

Sponsored by
The Science Foundation College
Uganda East Africa
Senior one to sinior six
+256 778 633 682, 753 802709
Based On, best for science



# Economics paper 1 set 3 and marking guide

### **SECTION A**

1. (a) Below are costs and revenues of a firm, using the information provided, answer the questions that follow:

Output Q	Total revenue (T.R) in Ushs Total cost (T.C) in Ush	
0	-	1100
1	500	1400
2	1000	1620
3	1500	1750
4	2000	1800
5	2500	1850
6	3000	1940
7	3500	2190
8	4000	2600
9	4050	3250

- (i) Is the firm under perfect or imperfect competition?
- (ii) What are fixed costs?
- (iii) What are its total variable costs for the first two units of output
- (iv) What is the marginal revenue

### Answer

Q	(T.R) in	MR	AR	(T.C) in	FC	VC
	Ushs			Ushs.		
0	-	500	500	1100	1100	-
1	500	500	500	1400	1100	300
2	1000	500	500	1620	1100	520
3	1500	500	500	1750	1100	650
4	2000	500	500	1800	1100	700
5	2500	500	500	1850	1100	750
6	3000	500	500	1940	1100	840
7	3500	500	500	2190	1100	1090
8	4000	500	500	2600	1100	1500
9	4050	500	500	3250	1100	2150

- (i) The firm is under perfect competition because MR= AR = P = 500
- (ii) Fixed cost = 110 Ushs. (i.e. cost of 0 output)
- (iii) Total variable costs for the first two units of output = 300+ 520 = Ushs 820
- (iv) Marginal revenue (MR) = Ushs. 500.

- (b) Explain the meaning of
- (i) complementary factors of production
- (ii) Giffen paradox

- (i) Complementary factors of production are factors inputs in the process of production that are used together to enhance one another e.g. capital and labour
- (ii) Giffen paradox is a situation where the quantity demanded of inferior good increases whenever there is an increase in its price.
- (c) Distinguish between:
- (i) Dividends and shares
- (ii) Explicit costs and implicit costs

#### Answer

- (i) Dividends are part of a company's profit that a firm periodically pays out to its shareholders as a return on their capital contribution. Whereas shares are units of capital contributed in formation of a joint stock-company.
- (ii) Explicit costs are direct costs incurred by the firm during production process e.g. costs of labour, raw materials, power, water etc. whereas implicit costs are indirect costs or overhead costs incurred by the producer during the production process such as quality control costs, insurance, depreciation, the foregone income that a business owner-manager could have earned working for someone else, accounting and legal expenses, administrative salaries, office expenses, rent, security expenses, telephone expenses, and utilities
- (d) What is the role of price in a free market?

## Answer

**Price** is the amount of money that has to be paid to acquire a given product:

- Price acts as a signal for shortages and surpluses which help firms to determines what to produce and how to produce it
- High prices act as incentives to increased supply and growth
- Guides producers on what techniques to use
- Helps consumer in making consumption plan
- Determines peoples income distribution, the price mechanism is a system of real flows from producers to consumers and from consumers to producers
- Ensures efficient utilization of resources; the factors of production (land, labour, capital) will be used for their most valuable purposes.
- High prices is an incentive for improvement on quality of the product
- Prices help to redistribute resources from goods with little demand to goods and services which people value more.
- (e) Distinguish between substitution effect and income effect

The substitution effect states that when the price of a good decreases, consumers will substitute away from goods that are relatively more expensive to the cheaper good or Substitution effect is increase in demand of a commodity whose price is said to fall as compared to its substitutes whose prices are said to be constant. Or

The income effect states that when the price of a good decreases, it is as if the buyer of the good's income went up. Or income effect refers to the increase in demand of a commodity due to increase in real income or purchasing power as a result of price fall of the commodity.

(f) Explain why leisure is an economic good.

#### Answer

It is defined as rest, idleness, play, or recreation thereby **regulating the body and mind**, alleviating the stress of life, and providing a pleasant experience.

Leisure is an economic good because;

- It commands price
- It is relatively scarce
- People derive satisfaction out of it
- It involves opportunity cost
- It arises because of scarcity and choice
- (g) What is meant by international cartels?. Give one example of an international cartel.

### Answer

International cartel refers to a group of firms from different countries coming together to coordinate output decisions and control prices in order to benefit from production and marketing their products. Example of a cartel is **The organization of petroleum-exporting countries (OPEC)** 

(h) Distinguish between social wealth and social welfare. Give two examples in each.

### Answer

Social wealth refers to the physical assets or stock of goods owned by the public or society or local authority, e.g. schools, roads, public hospitals, and public libraries.

Social welfare refers to the general wellbeing of people represented by the quality and quantity of social services available to them, e.g. level of education attained, health conditions, leisure, employment and political stability.

(i) Differentiate between revaluation and overvaluation of a currency

### Answer

Revaluation of a currency occurs when the value of a currency is increased relative to another currency in a fixed exchange rate regime whereas overvaluation of a currency is that currency whose exchange rate is fixed above the fixed market rate (equilibrium rate)

(j) Give two differences between structural and frictional unemployment

digitalteachers.co.ug

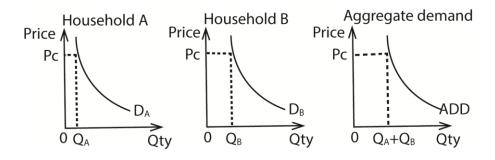
Unemployment that is frictional is chosen, whereas that which is structural is
typically forced. People who voluntarily quit their jobs and then don't find new work right
away usually fall into the frictional category. Those who are fired, laid off, or otherwise
terminated are usually seen to be in the structural class.

• Structural unemployment refers to a situation where people become unemployed due to changes in the structure of the economy e.g. retrenchment while frictional unemployment refers to short-term unemployment that occurs during the time when labour leaves one job to another.

- Structural unemployment is brought about due to the exhaustion of some inputs for example minerals such as copper while frictional unemployment is due to working conditions which force labour to look for new jobs.
- Structural unemployment can cause by an upgrade in technology/ automation while frictional unemployment is caused by discontents
- 2. (a) Explain and illustrate an aggregate demand curve

A demand curve is the locus of points showing quantity demanded of commodity demanded at various prices per period of time. It draws on assumption that the higher the price, the lower the quantity demanded other factors remaining constant.

Aggregate demand curve is the horizontal summation of all individual household demand curves.



(b) Why is aggregate demand curve down sloping?

Note that different reasons account for down slopping of a demand curve (one product) and aggregate demand curves (many products)

Three reasons cause the aggregate demand curve to be downward sloping.

- The first is the **wealth effect**. The aggregate demand curve is drawn under the assumption that the government holds the **supply of money** constant. One can think of the supply of money as representing the economy's wealth at any moment in time. As the price level *rises*, the wealth of the economy, as measured by the supply of money, declines in value because the purchasing power of money falls. As buyers become poorer, they reduce their purchases of all goods and services. On the other hand, as the price level *falls*, the purchasing power of money rises. Buyers become wealthier and are

- able to purchase more goods and services than before. The wealth effect, therefore, provides one reason for the inverse relationship between the price level and real GDP that is reflected in the downward-sloping demand curve.
- A second reason is the interest rate effect. As the price level rises, households and firms require more money to handle their transactions. However, the supply of money is fixed. The increased demand for a fixed supply of money causes the price of money, the interest rate, to rise. As the interest rate rises, spending that is sensitive to rate of interest will decline. Hence, the interest rate effect provides another reason for the inverse relationship between the price level and the demand for real GDP.
- The third and final reason is the net exports effect. As the domestic price level rises, foreign-made goods become relatively cheaper so that the demand for imports increases. However, the rise in the domestic price level also means that domestic-made goods are relatively more expensive to foreign buyers so that the demand for exports decreases. When exports decrease and imports increase, net exports (exports imports) decrease. Because net exports are a component of real GDP, the demand for real GDP declines as net exports decline.
- 3. (a) What is meant by an inefficient firm in economic theory?
  - (b) Why may inefficient firm continue production both in short run and long run Answer
  - (a) An inefficient firm is a firm that operate at high cost of production. Or it is a firm that may not be in position to meet its running costs.

(b)

- When the aim is to provide employment opportunities for the people other than profit maximization. In this case, as long as the desirable labour force is employed, such firm don't close down.
- Sales maximization other than profit maximization. The firm continues producing provided the sales are higher.
- When the firm is government owned and their goal is socio-economic welfare of the population.
- When the firm is receiving subsidies from government in which case even though they are incurring losses, their expenditures are met by government
- When a firm is using profits earned from other sources to operate.
- When a firm hopes to change management in order to improve in future.
- When a firm hopes to secure a long term credit
- When a firm fears to lose its popularity/name, losses may be met by the shareholders
- When a firm fears to lose its customers.
- When a firm had accumulated profits and assets in the previous trading period
- When a firm fears to lose its assets
- It can be a non-government organization that depend on foreign aid or donations
- 4. (a) Explain how National income is calculated
  - (b) Does the level of National income give an accurate picture of the economic and social wellbeing of the population? Give reasons to support your answer?

    Answer
  - (a) National income is calculated in the following ways;
  - The income approach: the national income is measured by adding up the pre-tax income generated by the individuals and companies in the economy. It consists of income from

wages, rent of buildings and land, interest on capital, profits, etc. in an accounting year. When this approach is used, transfer payments are excluded to avoid double counting

- The expenditure approach: the national income is measured by adding up the expenditures made by individuals, companies, and the government. Thus, it combines consumer spending, investments made by companies, net exports, and government spending to calculate the national income. Such expenditures exclude consumptions, investment, government expenditures and net exports.
- The product (output) approach: the aggregate value of final goods and services produced in a country during a financial year is computed at market prices. The data of all the productive activities-agricultural products, Minerals, Industrial products, the contributions to production made by transport, insurance, communication, lawyers, doctors, teachers. Etc. are accumulated and assessed.
- Value Added Method: The distinction between the value of material outputs and material inputs at every stage of production is Value added.
- (b) Note: National income figures are not designed to assess welfare or the wellbeing of citizens. It was designed to measure production capacity and economic growth. However, when National figures are high, it means that per capita income will also be high. So using national income figures to measure standards of living is the same as using per capita income to measure standards of living.
  - The problems associated with the per capita are
- Per capita income does not consider the level of illegal activities in an economy. National income figures may be low when people are enjoying high standard of living
- It does not consider the type of good produced. A country may portray high per capita income figures when than nationals are experiencing low standards of living.
- National income figures may be high when majority of the people are unemployed, this therefore does not designate high standards of living
- National income figures may be high when most of people's income is taken in form of taxes which lead to low standards of living.
- National figures may be high when people are over working, hence low standards of living.
- National income figures shoot up during inflation which does not depict high standards of living due to high cost of living.
- National income figures do not show the distribution of income. The figures may be high when the income is unevenly distributed and majority have low standards of living. Rising inequality is resulting in a rise in societal discontentment and increased polarization.
- The non-market output increase national standards of living yet are not portrayed in national income figures.
- A country can have high levels of national figures when actually it is facing political unrest which does not mean that people are enjoying high standards of living.
- National income figures do not discount the negative impact growth may cause towards health and environment which have negative impact to standards of living such as pollution and environment degradation.
- National income figure do not reflect information and entertainment that drive the growing service economy providing positive influence on the quality of life.

- 5. (a) Give five salient features of Uganda's (LDC) economy.
  - (b) What changes would you consider for such an economic structure?

- (a) Uganda's economy is characterized by the following
- Agricultural sector (predominantly subsistence in nature)
- Dualism- technological, sectoral, social
- Industrial sector is small but growing
- Unemployment and underemployment
- Excess capacity (underutilization of resources in several sectors)
- Dependence
- Interdependence
- Private sector
- Under developed infrastructure
- Open economy
- High levels of illiteracy with abundant supply unskilled and semiskilled labour
- High rate of population growth
- High import and low export structure
- (b) The following are proposed remedies
  - (i) The large subsistence sector can be reduced by the following measures
- There is need to establish, provide and maintain adequate infrastructures such roads and electricity supply to stimulate production in rural areas
- Value addition to agricultural products to attract high prices
- Cooperative movements should be fostered to encourage production and joint marketing
- Provision of credit facilities to the farmers
- Diversification within agriculture sector
- Access to inputs such as fertilizers and tractors
  - (ii) The import-export structure can be changes through
- Import restrictions to minimized expenditure of foreign exchange
- Export promotions
- Government should encourage industrial development
  - (iii) Economic dependence can be reduced by
- Control population growth rate
- Providing and improving education system to provide skilled manpower
- Improved tax system for internal financing
- Promotion of technological research and innovation
- Development and provision of communication and information technology
- 6. Under what socio-economic conditions may economic growth lead to economic development in an economy?
  - When an increase in real per capita income is sustained for a long period of time
  - When increase in national income is used to acquire things which improve human welfare e.g. food, clothing, shelter, education, health and information
  - Increased literacy and education
  - Environmental protection to ensure safety of future generations
  - When national income is equitably distribute across all the population

- Improvement in technology to lead to improvement in the quantity and quality of production
- Job creation to cater for the growing population
- Production favourable goods and services
- Good working conditions
- Research and innovation
- Information technology
- 7. (a) Account for the causes of demand-pull and cash-push inflation in your country
  - (b) What measures can be used to curb imported inflation?

- (a) Causes of demand-pull inflation
  - Demand-pull inflation is when growing demand for goods or services meets insufficient supply, which drives prices higher or Rising prices caused by consumers wanting more goods than current supply
- **A strong economy.** When the economy is booming and unemployment is low, consumers tend to earn more income and spend more money, which drives up levels of aggregate demand throughout an economy.
- Increase in money supply. An increase in money supply leads to more demand and services relative to the supply of these commodities available. This leads to shooting prices due to excessive demand
- **Supply shortfalls.** Higher income and more spending drive growing demand, and companies respond by trying to increase supply to keep up. Waves of demand for raw materials, subcomponents and labor ripple through an economy, and it may take time for production to meet the demand.
- **Inflation expectations.** when consumers expect inflation to rise in the near future, they may pre-emptively start buying more things now to avoid paying what they expect will be higher prices later a period following Christmas. This can lead to a problem with supply, leading to demand-pull inflation.
- Government policy of reducing taxes on some essential goods increases people's disposable income leading to excessive demand and rise in prices
- **The low level of liquidity preference.** When people's desire to hold money is low, much of their earnings will have to be spent. This therefore leads to price increase
- **Increase in government expenditure.** If government expenditure is financed by borrowing from banks other than taxation (deficit financing), more money will be injected into the economy leading to price increase.
- **Low marginal propensity to save.** Reduced savings especially during conditions of full employment will cause demand and prices to increase
- Rural-urban migration causes high demand for consumer goods in urban areas
- Restriction of supply by monopolies and aligopolies. These lead to shortage in supply of some commodities leading to price increase

### Causes of cost-push inflation

Cost-push inflation occurs when higher production costs push up the prices of goods and services

- High wages and salaries which are often influenced by government and trade unions and cause rise in cost of production

- Increasing prices of factors inputs such as raw materials will lead to an increase in prices of outputs
- The cost of transport of raw materials and finished good cause increase in prices
- High cost of borrowing associated with high interest rates increase the costs of production
- High levels of taxation on producers and importers
- High advertising costs
- High rent for business premises
- natural disasters, such floods, earthquakes, fires, or tornadoes leading to destruction of production facilities.

### (b) Measures to imported inflation

Imported inflation is the Increase in prices of domestically produced goods and services due to increase in the prices of imported fuels and raw materials for production

- Revaluation of domestic currency
- Adoption of import subsidization
- Use of barter trade system in international trade
- 8. How is devaluation of the currency supposed to cure an economy's balance of payments current account deficit? Is it likely to succeed? Give reasons to support your answer.

#### Answer

- When the demand for export is price elastic such that a fall in their prices lead to greater increase in quantity demanded abroad and hence lading to increase in foreign exchange
- When the demand for imports is price elastic such that when the currency is devalued, the prices of imports increase discouraging importation
- When the supply of exports is highly price elastic such that when demand for them increase, the supply should follow immediately to avoid shortages
- There should be no restrictions put on country's export.
- When other countries do no devalue their currencies
- When the devaluating country is not facing inflation
- There must enough to export and leave enough for domestic market
- When the currency in which exports are priced remains stable

### Benefits of currency devaluations include

- It stimulates demand for export and increase foreign exchange earnings.
- It discourages import because it makes them expensive protecting infant domestic industries
- It reduces imported inflation
- It is a way or retaliation by one country against the other whose devaluation might have affected its economy.
- It corrects balance of payment deficits because it reduces the volume of imports and increases the volume of exports thereby increasing export earnings.
- It promotes self-reliance since it decreases demand for foreign commodities and encourages consumption of local goods.
- It reduces export unemployment since it makes exports cheaper, increase their demand which increases on investment.

- It enables a country to access financial assistance from IMF and World Bank because devaluation is one of the conditions.
- It motivates farmers since devaluation increase agricultural produce
- It restricts capital outflow as importation is discouraged.

# Limitation of devaluation

- It causes retaliation by other countries that would have been affected by devaluation of one country.
- It limits the market for country's exports especially when other countries also devalue their currencies.
- It may worsen imported inflation especially when the demand for imports is price inelastic.
- It causes smuggling as nationals will try to earn high value foreign currencies which increase per capita outflow.
- Balance of payments problem worsens in case of inelastic demand for imports by devaluating country.
- It increases the value of foreign debts because foreign currency becomes expensive.
- It leads to corruption in the civil service as they hoard foreign currencies so that they get higher profits in future when devaluation occurs.
- Cheaper substitutes commodities are developed especially in developed countries causing failure of devaluation process.
- LDCs tend to have insufficient import substitutes making importation inevitable
- The policy of devaluation fails when the devaluing country is not a major produce/supplier of export commodities in questions.