

**STRICTLY CONFIDENTIAL**



**2015 EXAMINATIONS**

**ACCOUNTING TECHNICIAN PROGRAMME**

**PAPER TC5: ECONOMICS**

**THURSDAY 4 DECEMBER 2014**

**TIME ALLOWED : 3 HOURS**

NOT FOR SALE

**SUGGESTED SOLUTIONS**

1. (a) State the difference between the following:
- (i) Demand is consumer's willingness or desire to purchase a certain amount of product at a certain price over a given period while quantity demanded is the actual amount purchased by consumers.
  - (ii) Supply is supplier's willingness or desire to produce or sell a certain amount of product at a certain price over a given period while quantity supplied is the actual amount produced or sold by suppliers.
- (b) Compute the following:
- (i) Excess demand – the excess of quantity demanded over quantity supplied – occurs when price is 10, i.e.:  $95 - 20 = 75$
  - (ii) Excess supply – the excess of quantity supplied over quantity demanded – occurs when price is 33, i.e.:  $80 - 40 = 40$
- (c) If 10 and 33 were legally established prices, then **A** and **B** are price ceiling and price floor, respectively.
- Price ceiling is a legally established maximum price that a seller can charge while price floor is a legally established minimum price that a seller can paid.
- (d) From (c) above, calculate the seller's total revenue when:
- (i) When price is 10, total revenue is  $10 * 20 = 200$
  - (ii) When price is 33, total revenue is  $33 * 40 = 1320$
  - (iii) When there is zero excess demand, total revenue is  $25 * 55 = 1375$
- (e) **Two** factors that can affect demand for a normal product include:
- (i) Price of the product.
  - (ii) Household income.

2. (a) Using a mid-point formula, calculate income elasticity of demand:
- (i) For product A when household income decreases from 45 to 35 is calculated as follows.

$$E_y = \frac{\% \Delta \text{in quantity demanded}}{\% \Delta \text{in income}} = \frac{(125-137)/(125+137)}{(35-45)/(35+45)} = \frac{-12/262}{-10/80} = 0.37$$

- (ii) For product B when household income increases from 50 to 55 is calculated as follows:

$$E_y = \frac{\% \Delta \text{in quantity demanded}}{\% \Delta \text{in income}} = \frac{(6-8)/(6+8)}{(55-50)/(55+50)} = \frac{-2/14}{5/105} = -3$$

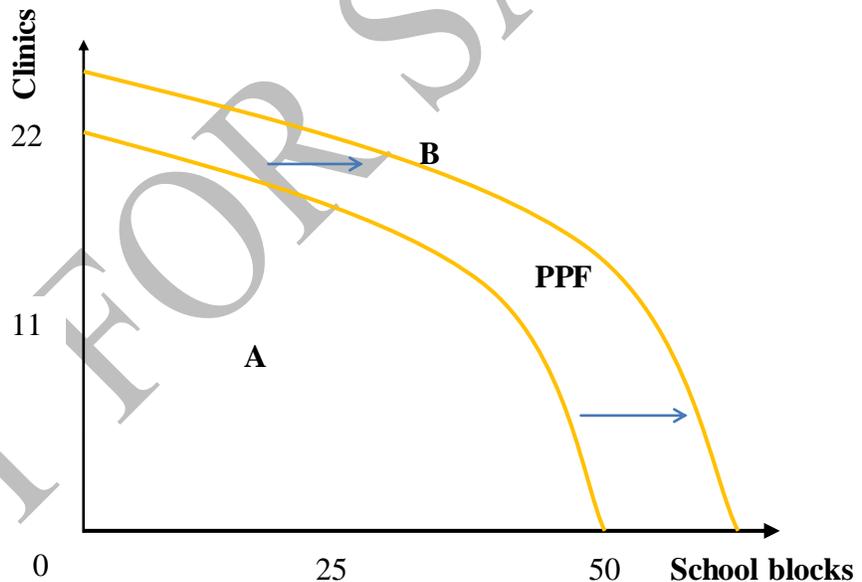
- (b) Product A is not inferior because the income elasticity of demand is positive.
- (c) **Three** factors that can affect the price elasticity of demand include:
- (i) Availability of close substitutes. The more substitute goods there are, especially close substitutes, the more elastic will be the price elasticity of demand for a good.
- (ii) The time period. The time horizon influences elasticity largely because the longer the time period which we consider, the greater the knowledge of substitution possibilities by consumers and the provision of substitutes by producers hence the more elastic the price elasticity of demand for a product.
- (iii) Habit forming. Products that are of habit forming, such as smoking tends to have price elasticity of demand being inelastic.

**Note: Other points can be considered**

- (d) Complete the areas represented by **A, B, C** and **D**.

| Price elasticity of demand | Change in price | Total revenue        |
|----------------------------|-----------------|----------------------|
| Elastic                    | Increases       | <b>A = Decreases</b> |
| Elastic                    | Decreases       | Increases            |
| Unitary                    | Increases       | No change            |
| Unitary                    | Decreases       | <b>B = No change</b> |
| Inelastic                  | Increases       | <b>C = Increases</b> |
| Inelastic                  | Decreases       | <b>D = Decreases</b> |

3. (a) Production Possibilities Frontier (PPF) shows the maximum combination of two outputs that an economy can produce if its resources are fully utilized.
- (b) The opportunity cost of constructing 22 clinics is 50 school blocks.
- (c) Between point A and B:
- Point A refers to a situation in which resources are inefficiently utilized. This is because the point is inside the PPF suggesting that it is possible to increase production of both, clinics and school blocks.
  - Point A can closely represent depression. This is because during depression a number of resources are either under-employed or inefficiently utilized.
- (d) With the aid of a clearly marked graph, **two** ways in which point B can be attainable are given as follows.



- If there is a discovery of new resources such as minerals.
  - Through improvement in technology.
- (e) **Two** reasons why Malawi is likely to operate close to point A rather than close to the PPF are given as follows.
- The country suffers from massive underemployment of resources
  - Many resources are inefficiently employed.

(f) **Three** factors of production (resources) and the way they are rewarded when put to use are given below.

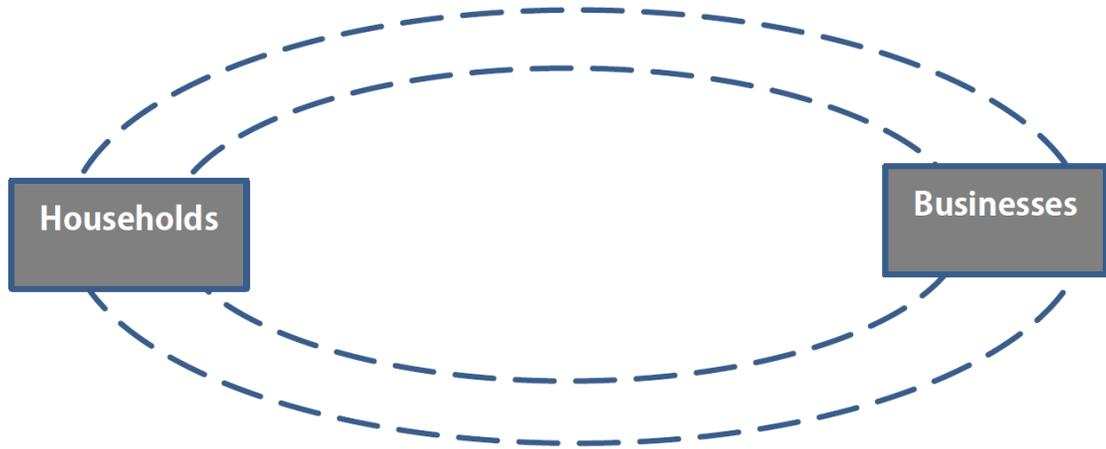
- (1) Land – rewarded with rent.
- (2) Capital – rewarded with interest.
- (3) Labour – rewarded with wages.

**Note: Other points can be considered**

### SECTION B

Answer three questions only from this section.

4. (a) Identifying (and explaining) which products are final products and which are intermediate products.
- (i) A household cleaning service purchased by a family from a domestic cleaning services company is a final product. This is because the cleaning service is the final service provided for the ultimate user.
  - (ii) A pair of gumboots sold to and to be used by a farmer is a final product. This is because the gumboot is the final good produced for the ultimate user.
  - (iii) A sheet of glass sold to a windscreen maker to be used to make windscreen is an intermediate product. This is because the glass will be used as a raw material for the production of windscreen.
  - (iv) Steaming coal used in the production of electricity is an intermediate product. This is because the coal will be used as a raw material for the production of electricity.
  - (v) Maize used to make floor at a certain factory in Mzuzu is an intermediate product. This is because the maize will be used as a raw material for the production of floor.
- (b) Explaining why the value of businesses' output of goods and services equals the income of households.



The basic circular flow model is based on the assumption that all output is purchased by households in the product markets. The quantity of output multiplied by the price determines the monetary value of expenditures, which are receipts for business firms. All revenues (value of output) received by firms are paid to households as factor payments (income). Factor payments include wages, salaries, interest, rents and profits, which are generated only by the value of output produced and sold. Hence, the value of businesses' output of goods and services equals the income of households.

- (c) The nation's GDP for the year is \$9 billion, not \$8.5 billion. GDP includes the market value of final goods and services produced, regardless of whether these products are sold. The unsold products are added to firms' inventories and included in gross national domestic investment.
- (d) **Three** reasons why comparing the GDPs of various nations might not tell you which nation's people are better off are as follows.
- (i) Different countries have different endowments. Some valuable endowments may not be captured by GDP.
  - (ii) GDP does not capture the distribution of income in a country.
  - (iii) Cultural values and perceptions are not reflected in GDP

Note: Other points can be considered

5. (a) Defining the following concepts:
- (i) Inflation: is an increase in the general price level of goods and services in the economy.
  - (ii) Consumer Price Index: is the most widely known price level index. It measures the cost of purchasing a market basket of goods and services by a typical household during a time period relative to the cost of the same bundle during a base year.
- (b) Supposing your annual income in 2014 was MK49,500 and assuming the base year for CPI was 2010 and the CPI in 2014 was 165, then the following can be calculated as follows:
- (i) Your real 2014 income measured in 2010 Malawi Kwacha, assuming the CPI is 165 in 2014.
 
$$Real\ Income_{2014} = \frac{Nominal\ Income}{CPI/100} = \frac{49,500}{165/100} = MK30,000$$
  - (ii) Inflation rate in 2014 if CPI in 2013 was 149.
 
$$Inflation\ rate_{2014} = \frac{(CPI_{2014} - CPI_{2013})}{CPI_{2013}} = \left(\frac{165 - 149}{149}\right) * 100 = 10.7\%$$
- (c) **Three** criticisms of the CPI as a measure of inflation are as follows:
- (i) The use of one 'typical' or 'average' basket.
  - (ii) Failure to adjust for changes in quality.
  - (iii) The impact of the substitution effect.
- (d) Suppose the annual nominal rate of interest on a bank fixed-term deposit is 9 percent. Therefore rate of interest if the inflation rate was 12 per cent is calculated as follows.
- $$Real\ rate\ of\ interest = Nomical\ rate\ of\ interest - inflation\ rate$$
- $$= 9 - 12 = -3\%$$
- (e) Identifying and briefly explaining any **two** disadvantages of inflation.
- (i) Redistribution effects. Different income groups are likely to be affected differently; for instance, those on fixed incomes will have their purchasing power reduced.

- (ii) The effect on the balance of payments. High inflation may make exports less competitive and depending upon the price elasticity of demand, the effect could be a deficit on the balance of payments.

6. (a) **Four** functions of money include.

- (i) Medium of exchange – People accept and have confidence in using money as a means of exchanging goods and services.
- (ii) Standard of value/Unit of account – This allows people to compare the value of different articles since the cost of items is measured in dollars and cents.
- (iii) Standard of deferred payment – Money allows people to identify the exact amount of debt to be repaid in the future.
- (iv) Store of value – Money allows people to calculate and store their wealth for future use.

(b) Could each of the following items potentially serve as money?

- (i) A K10 note: Yes, it meets all the above functions.
- (ii) Horses: No, it dies and cannot act as a store of value.
- (iii) Gold rings: Yes, gold rings can largely meet the above functions.
- (iv) A Visa credit card: No, it is hardly a medium of exchange nor a store of value.
- (v) A bank-certified cheque: Yes, it can easily meet the above functions.

(c) The main difference between commodity money and fiat money is that commodity money, such as gold and silver, is anything that serves as money but also has some innate market value in its other uses. Fiat money is backed only by law and not by any redeemability or intrinsic value.

(d) Suppose you remove MK2500 from your saving pot and deposit this amount into a bank. If the required reserve ratio is 10%, the maximum amount of loans the bank can create from this deposit is calculated as follows.

The maximum amount this bank can lend is equal to its excess reserves, i.e. initial deposit of K2500 less the required reserve of K250 = K2250.

- (e) Motives for holding money:
- (i) Transactions motive, i.e. holding money to pay off everyday expenses.
  - (ii) Precautionary motive, i.e. holding money to pay off unpredictable expenses.
  - (iii) Speculative motive, i.e. holding money to take advantage of changes in bond prices or interest-bearing assets.
7. (a) Unemployment refers to the numbers of people who are out of work and are actively looking for a job.
- (b) Identifying and briefly explaining any **three** types of unemployment.
- (i) Seasonal unemployment: unemployment caused by recurring changes in hiring due to changes in weather conditions, demand and/or production patterns.
  - (ii) Frictional unemployment: Unemployment caused by the normal search time required by workers with marketable skills who are changing jobs, initially entering the labour force or re-entering the labour force.
  - (iii) Structural unemployment: Unemployment caused by a mismatch of the skills of workers out of work and the skills required for existing job opportunities.

**Note: Other points can be considered – e.g. Cyclical unemployment: Unemployment caused by the lack of jobs during a recession.**

- (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.
  - (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.
- (d) Technological improvement such as usage of tractors in the agriculture 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 agriculture sector 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.

- (e) Two remedial policies that the Government of Malawi can employ to reduce youth unemployment are fiscal and monetary policies.
  - (i) In the case of fiscal policy, government can increase aggregate demand, either through the increase in total government expenditure or by reduction of taxes.
  - (ii) 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.

**END**

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