Economics paper 2 set 2 and marking guide

1. (a) How is rent related to transfer earnings in economics

Transfer earnings are the minimum amount labour must be paid in order to keep it in its present use. It is an opportunity cost of labour or value of the next best employment foregone. Economic rent is the amount received by the factor of production labour above the minimum required to supply labour, it is the amount earned by labour above transfer earning. For example, if a doctor would leave the profession if her wage fell below sh. 100,000 a year and she currently earn shs.120,000, transfers earnings are sh.80,000 and economic rent is sh. 20,000. For most workers' wages are composed of both elements. The ratio of transfer earnings to economic rent will vary, and depends largely on the elasticity of supply of labour – the more inelastic the supply of labour the greater the share of economic rent.

(b)(i) What is meant by beggar-my-neighbour policy in economics?

It is a policy adopted by a country as a relation or a reaction to policies by neighbouring country to benefit in its own economy but harmful to other economies or trade partners e.g. import restriction, devaluation

Give two reasons why a beggar-my-neighbour policy may be adopted

- to protect the domestic infant industry by encouraging consumption of domestic goods
- Improve balance of payment by reducing imports and increasing exports.
- Increase the level of employment

(c) Study the table below

Price	quantity
300/=	1
250/=	2
200/=	3
150/=	4
100/=	5
50/=	6

Using sh. 150/= as the fixed market price

(i) Define and calculate the consumer's surplus

Consumer surplus is the additional benefit a customer get when he pays less than he/she willing and able to pay to a good.

Price	quantity	Consumers surplus
300/=	1	300 – 150 = 150
250/=	2	250 – 150 = 100
200/=	3	200 – 150 = 50
150/=	4	150 – 150 = 0
100/=	5	100 – 150 = -50
50/=	6	50 – 150 = -100
Total		150

Consumer's surplus = 150

Or

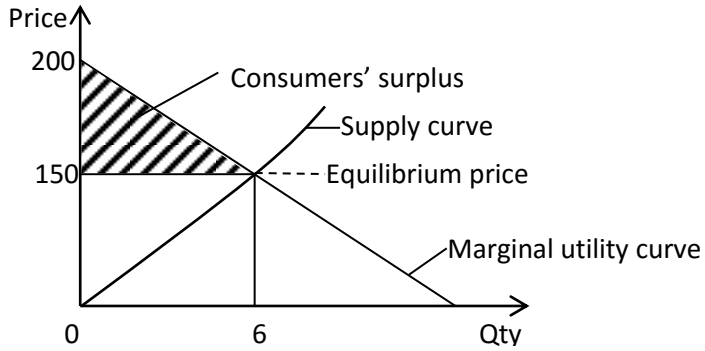
Consumer's surplus = total expenditure – actual expenditure

Total expenditure = 300 + 250 + 200+ 150 + 100 + 50 = 1050/=

Actual expenditure = 150 x 6 = 900

Consumer's surplus = 1050 – 900 = 150/=

(ii) Illustrate the level of consumer's surplus on a graph



(d) (i) what is supplementary cost

Supplementary costs are also called overhead costs or fixed costs. They are costs incurred that do not vary or change with changes in the output level

(ii) Give two examples of supplementary costs.

- Rent **and lease costs**
- Salaries of permanent managerial or top administration
- Interests payable on loans
- Cost of advertisement
- insurance,
- loan repayments
- Property taxes
- Business licence

(e)(i) What is a product differentiation?

A product differentiation is a practice by producers in imperfect market to create artificial differences between goods which perform or serve similar functions. Product differentiation involves highlighting the features of a product or service that make it unique and valued by customers.

(ii) Name the features of product differentiation

- Difference in packing
- Differences in branding
- Differences in designing
- Differences in labelling
- Quality of products
- Scent/smell
- Color

(f)(i) Given that the supply of commodity X has increased from 200 units to 300 units per week due to a decrease in price for commodity from 80/= to 60/= per unit

(i) Calculate the elasticity of supply of commodity x

$$E_s = \frac{\%\ change\ of\ quantity\ of\ commodity\ X}{\%\ change\ of\ price\ of\ commodity\ Y} = \frac{\left(\frac{300-200}{200}\right)x100}{\left(\frac{60-80}{80}\right)x100} = -2$$

(ii) Give possible examples of X and Y: X= hides and Y- beef

(g)(i) What is meant by the term "black market"?

A black market is any market where the exchange of goods and services takes place in order to facilitate the transaction of illegal goods or to avoid government oversight and taxes, or both or in violation of legal price controls and rationing.

(ii) Why does it occur?

- To avoid taxes
- Buying and selling goods prohibited by law such as cocaine or cannabis
- Hoarding of commodities due to expectation of higher prices
- To highly restricted and/or taxed goods

(h)(i) Explain what agricultural labour productivity is.

Agricultural labour productivity is **output per unit of labour input** used in agricultural production process

(ii) What are non-economic factors affect agricultural labour productivity in Uganda

- Soil fertility
- Climatic changes
- Political stability
- Public opinions
- Pests and diseases
- Cultural/traditional practices
- Levels of skills of agricultural worker
- Population structure

(i) Distinguish between liquid money from money in circulation

Liquid money is money in cash form possessed by the public while money in circulation refers to liquid cash/ money in cash form in the hands of the public and financial institutions , plus instruments that can perform the function of money but are not money themselves e.g. bank drafts, cheque.

(j) (i) what is meant by credit

Credit is the process of borrowing and lending or it is a process where lending institutions such as commercial banks extend facilities to deficit-spending units for financing new or on-going investment.

(ii) List four instruments of credit

- Over drafts
- Bills of exchange
- Credit cards
- Securities
- Promissory notes:
- bonds,
- checks,
- invoices.

2. (a) Outline the factors that determine the price elasticity of demand of a product.
    - Availability of substitute
    - The proportion of income spent on the product
    - Habit forming products e.g. cigarettes and alcohol.
    - The number of uses to which a commodity can be put to convenience
    - Degree of advertising
    - Degree of necessity
    - Consumer's income
    - The number of new purchase
    - Time of the year e.g. the demand for Christmas cards in December is inelastic
    - Apathy/ignorance of the availability of cheap goods elsewhere
    - Convenience i.e. the demand can remain inelastic because of convenience.
    - Durability i.e. durable goods like type machinery experience inelastic demand
    - Joint demand i.e. goods jointly demanded then their demand is inelastic if one is already possessed e.g. car and petrol
    - Inflation
    - Future expectation of price increase or fall
    - Possibility of postponing consumption
    - how much time has elapsed since the time the price changed.

(b) What is the relevance of the concept of price elasticity to

(i) government

(ii) consumer

(iii) producers

(i) Government
- **It helps government in currency devaluation.** The government can devalue it currency if her imports and exports have elastic demand and supply such that as the prices of imports increase, quantity of imports reduce and as prices of exports reduce the volume of export increase.
- **Nationalization.** The concept of elasticity of demand enables the Government to decide as to which industry should be declared as public utility and consequently owned and

controlled by the state. The products like electricity, gas, water, transportation, etc. have inelastic demand to avoid high prices to the nationals.

- **Wage policy.** This helps the government when establishing wages of its workers. Workers with inelastic demand such as Doctors are paid more than those that have elastic demand are paid less e.g. office messengers, cleaners, drivers
- **Protection and subsidization.** It helps the government in giving subsidies to producers. The producers whose products have elastic demand seek more protection and assistance from the government because they are unable to face strong competition whereas produce whose products have inelastic demand will get less subsidies from government.
- **Can be used by government to determine taxes on commodities**. Government can impose higher taxes on goods with inelastic demand whereas low rates of taxes imposed on commodities with elastic demand
- This measurement can be useful in predicting consumer behavior as well as forecasting major events, such as an economic recession or recovery.
- **Helps government to regulate prices**. I.e. In order to protect the interest of consumers' government fixes the maximum price of the commodity with inelastic demands and those for export.
- **To address Paradox of poverty amidst plenty**. Government can stabilise the prices of agricultural goods by following a policy of price support programme in the event of increased production.
- **International Trade:** The 'terms of trade' can be determined by measuring elasticity of demand in two countries for each other's goods. In international trade, a country earns more profits by importing the commodities, which have high elastic demand and exporting the ones, which have relatively less elasticity.
- To regulate consumption of harmful goods by high taxation.
- To reduce inflation. Government can levy taxes on products with inelastic demand to withdraw money from circulation

(ii) Consumer

- It helps in determining incidence of tax. For goods whose demand is elastic, the burden is borne by the producer and for those whose demand is inelastic; the burden is borne by the consumer.
- It is used to determine the expenditure of the consumers. Consumers spend more on commodities whose demand is inelastic such as soap and spend lend less on commodities whose demand is elastic
- Protection and subsidization. The government has a duty to protect its citizens from over exploitation by giving subsidies to essential commodities such as drugs and maintenance of roads.

(iii) Producer

- **It helps a producer in determining prices for his commodities.** If a commodity has elastic demand, the producer will reduce the price and charge high price for a commodity that has inelastic demand
- **It helps the producer in determining wages of his workers.** Workers whose demand is inelastic are paid more than those whose demand is elastic
- It helps a monopolists in price discrimination. A monopolist will charge high price for same for commodity where prices are inelastic and less price are elastic price.

- **It helps a producer to determine advertisement costs.** If a commodity has inelastic demand, the producer tends to spend less on advertisement and spends more on advertisement of commodities that have elastic demand because of stiff competition.
- **In the Determination of Output Level:** For making production profitable, it is essential that the quantity of goods and services should be produced corresponding to the demand for that product. Since the changes in demand is due to the change in price, the knowledge of elasticity of demand is necessary for determining the output level
- **In Demand Forecasting:** The elasticity of demand is the basis of demand forecasting. The knowledge of income elasticity is essential for demand forecasting of producible goods in future. Long- term production planning and management depend more on the income elasticity because management can know the effect of changing income levels on the demand for his product.
- **Making decisions on what to produce**. A businessman chooses the optimum product-mix on the basis of elasticity of demand for various products. The products having more elastic demand are preferred by the businessmen. The sale of such products can be increased with a little reduction in their prices.

3. (a) Explain the concept of profits as used in economics.

Profit is the return to an entrepreneur for bearing the uninsurable risks of production, Or it is the difference between total revenue and total cost.

In economics literature, the concept of profit refers to concepts of normal profit and pure profit.

- Normal profit is the minimum rate of return that a firm must earn to remain in industry. It also refers to the long term earning of the entrepreneurs under competitive conditions

Note: Any excess of total revenue over total cost is called abnormal profit

- Pure profit (economic profit) is a return over and above the opportunity cost in the payment that would be necessary to draw forth the factors of production from their remunerative alternative employment.

Or

It is defined as "residual leftover after all contractual costs have been met, including the transfer costs of management, insurance risks, depreciation and payments to shareholders sufficient to maintain investment at its current level.

Or

Pure profit equals net profit less opportunity costs of management, insurance risks, depreciation of capital, necessary minimum payment to shareholders that can prevent them from withdrawing their capital from its current use.

(b) What are the functions of profit in an economic system?

Profit plays the following roles in economic systems:

- It provides to entrepreneurs with reward for risk bearing without which he/she could not undertake production
- It can be used for expansion of the business operations
- It can be used for research, invention and innovations
- It encourages efficient allocation of resources. More resources are allocated in the line where profit is highest
- It attracts resource flow in the country by foreign investors who invest in the country to get profit

- It a source of revenue to the government by taxing profit
- It can be used to reward other factors such as capital and land

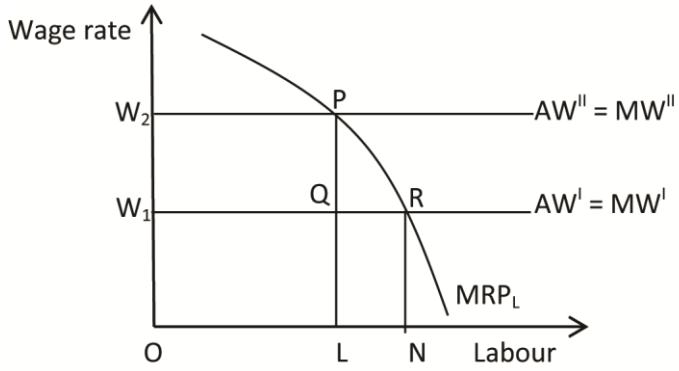
4. (a) What is meant by the term full employment
   Full employment refers to a situation where all factors of production especially labour are fully utilized. It is also defined as a state where the labour force is fully utilized and the rate of unemployment is less than 2%.
   Or
   Full employment is the situation where all people who are available and searching for work can find a job at the prevailing remuneration rates and conditions.

   (b) Why is it difficult to attain full employment in an economy?
   - There is inadequate information about where jobs are; where jobs are advertised in newspapers most unemployed people fail to get this information because they cannot afford the papers
   - Shortage of co-operant factors i.e. there could be availability of one factor ad less or scarcity of the other
   - High population growth rate that does not match with employment creation. This makes proper planning for distribution of jobs very difficult.
   - Rural-urban migration. This leads to urban unemployment creating gaps in rural areas.
   - Seasonal employment where people are employed in one season and not in another such planting, weeding and harvesting in agriculture
   - Immobility of factors of production. For example there exist plenty of land in some areas and lacking in some areas. Labour immobility may be due to family ties.
   - Restriction of entry into certain jobs by trade unions e.g. due to age limit, language and experience
   - Large private sector which tend to use less labour to maximize profit.
   - Limited market for commodities produced which does not encourage expansion of businesses to use up labour.
   - Employment of expatriates in preference to local people
   - Lack necessary skills and education required by the job market
   - Lack of value addition limiting job creation.
   - Automation substitute employees
   - Some people who are capable to work choose not to particularly if unemployment benefits are available.

5. (a) Explain what is meant by marginal revenue products.
   The marginal revenue product is the increase in total revenue resulting from the employment of each additional labour unit.

   Marginal revenue product in a perfectly competitive market is equal to the price multiplied by the marginal revenue. Marginal revenue is the increase in revenue that results from the sale of one additional unit of output.

   For example, the labour market is in equilibrium, wage rate equals marginal product of labour multiplied by price of product.



Given the MRP_L curve, the number of workers to be employed will be determined by where MRP_L = wage rate. For example, if wage rate is given at OW_2 a profit maximizing firm will employ labour where $OW_2 = MRP_L$. This condition is fulfilled at point P, only OL number of workers will be employed. When wages go down to OW_1, more workers are employed, but if wages go down OW_2 to OW_1 and employers still employ only OL workers, they will lose possible revenue equal to area PQR.

(b) Why is marginal productivity theory rarely used in determining wages?

- The theory assumes that there is no government interference, but government usually interferers in wage determination
- The theory assumes the law of diminishing returns, but this does not apply at all times since government sometimes establishes minimum wages
- The theory assumes that employers can calculate MRP_L but labour employers cannot calculate the marginal product and it changes with time leading to wage instabilities.
- It assumes that all factors of production are substitutable but some factors of production are not substitutable
- It assumes that output can be quantified in measurable units to quantify the output
- It assumes that all factors are employed, but all factors of production are not fully employed.
- The theory assumes that the bargaining power of labour and management is equal, this is not true because most times workers are exploited.
- It assumes perfect competitive labour market but there is no perfectly competitive labour market.
- Wages are usually determined by several other factors rather than marginal product of labour.
- The labour is not perfectly mobile.
- The theory assumes that there exists perfect competition in all the markets. But in reality, perfect competition is only an imaginary concept. In modern days, perfect competition does not hold good.
- The marginal productivity theory holds good in the long run only while it ignores the short period
- The theory assumes employment can be increased by wage cut. Moreover, according to Keynes, the volume of employment is not determined by wage rate but by effective demand.
- Production is the result of the co-operative efforts of all the four factors of production and it is not possible to separate out the contribution of one factor.

6. (a) Distinguish between buffer stock and stabilizing fund policies
   Buffer stock refers to government policy of setting effects of price fluctuations by buying the excessive produce so as to stabilize prices of agricultural products by releasing quantities of the produce to the market during periods of scarcity.
   Whereas stabilization fund refers to government policy of creating fund or pool from where it draws money to effect payments when prices fall.

   (b) What problems are faced in administering the two policies?
   - LDCs are poor and therefore cannot afford purchasing the excess surplus due to limited funds
   - There are inadequate storage facilities especially for perishable goods such as vegetables
   - Poor transport system to collect these produces from all parts of the country
   - Reluctance by the government to take risk
   - Corruption may lead to mismanagement of funds
   - In case of continuous declining prices for several seasons, the funds is likely to be exhausted
   - Producers continue producing the same products that lack market instead of diversification
   - In case of a general trend of price increase due to scarcity, producers at times keep on producing less instead of producing more. This makes price increase persistent.
   - International commodity agreements which would be stabilizing prices of agricultural products are weak and disorganized.
7. (a) With examples distinguish between a 'leakage' and an 'injection' in the circular flow of income.

   A 'leakage' refers to variables or items which take away money from the circular flow of income. Such variables include savings, imports and taxes whereas an 'injection' refers to variables or items that add money into circular flow income such as investment, exports and government expenditure.

   (b) What are determinants of consumption in society?
   - **The level of disposable income** i.e. income which is available to individuals and households after taxation. When this income is high then consumption levels are high and vice versa.
   - **Sales Effort:** Advertising and various sales efforts of producers of consumer goods are considered as a means for increasing consumer demand. It is quite likely that an increase or decrease in the amount of sales effort may lead to a greater or lower demand for consumer goods.
   - **Terms of Consumer Credit:** The hire- purchase system of buying durable consumer goods has become popular in these days. Where goods are bought on hire-purchase system, consumer credit on reasonable terms, increases consumption**.**
   - **The nature of income distribution.** Fair distribution of income increase aggregate demand for goods and services
   - **Durability of goods.** Generally durable goods are consumed when the economy is strong and improving.

- **The degree of speculation.** When individuals anticipate price change. When customers speculate price increase or increase in income, they will increase the current level of consumption and speculating a fall in price will reduce current consumption
- **The marginal propensity to save (MPS).** The more an individual save, the less he/she consume.
- **Government fiscal policy.** Through taxation government discourages consumption of harmful products such as alcohol, luxuries such as posh vehicles and increases the consumptions of basic products such as solar energy through subsidization
- **The interest rate.** When the interest rate is high, savings tend to increase and this leads to reduction in consumption and increase when interest rate is low.
- **The level of consumption.** When there is a tendency to save for other functions like school fees, retirement age, the current consumption tend to decrease
- **Demonstration effect.** Consumption patterns tend to change or increase when people have the tendency of copying what others do i.e. a person may consume a product because his neighbour is consuming it
- **Time for income reception.** Quite often consumption is high for those who receive regular income and low for those with low or no income at all.
- **Number of Buyers in the Market.** The number of consumers plays a vital role in net/total demands. When the number increases, the demand also increases.
- **Price of the Product.** Price is used as a parameter by the people to decide if all the other factors remain constant or equal. According to the law of demand, the decrease in the demand follows an increase in the price and an increase in the demand follows a reduction in price.

8. (a) Describe the basis of monopoly power.
   The basis of monopoly refers to the origin or causes of monopoly powers
   Passible causes/origin of monopoly power include
   - Legal barriers comprising copyrights, licenses, patents, need for insurance
   - Red tape or bureaucracy can prevent a new entrant into the market
   - **Natural monopolies.** This occurs due to the ownership of resource such as power to control a natural resource or factor of production such as mineral deposits, fresh water, historical site for tourism
   - **Person talent.** Talented individuals become specialists and therefore become monopolists when they emerge as the best suppliers of service e.g. athletes, musicians, footballer, dancers, designers etc.
   - **Spatial monopoly.** This occurs when one become a monopolist because the prospective competitors are far. Or differences between producers of similar products
   - **Product differentiation:** producers endeavour to give distinctions of their products by way of design, labelling, trade mark, brand names, packaging thereby becoming monopolists in their respective brand and design such phone service providers such as MTN, Airtel.
   - **Advantages of large scale production which requires huge capital base.** This makes firms capable outcompeting others hence emerging as a single supplier of the product.
   - **Government policy.** State or statutory firms e.g. examination bodies, electricity bodies enjoy state protection and hence emerge as single suppliers of their products and services.
   - **Small market.** too small market may prevent entry of other competitors

- **Protectionism.** Local producers tend to enjoy monopolistic conditions by being protected from foreign competitors (imports) through heavy tariffs by government e.g. Mukwano group of companies in Uganda for soap, oils and laundry products.
- **Technical conditions such as standards and/or regulations.** In most cases, the prospective competitors fail to meet minimum technical requirement. This leads to technically competent firms to enjoy monopolistic conditions such as civil engineering contractors.
- **Entry restrictions.** Certain professional organizations tend to maintain difficult entry requirements e.g. accountancy, medical, legal professions keep their service in monopolistic situations
- **Mergers.** The amalgamation of firms to form monopolies among themselves reduce the degree of competition e.g. SCOUL.
- **Reputation.** A producer emerge as monopolist once his products have acquired high reputation because of high quality e.g. publisher of books.
- **Long period of training especially for professionals.** In the short run when it is impossible to train and acquire enough qualification it leads to monopolies of the already qualified ones.
- high starting cost make an entity a single seller of goods
- Technological advantages and innovation may sometimes result in monopolistic markets.
- Manipulation: A company wanting to monopolise a market may capture various kinds of deliberate action to exclude competitors or eliminate competition. Such steps include collusion, lobbying governmental administrators, and force
- High Sunk costs; costs that cannot be recovered when a business exist the market such advertising costs and specialist machinery.
- Heavy advertising, price cuts by existing companies can scare a new entrant into the market

(b) How is monopoly controlled?

- Nationalization of monopoly firm(s) by the state.
- By forming regulatory bodies such as water and electricity to check on monopoly decisions e.g. through price legislation
- By determining the standards of commodities says by National Bureau of Standards to save society of inefficiency, low quality goods and services from monopolies.
- There is need to reduce periods of patent right offered to individual producer so that other producers can readily join the market.
- By the state encouraging importation of similar commodities to introduce competition
- By the government offering credit at low interest rates to other potential entrepreneurs to increase their competitiveness.
- The government should use contractionary fiscal policy in which all monopolists are taxed heavily to reduce their power so that weak potential producers can easily compete with them.
- The government may put in place anti-monopoly laws such as laws that discourage emerging of firms.
- The government should encourage entrepreneurship education to elicit new investors
- **Investigation of abuse of monopoly power to disband collusion** (firms agree to set higher prices); collusive tendering. This occurs when firms enter into agreements to fix the bid at which they will tender for projects. Firms will take it in turns to get the

contract and enable a much higher price for the contract; Predatory pricing (setting low prices to try and force rival firms out of business); Vertical restraints – prevent retailers stock rival products and Selective distribution