

> Paper 2 (SL and HL) markschemes

Question 1

- a i East Asia because it has the highest *PED*, meaning that for any change in price the change in quantity demanded is proportionately greater than in any other region.

Marks allocation

For appropriate use of the *PED* concept [1]

For identifying East Asia [1]

- ii European Other because it has the lowest *YED*, meaning that for any change in income the change in demand is proportionately lower than in any other region.

Marks allocation

For appropriate use of the *YED* concept [1]

For identifying European Other [1]

- b i An explanation that it is two of the following:

- Permits issued by an authority to firms, granting permission to pollute
- The permits can be traded in a market
- The total amount of pollutants emitted is limited

Marks allocation

For a correct identification of each one of two of the above [1]

- ii Percentage increase in price of meat = $(18-15)/15 \times 100 = 20\%$

$$PED = \frac{\% \Delta Q}{\% \Delta P} \text{ therefore } 0.49 = \frac{\% \Delta Q}{20\%} = 9.80\% = \text{percentage decrease in quantity of meat demanded}$$

Marks allocation

For some valid working [1]

For the correct answer [2]

- c *Marks allocation*

For a correctly labelled market failure diagram showing a negative consumption externality, with *MSB* below *MPB*, overprovision and overconsumption in the market, with welfare loss. [2]

For explaining that consumption of too much meat leads to external costs to third parties involving diseases with health care costs, therefore the social benefits of meat consumption are less than the private benefits. [2]

- d The imposition of an indirect tax on meat to reduce meat consumption would raise the price of meat. The lower the *PED* (the more inelastic the demand) the lower the responsiveness of quantity demanded to

the increase in price. Therefore the region that would have to impose the highest indirect tax is the one that has the lowest *PED*, which is Oceania.

Marks allocation

For correctly identifying Oceania [1]

For a correct explanation [3]

e *Marks allocation*

For a correctly labelled Lorenz curve diagram, with cumulative percentage of the population on the horizontal axis and cumulative percentage of the population on the vertical axis and two Lorenz curves, with the one furthest away from the line of perfect equality representing income distribution after the tax. [2]

For explaining that a tax on meat is an indirect tax which is regressive, meaning that the fraction of income paid as indirect tax increases as income decreases. Therefore people on lower incomes would have to pay a higher fraction of their income to buy meat than people on higher incomes, making income distribution more unequal. [2]

f *Marks allocation*

For a correctly labelled diagram showing a subsidy granted on organic or less environmentally harmful food products, showing the increase in quantity produced which is sold at a lower price due to the subsidy. [2]

For explaining that the lower price creates incentives for consumers to switch to these products, which would result in a decrease in demand for environmentally harmful livestock products, thus reducing the GHG emissions of livestock. [2]

g Answers **may** include:

- An explanation that both negative consumption and negative production externalities are involved.
- Policies to deal with the negative production externalities:
 - An indirect tax on meat, but given the low *PED* this would have to be high; also it is regressive, making it politically unpopular
 - Use of tax revenues to help livestock producers restructure their production, but these have opportunity costs
 - A tradable permits scheme on methane, though there may be practical difficulties with the distribution of permits to farmers and with setting the upper limit on permissible methane emissions
- Policies to deal with the negative consumption externalities:
 - An indirect tax on meat; this is the same policy noted above
 - Lower taxes on environmentally less harmful meat substitutes to induce consumers to switch to these
 - Subsidies on environmentally less harmful food products, though there may be difficulties in selecting what to subsidise, with opportunity costs for the government
 - Education and awareness creation for consumers, with opportunity costs for the government
 - Nudges (HL), though there may be difficulties in designing effective ones

Any other reasonable argument.

For full marks the response must:

- *fully address the demands of the question*
- *fully explain the relevant economic theory*
- *use economic terms correctly*
- *if relevant use diagrams effectively*
- *contain effective synthesis or evaluation*
- *use information from the text or data appropriately to support the arguments*

Question 2

- a i A trade strategy where a country encourages the development of manufacturing for the domestic market by imposing protective trade barriers in order to prevent the entry of imports that compete with domestically produced goods.

Marks allocation

For the idea that it tries to increase domestic production [1]

For the idea that it involves the use of trade protection [1]

- ii A demand management policy where the central bank increases interest rates in order to discourage investment and consumption spending so as to reduce aggregate demand.

Marks allocation

For the idea that it involves the use of higher interest rates [1]

For the idea that it is intended to result in lower *AD* through lower consumption and investment [1]

- b i Since $\text{GDP (current US\$)} = \text{GDP per capita (current US \$)} \times \text{population}$,

$250.9 \text{ billion} = 2549.1 \times \text{population}$, therefore

$\text{population} = 250.9 \text{ billion} / 2549.1 = 98.43 \text{ million}$

If GNI figures are used the population is calculated to be 98.36 million

Marks allocation

For some valid workings [1]

For the correct answer [1]

- ii $\text{GNI} = \text{GDP} + \text{income received from abroad} - \text{income sent abroad}$

Therefore GNI is greater because income received from abroad is greater than income sent abroad. The most common income flows involve remittances and profit repatriation.

Marks allocation

For referring to the data [1]

For correctly identifying each one of two reasons [1]

- c *Marks allocation*

For drawing an exchange rate diagram where the horizontal axis is labeled Q of Egyptian pound (or just Egyptian currency) and the vertical axis P of Egyptian pound, or another currency per Egyptian pound, showing a second demand curve that results in excess demand or supply for the Egyptian pound, which is made to shift back to the original equilibrium exchange rate through appropriate policies. [2]

For explaining that a floating exchange rate is determined by free market forces, therefore by the intersection of currency demand and currency supply without government intervention, whereas in a fixed exchange rate currency demand and supply are made to determine the exchange rate through buying or selling of reserve currencies, changes in interest rates, or some other policy. [2]

- d *Marks allocation*

For drawing a subsidy diagram showing how the subsidy results in a lower price and greater quantity. [2]

For explaining how price through its signaling and incentive functions reallocates resources; however subsidies work to distort prices therefore prices send out the wrong signals and incentives to consumers, causing them to overconsume. Therefore reduction or removal of subsidies will allow prices to perform better in their allocation function. [2]

e *Marks allocation*

For drawing an *AD-AS* diagram showing *AD* shifting to the right, resulting in higher real GDP. [2]

For explaining that net exports are exports minus imports, which are a component of *AD*, so an increase in net exports means that exports have increased but also that imports may have decreased causing *AD* to increase. [2]

f *Marks allocation*

For drawing an *AD-AS* diagram showing *SRAS* shifting to the left, resulting in a higher price level as well as lower real GDP. [2]

For explaining that this is cost-push inflation, caused by higher costs of production. The depreciating currency increases the domestic price of imported inputs, therefore firms that depend on imported inputs face higher costs of production. [2]

g Answers **may** include:

- Egypt has a growing share of the population living below the poverty line, which may actually be an underestimate.
- It also faces growing income inequality.
- Possible policies include:
 - Increased spending on health care and education, which actually fell; this trend should be reversed
 - Reduction of public school fees that recently actually increased
 - Changes in the tax system to make it more progressive; this recently became more regressive through a new indirect tax which works to increase income inequality
 - Increases in transfer payments
 - More targeted spending on goods and services such as merit goods, which is made possible through the reduction in fuel subsidies
 - Further efforts to integrate women and youth in the labour market; youth unemployment is high and many new jobs are in the informal economy; efforts should be made to create more jobs in the formal economy, which offers worker protection

Any other reasonable argument.

For full marks the response must

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- *use economic terms correctly*
- *if relevant, use diagrams effectively*
- *contain effective synthesis or evaluation*
- *use information from the text or data appropriately to support the arguments*