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ECONOMICS	**0455/21**
Paper 2 Structured Questions	**October/November 2016**
MARK SCHEME	
Maximum Mark: 90	

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1 (a) Using information from the extract, explain whether the US was operating on or inside its production possibility curve in 2014. [2]

Inside/moving towards (1).
More resources e.g. capital equipment/specialist engineers would be used to increase oil production / the country was experiencing unemployment (1)

(b) Explain whether the extract suggests the demand for oil in the US is price-elastic or price-inelastic. [2]

Inelastic (1) a rise in price still results in a rise in revenue (1)

(c) Using information from the extract, explain two economies of scale that US oil companies are experiencing. [4]

Internal/Technical / use of new technologies (1) larger and more expensive capital equipment is likely to be more cost effective / more efficient (1) producing more units per dollar spent (1).
Internal/Managerial (1) employing specialist engineers becomes possible if there is sufficient output (1) reduces costs because of greater productivity of the workers (1).

(d) Calculate the US's demand for oil per day in 2013. [3]

18 million (3) 18 (2)
Correct working: 10.5m – 3.4m + 10.9m (2)
Correct identification of all of the relevant data (1).

(e) Analyse how the discovery of more oil in the US would be likely to affect the value of the US dollar. [4]

The value of the dollar would be expected to increase (1) against other currencies (1) the US would export more oil (1) the demand for dollars would increase (1) to buy imports of US oil (1) the supply of dollars would decrease (1) as US demand for oil imports decreases (1).

(f) Discuss whether a cut in the rate of interest will increase a country's economic growth rate. [5]

Up to 3 marks for why it might:
A cut in the rate of interest means it is now cheaper/easier to borrow (1) more people may borrow (1) this may increase consumer expenditure (1) increase investment (1) may increase productivity (1) increasing productive potential (1) less reward for saving (1) people will save less (1) total demand would increase (1) encouraging firms to increase output (1).

Up to 3 marks for why it might not:
Households may not spend more (1) firms may not spend more (1) they may be pessimistic about the future (1) may expect the interest rate to rise in the future (1).
The economy may initially be operating at full employment (1) so a cut in the rate of interest may only cause inflation (1).
Increased spending may be on imported goods (1) reducing total (aggregate) demand (1).

(g) Using information from the extract, explain why the price of oil may rise more in China than in the US in the future. [4]

The demand for oil may increase in China (1) at a greater rate than in the US (1) incomes and industrial production may rise more rapidly (1) the number of cars in China is forecast to rise (1) consuming more fuel (1).
Demand in the US may fall (1) or increase more slowly than in China (1) because of e.g. cars becoming more fuel efficient / fewer young people learning to drive (1).
The supply of oil may increase in the US (1) with developments in the extraction of oil (1).

(h) Discuss whether a government should try to reduce a surplus on the current account of its country's balance of payments. [6]

Up to 4 marks for why it might:
Living standards would be higher (1) as more imports could be purchased (1).
Exports satisfy foreign demand not domestic demand (1).
May reduce inflationary pressure (1) a surplus results in higher demand (1).
A surplus would put upward pressure on the exchange rate (1) making exports more expensive (1) and making it more difficult for a government to maintain a fixed exchange rate (1).
Importing more machinery (1) will increase economic growth in the long-run (1).

Up to 4 marks for why it might not:
Exports exceeding imports will increase total demand (1) this may increase economic growth (1).
Higher demand for exports and import substitutes will encourage firms to expand output (1) this will create more jobs / reduce unemployment (1).
More exports / fewer imports may increase the demand for the currency (1) causing the currency to appreciate (1) keeping imported inflation down (1) reduce the surplus without government action (1) by raising export prices and lowering import prices (1).

2 (a) What is meant by a 'depreciation' of a currency? [2]

A fall in value (1) of a floating exchange rate (1) compared to another currency (1).

(b) Explain how a depreciation of a currency can cause a rise in the inflation rate of a country. [4]

A fall in the exchange rate will increase the price of imports (1) this will directly increase the domestic price level (1) costs of imported raw materials will increase (1) firms raise prices to maintain profits (1) causing cost-push inflation (1).
A fall in the exchange rate may reduce competitive pressure on domestic firms (1) to keep price rises low (1).
A fall in the exchange rate will reduce the price of exports (1) this may increase total (aggregate) demand (1) causing demand-pull inflation/shown on a diagram (1).

(c) Analyse why it may be difficult for an economy to have both low unemployment and low inflation at the same time. [6]

Low unemployment is likely to mean high employment (1) higher incomes (1) high total demand (1) it may be difficult to meet the higher demand so prices may be pulled up (1) causing demand-pull inflation (1).
Low unemployment is likely to increase competition for workers (1) this will push up wages (1) increasing firms' costs of production (1) causing cost-push inflation (1).

(d) Discuss whether an increase in taxes will cause deflation. [8]

Up to 5 marks for why it might:
An increase in income tax will reduce disposable income (1) reducing tax payers' purchasing power (1) this may reduce consumer expenditure (1) lower consumer expenditure may reduce investment (1) which may reduce total demand (1) this may cause deflation/lower the price level (1).
Higher corporation tax may result in firms reducing output (1) this may lower employment (1) lowering total (aggregate) demand (1) this may cause deflation/lower the price level (1).
If producers decide not to pass on the extra cost to consumers (1) higher taxes may not cause prices to change (1).

Up to 5 marks for why it might not:
Workers may reduce saving when their disposable income falls (1) leaving consumer expenditure unchanged (1).
Workers may respond to higher tax by pressing for wage rises (1) if granted these may push up costs of production (1) causing cost-push inflation (1).
With higher tax revenue e.g. higher income tax revenue (1) the government may spend more (1) leaving total demand unchanged (1).
Increasing indirect taxes will cause prices to rise (1) because they add to the production costs of firms (1) who wish to maintain their profits (1).

3 (a) Define 'inelastic supply'. [2]

When supply changes by a smaller percentage (1) than the change in price (1).
When PES is less than 1 (1).

(b) Explain why market failure occurs. [4]

Market failure is when the market forces of demand and supply (1) result in an inefficient allocation of resources (1) an example such as pollution (1).
Market failure may arise if there is a persistent shortage/surplus (1) with market forces not moving towards equilibrium (1).
Market failure occurs when social costs are greater than private costs (1) the existence of external costs (1) means that consumption/production is too high (1).
Social benefits are greater than private benefits (1) existence of external benefits (1) means that consumption/production may be too low (1).
Abuse of market power (1) a monopoly may restrict output to drive up price (1).
Also accept but do not expect:
The existence of merit goods (1) people may not appreciate the true benefit (1) valid example e.g. education (1).
The existence of demerit goods (1) people may not appreciate the true cost (1) valid example e.g. cigarettes (1).

The existence of public goods (1) private sector firms will not have an incentive to produce them (1) valid example e.g. defence (1).
Information failure (1) e.g. firms may not know cheapest source of raw materials (1).

(c) Analyse how a government could reduce meat consumption. [6]

It could ban meat consumption (1) making it illegal to eat meat/backing up the ban by law (1).
It could introduce regulations (1) making it more difficult to buy meat (1) increase the costs of meat producers (1).
It could place a tax on meat consumption (1) raising its price (1) reducing demand for meat (1).
It could place a tariff / quota on meat imports (1) to limit the amount imported (1).
It could provide information/advertise about the harmful effects of eating meat / cruelty to animals in meat production (1) reducing demand (1).
It could subsidise / reduce the tax on meat substitutes e.g. fish, vegetables (1). Encouraging households to switch demand from meat to vegetables (1).
If the government is a meat producer (1) it could control the price (1).

(d) Discuss whether population growth is likely to exceed the growth of food production in the future. [8]

Up to 5 marks for why it might:
Diseases/pests/bad weather might reduce the supply of some food products (1) famines may occur (1).
Rises in income (1) will increase demand for food (1) put pressure on natural resources (1).
Reduction in food waste (1) may enable a higher population to be supported by the same amount of food (1).
Birth rate may accelerate (1) due to e.g. lack of contraception (1).
Death rate may fall faster (1) due to e.g. better healthcare (1).
Shortage of land (1) on which to produce more food crops (1).
Global warming (1) may reduce the amount of productive land (1).
Overfishing of the oceans (1) may reduce availability of fish (1).

Up to 5 marks for why it might not:
Advances in technology (1) greater use of capital equipment (1) may increase the output of food per unit of land (1).
Population growth is likely to decline as economies develop (1) birth rates tend to fall (1) as e.g. the cost of having children increases (1).
Food consumption per person may be reduced (1) concerns about obesity in some countries (1).
An individual country may be able to import more food (1) to match any growth in population (1).
Food production may increase if there is a switch from meat to arable production (1) it takes less land to produce the same amount of e.g. vegetables (1).

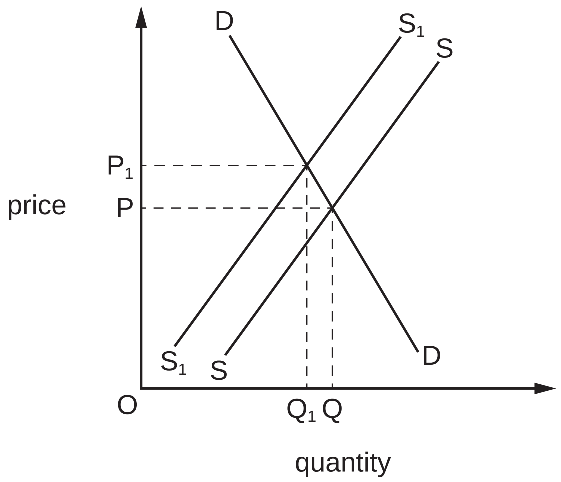
4 (a) Define 'GDP per head'. **[2]**

Total output/income (1) divided by population (1).

(b) Explain two reasons why firms may find it difficult to obtain loans from commercial banks. **[4]**

Banks may be concerned that firms may not be able to repay the loan (1) may not expect to make a profit (1).
The firms may already have debts (1) banks may not want to increase them (1).
The firms may not be able to offer collateral (1) due to lack of wealth (1) firms have low-credit rating (1).
Small/new firms may be less well-known to banks (1) may be regarded as a greater risk (1)
The economy may be deteriorating / in recession (1) so banks may avoid risks (1).
Banks may not have sufficient funds to lend (1) may not have attracted household savings (1).
The central bank may be trying to reduce bank lending (1) e.g. by raising the rate of interest (1).
Interest rates may be too high (1) making repayment terms too expensive (1).
The central bank may be trying to reduce bank lending (1) e.g. by imposing limits on loans (1).

(c) Using a demand and supply diagram, analyse the effect on the market for petrol if a subsidy on petrol is removed. **[6]**



Up to 4 marks for the diagram:
- axis correctly labelled – price and quantity or P and Q (1).
- demand and supply curves are correctly labelled (1).
- Supply curve shifts to the left (1).
- Correct equilibriums identified either by lines drawn to both axes or equilibrium points clearly identified as E and E1 (1).

Up to 2 marks for written explanation:
- removing a subsidy effectively increases costs of production (1).
- a decrease in supply will increase the price of petrol (1).

(d) Discuss whether a fall in a country's GDP will result in net emigration. **[8]**

Up to 5 marks for why it might:
A fall in GDP may reduce income per head / reduce standards of living (1) incomes / standard of living may be higher in other countries (1).
Lower GDP may mean higher unemployment (1) so people may go abroad in search of employment (1).
Lower GDP may reduce health care and education (1) lowering living standards (1).

Up to 5 marks for why it might not:
GDP per head may rise (1) if population falls more than GDP (1).
Living standards may improve even if GDP per head falls (1) e.g. if pollution falls (1).
GDP may fall by more in other countries (1) or despite the fall in GDP, income per head may still be higher in the country (1).
Living standards may still be rising if income is more evenly distributed (1).
Other countries may impose restrictions on immigration (1) making it difficult for people to emigrate even if they want to (1).
Potential emigrants can't afford to emigrate (1) do not wish to leave their families (1).

5 (a) Define 'specialisation'. **[2]**

Concentration / focus (1) on particular products/tasks (1).

(b) Explain how a fall in output will affect average fixed cost and average total cost. **[4]**

Average total cost = average fixed cost plus average variable cost (1).
A fall in output will increase average fixed cost (1) total fixed cost will be divided by a smaller output (1) example (1).
The effect of a fall in output on average total cost is uncertain (1) it will fall if variable costs fall by more than output (1).
AVC will depend upon whether or not the firm is experiencing economies of scale / diseconomies of scale (1).

(c) Analyse how a firm could reduce its output and increase total profit. **[6]**

Profit is the difference between revenue and costs (1).
It may cut its costs (1) by more than revenue (1) by, for example, reducing the number of workers it employs / cutting wage rates (1) especially if it is reducing the number of unskilled workers (1).
It may raise the price it charges (1) if demand is price inelastic (1) revenue may increase even on a smaller output (1).
It may stop producing products in declining demand (1) which are less profitable (1).
Improve quality (1) so a higher price can be charged (1).
Reducing output may be due to decreasing competition / monopoly (1) allowing the firm to raise its prices / revenue (1).

(d) Discuss whether workers who have lost their jobs are likely to still be unemployed a year later. **[8]**

Up to 5 marks for why it might:
Unemployment may be due to a recession / cyclical unemployment (1) Total demand may stay low (1) causing cyclical unemployment to continue (1).
The unemployed may be geographically immobile (1) occupationally immobile / workers lack appropriate skills (1) causing structural unemployment to continue (1).
The unemployment may be due to technological changes (1) even if the firm expands it will use more machines instead of workers (1).
The unemployed may still receive more income from unemployment benefit than from wages (1) and so may choose to stay unemployed (1).
The unemployed may lose the skills to do the same job (1) miss out on training (1).
The unemployed may become depressed (1) lose motivation to work (1).

Up to 5 marks for why they might not:
Total demand may increase (1) the economy may move from a recession to positive economic growth (1).
The unemployed may increase their qualifications (1) making them more attractive to employers (1).
The unemployment may be seasonal (1) they will return to their jobs next year (1).
The unemployed will have had more time to find a job (1).
The unemployed may have become more prepared to accept low paid jobs (1) running out of funds (1).
Some of those who lose their jobs may leave the labour force (1) e.g. retire early (1).
Some of those who lose their jobs may start their own business (1).
It will depend on the type of policies adopted by the government (1) example of a policy measure to reduce unemployment (1).

6 (a) Identify two reasons why a country may have more women than men. **[2]**

1 mark for each of two reasons identified:
- women having a longer life expectancy / higher infant mortality in males (1)
- more emigrants may be men / more immigrants may be women
- more men than women dying in armed conflicts
- more men in dangerous / risky jobs having a shorter life expectancy

(b) Explain two causes of a fall in the death rate. **[4]**

Improved health care (1) will reduce a range of diseases and illnesses (1).
Improved housing/sanitation (1) will help prevent the spread of diseases (1).
Improvements in the environment (1) e.g. reduction in smoke from factories (1).
Improvements in lifestyle (1) e.g. more exercise/reduced alcohol consumption (1).
Improved nutrition (1) will reduce e.g. diabetes (1).
Reduction in military conflict (1) will reduce those killed in wars (1).

(c) Analyse three policy measures a government could introduce to increase the birth rate. [6]

Provision financial incentives (1) e.g. child benefit will help people to afford to have children/may enable a parent to stay at home to look after children (1).
Subsidised education / providing free education (1) this will lower the cost of having children (1).
Providing new housing / better housing (1) providing security for families (1).
Reduction in the provision of family planning (1) this will make it more difficult to limit family size (1).
Provision of subsidised / free fertility treatments (1) helping couples have children (1).
Taxation on contraceptive medicine (1) reducing the demand (1).
Reduction/the stopping of state pensions (1) this may encourage people to have children to support them in old age (1).
Introduction of laws on maternity/paternity (1) e.g. protecting working women who are pregnant/giving parents paid leave (1).
Use of campaigns/advertising (1) encouraging families to have more children (1).

(d) Discuss whether the government of a country with an ageing population should raise the retirement age. [8]

Up to 5 marks for why it should:
Increasing the retirement age will increase the size of the labour force (1) there will be a decrease in the dependency ratio (1) output / incomes will increase (1) this will increase tax revenue (1).
Older workers have more experience (1) productivity may be higher (1).
The cost of pensions will fall (1) pensions will become more affordable to the government/firms (1).
It will enable workers to save for their retirement (1) may increase the physical and mental health of the elderly (1).
It may avoid the need to raise tax rates (1).
Pension provision involves opportunity cost (1) the funds could be spent on e.g. infrastructure projects (1).

Up to 5 marks for why it should not:
If life expectancy is low (1) it may be seen to be inequitable (1) it may lower living standards (1).
Older people blocking jobs to younger people (1) older workers may be less productive than younger workers (1).
If work is physically demanding (1) older workers' health may suffer (1).
There are alternative measures (1) encouraging immigration of people of working age (1) promote private pensions (1).

7 (a) Giving an example, define 'labour'. [2]

Human effort / workers (1) e.g. teachers (1).

(b) Explain two reasons why a firm may change from labour-intensive to capital-intensive production. [4]

A rise in wages (1) increases relative cost of labour (1).
Advances in technology (1) increase capital productivity / improve efficiency (1) lower the cost of production (1).

Industrial action / strikes (1) may reduce reliability of labour (1) may reduce firms' output / revenue (1).
Government subsidies on capital equipment (1) lowering cost of capital (1).
A change in the products produced (1) e.g. switching from individually designed cars to mass produced cars (1).

(c) Analyse why the wages of workers in a particular occupation may fall. [6]

Demand for the workers may fall (1) reasons e.g. demand for the good or service they provide falls/productivity falls/replaced by capital equipment / technological advances / obsolete skills (up to 2) this may be shown on a diagram (1).
Supply of the workers may increase (1) this may be shown on a diagram (1) reasons e.g. immigration/rise in retirement age/increased participation of women in the labour force (up to 2).
Trade union power may fall (1) due to e.g. fall in membership (1) bargaining strength may decline (1).

(d) Discuss whether a government should subsidise the provision of training. [8]

Up to 5 marks for why it should:
Improved training should increase labour productivity (1) this will increase output (1) causing economic growth (1).
An increase in training may improve the quality of output (1) increasing demand for products (1)
An increase in training may increase workers' skills (1) reducing unemployment (1) and the government has to spend less on unemployment benefits (1).
An increase in training would provide jobs for teachers / trainers (1) reducing unemployment (1).
An increase in labour productivity may cut firms' costs of production (1) reducing inflationary pressure (1) increasing international competitiveness (1) improving the current account position (1).
Private sector firms may under-provide training (1) fearing that trained workers may leave to work for other firms (1) which will gain the benefit of their spending (1).

Up to 5 marks for why it should not:
Workers should pay for their own training (1) as they are likely to earn higher wages (1) increase their employment chances (1).
Subsidising training involves an opportunity cost (1) the funds could have been spent in other areas e.g. improving infrastructure (1) there is no guarantee that the training will be of high quality (1).
Trained workers may emigrate for better paid jobs (1) so other countries benefit (1)
Firms should pay (1) as they may receive a benefit in the form of lower costs (1) better quality products (1) increasing their profitability (1).
Training is a long-term solution (1) time and output lost during training (1).