

PRINCIPLES OF ECONOMICS

Do not write in this margin

SECTION I:

Q1. The following table shows the factors of production and their respective factors of production price (rewards). Complete the missing terms.

Factors of production	Rewards (Factors prices)
1. Land	a.
2.	b. wage
3. Capital	c.
4.	d.

(5 marks)

Answer:

Factors of production	Rewards (Factors Prices)
1. Land	a. Rent (1.5 marks)
2. Labour (1.5 marks)	b. wage
3. Capital/Enterprise or organisation (1 mark)	c. Interest (1 mark)
4. Entrepreneur/Enterprise or organization (1 mark)	d. Profit

Q2. Write the statement which is true among the following as related to "the price of good X increased and this caused the demand for good Y to increase too"

- a. X and Y are substitute goods
- b. X and Y are independent goods.
- c. ~~Demand~~ for Y is a derived demand from demand for X.
- d. X and Y are Complementary goods (5 marks)

Answer:

- a. True
- b. False
- c. False
- d. False

OR:

- a. X and Y are substitute goods (5 marks)

Q3. Explain the advantages of a planned economy. (5 marks)

Answer:

- Planned economies guarantee the production of necessary goods especially for the poor people.
- Planned economies ensure economic stability: A planned economy does not suffer from business cycles.
- Under a planned economic system, long-term investment in infrastructure can be made without fear of a market downturn. This is especially the case where returns from an investment are risky.
E.g: Fusion reactor technology.

- Under a planned economic system, payments and rewards like wages are paid according to the importance (rather than market forces)

- A planned economy avoids the production and consumption of demerit goods.

- Planned economies are able to invest enormous resources.

- Planned economic system avoid income inequalities

- Planned economic system avoid the problems of uncoordinated development.

- A planned economy serves collective rather than individual needs

- The planned economy avoid duplication of resources.

(Each correct answer 1 mark x 5 = 5 marks)

Q 4. John Stuart wants to establish a coffee processing plant and approach you to provide an advice on what to consider when identifying the suitable place. Explain the factors that should be taken into consideration by John Stuart when deciding on the location of his plant. (5 marks)

Answer:

- Availability of raw materials

- Presence of land

- Availability of customers

- Presence of transport means

- Presence of public services like hospitals, schools, Banks, ---

- Availability of labour
- Sufficient infrastructure

Do not write in this margin

(Each correct answer 1 mark $\times 5 = 5$ marks)

Q5. How is the price determined in the oligopoly (5 marks)

Answer:

Price under oligopoly are determined in 5 major ways:

* **Collusion:** Firms under oligopoly must decide whether to compete or co-operate with other firms.

* **Independent pricing:** This is where firms act independently and set prices on their own and this leads to price war.

* **Price leadership:** This is when a firm in oligopoly decides to set a price leader.

* **Predatory pricing**

* **Limit pricing**

* **Non-price competition.**

(Each correct answer 1 mark $\times 5$ elements = 5 marks)

Q6. Suppose that the market demand for potatoes is given by:

$Q_d = 1000 - 250p$ and the market supply for potatoes is given as $Q_s = 150p$

- what are the equilibrium price and quantity for potatoes?
- Illustrate your answer graphically (5 marks)

Answer:

$$Q_d = 1000 - 250p$$

$$Q_s = 150p$$

a) Equilibrium price

$$Q_d = Q_s$$

$$1000 - 250p = 150p$$

$$-250p - 150p = -1000$$

$$-400p = -1000$$

$$p = \frac{-1000}{-400}$$

Equilibrium price = 2.5 RWF (1.5 marks)

Equilibrium Quantity:

$$* Q_d: 1000 - 250p$$

$$EQ = 1000 - 250(2.5)$$

$$EQ = 1000 - 625$$

$$EQ = 375 \text{ units}$$

(1.5 marks)

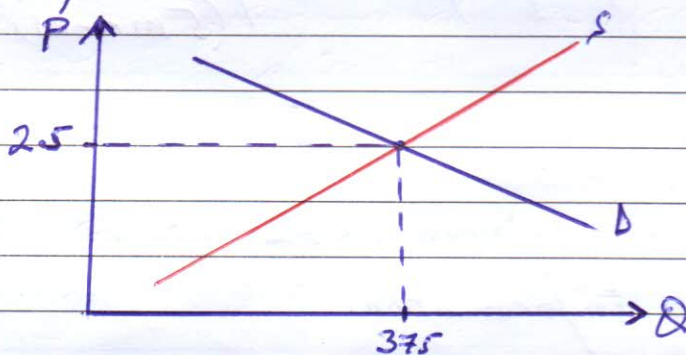
OR:

$$* Q_s = 150p$$

$$EQ = 150(2.5)$$

$$EQ = 375 \text{ units.}$$

b) Graph illustration:



(2 marks)

Q7. Give the characteristics of wealth and then explain the three(3) forms of it.

Answer:

* Characteristics:

- It has value
- It is scarce
- It is transferable
- It has utility

* Forms of wealth:

Personal wealth / Individual wealth / Private wealth:

It is held in form of houses, cars, house equipment, land and others, ... that belong to a specific individual like car of John

Public wealth / social wealth: Is owned and held by the community as a whole.

Marketable wealth / Business wealth: possessions that can be bought and sold.

Non-marketable wealth: Possessions that can not be bought and sold.

Tangible wealth: Possessions that can be touched / visible

Intangible wealth: Possessions that cannot be touched or not visible.

[Each form 0.5 mark x 3 = 1.5 marks]
[Each explanation 0.5 mark x 3 = 1.5 marks]

Q 8. Give the features of perfect competition

Answers:

(5 marks)

- Many buyers
- Many Sellers
- Atomistic market
- Homogeneous product
- perfect and complete information
- Free entry and exit
- Equal access to the factors of production
- Individual buyers and sellers act independently
- Consumers aim at utility maximisation

(Each correct Feature 1 mark x 5 = 5 marks)

Q 9. Given that MPC is 80% and change in income is 1000 000 RWF, Calculate the ΔY , ΔC and ΔS for the period B, C, D in the table

below, state the multiplier magnitude when MPC is 80% and calculate the overall (Final) Change in the level of income in the economy.

Time period	ΔY_{RWF}	ΔC_{RWF}	ΔS_{RWF}
A	1 000 000	800 000	200 000
B			
C			
D			

Required: variation Income, variation Consumption, variation Saving

Answer:

Time period	ΔY_{RWF} (1mark)	ΔC_{RWF} (1mark)	ΔS_{RWF} (1mark)
A	1 000 000	800 000	200 000
B	800 000	640 000	160 000
C	640 000	512 000	128 000
D	512 000	409 600	102 400

$$K = \frac{1}{1 - MPC}$$

$$K = \frac{1}{1 - 0.8} \Rightarrow K = 5 \quad (1 \text{ mark})$$

The overall (Final) Change in the level of income = $1\,000\,000 \times 5 = 5\,000\,000$ (1 mark)

Q10. Describe the role of land in economic development of a country. (5 marks)

Answer:

- Sources of income
- sources of raw materials
- sources of minerals
- sources of fishing

- Sources of food
- Sources of touristic attraction
- Sources of agricultural means
- Sources of construction materials.

(Each correct elt 1 mark $\times 5 = 5$ marks)

Q11. What is income inequalities? What are the causes of income inequalities in less developed countries? (5 marks)

Answer:

* Income Inequality: IS an economic distance (gap) between the very poor and the very rich in an economy OR: Income disparities.

* Causes of Income inequalities:

- political instability
- Level of education
- Inheritance
- Family background
- Corruption
- Nepotism
- poor planning
- Accessibility to resources
- Accessibility to employment
- Accessibility to regions with more resources

(Each correct answer 1 mark $\times 4 = 4$ marks)

Q12. From the information provided in the table below:

- calculate the income elasticity of demand
- what type of commodity is "X"?

Income	Demand for commodity "X"
7000	12
10000	8

Answer:

$$(a) Y_{ed} = \frac{\Delta Q}{\Delta Y} \times \frac{Y_1}{Q_1} \quad (1 \text{ mark})$$

$$Y_{ed} = \frac{8-12}{1000-7000} \times \frac{7000}{12} \quad (1 \text{ mark})$$

$$Y_{ed} = \frac{-4}{3000} \times \frac{7000}{12}$$

$$Y_{ed} = \frac{-7}{9}$$

$$Y_{ed} = -0.777 \quad (2 \text{ marks})$$

$$Y_{ed} \approx -0.78$$

(b) The commodity "X" is inferior good. (1 mark)

SECTION II

Q13. a) Give the difference between socialism and capitalism economy system.

b) Provide at least five (5) advantages of capitalism system (10 marks)

Answer:

Difference:

Socialism Economy	Capitalism Economy
- Direct govt intervention	- NO govt intervention
- Resources are owned by the government	- Resources are owned by private individuals
- Govt decides what, how, when & where to produce	- Private individuals decides what, how, when & where to produce
- Price is determined by the govt	- price is determined by the force of demand & supply

- Society of equality. i.e.: No rich, no poor people
- Income inequalities. i.e.: There are gaps between poor people and rich people

(Definition equals X5 marks)

b) Advantages of capitalism:

- No government intervention
- Free allocation of goods & services
- Freedom of entry and exit to the production process.
- Consumers sovereignty (Customer is a king)
- Improved quality of goods & services to the competition.
- Profit maximization is the main aim of producers.
- There is more flexibility since there is no law enforced by the government.
- Freedom to earn more money (To become rich than others)
- Efficient and effective allocation of resources. (Each correct answer 1 mark X 5 = 5 marks)

Q14. a) Give the difference between monopoly and monopolistic market.

b) Describe the advantages of monopoly, explain how and why monopoly should be controlled. (10 marks)

Answer:

Difference:

a) Monopoly	Monopolistic market
- one seller	- Many sellers
- No close substitute goods	- Close substitute goods
- Price maker	- Price taker.
- Significant barriers of entry of new firms in industry	- Freedom of entry and exit in the industry

- Monopoly firms produce at excess capacity

- do not produce at excess capacity

Do not write in this margin

(Differentiated definition 5 marks)

b) Advantages of Monopoly:

- It reduces resources wastage
- There is no persuasive advertisement
- It leads to innovation and reduce the cost of production
- Monopoly firms are sources of government revenue.
- Big monopolies are sources of employment
- Price discrimination is possible

(Each advantage 1 mark, $1 \times 3 = 3$ marks)

* How to Control Monopoly:

- Price Control
- To create new firms
- To regulate market.

(Each correct answer = 1 mark)

* Why monopoly should be controlled:

- To maintain price stability.
- To protect consumers against price discrimination
- To protect environment

(Only 1 correct answer = 1 mark)

Q15. a) Explain the law of demand

b) List three (3) situations where there can be an abnormal curve.

c) Compute the market demand from the table below:

Price Level	Consumer A	Consumer B	Consumer C	The market demand curve
25	100	100	100	---
15	120	140	100	---
5	150	180	100	---

Do not write in this margin

d) Explain the nature of nature of price-elasticity of demand for the consumer C.

Answer:

a) Law of demand states that: "The higher the price, the lower the quantity demanded and vice-versa" ceteris paribus. (Definition: 3 marks)

b) Situation of abnormal demand curve:

- Situation of Giffen goods
- Situation of goods of ostentation
- Situation of necessities goods.

(Each correct situation 1 mark X 3 = 3 marks)

c) Market demand

Price level	Consumer A	Consumer B	Consumer C	The market demand curve
25	100	100	100	300 (1 mark)
15	120	140	100	360 (1 mark)
5	150	180	100	430 (1 mark)

d) The nature of price-elasticity of demand for the consumer C.

$$P_1 = 25$$

$$P_2 = 15$$

$$Q_1 = 100$$

$$Q_2 = 100$$

Do not
write in
this margin

$$P_{ed} = \frac{\Delta Q}{\Delta P} \times \frac{P_1}{Q_1} \quad (0.5 \text{ mark})$$

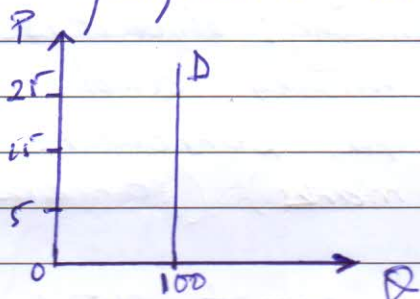
$$= \frac{100 - 100}{15 - 25} \times \frac{25}{100}$$

$$= \frac{0}{-10} \times \frac{25}{100}$$

$$= \frac{0}{1000}$$

$$P_{ed} = 0$$

It is perfect inelastic (0.5 mark)



Q16: What is money? Discuss the function of money and characteristics of money. (2 marks)

Answer:

* Money: Is a generally accepted common medium of exchange for goods and services in the market place that functions as a unit of account, a means deferred payment and a store of value; (2 marks)

* Functions of money:

- Medium of exchange: Money is used in buying and selling process.
- Store of value: Money is used to keep

Commodities in form of money to avoid perishability -

- Standard deferred payments: These are payments that have to be made in the future.
- Money facilitates specialisation: Money enables producers to specialise in production of a particular commodity.
- Unit of account and measure of value: Money is used to express the value of goods and services.
- Money serves as tool of monetary policy: The government controls economic activities in an economy through monetary policy.

- Money facilitates borrowing/lending: Since it is scarce, money lenders in the money and capital markets extend loans to borrowers.

(Each function 1 mark $\times 4 = 4$ marks)

* Characteristics of Money:

- General acceptability: people accept money in exchange.
- Durability: This is the ability to last long time.
- Portability: Good money be easy to transport.
- Scarcity: Good money should be relatively scarce.
- Homogeneity: Every unit of money must be resemble.
- Stability of value: Good money should be relatively stable and good store of value.
- Difficult to counterfeit: Good money should be difficult to forge.
- Divisibility: Good money should be divisible.
- Easily recognized: Good money is easy to identify.

Q17. Explain the sources of the government revenue spending in the economy. (10 marks)

Do not write in this margin

Answer:

- * **Taxes:** Compulsory contribution collected by the government for public use.
- * **Fees:** Is money paid in direct exchange for professional services rendered.
i.e: Government provides certain services and charges fees.
- * **Fines and penalties:** Is money imposed on people who commit crime or break the law.
- * **Grants:** These are financial donations given to the government to cater for the costs of specific projects.
- * **Deficit financing:** This is where the government orders the printing and minting of more currency notes and coins to finance its expenditures.
- * **Loans:** The government raises revenue by borrowing internally and externally.
- * **Profits from business activities:** The government at times owns companies; from such companies, the government gets profits.
- * **Securities:** Government may raise money by issuing securities such as treasury bills and bonds.
- * **Rates:** are charges imposed on owners of specified types of property especially in urban areas.

* Licences: Is a document that authorizes a person or a company to conduct business, own something or deal in profitable or non profitable activity.

Do not write in this margin

* Gambling: Govt raises revenues through gambling activities usually in form of lotteries e.g: National lotteries.

* other revenue like Fund-raising, sale of gov't properties, Agaciro Development fund.

(Each source 1 mark $\times 5 = 5$ marks)
Explanation 1 mark $\times 5 = 5$ marks

Q 18. Economic Integration is the co-operation of several countries for sake of enjoying economic benefits - East African Community (EAC) is one of the examples of economic integration.

Illustrate the necessary conditions for success of economic integration.
outline the advantages and disadvantages of economic integration. (10 marks)

Answer:

* Necessary Conditions for the success of Economic Integration:

- Countries should be in the same geographical region.
- Countries integrating must be at relatively the same level of development.
- Integrated countries should have similar political or economic ideology.
- Countries should be ready to maintain good political relationship among themselves.

- The comparative advantage must be different among countries.

- Countries integrating should also have well developed infrastructure.

(Each condition 4×4 marks = 4 marks)

* Advantages of Economic integration:

- Trade Creation: This occurs when consumption shifts from a high cost producer to a low cost producer.

- Economic integration increases the variety of products available.

- Member countries enjoy economies of scale because of expanding market.

- Attracting Direct Foreign Investment

- More bargaining power

- No exchange rate problems

- Promote specialisation

- More jobs

- Cheaper research

- No duplication.

- Increased competition

- peace and security. (Each advantage 1 mark $\times 4 = 4$ marks)

* Disadvantages of Economic Integration:

- Trade diversion

- Loss of revenue

- Kills infant industries

- Similar products produced

- Retaliation to other blocs

- Unemployment

- Unequal share of profits

- Loss of economic sovereignty.

- Administrative cost.

(Each disadvantage 1 mark $\times 2 = 2$ mark)