#### **CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**Cambridge International General Certificate of Secondary Education** 

# MARK SCHEME for the October/November 2015 series

# 0455 ECONOMICS

0455/21

Paper 2 (Structured Questions), maximum raw mark 90

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2015 series for most Cambridge IGCSE<sup>®</sup>, Cambridge International A and AS Level components and some Cambridge O Level components.



Page 2	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2015	0455	21

# 1 (a) Using information from the extract, calculate the value of Cambodia's clothing exports in 2012. [2]

US\$4.8bn or \$4800000000 (2) 80/100 x US \$6bn (1)

### (b) Explain two reasons why demand for Cambodia's rice may increase in the future. [4]

- lower price (1) due to lower transport costs (1)
- better quality (1) due to e.g. more skilled workers (1)
- higher incomes (1) increasing their ability to buy the rice (1)
- rise in population (1) more people to buy the rice (1)
- rise in the price of rice produced by other countries (1) some people switch to Cambodian rice (1)
- fall in the value of the Cambodian currency (1) making their rice relatively cheap (1)
- rise in price of competing products (1) e.g. other staple foods such as wheat (1)

# (c) (i) Explain why high economic growth can increase investment.

[4]

- high economic growth involves an increase in output (1) to produce more, firms are likely to spend more on capital goods (1)
- high economic growth involves an increase in incomes (1) this will lead to an increase in demand for firms' products (1)
- high economic growth means an increase in output (1) this may encourage firms to expand their capacity (1)
- high economic growth may mean that profits are high (1) high profits provide the finance to buy capital goods (1)
- high economic growth can increase firms' confidence (1) being more optimistic may mean that firms will be more willing to invest (1)
- high economic growth attracts overseas investors (1) because of prospect of secure returns (1)
- high economic growth increases tax revenues (1) this allows the government to spend more on e.g. investing in infrastructure (1)

# (ii) Using Table 1, comment on whether the information supports the view that high economic growth leads to a high rate of investment. [3]

#### One mark for decision:

yes/generally yes

#### One mark for supporting evidence e.g.:

- four countries are in the same ranking order (China, India, Malaysia and Pakistan)
- two examples e.g. China has the highest for both categories whilst Pakistan has the lowest

#### One mark for exception:

exceptions – Cambodia or Indonesia

[2]

Page 3	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2015	0455	21

# (d) Using information from the extract, explain whether Cambodia experienced an increase or a decrease in population in 2012.

Increase (1) as the birth rate exceeded the death rate and its difference (natural increase) was greater than the net migration (1).

# (e) Discuss whether building more roads and ports would increase Cambodia's exports of rice. [5]

#### Up to 3 marks for why it might:

- may reduce transport costs (1) reduce costs of production (1) reduce prices (1) make rice more price competitive (1)
- enables more rice to reach the coast/easier distribution of rice/easier access (1) and enables more rice to be shipped abroad (1) increase quality of exports (1) make rice more quality competitive (1) open up new markets (1)

## Up to 3 marks for why it might not:

- costs other than transport costs may rise (1)
- demand for road space may increase more than supply (1) increasing congestion (1) increasing transport costs (1)
- there is no guarantee that farmers would use the new roads (1)
- there will be no increase in exports if agriculture lacks investment to increase output (1)
- the quality of the roads and ports built may be poor (1) particularly if there is a lack of skilled workers to build them (1)
- there may be a lack of associated capital equipment e.g. vehicles to use roads and ports
   (1)
- demand for rice may fall (1) due to e.g. changes in tastes (1) costs and prices falling more in other countries (1)
- supply of rice may fall (1) due to e.g. bad weather (1)

#### (f) Explain two functions of a stock exchange.

[4]

- provides a market for the sale and/or purchase of shares (1) enabling firms to raise finance (1)
- allows members of the public to own part of a company (1) which may enable them to influence the behaviour of the company (1)
- provides a market for the sale of government securities (1) enabling governments to raise finance/borrow (1)
- enables firms to grow (1) by merging or taking over other firms (1)
- channels savings (1) for financial investment (1)
- acts as a source of information on share prices (1) enabling transactions to be carried out more effectively (1)
- protects buyers of shares/supervises brokers (1) as listed firms have to meet set standards and provide information (1)

Page 4	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2015	0455	21

# (g) Discuss whether a company will have to raise wage rates to attract more workers. [6]

### Up to 4 marks for why it might:

- wages are a key influence on people's choice of where to work (1)
- there may be a shortage of workers (1)
- companies compete for workers (1)
- to attract workers from other companies, wages may have to be raised (1)
- higher wages could attract workers from a long distance away who otherwise would not be able to afford the transport costs (1)

# Up to 4 marks for why it might not:

- unemployment may be high (1) so the offer of a job may be sufficient to attract workers
   (1)
- the company may already be paying more than other companies (1) so again just the offer of jobs may be sufficient (1)
- the company can offer non-wage (non-pecuniary) benefits/fringe benefits (1) e.g. better promotion chances, longer holidays, good pensions, job security (up to 2 marks)

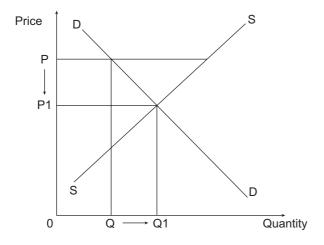
# 2 (a) Define 'demand'. [2]

• the willingness (1) and ability to buy a product (1)

# (b) Explain what impact an imbalance between supply and demand is likely to have on price and the quantity traded. [4]

- if supply exceeds demand (1), there will be a surplus (1)
- the equilibrium position in the market will change (1)
- price will fall/be driven down (1)
- the quantity traded will rise (1)

Accept a diagrammatic approach for up to 2 marks.

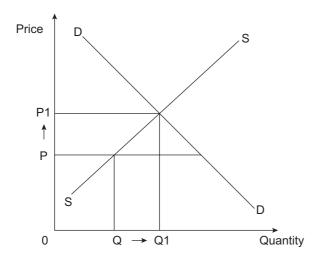


Page 5	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2015	0455	21

#### **OR**

- if demand exceeds supply (1) there will be a shortage (1)
- the equilibrium position in the market will change (1)
- price will rise/be driven up (1)
- the quantity traded will rise (1)

Accept a diagrammatic approach for up to 2 marks.



# (c) Analyse why economic growth may increase demand for electricity.

- [6]
- economic growth will increase income (1) higher income will increase demand for e.g. televisions and laptops (1) electricity is a complement to televisions etc./used to operate televisions (1)
- with higher income, some people may switch from other fuels to electricity (1)
- economic growth involves higher output (1) electricity is used in the production of a variety of products (1) higher output will require more electricity (1)
- economic growth involves investment in capital equipment (1) e.g. new machines will require electricity to run them/electricity is a complement (1)
- economic growth often involves new technologies (1) which use electricity to function (1)
- with economic growth more people will now have access to electricity (1) more towns and villages may now be on the grid/electricity may have reached more areas (1)

# (d) Discuss whether the social costs of operating power stations are likely to be greater than the social benefits. [8]

**Either** Social costs = private costs + external costs <u>or</u> social benefits = private benefits + external benefits (1)

#### Up to 3 marks for explaining social costs:

- private costs are costs to producers/consumers (1) examples: labour costs, rent, insurance (up to 2)
- external costs are harmful effects on third parties/social costs minus private costs (1)
  examples: air pollution, noise pollution, risk of accidents, fall in price of nearby houses
  (up to 2)

Page 6	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2015	0455	21

#### Up to 3 marks for explaining social benefits:

- private benefits are benefits to producers/consumers (1) examples: revenue, satisfaction gained from consuming the fuel generated, reduction in risk of power outages (up to 2)
- external benefits are beneficial effects on third parties/social benefits minus private benefits (1) examples: rise in employment in the area, improved transport links in the area (up to 2)

# Up to 3 marks for coming to a conclusion e.g.:

- may be influenced by whether the power stations are run by the state or the private sector (1) state sector may be more inclined to base decisions on social costs and benefits (1)
- may be influenced by the government policy measures (1) designed to reduce market failure (1) external costs may be minimised by e.g. taxes, laws (1)
- may be influenced by the age of the equipment used (1) old equipment may be more likely to cause external costs (1)
- private costs are likely to be very high for a power station (1) because of the large and expensive capital equipment involved (1)

# 3 (a) Identify two functions of an entrepreneur.

[2]

[6]

- bearing (uninsurable) risks (1)
- organising the other factors of production (1)
- making key business decisions (1).

# (b) Explain two ways a government could redistribute income from the rich to the poor. [4]

- taxing the rich (1) imposing progressive taxes (1) reducing regressive taxation (1)
- using government spending to benefit the poor (1) e.g. providing free healthcare / education for the poor (1)
- using government spending to generate jobs for the unskilled/introduce a minimum wage
   (1) make it easier for people to gain employment/increase earnings of low paid workers
   (1)

# (c) Analyse why price may be higher and output lower in a monopoly than in a more competitive market.

- a monopoly may restrict output (1) to drive up price (1)
- monopolies are price makers (1) and can therefore charge high prices if they wish (1)
- there are barriers to enter into a monopoly (1) this causes lack of competitors/substitutes (1) meaning that consumers have no choice (1) so have to pay the higher price (1)
- a firm in a more competitive market will have less influence on price (1) if they raise price
   (1) consumers will switch to rival firms (1)
- firms in (perfectly) competitive markets are price takers (1) and so have no influence on price (1)
- firms in competitive markets have to keep their costs low (1) in order to remain competitive (1)

Page 7	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2015	0455	21

### (d) Discuss whether workers benefit from specialising.

[8]

### Up to 5 marks for why they might:

- their specialism may be in high demand (1) leading to good employment opportunities (1) high wages (1)
- specialisation allows workers to develop their skills (1) increasing their productivity/efficiency (1) which enables employers to pay them more (1) for the value of their extra output (1)
- enable workers to concentrate on areas they most enjoy (1) e.g. history lecturers specialising in particular periods of history (1)
- specialised jobs may be less demanding (1) may need less training (1)

### Up to 5 marks for why they might not:

- demand for specialism may decrease (1) leading to unemployment (1) may be difficult to get another job (1) specialists have low occupational mobility (1)
- time has to be spent acquiring specialist skills (opportunity cost) (1) this time could have been spent earning money (1)
- doing the same task may be boring (1) reducing the quality of life (1)
- alienation reduces productivity (1) reducing the amount firms are able to pay workers (1)
- may not find out what other talents they have (1)
- specialist tasks can depend heavily on other workers (1) if those workers perform badly then productivity falls (1) and wages may fall (1)

# 4 (a) Identify two features of a sole proprietor.

[2]

- a business owned by one person (1)
- has unlimited liability (1)
- lack of continuity (1)
- takes all of the profits/bears all of the risks/losses alone (1)

#### (b) Explain how government subsidies can increase the size of firms.

[4]

- government subsidies are payments to producers (1) they effectively reduce firms' costs
  of production (1) this encourages an increase in supply (1) the resulting lower price will
  raise demand (1) producing more will increase the size of firms (1)
- subsidises to domestic producers make them more internationally competitive (1) enabling them to capture more of foreign and domestic markets (1)
- subsidises can be used to buy capital equipment/invest in new technology or research
   (1) expanding productive capacity (1)
- subsidies can be used to increase wages or reduce wage costs (1) this can lead to more workers being employed (1) a larger workforce increases the size of firms (1)

Page 8	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2015	0455	21

#### (c) Analyse three advantages of small firms.

[6]

- flexible (1) can adjust quickly to changes in market conditions as fewer people to consult
   (1)
- better communication with workforce (1) because of simple structure of firm (1)
- can provide a more personalised service (1) more contact with consumers so can meet specific needs (1)
- can specialise in niche markets (1) demand for particular products/types of products may be low and a large firm may not cater for such a small market (1)
- may have low transport costs (1) located close to customers (1)
- may receive government subsidises (1) to encourage new firms/because they generate jobs (1)
- may be charged a lower rate of tax (e.g. corporation tax) (1) reducing the firm's costs (1)
- easy to set up (1) initially not much capital may be involved in the form of e.g. factory buildings (1)
- less likelihood of trade unions (1) wage costs will be lower (1)

### (d) Discuss whether imposing tariffs will benefit an economy.

[8]

#### Up to 5 marks for why it might:

- will raise revenue for the government (1) this could be spent on e.g. healthcare / education (1)
- may reduce demand for imports (1) improve the trade in goods position (1) and so improve the current account position (1)
- may protect infant industries (1) these may grow and take advantage of economies of scale (1) become internationally competitive (1) create output and employment (1)
- may protect declining industries (1) preventing unemployment (1)
- may prevent dumping (1) foreign firms selling at below cost price (1) prevent domestic firms being driven out of business (1)
- may protect consumers from harmful products (1)

#### Up to 5 marks for why it might not:

- raise prices to consumers (1) may not have domestic products to switch to (1) any domestic substitutes may be of a lower quality (1) reduces variety for consumers (1)
- raise costs of imported raw materials (1) raise costs of production (1) cause cost-push inflation (1)
- reduction in competitive pressure on domestic firms (1) may lead to inefficiency (1)
- there may be retaliation (1) with other countries imposing tariffs on the country's exports
   (1)
- there may not be domestic substitutes for imports (1) consumers may not stop buying imports (1) because of inelastic demand (1)

Page 9	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2015	0455	21

### 5 (a) Identify two causes of an increase in the size of a country's labour force.

[2]

1 mark for each of **two** causes identified:

- rise in retirement age
- fall in school leaving age
- immigration
- rise in birth rate (some years before)
- fall in death rate
- greater acceptability of women working

### (b) Explain how a country's inflation rate is measured.

[4]

- CPI/RPI (1)
- base year selected (1)
- survey of spending patterns undertaken (1)
- a basket of goods and services selected (1)
- weights selected (1) based on proportion of total spending devoted to the items (1)
- price changes monitored in a number of outlets (1)
- weights are multiplied by price changes (1)
- price level compared with previous year's price level (1)

# (c) Analyse how free trade can reduce firms' costs of production.

[6]

- can allow a country to specialise in what it's best at (1) use resources more efficiently (1)
- no tariffs charged on exports/imports (1)
- increase competition (1) may force firms to reduce costs/increase productivity (1)
- larger market (1) firms may be more able to take advantage of economies of scale (1) example(s) (1)
- more sources of raw materials/capital goods (1) lower price or better quality (1)

#### (d) Discuss whether unemployment always harms an economy.

[8]

#### Up to 5 marks for why it might:

- lower output/incomes (1) lower living standards (1) increased poverty (1)
- lower demand (1) from consumers who are now unemployed (1)
- loss of tax revenue (1) lower expenditure on e.g. transport infrastructure (1)
- increased government spending on benefits (1) involves an opportunity cost (1)
- not using factors of production efficiently (1) waste of resources/opportunity cost (1) output below potential output (1)

#### Up to 5 marks for why it might not:

- unemployment may be low (1) frictional unemployment is always present (1)
- duration of unemployment may only be short term (1)
- some unemployment provides flexibility (1) enables firms to expand (1)
- may put downward pressure on inflation (1) lower demand (1) workers more reluctant to ask for wage rises (1)

Page 10	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2015	0455	21

### 6 (a) Define 'regressive tax'.

[2]

A tax that takes a higher proportion of the income of the poor. (2) A tax that falls more heavily on the poor. (1)

# (b) Explain <u>two</u> influences on the amount firms spend on capital goods.

[4]

- the amount of profits earned (1) high profits provide the finance and incentive to invest
   (1)
- the size of the firm (1) large firms are able to finance large scale capital investment (1)
- the type of firm (1) e.g. a steel producing firm will use a higher value of capital goods than a flower seller (1)
- interest rates (1) low interest rates allow firms to borrow cheaply for investment (1)
- inflation (1) a low rate of inflation gives firms confidence to invest (1)
- economic stability (1) a stable economy gives firms confidence to invest (1)
- corporation tax (1) a lower rate of corporation tax provides the finance and incentive to invest (1)
- advances in technology (1) may encourage firms to replace existing machines (1)
- expectations (1) if firms anticipate selling more in the future, they may expand (1)
- price of labour (1) a rise in wages may cause firms to replace labour with capital (1)

### (c) Analyse how monetary policy could increase the price level.

[6]

- a decrease in the rate of interest (1) may increase borrowing (1) reduce saving (1) increase demand (1) cause demand-pull inflation (1)
- increase money supply (1) raise spending/total demand (1) cause demand-pull/monetary inflation (1)
- reduce the exchange rate (1) increase price of imported materials (1) reduce pressure on domestic firms to keep costs down (1) cause cost-push inflation (1)
- reducing the exchange rate will reduce export prices (1) increase total demand (1) cause demand-pull inflation (1)

#### (d) Discuss whether an increase in the rate of a sales tax would benefit an economy. [8]

#### Up to 5 marks for why it might:

- may provide more government tax revenue (1) enable the government to spend more (1)
   e.g. may raise educational standards (1)
- may discourage consumption of harmful products (1) those that cause external costs (1) may reduce e.g. healthcare costs from smoking (1)
- may discourage the purchase of imports (1) improve current account position (1)
- could be used to reduce a budget deficit/increase a surplus (1)
- could be used to reduce (aggregate) demand (1) thus reducing inflation (1)

#### Up to 5 marks for why it might not:

- likely to fall more heavily on the poor (1) increase income inequality (1)
- increases firms' costs of production (1) raises price of products (1) causing cost-push inflation (1)
- may reduce spending (1) reducing output (1) increasing unemployment (1)
- may be placed on products that are already under-consumed (1) increase inefficiency (1)

Page 11	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2015	0455	21

#### 7 (a) Define 'mixed economy'.

[2]

- an economy with a private sector (1) and a public sector (1)
- a mix of both free market (1) and planned economies (1)
- resources allocated by both the price mechanism (1) and government decisions/consumers and government deciding what is produced (1)
- some prices determined by market forces (1) and some by directives/the government (1)

### (b) Explain two reasons why the world population in 2050 may be more than forecast. [4]

- birth rate may be higher than expected (1) due to e.g. lack of education, children needed to work because of poverty (1)
- death rate may be lower than expected (1) due to e.g. healthcare provision being of a higher quality/more widely available (1)
- economic forecasts are often inaccurate (1) the further ahead a forecast is the less accurate it tends to be as more can change (1)

# (c) Analyse how the population structure of a developing country is likely to differ from that of a developed country. [6]

- a developing country is likely to have a younger population (1) may have a higher birth rate (1) due to e.g. lower cost of raising children/need for children to support their parents later in life (1)
- a developing country may experience net emigration whereas a developed country may experience net immigration (1) due to differences in living standards (1)
- a developed country is likely to have small families (1) due to e.g. social attitudes (1)
- a developed country is likely to have more awareness of contraception (1) due to greater educational/healthcare provision (1)
- a developed country is likely to have an older population (1) a developed country may have a lower death rate (1) due to e.g. better healthcare/nutrition (1)

Up to 2 marks for a correctly labelled population pyramid(s)

# (d) Discuss the effectiveness of possible government policy measures to reduce the growth of population. [8]

### Up to 5 marks for why policy measures may be effective:

- improved/increased education (1) raise the cost of having children (1) people in education tend to delay having children (1) more educated women are likely to work and have fewer children (1) increase information about contraception (1) lower birth rate (1)
- improved/increased healthcare (1) lower infant mortality rate may reduce number of children people have (1) as more expected to survive (1)
- improved/increased state provision of healthcare and pensions (1) reduce need to have children to support adults in old age (1)
- tighter immigration restrictions (1) may reduce inward migration (1)
- remove state benefits for having children (1) may increase the cost to families of bringing up children (1)
- adopt a "one child per family" policy, such as in China (1) directly reducing population growth (1)

Page 12	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2015	0455	21

#### Up to 5 marks for why policy measures may not be effective:

- improved/increased education may also lower death rate (1) is more likely to lead to healthier lives e.g. eat more nutritious food (1) have higher incomes and so better living standards (1) may also reduce emigration (1) as may be more job opportunities (1)
- improved/increased healthcare is also likely to reduce death rate (1) if death rate falls by more than birth rate, population may continue to increase (1)
- tighter immigration restrictions may make it difficult for firms to obtain skilled labour (1) may increase dependency ratio (1) may be difficult to stop people entering the country (1)
- remove state benefits for having children may increase poverty (1) as poor families may have a large number of children/be less able to afford to raise children (1) this may increase infant mortality (1) and as a result people may have more children (1)
- adopting a "one child policy" causes problems with population structure (1) e.g. lack of young people to support the elderly population (1)