

**STRICTLY CONFIDENTIAL**

**THE PUBLIC ACCOUNTS EXAMINATION COUNCIL  
OF MALAWI**

**2012 EXAMINATIONS**

**ACCOUNTING TECHNICIAN PROGRAMME**

**PAPER TC 5: ECONOMICS**

**TUESDAY 4 DECEMBER 2012**

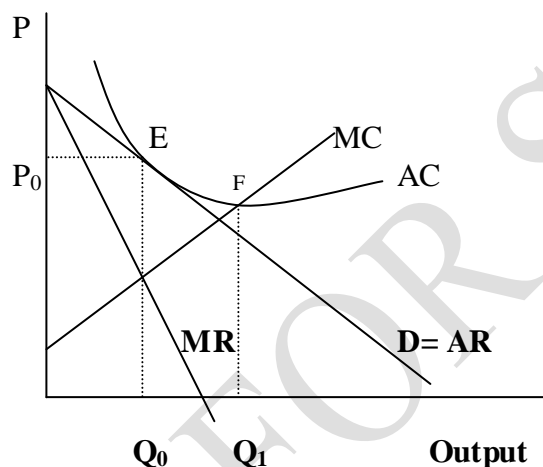
**TIME ALLOWED: 3 HOURS  
2.00 PM - 5.00 PM**

**SUGGESTED SOLUTIONS**

1. (a) Based on the description provided, Kutचना Salon belongs to monopolistic competition. **2 Marks**
- (b) Two long-run characteristics of firms operating in monopolistic competition are as follows:
- (i) There is freedom of entry and exit into the industry. **2 Marks**
- (ii) There are a large number of firms in the market, each producing products that are slightly different from their competitors.
- Note:** Other points may be considered. **2 Marks**

**4 Marks**

- (c) The likely output and pricing levels for a firm operating in monopolistic competition are as shown in the graph below:



where  $P$  = Price,  $Q$  = Output,  $MR$  = Marginal Revenue,  $MC$  = Marginal Cost,  $AC$  = Average Cost,  $AR$  = Average Revenue. **5 Marks**

From the description provided, Kutचना Salon is operating in the long-run (more than twelve years). This implies that while it was possible to earn supernormal profits in the short run, the firm can now only break even in the long run due to freedom of entry into the industry. However, still Kutचना Salon is likely to operate with spare or excess capacity ( $Q_1 - Q_0$ ) because of the monopolistic attributes that it still retains. The firm will therefore produce an output of  $Q_0$  at price  $P_0$ , making normal profits.

**5 Marks****10 Marks**

- (d) **One** major advantage of a firm operating in monopolistic competition is that there is entry of other firms into the industry particularly in the long-run and this leads to reduction in the prices of products which is good for customers. **2 Marks**

On the other hand, its major disadvantage is that a firm in monopolistic competition operates with excess capacity implying that a firm produces less than it could if it were operating in the perfect competition. In other words quantity produced is usually less than expected and this denies customers an opportunity to consume products optimally.

**2 Marks**

**4 Marks**

**(TOTAL: 20 MARKS)**

2. (a) Price elasticity of demand is the percentage change in quantity demanded of a product as a result of a percentage change in price of that product. The arc elasticity involves either contraction or extension along the demand curve and is calculated as follows:

$$P_{Ed} = \frac{Q_1 - Q_0 / Q_1 + Q_0}{P_1 - P_0 / P_1 + P_0}$$

**1 Mark**

For the purpose of this question:

$$P_{Ed} = \frac{450 - 550 / 450 + 550}{3000 - 2000 / 3000 + 2000}$$

**1 Mark**

$$= \frac{-100 \times 5000}{1000 \times 1000}$$

**1 Mark**

$$= -0.5 \text{ or } 0.5$$

**2 Marks**  
**5 Marks**

- (b) From the diagram:

- (i) The demand curve **C** best describes the answer in (a) above.
- 2 Marks**

- (ii) If there was one trader at Kampepuza then in case of a decrease in the price of maize, the demand curve **B** would be more desirable. This is because the more relatively elastic the demand curve, the more total revenue accrues to traders when there is price decrease.

**3 Marks**

- (c) The following are the **four** factors that can influence the price elasticity of supply:

- (i) **The existence of spare capacity.** Even if the price of the product increases a firm may not be able to increase supply if they do not have spare, unused or surplus capacity.
- 2 Marks**

- (ii) **The availability of stocks.** The firm may have accumulated a large quantity of unsold stocks which can be quickly supplied to the market. If this is the case then supply will tend to be more elastic.

**2 Marks**

- (iii) **Mobility of factors of production.** If there is easy reallocation of resources from one product to the other in the firm then the supply for that product will be more elastic.

**2 Marks**

- (iv) **The time period.** The supply is more likely to be more elastic in the long run than in the short run.

**Note:** other points can be considered.

**2 Marks**

**8 Marks**

- (d) Cross-price elasticity of demand refers to the response of demand for one product to the change in the price of another product. It can be put as the percentage change in quantity demanded of a product A divided by the percentage change in the price of product B; i.e., cross-price elasticity,

$$X_{EAB} = \frac{\% \Delta Q_A^d}{\% \Delta P_B}$$

**1 Mark**

$$= \frac{\Delta Q_A}{\Delta P_B} * \frac{P_B}{Q_A}$$

**1 Mark**

**2 Marks**

**(TOTAL: 20 MARKS)**

3. (a) The following are economic systems (A candidate may mention and explain any two of the following):

- (i) A free market economy – allocates resources through the forces of demand and supply with prices being determined by the market. Much as free market economy is by and large hypothetical, most western economies would act as close examples.

**2 Marks**

- (ii) A planned economy – allocates resources through administrative decisions. Some of the economies that would be ranked under this system include Communist China, North Korea and Cuba.

**2 Marks**

- (iii) A mixed economy – this contains features of both the free market and planned economic systems. Nearly all economies are mixed; the variations are on the degree of mixture; while some lean toward free market like the capitalistic nations, others bend towards command system.

**2 Marks**

(b) **Two** advantages of the free market economy are:

- (i) The market mechanism means that resources are allocated automatically without the need to resort to government intervention. **1 Mark**
- (ii) Due to competition amongst producers, high quality of products is usually guaranteed. **1 Mark**

On the other hand, two disadvantages of a free market economy are:

- (i) It leads to discrimination: those with higher income levels have more money votes and therefore greater say in what is produced (since the market is based on the 'ability to pay' principle). **1 Mark**
  - (ii) Certain goods, especially the merit and public goods may be under-provided or not provided at all. **1 Mark**
- 4 Marks**

**Note:** Other points on both advantages and disadvantages may be considered.

(c) **Four** points indicating to what extent it could be argued that the planned economy is better than the market mechanism as a means of allocating resources are:

- (i) Under the planned economic system, the planning office determines what goods to produce implying that any wasteful competition is avoided. **2 Marks**
- (ii) Unlike in free market economy, negative externalities can easily be controlled in the planned economy. **2 Marks**
- (iii) Planned economy leads to more equal income distribution since factors of production are controlled by the state. **2 Marks**
- (iv) Unlike free market economy, planned economy can effectively control inflation. **2 Marks**

**Note:** Other points may be considered.

**8 Marks**

(d) A public good is the one such that the consumption by one individual does not affect the consumption of the same product by another person. In other words, public goods are *non-rival* and *not exclusive* in consumption. An example of a public good is a public road. Merit good, on the other hand, is the one such that people are reluctant to consume although it is to their benefit. For instance, wearing of car seat belts. **4 Marks**

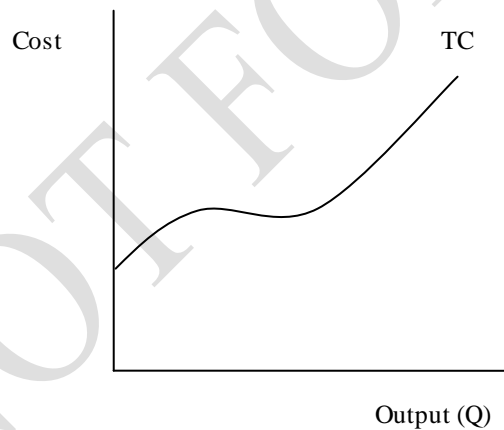
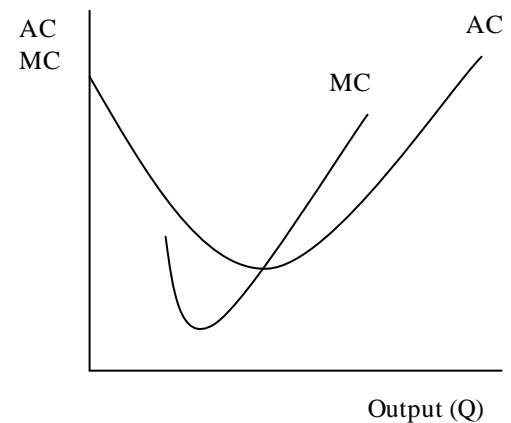
**(TOTAL: 20 MARKS)**

4. (a)

Units of output	Total cost	Average cost	Marginal cost
1	10	10	10
2	15	7.5	5
3	18	6	3
4	26	6.5	8
5	35	7	9
6	45	7.5	10
7	56	8	11
8	68	8.5	12

**4 Marks****4 Marks****8 Marks**

- (b) The graphs below indicate the total cost (TC), average cost (AC) and marginal cost (MC). The graphs also show the relationship between marginal cost and average cost when the latter is at its minimum point.

**4 Marks****4 Marks**

The marginal cost curve intersects the average cost curve at its minimum point from below, implying that as long as marginal cost curve is below average cost curve, the average costs of production will be decreasing. In the long run where all the factors of production are variable, any points before marginal cost curve cuts average cost curve would imply that a firm is enjoying economies of scale. After the marginal cost curve intersects the average cost curve, a firm would be experiencing diseconomies of scale.

**4 Marks**

**12 Marks****(TOTAL: 20 MARKS)**

5. (a) Aggregate demand is the measure of all economic units in the economy or the sum total of spending on goods and services in the economy. **2 Marks**
- (b) Below is an equation representing the components of aggregate demand, AD.

$$AD = C + I + G + (X - M)$$

where, C is private consumption, I is investment expenditure, G is public expenditure and (X-M) is net exports. **5 Marks**

- (c) Factors that can explain and change each of the components of aggregate demand are as explained below:

One factor that may affect private consumption is direct tax such as PAYE. An increase in direct tax will lead to decrease in consumption as the take home income decreases. This will in turn decrease the AD.

**3 Marks**

In case of investment, an increase in interest rates can reduce private investment, as it will be expensive to borrow from the lending institutions hence the whole AD will decrease.

**3 Marks**

Exchange rate will have an effect on net exports (X-M) in such a way that, holding everything else constant, depreciation of a local currency will lead to an increase in net exports. This will be so because while imports will become more expensive, exports will become competitive on the foreign market.

**3 Marks****9 Marks**

- (d) (i) GNP is the nominal value of all final goods and services produced in a country in a given period of time, usually a year. Specifically, it is gross domestic product (GDP) plus net property income from abroad. **2 Marks**
- (ii) This is different from NNP in the sense that NNP is GNP minus capital consumption allowance. **2 Marks**

**(TOTAL: 20 MARKS)**

6. (a) International trade, say in the COMESA region, may arise for a number of reasons:
- (i) Different goods require different proportions of factor inputs in their production which are found in different countries. **1 Mark**
- (ii) Economic resources are unevenly distributed throughout the SADC region (and indeed throughout the world). **1 Mark**

- (iii) The international mobility of resources is extremely limited. **1 Mark**  
**3 Marks**
- (b) **Four** advantages that might arise from free trade amongst the COMESA member states are:
- (i) Some countries within the COMESA region have a surplus of raw materials to their need while others have a deficit. Countries with a surplus, e.g., oil can take advantage of its resources and export them. **2 Marks**
  - (ii) International trade would increase competition amongst suppliers in the COMESA member states and this would lead to adequate and better quality products at fair prices. **2 Marks**
  - (iii) International trade would help create larger markets for firms' output in the COMESA region as such some firms can benefit from economies of scale by engaging in export activities. **2 Marks**
  - (iv) There are political advantages to international trade, because the development of trading links provides a foundation for closer political ties. This is what COMESA requires to accomplish. **2 Marks**  
**8 Marks**
- Note: Other points may be considered.**
- (c) In spite of the calls for free trade, Malawi, like many other countries, may still pursue protectionist measures due to the following **four** reasons:
- (i) There might be a need to protect infant industries that are not yet ready to compete in international markets. **1 Mark**
  - (ii) Protectionism is often seen as a means for a country to reduce its balance of trade deficit by imposing tariffs on imports. **1 Mark**
  - (iii) Protectionism might help countries like Malawi in the short term to deal with the problems of declining industries. **1 Mark**
  - (iv) Protectionism might be the right measure to counter dumping of surplus production from other countries. **1 Mark**  
**Note: other points may be considered.** **4 Marks**
- (d) The **five** disadvantages of protectionism are as follows:
- (i) Protectionist measures usually taken by one country tend to provoke retaliation by others. This leads to reduction in the volume of trade. **1 Mark**



- (ii) Protectionism would limit competition and hence lead to inadequate and poor quality products being produced at high prices. **1 Mark**
  - (iii) Because of retaliation by other countries, protectionist measures to reverse balance of trade deficit are unlikely to succeed. **1 Mark**
  - (iv) Generally, widespread protectionism tends to damage the prospects of economic growth. **1 Mark**
  - (v) Protectionism creates political ill-will amongst countries and so there are political disadvantages in a policy of protection. **1 Mark**
- Note:** other points may be considered. **5 Marks**

**(TOTAL: 20 MARKS)**

7. (a) **Four** main factors that can influence the volume of investment in an economy are:
- (i) The expected return from investment. **1 Mark**
  - (ii) Interest rates. **1 Mark**
  - (iii) New technology and methods of production. **1 Mark**
  - (iv) Changes in income. **1 Mark**
- Note:** other points may be considered. **4 Marks**
- (b) The question about marginal propensity to save is answered as follows:
- (i) Marginal propensity to save is the proportion of the increase in income that is saved. **2 Marks**
  - (ii) The multiplier is given as  $\frac{1}{MPS} = \frac{1}{0.10} = 10$  **2 Marks**
  - (iii) If household income increases by MK300, then the total national income will increase by  $\frac{1}{MPC} * 300 = 10 * 300 = MK3000$  **2 Marks**
- (c) The size of the multiplier depends on:
- (i) The marginal propensity to save. **1 Mark**
  - (ii) The marginal propensity to import. **1 Mark**
- Note:** other points may be considered such as tax rates. **2 Marks**
- (d) **Four** main factors that tend to limit the importance of the multiplier as far as the economic management is concerned are:

- (i) It is more relevant to a demand-deficient economy with high unemployment of resources, than to an economy where there is full employment. If there is full employment, any increases in demand will be inflationary. **2 Marks**
- (ii) The leakages from the circular flow of income might make the value of the multiplier very low and so 'pump priming' measures to inject extra spending in the economy would have little effect. This is relevant to Malawi where there is very high marginal propensity to import. **2 Marks**
- (iii) There may be long periods of adjustment before the benefits of the multiplier are felt. If a government wants immediate action to improve the economy, relying on demand management the multiplier could be too slow. **2 Marks**
- (iv) The consumption function in advanced economies is probably more volatile than Keynes believed. If consumption is unpredictable, measures to influence national income through the multiplier will be impossible to predict too. **2 Marks**

**8 Marks****(TOTAL: 20 MARKS)**

8. (a) The term unemployment can be defined as people who are out of work, who want a job and are actively looking for a job. **2 Marks**
- (b) The unemployment being referred to here is likely to be seasonal unemployment. **2 Marks**

Seasonal unemployment arises due to changes in times or seasons. This is very common in the agricultural sector of poor countries such as Malawi. In case of the tobacco industry, the many people are likely to get employed during the planting and harvesting time. However, these people are likely to be unemployed afterwards and they tend to remain unemployed until the next growing season.

**4 Marks****6 Marks**

- (c) **Two** negative effects of unemployment include the following:

- (i) The economic cost

This refers to the lost output which could have been produced had the unemployed been in employment. The unemployed labour represents a loss of resources and with it a resulting lower standard of living. **2 Marks**

- (ii) The social cost

Though this cost is difficult to calculate, unemployment will in the long-term lead to demoralization. The results can be family unrest, depression and possibly an increase in crime rate.

**2 Marks**

**4 Marks**

- (d) Technological improvement such as usage of tractors in the tobacco industry and structural unemployment could be linked in the following way:

Structural unemployment is the one that arises due to structural changes in either an industry or the economy such as changes in technology and comparative costs of an industry. With technological advancements regarding the usage of tractors, the cultivation of tobacco may require fewer labourers. The reduction in demand for labourers (most of whom might not be highly trained technologically) would lead to this kind of unemployment.

**4 Marks**

- (e) **Two** remedial policies that the Government of Malawi can employ to reduce cyclical unemployment are fiscal and monetary policies.

- (i) In case of fiscal policy, government can increase aggregate demand, either through the increase in total government expenditure or by reduction of taxes.

**2 Marks**

- (ii) On its part, the monetary policy can be used to influence the level of aggregate demand by means of interest rate and the level of credit available. For instance, the reduction in interest rate makes it cheaper to borrow for consumption and investment and this will stimulate demand in the economy.

**2 Marks**

**4 Marks**

**(TOTAL: 20 MARKS)**

9. (a) Barter trade is the trade in which exchange of goods only is involved.

**2 Marks**

- (b) **Five** disadvantages of barter trade are as follows:

- (i) It is cumbersome. **1 Mark**

- (ii) It might be difficult to find a prospective customer who has a product for sale that one is looking for and is also interested in the good on sale (coincidence of wants). **1 Mark**

- (iii) There might be problems of divisibility. **1 Mark**

- (iv) There are likely to be problems of transferability. **1 Mark**

- (v) It would have significant problems when it comes to international trade. In other words, international trade would be almost

impossible.

**Note:** Other points may be considered.

**1 Mark**

**5 Marks**

- (c) According to Economic Progress Report (1988) *narrow money* is money balances that are readily available to finance current spending, that is to say for 'transactions purposes'; while *broad money* refers generally to money held for transactions purposes and money held as a form of saving. It provides an indicator of the private sector's holdings of relatively liquid assets – assets that could be converted with relative ease and without capital loss into spending on goods and services. **4 Marks**
- (d) The following **three** assumptions must be made if the quantity theory of money is to become an explanation of price inflation:
- (i) Velocity,  $V$ , has a roughly constant value. The velocity of circulation of money remains the same at all times, or at least changes very slowly over time. **3 Marks**
  - (ii) Transaction,  $T$ , is either given or it is independent of the amount of money,  $M$ ; the reason why  $T$  should be a given total is that supporters of quantity theory argue that in the economy, full employment of resources is the norm and all resources are fully utilized, the volume of transactions,  $T$  must be a constant value. **3 Marks**
  - (iii) The amount of money,  $M$ , is determined by other factors and is independent of  $V$ ,  $T$  or price,  $P$ . The money supply could be controlled by government authorities. **3 Marks**

**9 Marks**

**(TOTAL: 20 MARKS)**

**E N D**