP per head is the best measure of comparative living standards. Up to 5 marks for why it may be: - Income / output is an important influence on living standards (1) income influences the quantity and quality of goods and services people can consume (1) the healthcare and education they can enjoy (1) - Higher GDP per head can increase tax revenue (1) which can be spent on items e.g. education which can increase living standards (1) - GDP per head takes into account the size of the population / it is an average (1) it is GDP divided by population (1) a rise in GDP matched by a rise in population would not mean that people are better off (1) - GDP per head is measured by all countries and so comparisons can be made (1) relatively easy to calculate / understand (1) Up to 5 marks for why it may not be: - There are wider/more accurate measures of living standards (1) e.g. HDI (1) which takes into account education/literacy (1) and health/life expectancy (1) - GDP per head is an average (1) it does not take into account distribution of income (1) GDP per head may be high but some people may be poor (1) - GDP per head does not take into account leisure time (1) GDP per head may be high but if people are working long hours the quality of their lives may be low (1) - Increases in output may increase pollution (1) e.g. lower air quality may reduce living standards (1) - GDP per head may not fully reflect the quality of products produced (1) which may increase even if GDP per head does not change (1) - GDP per head may not fully reflect the quantity of goods produced (1) due to the existence of the informal economy (1) - GDP per head does not include safe drinking water (1) which has a significant influence on health (1)	8	A response may develop a mixture of relevant points to achieve up to 5 marks on either side. Maximum of 2 marks on each side of the discussion for a list-like approach. Reward but do not expect reference to the Multi-Dimensional Poverty Index/Genuine Progress Indicator/real income/etc.

Question	Answer	Marks	Guidance
5(a)	Define a ‘trade union’. An association/body/group/organisation (1) which represents its members/workers by protecting workers’ rights/seeks to improve workers’ pay and/or working conditions (1).	2	
5(b)	Explain two possible causes of a fall in a worker’s earnings. - A change to a lower paid job (1) a worker may decide that non-wage factors, e.g. working conditions, are more important than wages (1) - A reduction in the hours worked (1) a worker may decide to do less overtime or may decide to switch to part-time work (1) - A replacement of some earnings by fringe benefits (1) an employer may cut wages in return for increasing fringe benefits such as free housing (1) - A decrease in output produced (1) a worker paid by piece rates will be paid less if their productivity falls (1) - A reduction in demand for labour (1) caused by a fall in demand for the product/recession (1) - An increase in the supply of labour (1) caused by immigration (1) - Weaker trade unions (1) weaker trade unions will have less bargaining power to protect workers’ wages (1) - Inflation (1) real wages will fall if wages rise by less than the inflation rate (1) - Firms may want to cut costs of production (1) to increase or maintain profits (1) - A rise in (direct/income tax) taxation (1) reducing disposable/net earnings (1)	4	Maximum of 2 marks for a list of causes. 1 mark for each cause identified (×2) 1 mark for each associated explanation (×2)

Question	Answer	Marks	Guidance
5(c)	Analyse the causes of unemployment. • A lack of total demand (1) low output (1) cyclical unemployment (1) • Lack of skills/qualifications/training (1) resulting in occupational immobility (1) • A lack of geographical mobility (1) caused by e.g. differences in house prices (1) resulting in regional unemployment (1) • Decline of domestic industries (1) resulting in structural unemployment (1) • Workers being replaced by machines (1) resulting in technological unemployment (1) • A time delay between workers changing jobs (1) lack of information about job vacancies (1) frictional unemployment (1) • High unemployment benefits discouraging people from seeking employment (1) voluntary unemployment (1) • Demand for labour may fall at certain times of the year (1) resulting in seasonal unemployment (1) example (1)	6	Maximum of 3 marks for a list-like approach.

Question	Answer	Marks	Guidance
5(d)	Discuss whether an ageing population benefits an economy. Up to 5 marks for why it might: • A rise in the average age from a young age (1) may increase the size of the labour force (1) which may reduce dependency ratio (1). • Older workers may be more experienced/skilled (1) more reliable (1) leading to higher productivity/efficiency (1) resulting in higher economic growth/lower unit costs (1). • May indicate longer life expectancy/better health (1) higher living standards (1) raising the level of economic development (1). • The outcome will depend on the cause (1) may be the result of a fall in the birth rate (1) or a fall in the death rate (1). Up to 5 marks for why it might not: • May increase need for healthcare (1) tax revenue used to provide healthcare could have been used for another purpose/opportunity cost (1) example (1) • Increase cost of pensions (1) which may require higher taxation (1) which may place a burden on workers (1). • May increase dependency ratio (1) more non-workers will have to be supported by fewer workers (1). • Reduce mobility of the labour force (1) older workers may be less geographically/occupationally mobile (1). • Older workers may be less familiar with advances in technology (1) less productive (1).	8	An ageing population does not necessarily increase, it would have to be established why growth may occur. A response may develop a mixture of relevant points to achieve up to 5 marks on either side. Maximum of 2 marks on each side of the discussion for a list-like approach.

Question	Answer	Marks	Guidance
6(a)	What is sold on a stock exchange? Shares/stocks (1) in public limited companies (1) government bonds/securities (1).	2	
6(b)	Explain how money helps specialisation and trade to occur. • If workers and firms specialise they have to sell what they produce (1) to get the products they want/to buy other products (1) • Money helps trade as it avoids the need for barter (1) overcomes the double coincidence of wants (1) • Any functions of money e.g. medium of exchange or store of value (max 2)	4	
6(c)	Analyse how advances in technology can affect demand and supply. • Advances in technology reduce costs of production (1) increases the speed of production (1) increases supply (1) lower price (1) increases quality/efficiency/reduces waste (1) lower price causes an extension in demand (1) • Advances in technology create new products and newer versions of products (1) higher demand will increase price (1) higher prices will cause supply to extend (1) • Advances in technology decreases demand for some products (1) example (1) • Advances in technology may reduce demand for labour (1) as machines may replace workers (1) example (1) • Advances in technology may enable firms to extract raw materials more easily (1) increasing the supply of raw materials (1) example (1)	6	Maximum of 4 marks if there is only reference to demand <i>or</i> supply.

Question	Answer	Marks	Guidance
6(d)	Discuss the economic arguments for and against a government raising the school-leaving age. Up to 5 marks for why it should: • It may increase educational standards (1) increase skills (1) raise labour productivity (1) increase innovation/technology (1) lower costs of production (1) raise output (1) improve the current account position (1). • More educated workers are likely to be in higher demand from employers (1) more occupationally mobile (1) lower unemployment (1) create jobs for teachers (1) raise wages (1) improve living standards (1) may reduce income inequality (1). • It may attract more MNCs to set up in the country (1) as they will expect a more skilled labour force (1) which may increase GDP(1). Up to 5 marks for why it should not: • It will increase government spending (1) opportunity cost (1) example (1) may lead to higher taxes (1). • Workers may be sufficiently qualified/there may not be vacancies for more-skilled workers (1) inappropriate use of resources (1) workers may become over-qualified for the jobs they do (1). • In the short run will reduce the size of the labour force (1) lower output/productive potential (1).	8	A response may develop a mixture of relevant points to achieve up to 5 marks on either side. Reward but do not expect education being a merit good. Maximum of 2 marks on each side of the discussion for a list-like approach.

Question	Answer	Marks	Guidance
7(a)	Identify two problems that prevent a worker finding employment. • lack of information on jobs available • lack of vacancies/low demand for labour • lack of skills/qualifications /experience/occupational mobility • lack of geographical mobility • possible age/gender/race/disability discrimination	2	Do not accept sickness/idleness.
7(b)	Explain two costs of long-term unemployment to those who are unemployed. 1 mark each for each of two costs identified: • loss of income • reduced ability to get a job • reduced confidence/self-worth • decline in health • reduced ability to educate children • loss of skills 1 mark each for each of two explanations given: • the unemployed may receive unemployment benefits which are usually lower than wages or may receive no income/may experience poverty • will lose out on training by not keeping up with advances in technology • unemployment reduces confidence which makes it harder for someone to get another job • unemployment can lead to mental health problems/may increase physical illness due to less nutritious diet and poor housing • lower income may mean children of the unemployed will receive less education which will reduce their chances of getting a job	4	

Question	Answer	Marks	Guidance
7(c)	Analyse why price elasticity of supply can differ between products. • Products which can be produced quickly (1) will have elastic supply (1) • Products which can be stored/non-perishable (1) will have elastic supply (1) • Products which are made with raw materials in short supply (1) will have inelastic supply (1) • Products made by firms with spare capacity/mobile resources/have a low cost of altering production/low cost of attracting resources into the industry (1) may have elastic supply (1)	6	Vice versa is acceptable i.e. some products may have inelastic supply. Note: can accept low cost of production for the last bullet point.
7(d)	Discuss whether increasing government spending will reduce poverty Up to 5 marks for why it may: • Increased government spending on benefits (1) will enable the poor to purchase basic necessities (1) • Increased government spending on education (1) will increase skills (1) increasing employment (1) raising wages (1) • Increased government spending may increase total demand (1) may raise GDP per head (1) • Increased government spending on healthcare (1) may keep people healthier (1) increasing their ability to earn income (1) • Increased government spending on infrastructure (1) will create jobs (1) increase income (1) Up to 5 marks for why it may not: • Increased government spending may cause inflation (1) reduce ability of poor to purchase basic necessities (1) • Increased government spending on benefits may increase reliance on benefits (1) which in the long term may reduce a person's earning potential (1) • Increased government spending may be financed by higher taxation (1) not increasing total demand (1) • Increased government spending on education may not improve the quality of education (1) may be in wrong areas (1)	8	A response may develop a mixture of relevant points to achieve up to 5 marks on either side. Maximum of 2 marks on each side of the discussion for a list-like approach.