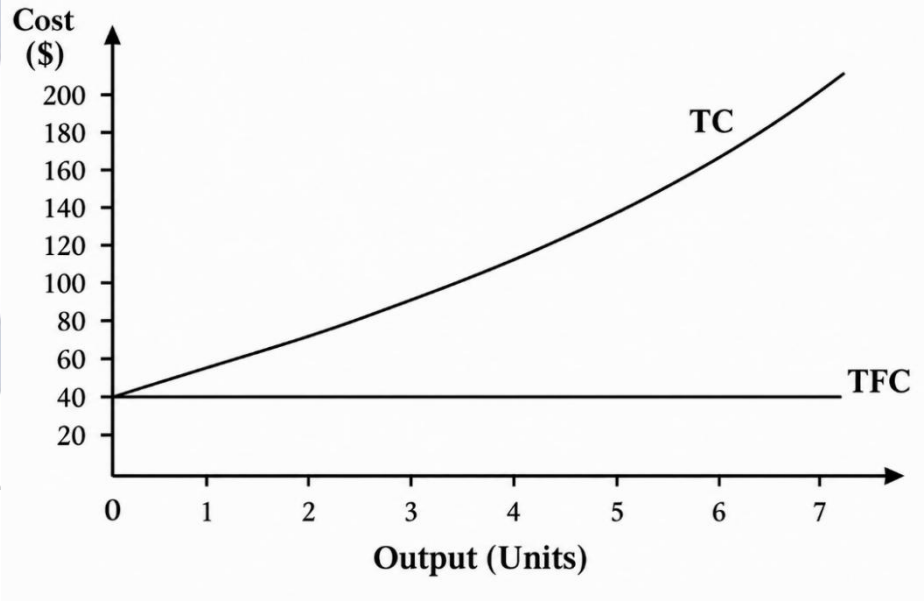
2015 WASSCE ECONOMICS PAPER 2 — THEORY

SECTION A

QUESTION 1

The total fixed cost (TFC) and total cost (TC) functions of a hypothetical firm are shown in the graph.



Study it and answer the questions that follow:

(a) Determine the firm's:

(i) variable cost at output levels 2, 4 and 6;

(ii) average total cost at output levels 2 and 3;

(iii) marginal cost at output levels 4 and 6.

(b) If the price of the firm's product is $40, calculate the firm's profit or loss when the following units are sold:

(i) 2 units;

(ii) 4 units.

Answer:

(a)(i) Variable Cost = Total Cost − Fixed Cost

At Level 2: VC = $(100 − 40) = $60

At Level 4: VC = $(140 − 40) = $100

At Level 6: VC = $(180 − 40) = $140

(ii) Average total cost = Total Cost ÷ Output

At Level 2: ATC = $100 ÷ 2 = $50

At Level 3: ATC = (value from graph) ÷ 3

(iii) Marginal Cost = Change in Total Cost ÷ Change in Output

At Level 4: MC calculated from graph values

At Level 6: MC calculated from graph values

(b) If price = $40: Total Revenue = Output × Price; Profit/Loss = Total Revenue − Total Cost

At Level 2: TR = $40 × 2 − $100 = $80 − $100 = −$20 → Loss of $20

At Level 4: Profit = ($40 × 4) − $140 = $160 − $140 = $20 → Profit of $20

Question 2

The table below shows the incomes and rates of income tax levied on four professionals in an economy. (SEE DIAGRAM)

Profession	Income per month ($)	Tax rate (%)	Disposable income ($)
Doctor	8,000	10	
Engineer	7,000	12	
Civil servant	5,000	18	
Nurse	6,000	15	

Use the above data to answer the questions that follow:

(a) Calculate the disposable incomes of the four individuals.

(b) What system of taxation was employed?

(c) Give reasons for your answer in 2(b).

(d) With the aid of a diagram, explain the system of taxation employed in 2(b).

Answer:

(a) Doctor's Tax = $8,000 × 10/100 = $800 → Disposable income = $8,000 − $800 = $7,200

Engineer's Tax = $7,000 × 12/100 = $840 → Disposable income = $7,000 − $840 = $6,160

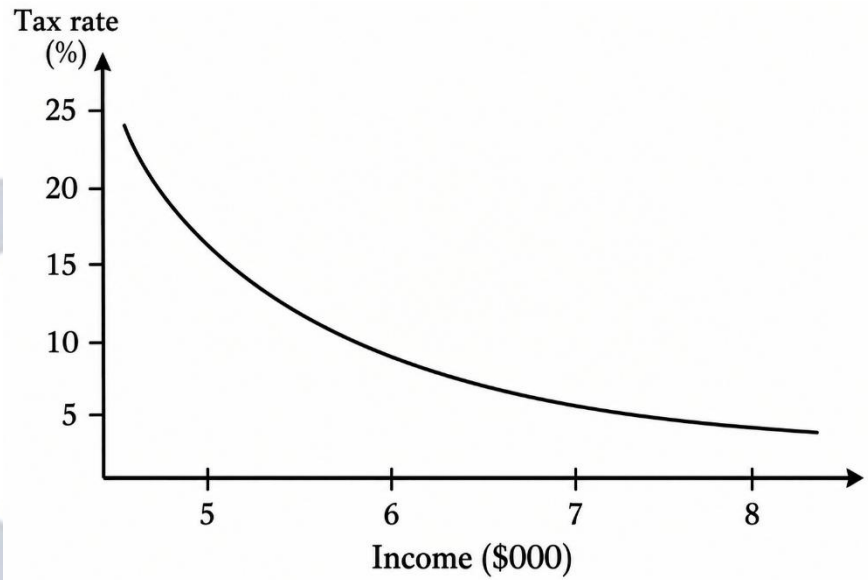
Civil Servant's Tax = $5,000 × 18/100 = $900 → Disposable income = $5,000 − $900 = $4,100

Nurse's Tax = $6,000 × 15/100 = $900 → Disposable income = $6,000 − $900 = $5,100

(b) The system of taxation employed was Regressive.

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(c) In a regressive tax system, the rate of tax reduces as income increases. From the computations above, it could be deduced that the highest income earner (Doctor) has the lowest tax rate.



(d) The diagram describes a regressive tax system which is a graph of Tax rate against Income. The gradient/slope of this curve would be negative, implying that as income increases (from Civil Servant to Doctor), tax rate decreases.

SECTION B

Question 3

(a) What is a trade union?

(b) Describe any four functions of trade unions.

(c) Outline any two weapons used by trade unions to achieve their objectives.

Answer:

(a) A Trade Union could be said to be an effective organised body of persons or employees who belong to the same trade or similar occupations to improve the welfare of their members. Trade Unions often use threat/protest of industrial actions (Strike), collective bargaining etc. to obtain increased earning and improved work conditions for their members.

(b) Functions of Trade Unions:

i. They constantly agitate for increased wages for their members and other fringe benefits.

ii. They organize workshops, seminars and other enlightenment programmes to educate their members on government policies.

iii. They fight for the welfare of their members.

iv. They intercede for their members who are being oppressed by the government.

v. They make frantic efforts to update their members on the recent developments in the country.

(c) Weapons used by Trade Unions:

i. Threat of industrial action

ii. Negotiations

iii. Work-to-rule approach

iv. Picket lines

Question 4

(a) Outline any four objectives of a price control policy.

(b) Highlight any four effects of a maximum price control policy.

Answer:

(a) Objectives of Price Control Policy:

To prevent price fluctuation.

To control excessive profits of some firms.

To protect the manufacturers from fluctuations in income.

To control inflation.

To protect consumers from the exploitation by the manufacturers and the middlemen.

To protect small-scale industries producers from the exploitative attitude of middlemen.

(b) Effects of Maximum Price Control Policy:

i. Excessive demand over supply (inflation).

ii. Change in production lines.

iii. Smuggling.

iv. Rationing of goods.

v. Hoarding of goods.

vi. Existence of black markets.

Question 5

(a) What are infant industries?

(b) State any four reasons for protecting infant industries.

(c) Outline any three ways by which industries can be financed in West Africa.

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Answer:

(a) Infant industries are newly established industries or under-developed industries. They are firms in the developing stage whose products cannot compete with their counterparts in the developed world.

(b) Reasons for protecting Infant Industries:

To promote locally produced goods to achieve favourable balance of payment.

To promote or encourage their growth.

Developing import-substitutes in the local economy.

To provide employment for the citizens.

(c) Ways industries can be financed in West Africa:

Provide adequate and improved economic and social infrastructures.

Create subsidies that would boost capital projects.

Make capital (fund) readily available for promoters of industries.

Encourage tax reduction/concession.

Encourage consistent and stable economic policies that would attract foreign investors.

Question 6

(a) What is balance of payment disequilibrium?

(b) Explain the two types of balance of payment disequilibrium.

(c) Highlight any four reasons most West African countries are experiencing balance of payment problem.

Answer:

(a) Balance of payment disequilibrium is experienced when the total payments of a country on its imports on the combined Current and Capital accounts is not equivalent to its receipts from its Exports. This unequal balance may be a surplus or deficit.

(b) Types of Balance of Payment disequilibrium:

Short-Term Balance of Payment disequilibrium: experienced when the disequilibrium is only in existence for a short while.

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Long-Term Balance of Payment disequilibrium: occurs when the disequilibrium lasts for a long period, resulting in a persistent surplus or deficit.

(c) Reasons for balance of payment problems:

Due to mono economy.

Due to inflation.

Due to decline in export.

Due to low technology.

High taste for foreign-made goods and services.

Poor or crude implements in the production sector.

Question 7

(a) What is deflation?

(b) Outline any three positive effects of deflation.

(c) Explain the ways by which inflation affects any three functions of money.

Answer:

(a) Deflation refers to the persistent fall in the general price level of goods and services as a result of a decrease in the volume of money in circulation.

(b) Positive effects of deflation:

Increase in the value of the local currency.

Fall in price of goods and services.

Fixed income earners gain.

Improvement in balance of payment as receipts from exports increase against payment on imports.

(c) Effects of Inflation on the functions of Money:

Money encourages division of labour due to specialization; increase in the value of money brings about a corresponding wage increase in labour.

Increase in the value of money enhances the ability to store money.

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It could serve as a standard for deferred payment because the lender gains more while the borrower loses, since the borrower has to pay more due to increase in the value of money.

Question 8

(a) What is protective tariff?

(b) Outline any four reasons in favour of protective tariff.

(c) State any two reasons against protective tariff.

Answer:

(a) A protective tariff is a form of tariff imposed by the government of a country so as to avoid dumping, protect infant industries, and reduce overdependence on foreign-made goods and services etc.

(b) Reasons in favour of Protective tariff:

Improvement in standard of living.

Prevention of importation of dangerous goods.

Protection of infant industries.

Correction of balance of payment deficit.

(c) Reasons against protective tariff:

It discourages consumers' freedom of choice.

It discourages foreign direct investment.

It destroys competition of locally made goods with foreign substitutes.

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2016 WASSCE ECONOMICS PAPER 2 — THEORY

SECTION A

Question 1

The following data shows the budget of a hypothetical country in 2006. Study the data and answer the questions that follow.

Revenue ($ millions)

Item	Amount
Company tax	240
Workers' income tax	160
Excise duties	80
Taxes on exports	100
Value added tax	150
Import duties	90
Non-tax revenue	40

Expenditure ($ millions)

Item	Amount
Construction of roads	100
Building of schools	120
Payment of workers' salaries	150
Government administration	200
Maintenance of health facilities	220
Extension of electricity to rural areas	180
Maintenance of official vehicles	70

(a) How much revenue was realised from: (i) direct taxes (ii) indirect taxes?

(b) Calculate the total: (i) recurrent expenditure (ii) capital expenditure

(c) What percentage of total revenue was collected as indirect tax?

(d) State two examples of non-tax revenue.

(e) What was the budget surplus or deficit? Explain your answer.

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Answer:

(a)(i) Direct Taxes = Company tax + Workers' Income tax = $240M + $160M = $400M

(ii) Indirect Taxes = Excise duties + Export Taxes + Value Added Tax + Import duties = $80M + $100M + $150M + $90M = $420M

(b)(i) Recurrent Expenditure = Payment of Workers' Salaries + Government Administration + Maintenance of health facilities + Maintenance of official Vehicles = $150M + $200M + $220M + $70M = $640M

(ii) Capital Expenditure = Construction of roads + Building of schools + Extension of Electricity = $100M + $120M + $180M = $400M

(c) Total Revenue = Direct Taxes + Indirect Taxes + Non-tax Revenue = $400M + $420M + $40M = $860M

% of Total Revenue as Indirect Tax = (420/860) × 100 = ≈48.84%

(d) Examples of non-tax revenue:

Fines and fees

Grants and loans

(e) Total Expenditure = Capital Expenditure + Recurrent Expenditure = $400M + $640M = $1,140M (approx., figures as computed: $1139M)

Since Total Expenditure ($1,139M) > Total Revenue ($860M), there is a deficit of $279M. This implies the government will need to borrow $279M to finance its 2006 budget.

Question 2

The utility schedule of a consumer for a brand of ice cream is shown in the table below. (SEE DIAGRAM — table)

Units Consumed (Q)	Total Utility (TU)	Marginal Utility (MU)
0	0	–
1	10	10
2	19	R
3	P	6
4	30	5
5	31	S
6	Q	0
7	29	–2

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(a) Calculate the values of P, Q, R and S.

(b) Given that the price of ice cream is $1.00 per unit, at what level of consumption is the consumer in equilibrium? Explain your answer.

(c) State the law of diminishing marginal utility.

(d) Using a graph sheet, draw the marginal utility curve. (SEE DIAGRAM)

Answer:

(a)

P (TU at Q3): MU at Q3 = 6, TU at Q2 = 19 → P = 19 + 6 = 25

R (MU at Q2): TU at Q2 – TU at Q1 = 19 – 10 = 9

S (MU at Q5): TU at Q5 − TU at Q4 = 31 − 30 = 1

Q (TU at Q6): MU at Q6 = 0, TU at Q5 = 31 → Q = 31 + 0 = 31

Completed table:

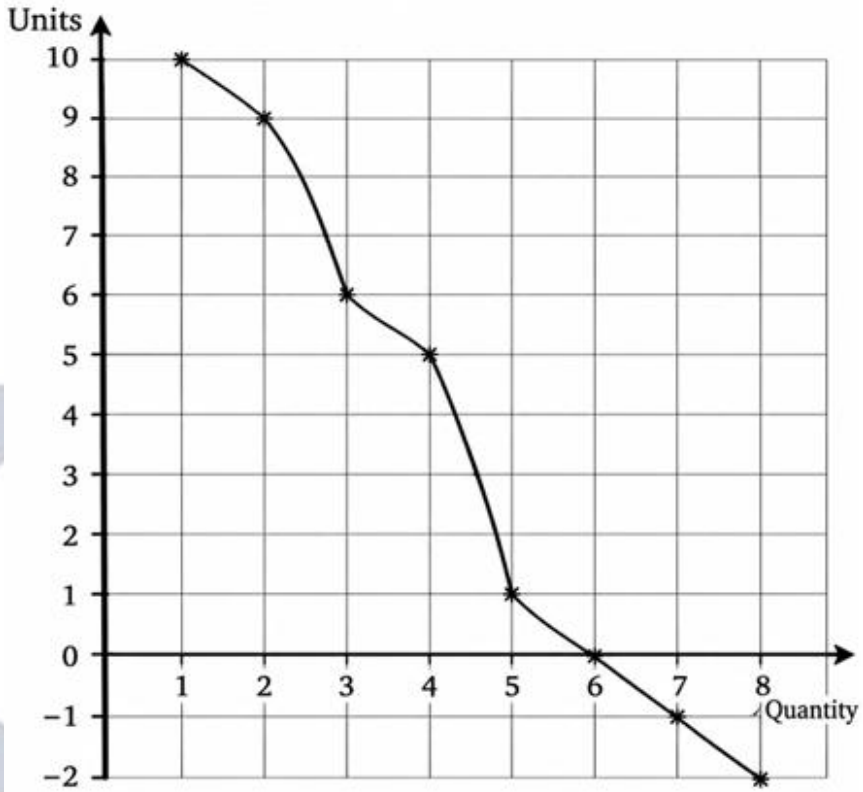
Units (Q)	TU	MU
0	0	–
1	10	10
2	19	9
3	25	6
4	30	5
5	31	1
6	31	0
7	29	–2

(b) At the 5th unit of consumption, the consumer is in equilibrium. Consumer equilibrium is achieved where the last amount spent equals the marginal utility (MU = P). This occurs at the 5th unit, where MU = P = 1.

(c) Law of Diminishing Marginal Utility: This law states that as more units of a commodity are consumed, the addition to total utility (marginal utility) reduces — i.e., as you consume more of a good, the extra satisfaction from each additional unit goes down.

(d) Marginal utility curve plotted from the table of values above)

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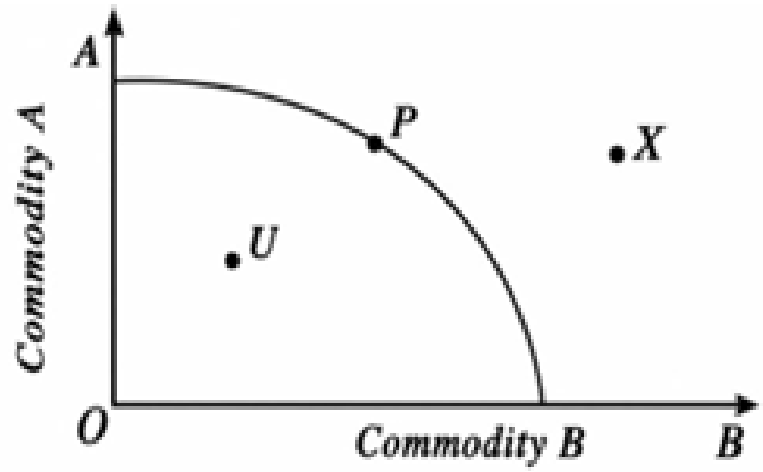


SECTION B

Question 3

(a) What is a production possibility curve?

(b) Draw a production possibility curve and indicate any: (i) point P, where resources are fully utilized (ii) point U, where resources are under-utilized (iii) point X, where production is not feasible



(c) Explain any two factors that can make production at point X feasible.

(d) Why is the production possibility curve negatively sloped?

Answer:

(a) A production possibility curve is a graph that shows the maximum possible output combinations of two different goods an economy can produce when all its resources and technology are fully and efficiently used.

(b) (SEE DIAGRAM — curve with Commodity A on y-axis, Commodity B on x-axis; point P on the curve, point U inside the curve, point X outside the curve)

(c) Factors that can make production at point X feasible:

i. An increase in the supply of productive resources like factor inputs, time or money

ii. Technical progress — improvement in technology through research and development

iii. Reallocation of productive resources to capital goods production over consumer goods

iv. Introduction of new methods, techniques or ideas

v. Human capital development through training and retraining

(d) The production possibility curve has a negative slope because it indicates that there is opportunity cost involved in producing more of one commodity. It indicates the rate of substitution of one commodity for another.

Question 4

(a) What is: (i) peasant farming? (ii) co-operative farming?

(b) Identify any five ways through which the government can assist peasant farmers.

Answer:

(a)(i) Peasant farming: Small-scale farming mostly for household (family) requirements. Also called subsistence farming, where farmers grow food crops and rear a few animals for the family and relatives.

(ii) Co-operative farming: A farming system in which members of a society come together to engage in farming so as to share land, machinery and facilities, and jointly produce for members of the cooperative society.

(b) Ways government can assist peasant farmers:

Provision of loans to peasant farmers who lack capital to invest in the farm.

Increasing investment in research and development, and extension services to improve seedlings.

Establishing agricultural marketing boards to help farmers collect and sell produce, optimizing income.

Provision of good storage facilities to minimize wastage of agricultural produce.

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Providing tools and machinery to improve output.

Providing fertilizers at affordable/reduced prices for optimum output.

Question 5

(a) What is price elasticity of supply?

(b) Differentiate between joint supply and competitive supply.

(c) Explain any four determinants of elasticity of supply.

Answer:

(a) Price elasticity of supply is the degree of responsiveness of quantity supplied to changes in price — the proportion of percentage change in quantity supplied to percentage change in price.

(b) Joint supply occurs when producing one good automatically produces another good, while competitive supply occurs when a producer uses the same limited resources to make one alternative good instead of another.

(c) Determinants of elasticity of supply:

i. Time: Supply tends to be more inelastic in the short run; more elastic as time elapses.

ii. Nature of the product: Durable commodities have more elastic supply; perishables have inelastic supply since they cannot be stored long.

iii. Cost of production: Commodities with higher production cost tend to be more inelastic; those with lower input costs are more elastic.

iv. Availability of storage facilities: Commodities that can be stored long have elastic supply; those that cannot be stored tend to be inelastic.

v. Market discrimination: Commodities sellable at different prices in different markets tend to be more elastic.

vi. Number of producers: More producers makes it easier to increase output, making supply elastic.

vii. Mobility/availability of factors of production: Mobile factors of production lead to more elastic supply.

viii. Availability of raw materials: The volume of raw materials available determines output level and thus elasticity.

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Question 6

(a) Define: (i) Building Society (ii) Central Bank

(b) Highlight any five instruments of the Central Bank in regulating the supply of money.

Answer:

(a)(i) Building Society: A mutually owned financial institution which offers banking and related financial services to its members, particularly for building purposes.

(ii) Central Bank: The apex bank in a country, charged with regulating the affairs of all financial institutions in the country.

(b) Instruments used by the Central Bank to regulate money supply:

Open Market Operations (OMO): Buying and selling of financial documents (e.g., bonds) to regulate money supply.

Discount Rate/Bank Rate: Interest rate the Central Bank charges commercial banks for short-term loans; raising it makes borrowing more expensive, reducing lending and money supply.

Moral Suasion: Informal appeals/persuasion to get commercial banks to align lending with national economic goals.

Reserve Requirement: Central Bank requires commercial banks to hold a portion of deposits in reserve, limiting how much they can lend/create.

Prudential Guidelines: Written directives requiring commercial banks to exercise special care in operations to achieve specified outcomes.

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Question 7

(a) Who is a discriminating monopolist?

(b) Explain any four conditions necessary for a monopolist to practise price discrimination.

(c) Explain any two benefits enjoyed by a discriminating monopolist.

Answer:

(a) A discriminating monopolist is a monopolist that charges different prices in different markets by segregating the market into different levels of consumers.

(b) Conditions necessary to practise price discrimination:

Geographical location of consumers: Consumers must not be located in the same geographical zone.

Imperfection of market: Some element of market imperfection must exist (e.g., preferential treatment of some customers).

Buyers' ignorance: Some buyers may be ignorant of prices/market conditions, allowing discrimination.

Artificial difference in demands: Some consumers make artificial demands the monopolist can capitalize on without offering better goods.

(c) (Note: source text does not explicitly list benefits separately — not extracted in source material.)

Question 8

Explain the following National Income concepts:

(a) Gross Domestic Product (GDP)

(b) Gross National Product (GNP)

(c) Cost of Living

(d) Per Capita income

(e) Standard of living

Answer:

(a) Gross Domestic Product (GDP): The monetary value of all goods and services produced by an economy within a particular period (usually one year), including goods/services produced within a geographical location. Measured via income, output, or expenditure approach.

(b) Gross National Product (GNP): The monetary value of all goods and services produced by the nationals of an economy in a particular period. GNP = GDP + Factor Income From Abroad (Net Income from Abroad).

(c) Per Capita Income: National income per head — a measure of standard of living. Per Capita Income = National Income ÷ Population.

(d) Cost of Living: The amount of goods and services required to meet the basic needs of life; the cost of maintaining a certain standard of living.

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(e) Standard of Living: A measure of the quality of life of people in a country at a given time — the level of wealth and comfort in terms of access to necessities of life.

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ANSWERS TO WASSCE JUNE 2017 ECONOMICS 2 ESSAY

SECTION A

1(a)(i) Price elasticity of demand = % Change in Qty Demanded ÷ % Change in Price

% Δ in Qty = (800−600)/800 × 100 = 25%

% Δ in Price = (500−450)/450 × 100 = 11.11%

Hence, Price Elasticity of demand = 25.0% / 11.11% = 2.25225

∴ Price elasticity of demand = 2.25

(ii) Type of elasticity:

It is fairly price elastic because the price elasticity of demand is greater than 1. If the value of the price elasticity has been so large or infinite, it would have been perfectly elastic.

(b)(i) Total revenue before price increased = 450 × 800 = $360,000

Total revenue after price increased = 500 × 600 = $300,000

(ii) Change in total revenue = $(360,000 − 300,000) = $60,000

(c) The effect of increase in price is a reduction of the total revenue by $60,000

(d) Factors influencing price elasticity of demand:

i. Change in consumers' taste

ii. Price of the commodity

2(a)(i) Demand Schedule

Price	Quantity Demanded
2	28
4	26
7	23

Qd = 30 − 2 = 28

Qd = 30 − 4 = 26

Qd = 30 − 7 = 23

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(ii) Supply Schedule

Price	Quantity Supplied
2	19
4	23
7	29

Qs = 15 + 2(2) = 19

Qs = 15 + 2(4) = 23

Qs = 15 + 2(7) = 29

(b)(i) Equilibrium price is achieved at Qd = Qs

Hence, 30 − P = 15 + 2P

30 − 15 = 2P + P

15 = 3P

∴ P = 15/3 = 5

⇒ P = $5

Substituting P into the demand equation:

QD = 30 − P = 30 − 5 = 25 units

and QS = 15 + 2P = 15 + 2(5) = 25 units

Hence, Price equilibrium = $5

While Quantity Equilibrium = 25 units

(ii) If price is fixed at $3, it implies that:

QD = 30 − 3 = 27 units

and QS = 15 + 2(3) = 21 units

⇒ Excess demand = 27 − 21 = 6 units

(c)(i) New demand function for new schedule: QD = 40 − P

Price	Quantity Demanded
2	38
4	36
7	33

QD = 40 − 2 = 38

QD = 40 − 4 = 36

QD = 40 − 7 = 33

(ii) The above result shows an increase in demand.

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(iii) Explanation:

It is an increase in demand because the new quantity demanded at the same level of price increases.

SECTION B

3. Definition of land as a factor of production:

Land is a factor of production which has fixed quantity and naturally available for exploration of resources with rent as its reward.

(b) Features of land:

i. Land is fixed in supply and cannot be moved.

ii. It is subject to diminishing returns law.

iii. It embodies natural resources.

iv. It cannot produce anything on its own.

v. It is a free gift of nature.

vi. No two pieces of land are identical in terms of fertility, location, topography and climate.

vii. The financial reward for the use of land is economic rent.

(c) Ways in which land contributes to economic development of Nigeria:

i. Land is used for farming and grazing in Nigeria (i.e. agricultural purpose).

ii. It is used in erecting or building factory or residential house in various places.

iii. It serves as a source of job opportunities to several people who engage in mining, quarrying, farming etc.

iv. Land provides resources such as crude oil, gold, coal in different parts of the country.

v. It supplies the soil and climate needed for agricultural growth.

vi. Land allocates ground for infrastructure such as roads, railways, airports.

vii. It acts as a financial asset that generates rental income and serves as collateral for bank loans.

4(a) Meaning of subsistence farming:

Subsistence farming refers to a system of farming for family consumption. It does not make provision for any produce that would be taken to the market for sale.

(b) Difference between crop farming and livestock farming:

Crop farming involves cultivation of food crops such as yam,

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cassava, rice, beans, corn etc. while livestock farming involves rearing of animals like poultry, goat, sheep, cow etc.

(c) Methods of boosting agricultural production:

I. By providing technical assistance and advice to farmers.

II. By granting loans and credit facilities to farmers.

III. By providing adequate facilities such as fertilizers to the farmers.

IV. By providing storage facilities and efficient marketing board for the farmers.

V. By providing machinery such as tractors, ridgers etc. for the farmers.

VI. By providing pesticides, fungicides and insecticides at affordable prices for the farmers.

5(a) Features of:

(i) Perfect Competition:

- Large number of buyers and sellers are present.
- It creates room for free entry and free exit to the Market.

(ii) Monopolistic Competition:

- There is restriction of entry and exit to the Market.
- It involves few sellers with differential goods.

(b) Meaning of being a:

i. Price taker: To be a price taker implies that the organisation cannot determine prices of goods but the Market determines it.

ii. Price Maker: To be a price maker means the firm or market participant that has enough market power to set or influence the price of a product or service.

(c) Meanings of:

i. Acts of Parliament: This relates to the law that establishes the monopoly and gives it the exclusive right to run or operate a business.

ii. Copyright: This considers the right by law to be the original owner (entity) which determines who may publish, copy and distribute a piece of writing, music, picture or other work of authorship. It gives the person the exclusive right to the material in question.

iii. Natural Monopoly: This deals with a situation where the monopoly is created as a result of some natural force which

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cannot be acquired.

iv. Cartel: In this case, monopoly power is created by coming together of firms that produce similar goods/product to regulate the output of such product.

6(a) Definition of Inflation:

Inflation refers to an increase in the quantity of money, which leads to a devaluation of existing money. It is the sustained increase in the general price level of commodities within some space of the year.

(b) Causes of:

(i) Demand-pull inflation:

1. Decrease in supply of output
2. Increase in the absolute total population
3. Excessive money supply
4. Growing economy and consumer spending
5. Increase in government spending
6. Surging export demand
7. Lower interest rates and borrowing cost

(ii) Cost-push inflation:

1. Increase in taxation
2. Fall in the domestic value of money.
3. Increase in the cost of factors of production.
4. Increase in the cost of raw materials.
5. Higher rates of indirect taxes.
6. Increase in wages.
7. Disruptions in supply chain.

7(a) Meaning of Economic development:

This is the process of improving the living standards, health, education and job options in a society or nation at large. It involves a sustained growth coupled with structural changes in the economy.

(b) Features of a developing country:

i. Low level of human development index

ii. High level of illiteracy

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iii. High fertility rate

iv. Low per capita income

v. Vicious cycle of poverty

vi. Dependency on Agriculture and Primary Sector

vii. High level of unemployment

viii. High level of income inequality

(c) Factors that can speed up economic development:

i. Diversification of the economy

ii. Adequate man-power training/education

iii. Improvement in the level of technology

iv. Stabilization of political posts and offices

v. Investment in physical assets such as tools, factories, machinery etc.

vi. Access to large domestic and international markets that promote businesses

8(a) Features of:

i. Free Trade Area:

- Zero taxes and rates on commodities
- Zero tariffs of goods
- Free movement of members' countries (to and from the region)

ii. Common Market:

- Free movement of factors of production.
- Equal percentage of tax and tariff.

(b)(i) Merits of a Common Market:

- A Common Market fosters friendliness among member countries.
- It promotes stability in the businesses of members.
- It gives room for free movement of resources.
- It enhances bigger market size and stronger bargaining power.

(ii) Demerits of a Common Market:

1. It can lead to human trafficking.
2. It leads to loss of national control as government may give up some of its powers or trade rules.

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3. It can lead to depression of wages and high job pressure.
4. It creates room for unequal gains between rich countries and poor ones.

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ECONOMICS THEORY 2018 — QUESTIONS

SECTION A

1. The table below shows the composition of exports and imports of a hypothetical country. Use the information to answer the questions that follow.

Exports	Amount ($)	Imports	Amount ($)
Crude oil	120,000,000	Rice and Flour	140,000,000
Groundnuts	40,000,000	Petroleum product	80,000,000
Tourism	45,000,000	Vehicles and accessories	50,000,000
Shipping and Insurance	60,000,000	Banking services	60,000,000
Bauxite	80,000,000	Freight and Insurance	40,000,000

(a) Calculate the value of visible exports.

(b) Calculate the balance of trade for the country.

(c) List the items of invisible exports and imports.

(d) Calculate the current account balance of the country.

(e) Is the country developed or developing? Give one reason for your answer.

2. The cost and output schedule of a firm is shown in the table below.

Output (kg)	0	15	35	60	85
Variable Cost ($)	0	30	55	75	90
Total Cost ($)	15	45	70	90	105
Total Revenue ($)	0	30	70	120	170

(a) Using the data in the table, at each level of output, calculate the firm's (i) marginal revenue (ii) marginal cost.

(b) At what output level did the firm: (i) break even (ii) make the highest profit (iii) attain equilibrium.

(c) Identify the market structure in which the firm operates.

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SECTION B

3. (a) Define optimum population.

(b) In what three ways can rapid population growth slow down the rate of economic development?

(c) Describe any three measures that can be adopted to control rapid population growth.

4. (a) What are state-owned enterprises?

(b) State any three reasons for the establishment of state-owned enterprises.

(c) Highlight any four problems associated with state-owned enterprises.

5. (a) Differentiate between unemployment and underemployment.

(b) With one example each, explain the following: (i) seasonal unemployment (ii) structural unemployment (iii) frictional unemployment (iv) cyclical unemployment.

6. (a) What is commodity money?

(b) Identify any three problems associated with trade by barter.

(c) Explain any three ways by which the advent of money has solved the problems of the barter system.

7. (a) What is a demand schedule?

(b) State the law of demand.

(c) Using appropriate examples, explain the following types of demand: (i) competitive demand (ii) derived demand (iii) joint demand (iv) composite demand.

8. (a) What is a tax?

(b) Describe the following rates of taxation: (i) progressive tax (ii) proportional tax (iii) regressive tax.

(c) Explain the following principles of a good tax system: (i) equity (ii) convenience (iii) economy.

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ANSWERS TO WASSCE JUNE 2018 ECONOMICS 2 (ESSAY)

SECTION A

1(a) Visible Exports:

Crude oil $120,000,000 + Groundnuts $40,000,000 + Bauxite $80,000,000 = $240,000,000

(b) Visible Imports = Rice and Flour $140,000,000 + Petroleum Product $80,000,000 + Vehicles and Accessories $50,000,000 = $270,000,000

Balance of Trade = Visible Export − Visible Import = $(240,000,000 − 270,000,000) = −$30,000,000 (a deficit of $30,000,000)

(c) Items of Invisible Exports and Imports:

Exports: Tourism, Shipping, Insurance

Imports: Banking Services, Freight, Insurance

(d) Current Account Balance = Total Export − Total Import

Total Export = 120,000,000 + 40,000,000 + 45,000,000 + 60,000,000 + 80,000,000 = $345,000,000

Total Import = 140,000,000 + 80,000,000 + 50,000,000 + 60,000,000 + 40,000,000 = $370,000,000

Current Account Balance = $345,000,000 − $370,000,000 = −$25,000,000 (a deficit of $25,000,000)

(e) The country is developing. Reason: It has a deficit balance of trade and a deficit current account balance — a peculiar feature of a developing nation.

2(a)(i) Marginal Revenue (MR) = ΔTotal Revenue / ΔOutput

0→15 units: ΔTR = 30, ΔQ = 15 → MR = $2.00

15→35 units: ΔTR = 40, ΔQ = 20 → MR = $2.00

35→60 units: ΔTR = 50, ΔQ = 25 → MR = $2.00

60→85 units: ΔTR = 50, ΔQ = 25 → MR = $2.00

(ii) Marginal Cost (MC) = ΔTotal Cost / ΔOutput

0→15 units: ΔTC = 30, ΔQ = 15 → MC = $2.00

15→35 units: ΔTC = 25, ΔQ = 20 → MC = $1.25

35→60 units: ΔTC = 20, ΔQ = 25 → MC = $0.80

60→85 units: ΔTC = 15, ΔQ = 25 → MC = $0.60

Output	Total Revenue	Total Cost	Profit/(Loss)
0	0	15	(15)
15	30	45	(15)
35	70	70	0
60	120	90	30
85	170	105	65

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(b)(i) Break-even is achieved when Total Revenue = Total Cost → at 35 units of output.

(ii) The highest profit is made at 85 units of output.

(iii) Equilibrium (MR = MC at zero economic profit condition) is attained at 35 units of output.

(c) The firm operates in an imperfect market, because profit can only be increased by selling more units.

SECTION B

3(a) Optimum population is the level of population that ensures maximum usage of all the available resources of the economy.

(b) Ways rapid population growth can slow down economic development:

It could lead to overpopulation and an increase in social vices.

It could destabilise the economic plan of a nation.

It could place more pressure on the infrastructure of the economy.

It could drain government funds toward basic consumption instead of long-term investment.

It would create a high level of unemployment.

(c) Measures to control rapid population growth:

Expanding access to family planning.

Improving the standard of education.

Empowering women.

Encouraging late marriage / discouraging early marriage.

Enforcement of laws to regulate family size.

4(a) State-owned enterprises are public corporations or institutions established by an act of parliament with taxpayers' money, owned and managed by the state or country.

(b) Reasons for establishing state-owned enterprises:

To improve the welfare of citizens.

To provide social amenities at affordable prices for citizens.

To provide job opportunities.

To reduce exploitation in the private sector.

(c) Problems of state-owned enterprises:

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Bureaucratic bottlenecks in administrative processes.

Corruption and mismanagement of funds.

Political instability.

Inefficiency and ineffectiveness of staff.

Inadequate government funding.

Enactment of unpopular policies.

5(a) Unemployment is a situation where able and qualified persons are unable to secure paid employment, while underemployment is a situation where a person is engaged at a wrong position or post, below their qualification or capacity.

(b)(i) Seasonal unemployment: Job loss due to seasonal changes during the year, recurring at the same time each year — e.g. most farmers are unemployed during the dry season in Nigeria.

(ii) Structural unemployment: Occurs due to structural change in the economy — e.g. the shift from manual to digital (e-)banking led to the laying-off of bank staff.

(iii) Frictional unemployment: Temporary joblessness while workers move between jobs, change careers, or enter the workforce for the first time.

(iv) Cyclical unemployment: Job loss caused by a downturn or recession in the business cycle; rises during recessions and falls during expansions.

6(a) Commodity money is any document, product, or material that can be used as a means of settling debts and payments.

(b) Problems of trade by barter:

Problem of double coincidence of wants.

Problem of a common standard of value.

Indivisibility of goods.

Difficulty in storing wealth.

Difficulty in making deferred payments.

Difficulty in transporting goods.

(c) How money solved the barter problems:

i. Acts as an intermediary, eliminating double coincidence of

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wants.

ii. Gives every good/service a clear price, solving the problem of common measure of value.

iii. Does not easily rot or lose utility over time, unlike stored wealth.

iv. Comes in small and large denominations, solving the indivisibility problem.

v. Makes buying on credit and future payment contracts simple, solving the deferred-payment problem.

vi. Comes in light, portable forms (coins, paper, digital funds), solving the portability problem.

7(a) A demand schedule is a tabular presentation of quantity demanded at different price levels.

(b) Law of demand: the higher the price of a commodity, the lower the quantity demanded, and vice versa.

(c)(i) Competitive demand: Demand for products that serve as close substitutes for one another — e.g. Coca-Cola and Pepsi; tea and coffee.

(ii) Derived demand: Demand for a good/factor that results from demand for a related final product — e.g. demand for cell phones creates demand for airtime.

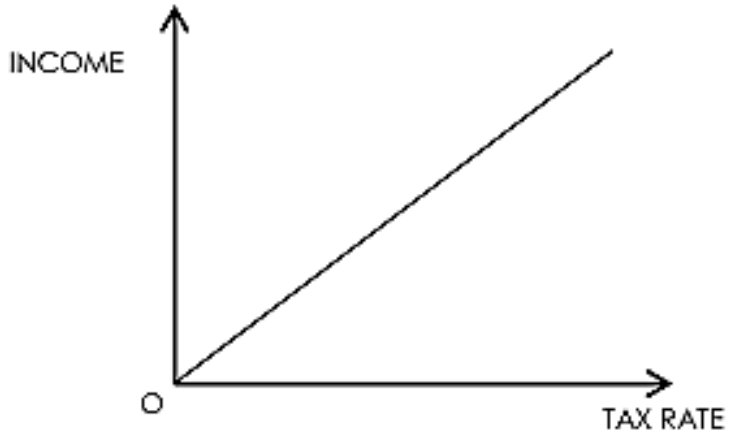
(iii) Joint demand: Occurs when two or more goods are demanded together because they complement each other — e.g. cars and petrol; printers and ink cartridges.

(iv) Composite demand: Occurs when a single good/resource has multiple different uses — e.g. land can be used for farming, housing, or commercial purposes; maize can be used for cornflakes, pap, or livestock feed.

8(a) Tax is a mandatory financial charge or levy imposed by a government on individuals, businesses, or transactions to fund public expenditure and regulate economic activity.

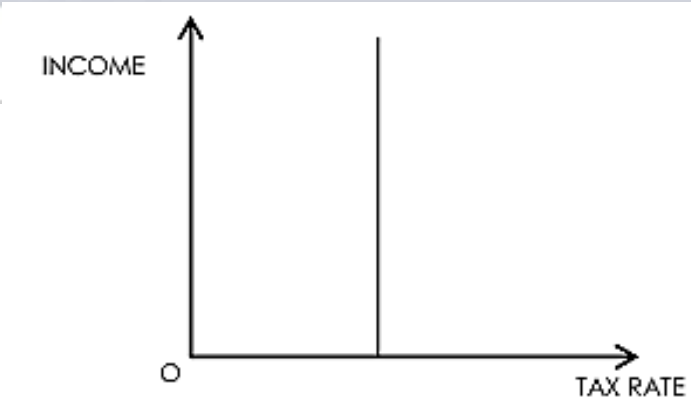
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(b)(i) Progressive tax: The rate of tax payable increases as income

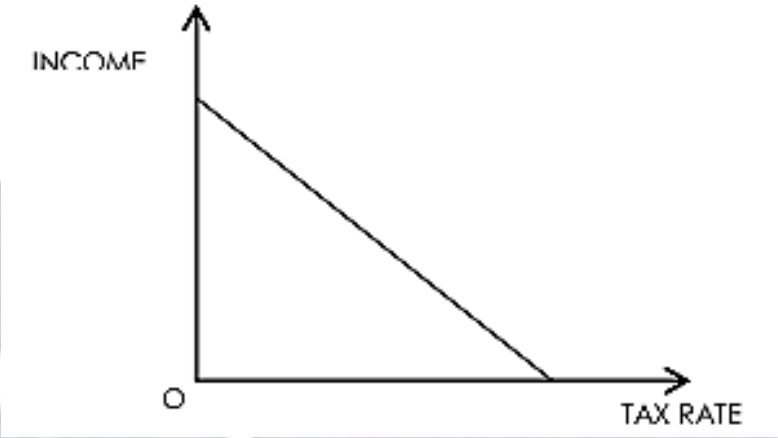


increases. Graphically, income against tax rate produces an upward-sloping straight line through the origin.

(ii) Proportional tax: The tax rate paid is the same irrespective of the individual's income — represented as a vertical line at a fixed tax rate.



(iii) Regressive tax: A larger percentage of income is taken from low-income earners than from high-income earners — represented as a downward-sloping line.



(c)(i) Equity: Taxes collected from people in the same category should be equal, based on each person's ability to pay.

(ii) Convenience: Taxes should be collected at times convenient for the taxpayer.

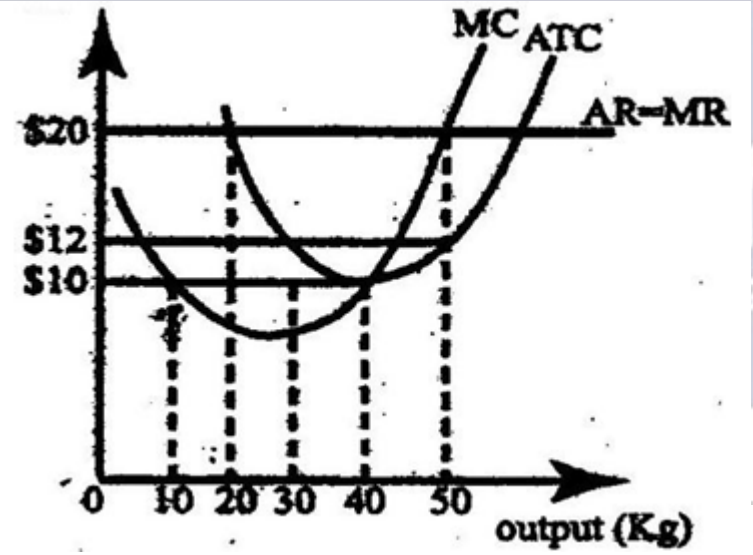
(iii) Economy: The cost of collecting tax should not be excessive relative to the revenue realised.

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WASSCE 2019 ECONOMICS 2 — THEORY QUESTIONS

SECTION A

1. The diagram below represents the equilibrium position of a firm in a perfectly competitive industry. Study it carefully and answer the questions that follow.



(a)(i) At what level of output and prices is the firm in equilibrium?

(ii) Calculate the firm's profit in equilibrium.

(iii) What type of profits is it? Explain your answer.

(b) Why is the average revenue (AR) function horizontal?

(c) State any two ways in which marginal cost (MC) and average total cost (ATC) are related.

2. The extract from a country's balance of payments account is shown below.

Item	Import ($ million)	Export ($ million)
Agricultural products	–	200
Mineral products	–	300
Consumer goods	250	–
Capital goods	400	–
Insurance	50	25
Banking	75	30
Transportation	85	25
Loans	150	60

Using the table above, calculate:

(a) balance of trade;

(b) invisible trade balance;

(c) balance on current account.

SECTION B

3. (a)(i) Define distribution of goods (ii) Illustrate the normal chain of distribution of goods

(b) Describe a consumer's cooperative society.

(c) Outline any four roles performed by a consumers' cooperative society.

4. (a) What is an industry?

(b) Explain the following: (i) Division of labour (ii) Economies of scale

(c) Outline any four internal economies of scale.

5. (a) Define a joint venture.

(b) Identify any three merits of a private company over a partnership.

(c) State any three sources of finance to a public enterprise.

6. (a) Distinguish between the following pairs of concepts:

(i) elastic demand and inelastic demand

(ii) income elasticity of demand and cross elasticity of demand

(b) Using diagrams, explain how a price increase will affect the total revenue of a producer if demand for his product is: (i) price elastic (ii) price inelastic.

7. (a) Distinguish between:

(i) a growing population and a declining population

(ii) overpopulation and underpopulation

(b) Explain any four disadvantages of a rapidly growing population in an economy.

8. (a) What is public debt?

(b) Outline any three reasons why countries borrow.

(c) Highlight any three effects of a huge national debt on the economy of a country.

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ANSWERS TO WASSCE JUNE 2019 ECONOMICS 2 ESSAY

SECTION A

1(a)(i) The firm is in equilibrium where Marginal Revenue (MR) = Marginal Cost (MC). At this level, Output = 50 kg while price = $20.

(ii) Profit = Revenue − Cost. Revenue = 50 × 20 = $1,000; Cost = 50 × 12 = $600. Profit at equilibrium = $1,000 − $600 = $400.

(iii) It is abnormal/economic/supernormal profit, because the profit is earned at a point where Price (AR) is greater than AC.

(b) The AR function is horizontal because the firm operates in a perfectly competitive industry, where firms are price takers, so price (AR) is fixed regardless of quantity sold.

(c) Relation between MC and ATC:

(i) When MC = ATC, ATC is at its minimum.

(ii) When MC > ATC, ATC rises.

(iii) When MC < ATC, ATC falls.

2(a) Balance of Trade = Visible Export − Visible Import

Visible Export = 200 + 300 = $500 m

Visible Import = 250 + 400 = $650 m

Balance of Trade = $(500 − 650) = −$150 m (deficit)

(b) Invisible Trade Balance = Invisible Export − Invisible Import

Invisible Export = 25 + 30 + 25 = $80 m

Invisible Import = 50 + 75 + 85 = $210 m

Invisible Trade Balance = $80 m − $210 m = −$130 m

(c) Balance on Current Account = Balance of Trade + Invisible Trade Balance

= −$150 m + (−$130 m) = −$280 m

SECTION B

3(a)(i) Distribution of goods refers to the channels through which goods reach the final consumer from the manufacturer or producer.

(ii) Normal chain of distribution: Producer → Wholesaler → Retailer → Consumer.

(b) A Consumers' Cooperative Society is an association of consumers with similar interests, formed for their mutual benefit. Members pool resources to buy goods in bulk from distributors, manufacturers, or government agencies, and sell mainly to members, who also participate in running the society. Members are rewarded according to patronage, and interest is paid on capital contributed.

(c) Roles of a Consumers' Co-operative Society:

(i) Protects the interest of consumers.

(ii) Buys in bulk from manufacturers/wholesalers and sells in units

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to members.

(iii) Stands against intimidation of consumers.

(iv) Aims to improve the welfare of its members.

4(a) An industry refers to the combination of firms that produce similar products and/or outputs.

(b)(i) Division of labour: the breaking down of a production process into stages, each handled by a particular individual, unit, or department.

(ii) Economies of scale: the internal and external cost-saving benefits that accrue to a firm as it expands in size.

(c) Internal economies of scale:

(i) Marketing economies — larger firms buy inputs in bulk, enjoy discounts, and run efficient marketing strategies.

(ii) Risk-bearing economies — larger firms diversify products so a loss in one line doesn't sink the business.

(iii) Financial economies — larger firms access loans more easily and at lower rates due to collateral and creditworthiness.

(iv) Technical economies — cost savings from using larger, more advanced machinery and efficient processes.

(v) Managerial economies — larger firms can hire specialized managers, lowering average cost per unit.

5(a) A joint venture is a business jointly owned by two or more independent firms that continue their original businesses but pool resources in another line of business.

(b) Merits of a private company over a partnership:

(i) Raises capital more easily — can issue debentures or borrow more easily from banks.

(ii) Shareholders risk only the money invested in shares; personal assets stay protected.

(iii) The company is its own legal person — can own property, sign contracts, sue or be sued.

(iv) The business can continue indefinitely as shares are sold, transferred, or inherited.

(v) Viewed by customers, banks, and suppliers as more stable and professional than a partnership.

(c) Sources of finance to a public enterprise:

(i) Revenue generated from services rendered to the public.

(ii) Sale of business assets.

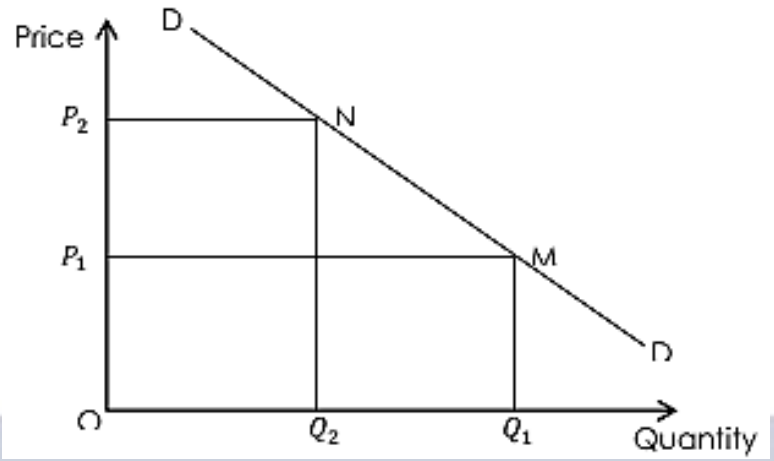
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(iii) Rents from properties owned by the enterprise.

(iv) Funds raised from the capital market via bonds.

(v) Grants and subsidies from government.

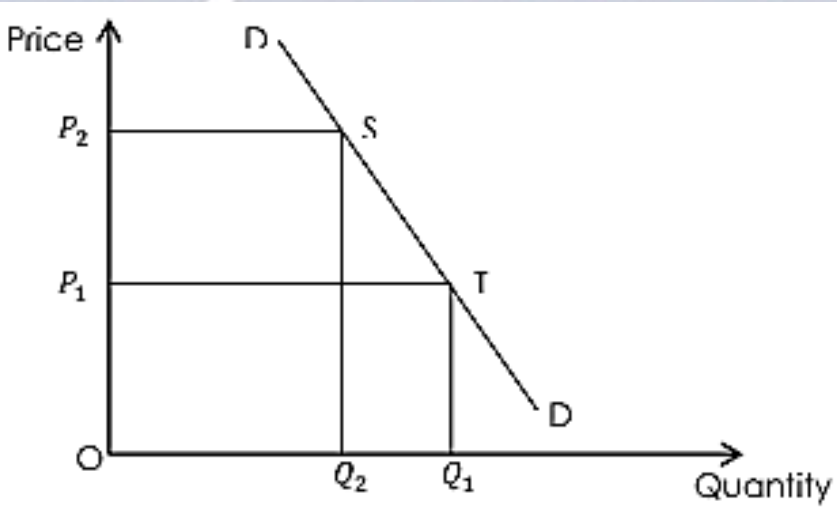
6(a)(i) Elastic vs inelastic demand: Demand is elastic if a price change causes a more-than-proportionate change in quantity demanded; inelastic if it causes a less-than-proportionate change.



(ii) Income elasticity of demand measures responsiveness of quantity demanded to a change in consumer income; cross elasticity of demand measures responsiveness of quantity demanded of one commodity to a price change in another commodity.

(b)(i) In elastic demand, a price increase causes a more-than-proportionate fall in quantity demanded, so total revenue falls.
SEE DIAGRAM — showing TR before > TR after the price increase)

(ii) In inelastic demand, a price increase causes a less-than-proportionate fall in quantity demanded, so total revenue rises.
(SEE DIAGRAM — showing TR after > TR before the price increase)



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7(a)(i) A growing population continues to increase throughout the year; a declining population continues to decrease throughout the year.

(ii) Overpopulation occurs when population exceeds available resources; underpopulation occurs when population is less than available resources.

(b) Disadvantages of a rapidly growing population:

(i) High crime rate due to unemployment.

(ii) Congestion in cities from rural–urban migration.

(iii) Disruption of national economic planning.

(iv) Excess pressure on infrastructure.

(v) Government funds drained toward basic consumption rather than long-term investment.

8(a) Public debt refers to the total borrowings owed by the government to the public, domestically or internationally.

(b) Reasons for borrowing:

To provide basic amenities.

To finance deficit accounts.

To boost economic growth and development.

To cover budget gaps/shortfalls.

To handle crises and recession.

To pay off older debts.

(c) Effects of huge national debt:

Devaluation of domestic currency.

Heavy burden of debt servicing.

Heavy borrowing costs for consumers.

Higher inflation and depreciation.

Risk of debt crisis, making the country vulnerable and stalling economic activity.

Crowding out private investment, raising interest rates.

Excessive foreign influence over the country.

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ECONOMICS YEAR 2020

PAPER 2 - ESSAY

PAPER 2 – ESSAY

Answer four questions in all. One question only from Section A and any three questions from Section B. All questions carry equal marks.

SECTION A

Answer one question only from this section.

5	80	0	16
6	X	-9.8	11.7

1. Table 1 below shows the number of workers engaged by an agricultural firm over a period of time. Study it and answer the questions that follow.

Table 1

Number of workers	Total product	Marginal product	Average product
0	0	0	0
1	20	20	20
2	50	30	Z
3	70	20	23.3
4	80	Y	20

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(a) Calculate the values of X, Y, and Z. [6 marks]

(b) At what level of employment of labour does the firm experience:

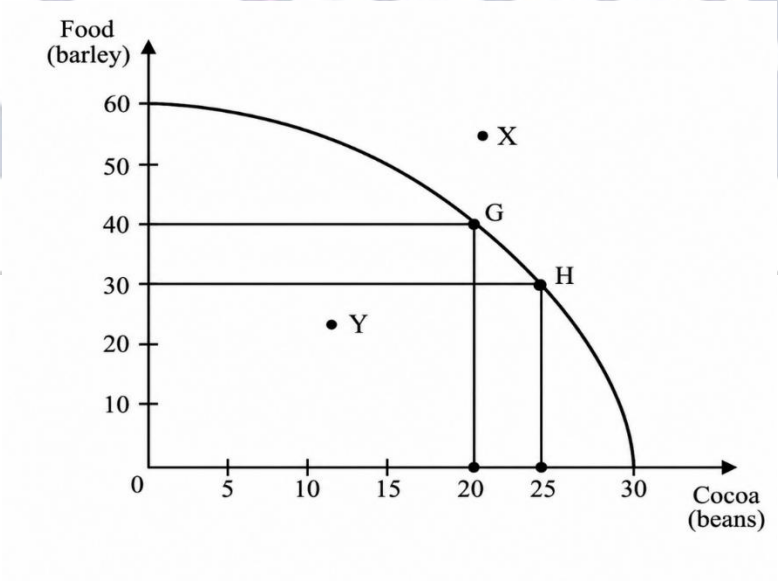
(i) increasing returns; [1 mark]

(ii) decreasing returns; [1 mark]

(iii) negative returns? [1 mark]

(c) State the law of diminishing returns. [2 marks]

(d) (i) On a graph sheet, draw the total product and marginal product curves. [7 marks]



(ii) State any two relationships between the two curves in (d)(i) above. [2 marks]

2. Figure 1 below represents the production possibility curve of a nation. Use it to answer the questions that follow.

(a) What is the opportunity cost of:

(i) producing 30 units of cocoa; [2 marks]

(ii) increasing textile production from 30 to 40 bales? [2 marks]

(b) Interpret the following points as found in the graph:

(i) point Y; [2 marks]

(ii) point G; [2 marks]

(iii) point X. [2 marks]

(c) List three conditions that can enable the nation to produce at point X. [3 marks]

(d) State two basic economic concepts illustrated in the diagram above. [2 marks]

(e) (i) Define production possibility curve. [3 marks]

(ii) What does the slope of the production possibility curve indicate? [2 marks]

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SECTION B

Answer three questions only from this section.

3. (a) Define consumer goods. [2 marks]

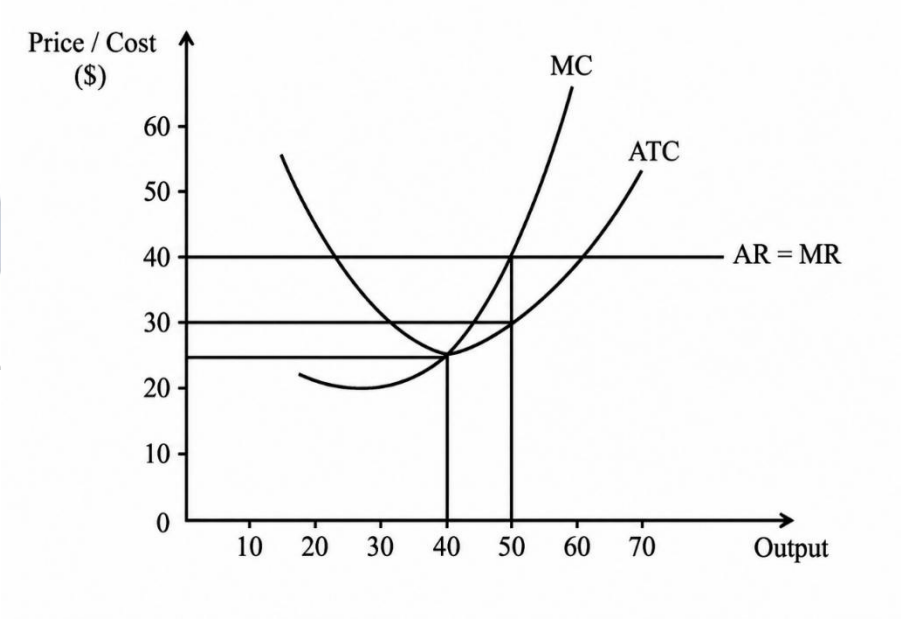
(b) Explain the following forms of capital with an example each:

(i) fixed capital; [3 marks]

(ii) social capital; [3 marks]

(iii) circulating capital. [3 marks]

(c) Outline three reasons for the low level of savings in a country.



[9 marks]

4. (a) Distinguish between the following pairs of terms:

(i) capital expenditure and recurrent expenditure; [4 marks]

(ii) fiscal policy and monetary policy. [4 marks]

(b) Explain four reasons why the government of a country imposes taxes. [12 marks]

5. (a) Define tariff. [2 marks]

(b) State the following laws:

(i) the law of absolute cost advantage; [3 marks]

(ii) the law of comparative cost advantage. [3 marks]

(c) Outline any four assumptions behind the law of comparative cost advantage. [12 marks]

6. (a) What is money? [2 marks]

(b) Explain the following concepts:

(i) value of money; [3 marks]

(ii) demand for money. [3 marks]

(c) Identify any four determinants of transactions demand for money. [12 marks]

7. (a) Distinguish between competitive demand and joint demand. [4 marks]

(b) Using diagrams, explain how the following factors will affect the equilibrium price and quantity of commodity R in the market:

(i) an increase in the price of the complement of commodity R; [6 marks]

(ii) an increase in the price of a substitute of commodity R; [6 marks]

(iii) imposition of an indirect tax on commodity R. [4 marks]

8. (a) Differentiate between subsistence farming and commercial farming. [4 marks]

(b) State four features of subsistence farming. [8 marks]

(c) Outline two positive and two negative effects of mining on the economy of West African countries. [8 marks]

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MARKING SCHEME

WASSCE 2020 ECONOMICS 2 (ESSAY)

SECTION A

QUESTION 1 — SCHEME 1 (Law of Diminishing Returns)

The table below shows the total product (TP) of a firm:

Labour	**1**	**2**	**3**	**4**	**5**	**6**
TP	—	—	—	—	80	70.2

(a) Calculate the following from the table:

X = Total Product at 6 units (TP_6)

Y = Marginal Product at 4th unit (MP_4)

Z = Average Product at 2nd unit (AP_2)

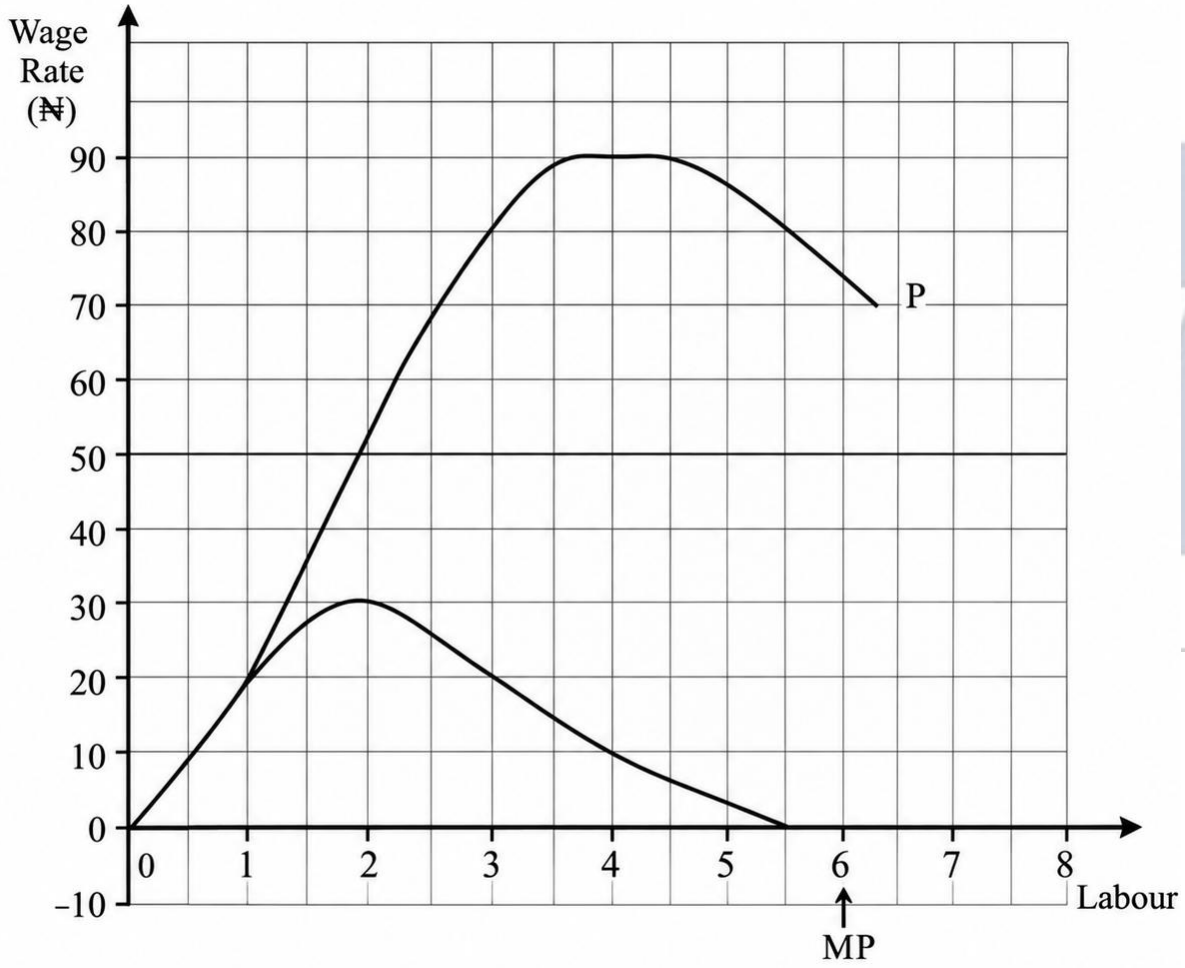
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(b) From the table, identify the units of labour at which the following returns occur:

(i) Increasing returns

(ii) Decreasing returns

(d)(i)



(iii) Negative returns

(c) State the law of diminishing returns.

(d) (SEE DIAGRAM — Graph of Total Product (TP) and Marginal Product (MP) against Labour)

Explain two relationships between Total Product (TP) and Marginal Product (MP) as shown in the graph.

(e) Explain the three stages of returns:

(i) Increasing returns

(ii) Decreasing returns

(iii) Negative returns

QUESTION 2 — SCHEME 2 (Production Possibility Curve)

The table below shows the production possibilities of an economy producing textiles and cocoa:

Production Possibility	Textiles (bales)	Cocoa (tons)
A	—	30
B	30	25
C	40	20
G	—	—
X	—	—
Y	—	—

(a) From the table, calculate:

(i) The opportunity cost of producing 30 tons of cocoa

(ii) The opportunity cost of increasing textile production from 30 to 40 bales

(b) Using the table, explain what the following points represent:

(i) Point Y

(ii) Point G

(iii) Point X

(c) State three conditions necessary for a production possibility curve.

(d) Identify two economic concepts illustrated by the production possibility curve.

(e)

(i) Define production possibility curve.

(ii) Explain the slope of the production possibility curve.

QUESTION 3 — SCHEME 3 (Capital and Savings)

(a) Define consumer goods.

(b) Explain the following types of capital:

(i) Fixed capital

(ii) Social capital

(iii) Circulating capital

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(c) Give three reasons why the level of savings is low in West Africa.

QUESTION 4 — SCHEME 4 (Government Expenditure and Taxation)

(a)

(i) Distinguish between capital expenditure and recurrent expenditure.

(ii) Distinguish between fiscal policy and monetary policy.

(b) Give four reasons why government imposes taxes:

(i) To raise revenue for administration, defense and to provide social services.

(ii) To regulate the importation of some commodities considered harmful.

(iii) To redistribute income between the rich and the poor.

(iv) To protect local infant industries from foreign competition.

(v) To correct a balance of payments problem by imposing taxes on imports to increase their prices and discourage imports.

(vi) To check deflation or inflation.

(vii) To prevent dumping.

(viii) As a retaliatory measure against other countries.

(ix) To create and protect employment in the domestic economy.

QUESTION 5 — SCHEME 5 (International Trade)

(a) Define tariff.

(b)

(i) State the law of absolute cost advantage.

(ii) State the law of comparative cost advantage.

(c) State six assumptions of the law of comparative cost advantage:

(i) There are only two countries in the world each producing and consuming only two goods.

(ii) Labour is the only factor of production and they are of uniform quality within each country.

(iii) There is perfect mobility of labour within each country whereas labour cannot move freely between the two countries.

(iv) Costs of production are constant. The costs remain the same whatever the quantities produced.

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(v) There are no costs of transportation.

(vi) There is full employment in each country. As a result, to produce more of one product will entail forgoing some quantity of the other product.

(vii) There are no trade barriers between the two countries.

QUESTION 6 — SCHEME 6 (Money and Demand for Money)

(a) Define money.

(b)

(i) What is meant by the value of money?

(ii) What is meant by the demand for money?

(c) Explain four determinants of the demand for money (liquidity preference):

(i) Level of income

(ii) Interval between pay days

(iii) The rate of interest

(iv) The price level

(v) Status in the society

(vi) The size of one's family

(vii) Personal tastes

(viii) Availability of credit facilities

(ix) Advancement in technology in the banking sector

QUESTION 7 — SCHEME 7 (Competitive and Joint Demand)

(a) Distinguish between competitive demand and joint demand.

(b) Using diagrams, explain the effects of the following on the market for commodity R:

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(i) An increase in the price of the complement of commodity R.

Figure 1: Complement of R showing demand curve shift;

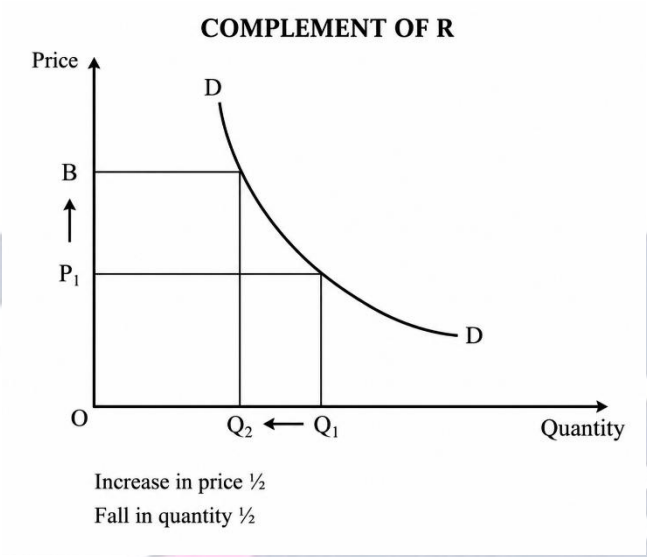
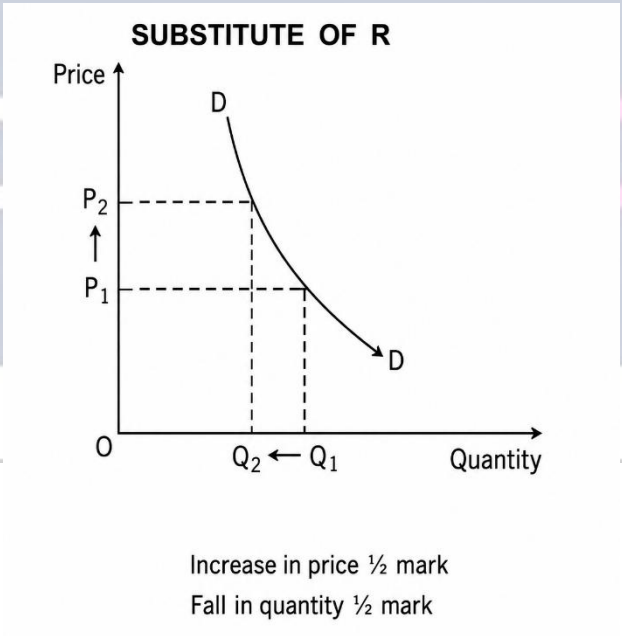
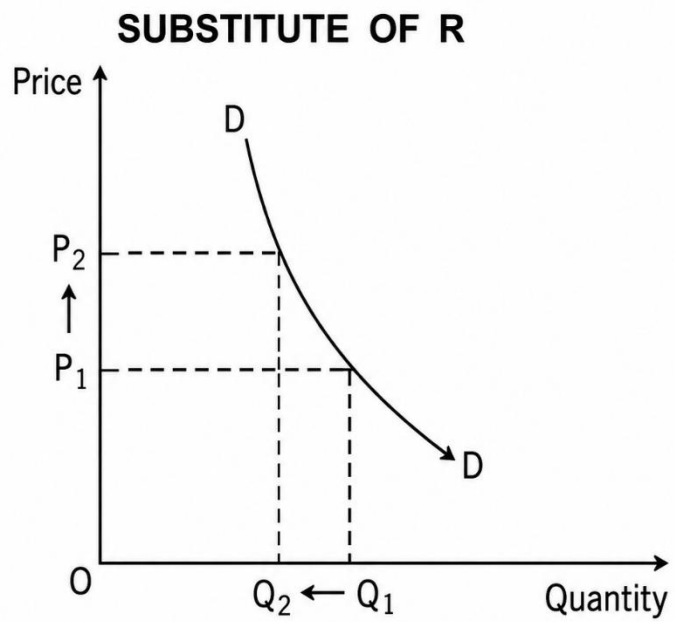


Figure 2: Commodity R showing supply and demand curves)

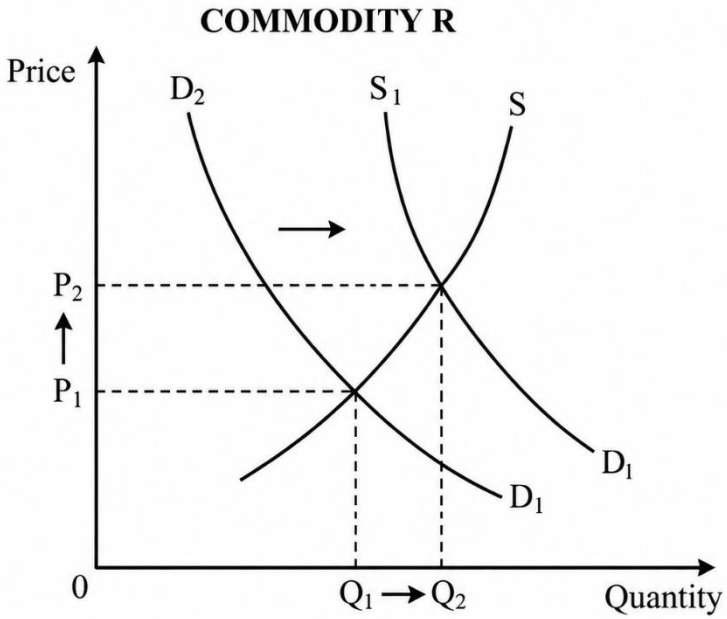


(ii) An increase in the price of a substitute of commodity R.



Increase in price ½ mark
Fall in quantity ½ mark

3: Substitute of R showing demand curve;



Supply curve 1 mark
Shift of dd curve 1 mark
Increase in price ½
Increase in quantity ½

Figure 4: Commodity R showing supply and demand shift)

(iii) The imposition of an indirect tax on commodity R.

Figure 5: showing supply shift from S-to-S_1, increase in price and decrease in quantity)

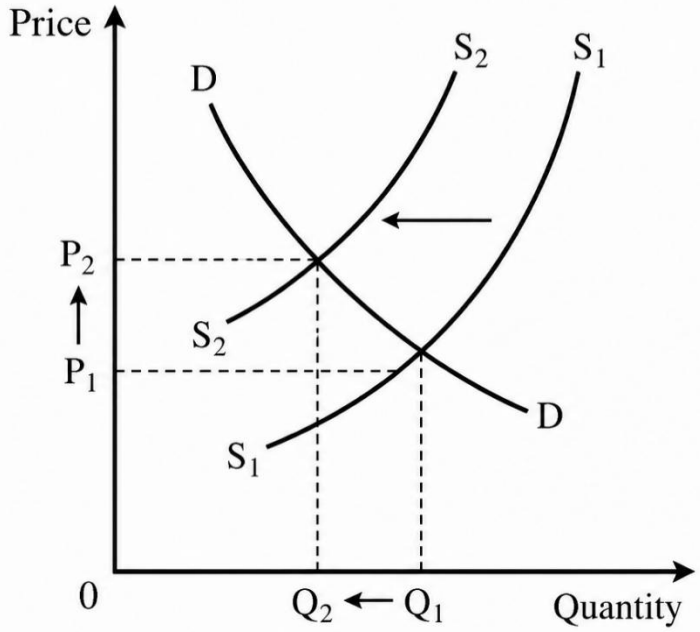


Figure 5

Shift in supply 1 mark
Increase in price ½
Decrease in quantity ½

QUESTION 8 — SCHEME 8 (Subsistence and Commercial Farming)

(a) Distinguish between subsistence farming and commercial farming.

(b) State four features of subsistence farming:

(i) It is done on a small scale

(ii) Simple tools like hoe and cutlass are used

(iii) Relies solely on the weather

(iv) Little or no pesticides are used

(v) It relies on family labour

(vi) Food crops are mainly cultivated for home consumption and not for sale

(vii) Yields are usually low

(viii) Mixed farming and mixed cropping is practiced

(ix) Individual farmers are owners of the farm

SECTION B (For Visually Impaired Candidates)

Question on Loans by Sector:

The table below shows loans granted to various sectors ($):

Sector	Loans Granted ($)
Primary sector	3000 + 8000 + 7000 = $18,000
Secondary sector	4000 + 8000 = $12,000
Tertiary sector	4000 + 6000 + 5000 = $15,000

(a) Calculate the loan granted to each of the following sectors:

(i) Primary sector

(ii) Secondary sector

(iii) Tertiary sector

(b) Calculate the total loan amount granted.

(c) Express the following as ratios:

(i) Primary sector loan to total loan granted

(ii) Tertiary sector loan to total loan granted

(d) Calculate the percentage of loans granted to the primary and tertiary sectors combined.

= (18,000 + 15,000) / 45,000 × 100

= 33,000 / 45,000 × 100

= 73.3%

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Question on Mining:

(a) Define mining.

(b) State four features of mining.

(c) Explain the effects of mining on the economy:

(i) Positive effects:

It is a source of foreign exchange

It provides employment

It is a source of raw material for local industries

The government generates revenue in the form of royalties

Contributes to infrastructural development

Contributes towards community development

Source of energy, e.g. coal

Avenue for transfer of technology

(ii) Negative effects:

It leads to loss of farmland

It leads to pollution of water bodies

It leads to loss of lives when people fall into abandoned pits

It increases expenditure for government in land reclamation

Able-bodied young men venture into it and abandon farming

It destroys animals and tree species

Contributes to corruption

It led to the neglect of other sectors

Depletion of non-renewable resources

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ECONOMICS YEAR 2021

PAPER 2 - ESSAY

Answer four questions in all. One question only from Section A and any three questions from Section B. You are reminded of the importance of clarity of expression and orderly presentation of relevant materials.

All questions carry equal marks.

SECTION A

Answer one question only from this section.

1. A hypothetical national income data for a country in a particular year is presented below.

ITEM	$ MILLION
Wages and salaries	250
Income paid abroad	75
Income from self-employment	120
Stock appreciation	5
Interest	10
Income received from abroad	50
Rent	25
Depreciation allowance	3

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Royalties	2
Profits and dividends	35

From the data above, answer the following questions.

Calculate the:

(a) Gross Domestic Product (GDP);

[11 marks]

(b) Gross National Product (GNP);

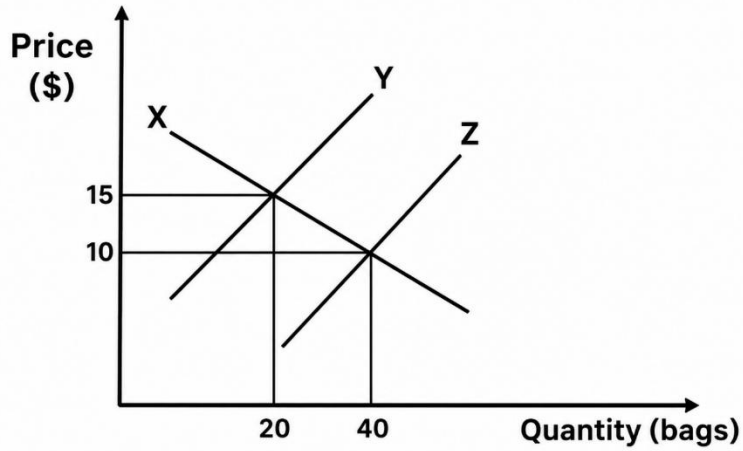
[5 marks]

(c) Net National Product (NNP).

[4 marks]

---

2. The diagram below shows the effects of the introduction of a subsidy on the production of maize. Study the diagram and answer the questions that follow.



The diagram shows a graph with the vertical axis labelled Price ($) with values at 10 and 15 marked, and the horizontal axis labelled Quantity (bags) with values at 20 and 40 marked. Three curves/lines are present: X — a downward-sloping demand curve; Y — an upward-sloping supply curve (original); Z — a second upward-sloping supply curve (after subsidy), shifted to the right of Y. X and Y intersect at approximately Price $15, Quantity 20. X and Z intersect at approximately Price $10, Quantity 40.

(a) (i) Identify the curves labelled X, Y and Z.

[3 marks]

(ii) State the direction of change in price and quantity with the

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introduction of subsidy.

[2 marks]

(b) Calculate the total revenue of the producers:

(i) before the introduction of subsidy;

[2 marks]

(ii) after the introduction of subsidy.

[2 marks]

(c) Calculate the percentage increase or decrease in the total revenue of the producers with the introduction of subsidy.

[2 marks]

(d) If the quantity demanded of maize increases from 20 to 40 bags as a result of a fall in price from $15 to $10, calculate the price elasticity of demand.

[7 marks]

(e) State the type of elasticity of demand in 2(d).

[2 marks]

SECTION B

Answer three questions only from this section.

3.

(a) Define the term limited liability.

[2 marks]

(b) Describe four differences between a public joint-stock company and a private joint-stock company.

[12 marks]

(c) Outline three sources of finance available to sole proprietorship.

[6 marks]

4.

(a) Distinguish between labour force and efficiency of labour.

[5 marks]

(b) Describe five factors which determine the size of the labour force in a country.

[15 marks]

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5.

(a) What is a demand schedule?

[2 marks]

(b) Explain each of the following terms:

(i) effective demand;

[2 marks]

(ii) composite demand;

[2 marks]

(iii) derived demand.

[2 marks]

(c) Using appropriate diagrams, explain how a change in the price of a commodity would influence the demand of its:

(i) substitute;

[6 marks]

(ii) complement.

[6 marks]

6.

(a) Explain the following types of taxes:

(i) specific tax;

[3 marks]

(ii) value-added tax.

[3 marks]

(b) With the aid of diagrams, describe the effects of an indirect tax on a commodity when demand is:

(i) perfectly inelastic;

[7 marks]

(ii) perfectly elastic.

[7 marks]

7.

(a) Distinguish between a:

(i) mortgage bank and a merchant bank;

[4 marks]

(ii) commercial bank and a development bank.

[4 marks]

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(b) Explain any four functions of commercial banks.

[12 marks]

8.

(a) What is economic integration?

[2 marks]

(b) Outline any three shortcomings of the Economic Community of West African States (ECOWAS).

[9 marks]

(c) Highlight any three achievements of the Economic Community of West African States (ECOWAS).

[9 marks]

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MARKING SCHEME

WASSCE 2021 ECONOMICS 2 (ESSAY)

SCHEME 1 (Question 1 — Labour force/occupation table)

(a) Labour force = (30 + 37 + 19 + 12.2 + 16.1 + 10.8 + 15.6 + 19 + 10.3) million = 170 million

(b) (i) Primary sector = (16.1 + 10.8 + 15.6) million ÷ 170 million × 100 = 42.5/170 × 100 = 25%

(ii) Secondary sector = (30 + 19 + 19) million ÷ 170 million × 100 = 68/170 × 100 = 40%

(iii) Tertiary sector = (37 + 12.2 + 10.3) million ÷ 170 million × 100 = 59.5/170 × 100 = 35%

(c) Mining: Shoe production = 16.1 : 30 (2 marks)

(d) Workers in Warehousing ÷ Size of entire labour force × 100 = 12.2 million ÷ 170 million × 100 = 7.18% or 7.2%

(e) (i) It is an advanced/developed/industrialized economy.

(ii) Majority (75%) of the labour force is engaged in the secondary (40%) and tertiary (35%) sectors.

SCHEME 2 (Question 2 — Hats table)

(a)

U = TR ÷ Q = \$3,600 ÷ 30 = \$120

V = TR_{40} = \$100 × 40 = \$4,000

W = MR_{40} = (TR_{40} − TR_{30}) ÷ (40 − 30) = (\$4,000 − \$3,600) ÷ 10 = \$400 ÷ 10 = \$40

X = AR_{20} = TR_{20} ÷ 20 = \$3,000 ÷ 20 = \$150

Y = AR_{40} = TR_{40} ÷ 40 = \$4,000 ÷ 40 = \$100

(b) The firm is operating in a monopolistic competition / imperfect market. This is because at each output level, the price is greater than marginal revenue, or the seller has to reduce price in order to sell more. The price is not fixed.

(c) The firm will be in equilibrium at output level 30. At that point, MR = MC = $60.

(d) $Profit_{50} = TR_{50} - TC_{50} = \$4,000 - \$600 = \$3,400$

(e) Another name for marginal cost: Incremental cost / Differential cost.

For Visually Impaired Candidates (alternative working):

(i) Price = TR/Q = $3,600/30 = $120

(ii) TR = $100 × 40 = $4,000

(iii) $MR_{40} = (TR_{40} - TR_{30})/(40-30) = \$400/10 = \$40$

(iv) $AR_{20} = TR_{20}/20 = \$3,000/20 = \$150$

(v) $AR_{50} = TR_{40}/50$... (note: as printed, likely $4,000/50 = $80)

SCHEME 3 (Question 3 — Economies of scale)

(a) Economies of scale refer to the benefits a firm derives as a result of expanding its productive capacity or the concentration of firms of an industry in an area, which lead to an increase in output and a fall in production cost per unit of output.

(b) Internal economies of scale:

(i) Financial — Large businesses are better able to raise funds from other sources by selling shares or borrowing from banks, and can negotiate for lower interest rates on loans.

(ii) Technical — A large firm can apply mechanized/modern technology to increase its output.

(iii) Marketing — Large firms can buy raw materials in bulk at good discounts, afford to advertise often, can package their goods better, and reduce transport costs considerably.

(iv) Risk-bearing — Large firms can deal with the risks of trading by diversifying their products and market base to international markets as well.

(v) Research — Large firms can carry out research into new areas to improve productivity by employing experts and setting up laboratories.

(Any 3 points at 3 marks each)

(c) Factors influencing where a firm is sited:

(i) Availability and cost of raw materials/availability of natural

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resources, e.g. gold, diamond, etc.

(ii) Access to source of power/regular power supply.

(iii) Proximity to the market (due to fragility, perishability, or bulkiness of the final product).

(iv) Access to specialized transport, e.g. rail services, etc.

(v) Availability of labour (skilled and unskilled).

(vi) External economies to be derived from other firms, e.g. internet, road network, etc.

(vii) Government policy/political influence affecting location of firms in specific places.

(viii) Climatic factors/conditions.

(Any 3 points at 3 marks each)

SCHEME 4 (Question 4 — Product retailing)

(a) Product retailing refers to those activities involved in product distribution from either the producer/wholesaler/retailer to the final consumers.

(b) Roles performed by the wholesaler to the manufacturer:

(i) Wholesalers provide warehousing facilities for the manufacturer, relieving him of the duty of providing the warehouse.

(ii) Wholesalers finance the manufacturer by paying in advance for the product.

(iii) They provide information to the manufacturer about the state of demand in the market.

(iv) They relieve the manufacturer of the costs of transporting the products to retailers in different locations.

(v) Packaging, blending, and branding of products are done by wholesalers.

(vi) Advertising and sales promotions are handled by wholesalers, relieving the manufacturer of the costs involved.

(Any 3 points at 3 marks each)

(c) Problems associated with distribution of products:

(i) Poor or high cost of transportation — road, rail, and air transport networks are poorly developed and expensive.

(ii) Poor market information due to inadequate means of communication.

(iii) Numerous middlemen in the channel of distribution make product prices high.

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(iv) A lot of wholesalers and retailers lack adequate capital to start or run the business.

(v) Inadequate warehousing/storage facilities result in damage to products and scarcity during off-seasons.

(vi) Hoarding of goods by middlemen to create artificial scarcity, resulting in profiteering.

(vii) Lack of aids to trade (banking, insurance, shipping, etc. poorly developed).

(viii) Insecurity on roads due to bad road conditions and armed robbery/thefts.

(ix) Administrative problems — official control measures like road checks, tax officials, etc.

(x) Adulteration of products by wholesalers.

(Any 3 points at 3 marks each)

SCHEME 5 (Question 5 — Price elasticity of demand)

(a) Price elasticity of demand is the degree of responsiveness of quantity demanded of a commodity to a change in its price.

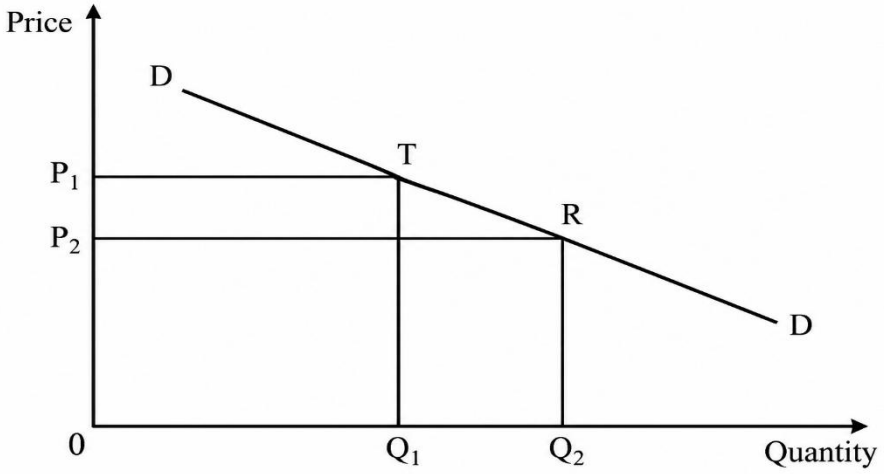
OR: PED = (% change in quantity demanded) ÷ (% change in price)

OR: PED = $(\Delta Q/\Delta P) \times (P/Q)$

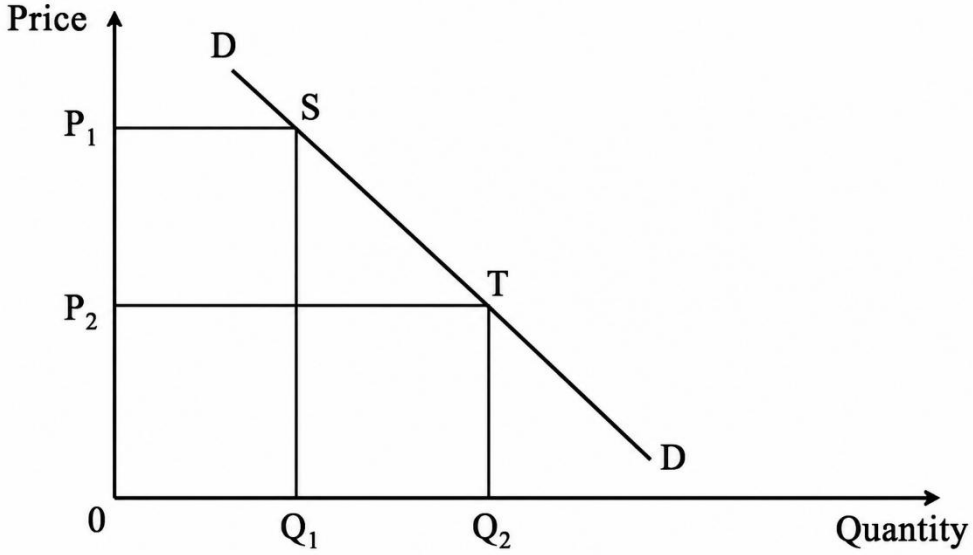
(b) Demand is said to be elastic when a change in price results in a more than proportionate change in quantity demanded. Demand is inelastic when a change in price results in a less than proportionate change in quantity demanded.

(c) (i) Elastic demand: If demand for a trader's product is elastic, a fall in price will result in a more than proportionate increase in quantity demanded. In such a case, the trader's total revenue will increase.

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Total revenue before price fall = area of OP_1TQ_1; Total revenue after price fall = area of OP_2RQ_2. $OP_2RQ_2 > OP_1TQ_1$.



(ii) Inelastic demand: If demand is inelastic, a fall in price will result in a less than proportionate increase in quantity demanded. In such a case, the total revenue of the trader will fall. SEE DIAGRAM

Total revenue before price fall = area of OP_1SQ_1; Total revenue after price fall = area of OP_2TQ_2. $OP_2TQ_2 < OP_1SQ_1$.

SCHEME 6 (Question 6 — Perfect competition)

(a) Characteristics of perfect competition:

(i) Large numbers of buyers and sellers such that no single buyer or seller can influence price.

(ii) Homogeneous products — the products are identical.

(iii) Free entry and exit of firms — firms are free to enter when profits are made and free to exit when losses are incurred.

(iv) Identical cost conditions — no differences in the cost of production of firms, e.g. no transport cost, etc.

(v) No governmental control — forces of demand and supply regulate prices in the market.

(vi) Perfect knowledge — producers and consumers have perfect knowledge of market conditions.

(vii) Firms are price-takers such that a single price rules the market.

(viii) No preferential treatment in the market since all buyers and sellers are treated equally.

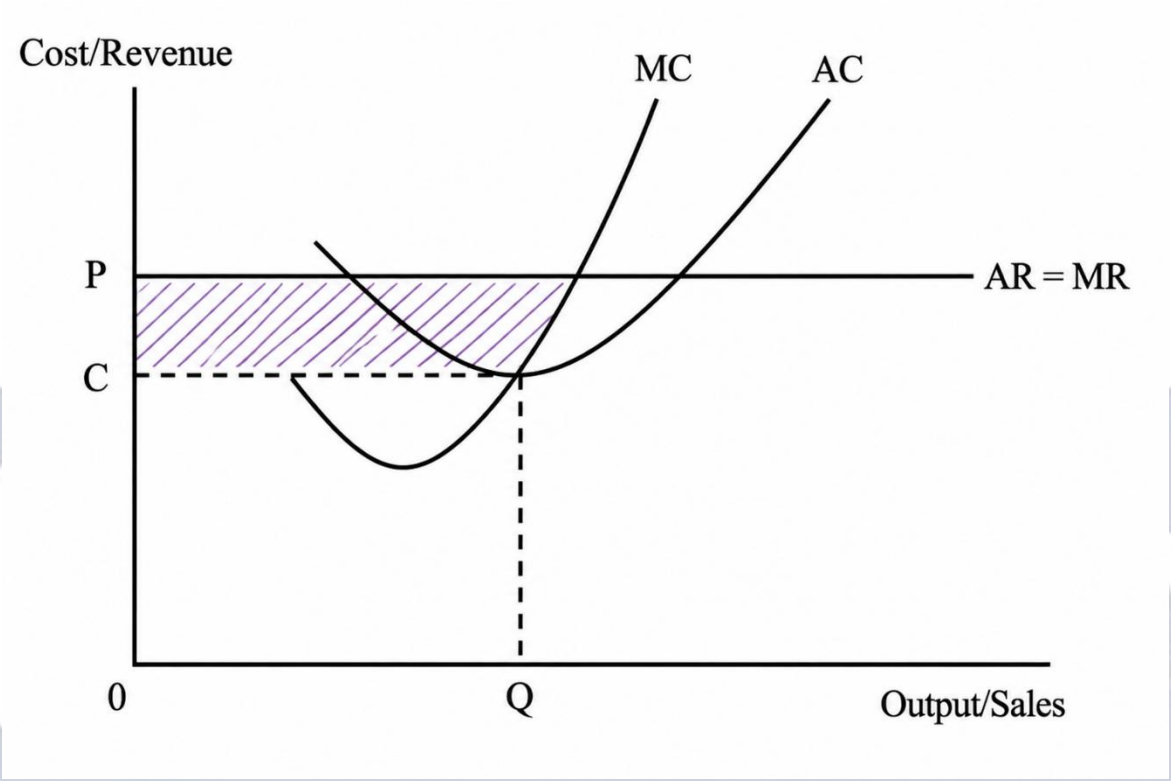
(ix) Perfect mobility of factors of production.

(Any 3 points at 2 marks each)

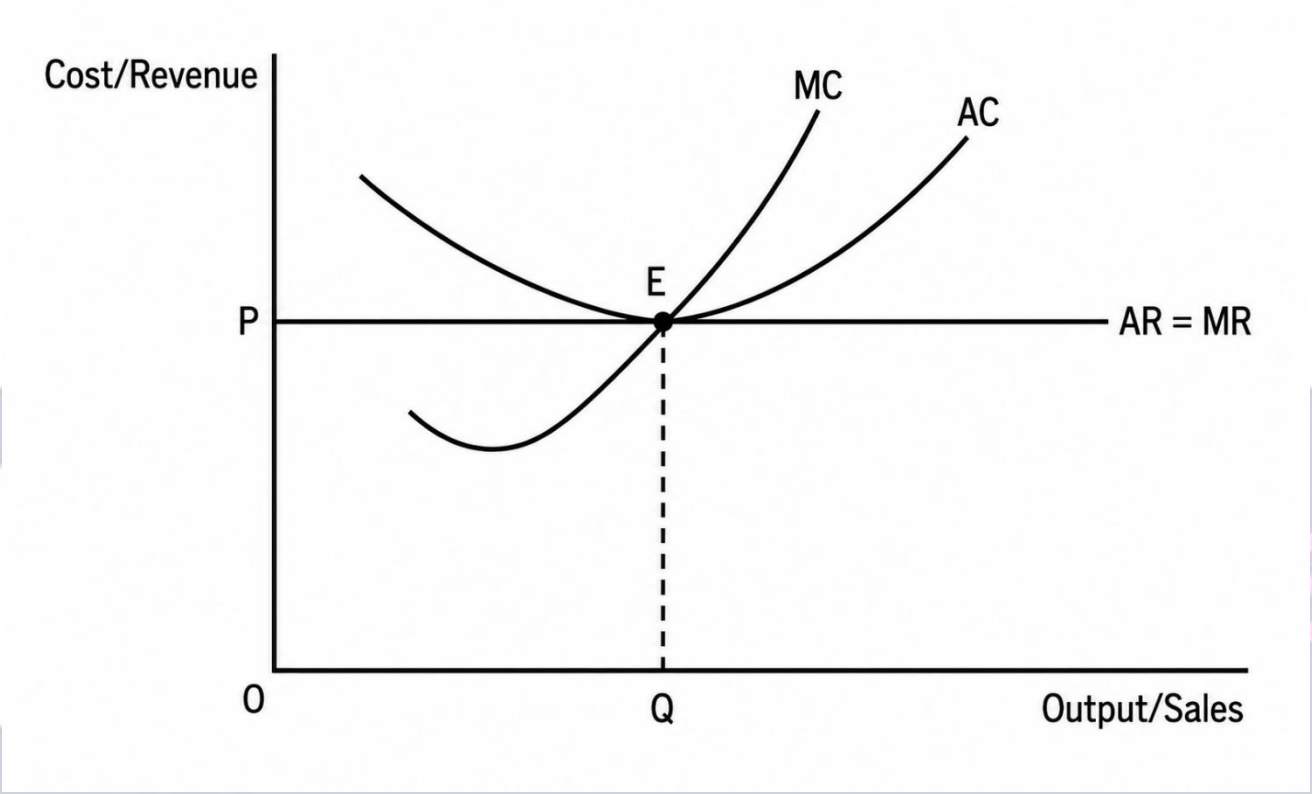
(b) (i) Short-run: A perfectly competitive firm attains equilibrium at an output where MC = MR. The firm is able to earn above normal profits.

SEE DIAGRAM

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The equilibrium output is Q. The firm earns abnormal profit as shown by the shaded portion where AR is greater than AC.



(ii) Long-run: The perfectly competitive firm earns only normal profit, where P = AR = AC = MR = MC, and produces at the optimal point E. SEE DIAGRAM

A perfect market is a market in which a large number of buyers and sellers trade in identical products so that a single buyer or seller cannot influence the prevailing market price.

A firm is in equilibrium in a perfectly competitive market at the point where P = AR = MR = MC.

Example calculation:

$TR_{50} = AR_{50} \times Q = \$15 \times 50 = \$750$

$Profit_{50} = TR_{50} - TC_{50} = \$750 - \$600 = \$150$

SCHEME 7 (Question 7 — Central Bank)

(a) (i) Open market operations: This involves the sale or purchase of securities, e.g. Treasury bills, through the commercial banks. If the Central Bank wants to increase money supply, it will purchase securities from the public through the commercial banks. This way, the reserves of the commercial banks will increase, thereby increasing their ability to grant more credit and vice versa.

(ii) Bank rate: This is the rate at which the Central Bank lends to the commercial banks and discounts bills of exchange, so as to influence the money supply. To increase money supply, the Central Bank will reduce the bank rate. This will in turn lower the lending rates of commercial banks, causing the public to demand for more loans, and vice versa.

(b) Functions of the Central Bank:

(i) It acts as an agent, banker, and adviser to the government.

(ii) It controls money supply/maintains price stability/determines monetary policy.

(iii) It issues currency.

(iv) It is a banker to the other financial institutions.

(v) It operates a clearing house system.

(vi) It manages the public/national debt.

(vii) It controls foreign currency.

(viii) It conducts research on the economy.

(ix) It is the lender of last resort.

(Any 4 points at 3 marks each)

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SCHEME 8 (Question 8 — Domestic/external trade)

(a) Domestic trade is the exchange of goods and services within the borders of a country and involves the use of only one currency, etc.

External trade is the exchange of goods and services across the borders of a country and involves the use of different currencies, etc.

(b) Terms of trade is the rate at which a country's exports are exchanged for its imports.

OR: Terms of trade = (Index of export prices ÷ Index of import prices) × 100

Balance of trade is the difference between the value of a country's visible exports and its visible imports over a time period.

(c) Causes of balance of payments deficit:

(i) Increased demand for foreign consumer goods due to high taste for foreign goods.

(ii) Demand for foreign capital goods due to rapid industrialization.

(iii) Unfavourable terms of trade because of falling commodity prices.

(iv) Decrease in the demand for local exports as a result of emergence of synthetic substitutes.

(v) Export of unprocessed primary products which attract lower prices in the world market.

(vi) Debt servicing due to borrowing from foreign lenders and inability to raise enough capital from domestic sources.

(vii) Transfer of capital abroad by foreign investors and citizens, leading to capital flight.

(viii) Large amount of payments for foreign invisible items, e.g. shipping, insurance, aviation, and tourism.

(ix) Increased expenditure on foreign missions.

(Any 4 points at 3 marks each)

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WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION (WASSCE)

YEAR 2022 — PAPER 2 ECONOMICS

ESSAY

Answer four questions in all; one question only from Section A and any three questions from Section B. You are reminded of the importance of clarity of expression and orderly presentation of relevant materials.

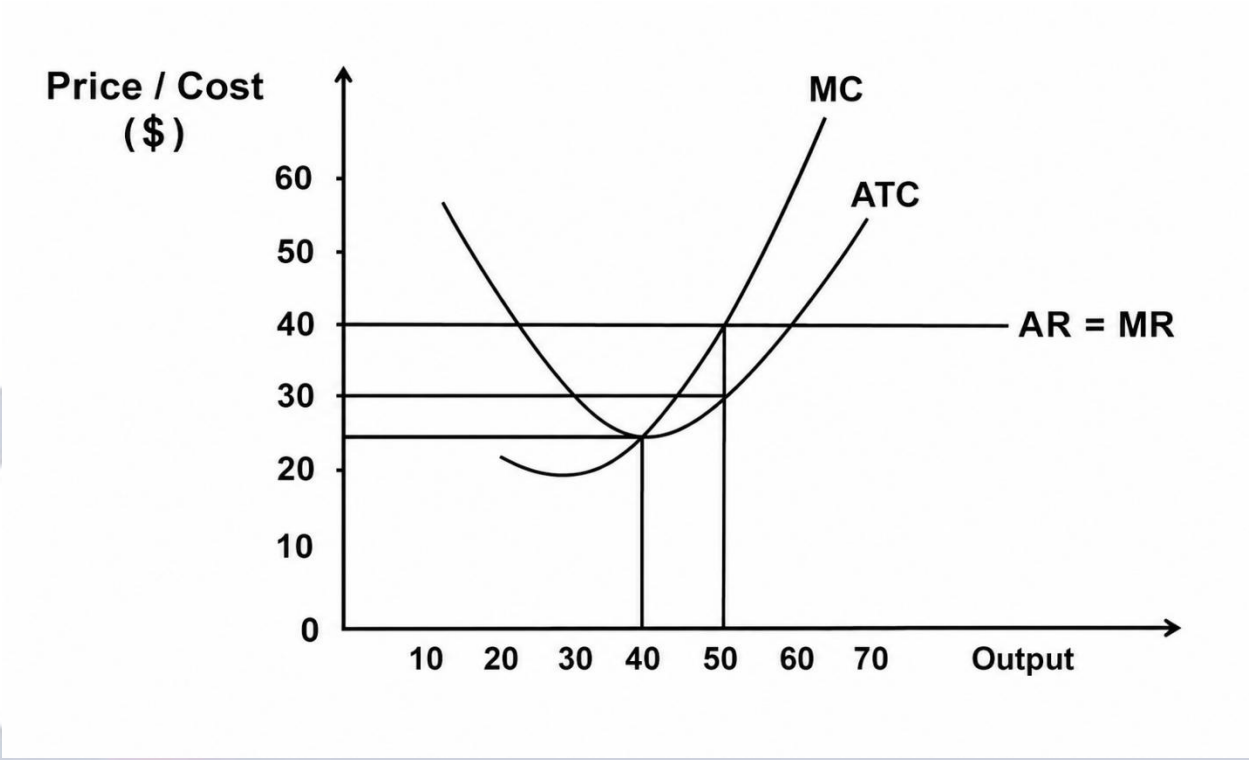
All questions carry equal marks.

SECTION A

Answer one question only from this section.

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1. The equilibrium position of a firm is illustrated in the diagram below. Study the diagram and answer the questions that follow.



The diagram shows a graph with the vertical axis labelled Price/Cost ($) ranging from 0 to 60, and the horizontal axis labelled Output ranging from 0 to 70. The graph contains three curves: MC (Marginal Cost) a U-shaped curve rising steeply on the right; ATC (Average Total Cost) a U-shaped curve below MC; and a horizontal line labelled AR = MR at approximately $30, intersecting both curves. Key data points on the horizontal axis are marked at 10, 20, 30, 40, 50, 60, 70.

(a) Determine the firm's:

(i) equilibrium output level;

[2 marks]

(ii) equilibrium price.

[2 marks]

(b) At the equilibrium output level, calculate the firm's:

(i) total cost;

[3 marks]

(ii) total revenue;

[3 marks]

(iii) total profit.

[3 marks]

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(c) Is the firm operating in the long-run or short-run? Explain your answer.

[3 marks]

(d) (i) What type of market is the firm operating in?

[1 mark]

(ii) List three features of the market type identified in (d)(i).

[3 marks]

2. Table 1 below represents the output levels of a firm producing hand sanitizer. Use the information to answer the questions that follow.

If the cost function of the firm is given as C = 30 + 4q, where C is the total cost and q is the units produced, calculate the:

(a) total cost in dollars of producing:

(i) 18 units;

[3 marks]

(ii) 36 units.

[3 marks]

(b) average cost in dollars of producing:

(i) 28 units;

[3 marks]

(ii) 45 units.

[3 marks]

(c) What is the marginal cost in dollars of producing 28 units?

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Table 1 below represents the output levels of a firm producing bread amassa. Use the information to answer the questions that follow.

Table 1

Output (units)	0	10	15	25	35	45

[3 marks]

Determine the profit made from producing 45 units when the market price is fixed at $5.00 per unit.

[3 marks]

(e) Determine the fixed cost of the firm. Explain your answer.

[2 marks]

SECTION B

Answer three questions only from this section.

3.(a) Distinguish between:

(i) money cost and opportunity cost;

[4 marks]

(ii) money good and inferior good.

[4 marks]

4.

(a) Explain how the scale of preference assists the following economic groups in making efficient allocation of their resources:

(i) individuals;

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[4 marks]

(ii) firms;

[4 marks]

(iii) governments.

[4 marks]

5.

(a) Define economic system.

[2 marks]

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(b) Distinguish between a capitalist economy and a socialist economy under the following:

(i) aim of production;

[4 marks]

(ii) consumer sovereignty;

[4 marks]

(iii) competition.

[4 marks]

(c) State three features of land as a factor of production.

[6 marks]

6.

(a) Differentiate between a sole proprietorship and a partnership.

[4 marks]

(b) List four characteristics of a sole proprietorship.

[4 marks]

(c) Outline four advantages of a public limited liability company.

[12 marks]

7.

(a) Define location of industry.

[2 marks]

(b) Explain the following factors that influence where a firm is sited:

(i) raw materials;

[3 marks]

(ii) market;

[3 marks]

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(iii) government policy.

[3 marks]

(c) Outline three advantages of localization of industry.

[9 marks]

8.

(a) Define Gross Domestic Product (GDP).

[2 marks]

(b) Describe the output approach as a method of computing national income.

[9 marks]

(c) Identify any three problems associated with the expenditure approach of calculating national income.

[9 marks]

9.

(a) What is an embargo?

[2 marks]

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(b) Outline any three reasons for imposing tariffs on imports.

[9 marks]

(c) Explain any three reasons against the use of tariffs.

[9 marks]

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MARKING SCHEME

WASSCE 2022 ECONOMICS 2 (ESSAY)

SCHEME 1

(a) Gross Domestic Product = Wages and Salaries + Income from self-employment + Rent + Profits and dividends + Royalties − Stock appreciation

= $((250 + 120 + 10 + 25 + 35 + 2) − 5) million

= $(442 − 5) million

= $437 million

(b) Gross National Product = Gross Domestic Product + Income from abroad − Income sent abroad

= $(437 + 50 − 75) million

= $412 million

(c) Net National Product = Gross National Product − Depreciation allowance

= $(412 − 3) million

= $409 million

Award of marks: 11 marks for (a); 5 marks for (b); 4 marks for (c)

SCHEME 2

(a)(i) X = Demand curve

Y = Old/Original/Initial supply curve/supply curve before subsidy/S_o

Z = New supply curve/supply curve after subsidy/final supply curve/S_1

(ii) Price decreases from $15 to $10.

Quantity increases from 20 bags to 40 bags.

(b)(i) Total revenue before the subsidy:

TR = P × Q = $15 × 20 = $300.00

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(ii) Total revenue after the subsidy:

TR = P × Q = $10 × 40 = $400.00

(c) Percentage change in total revenue = (400 − 300)/300 × 100/1

= 100/300 × 100/1

= 33.3%

Percentage increase in total revenue is 33.3%

(d) % change in quantity demanded = (40 − 20)/20 × 100/1

= 20/20 × 100/1 = 100%

% change in price = (10 − 15)/15 × 100/1

= −5/15 × 100/1 = (−)33.3%

Price elasticity of demand = 100% / (−)33.3% = 3.0

Price elasticity of demand = ΔQd/ΔP × P/Qd

= (40−20)/(10−15) × 15/20

= (20/−5) × (15/20)

= 3.0

(e) Demand is elastic.

Award of marks: 5 for (a); 4 for (b); 2 for (c); 7 for (d); 2 for (e)

VISUALLY IMPAIRED CANDIDATES

(a) Given demand equation Qd = 30 − 4p and supply equation Qs = 6 + 8p:

(i) At $1.00: Qd = 30 − (4×1) = 26 bags; Qs = 6 + (8×1) = 14 bags

(ii) At $2.00: Qd = 30 − (4×2) = 22 bags; Qs = 6 + (8×2) = 22 bags

(iii) At $3.00: Qd = 30 − (4×3) = 18 bags; Qs = 6 + (8×3) = 30 bags

(b)(i) Equilibrium price is $2.00.

(ii) Equilibrium quantity is 22 bags.

SCHEME 3

(vi) Public companies can raise capital by issuing debentures, while private companies cannot.

(vii) In public companies ownership is separated from management, while in private companies ownership may not be separated from management.

(viii) The name of a public company must end with 'Plc' and that of a private company 'Ltd'.

[Any 4 points at 3 marks each]

(c) Sources of business finance:

(i) Personal savings.

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(ii) Borrowing from family and friends.

(iii) Loans from financial institutions.

(iv) Plough back profits.

(v) Trade credit.

(vi) Grants/loans from government.

(vii) Inheritance.

(viii) Sale of assets.

(ix) Hire purchase.

(x) Leasing of assets.

(xi) Assistance from family and friends.

[Any 3 points at 2 marks each]

Award of marks: 2 marks for (a); 12 marks for (b) i.e. 3 marks each

for any 4 points; 6 marks for (c) i.e. 2 marks each for any 3 points

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SCHEME 4

(a) Labour force refers to the proportion of a country's population in the working age group who are employed or are seeking employment, while Efficiency of labour refers to the ability of labour to achieve the highest output possible without compromising quality in a given period of time.

(b)(i) The total population of the country. If the total population is large, labour force will be large and vice versa.
(ii) The age distribution of the country's population. If the population is youthful, labour force will be large and vice versa.
(iii) The official retirement age of workers. If this is low, labour force will be reduced and vice versa.
(iv) The number of women who take up paid jobs. If this is large, labour force will be also large and vice versa.
(v) The school leaving age of students. If this is low, labour force will be large and vice versa.
(vi) The number of people pursuing further studies after the school leaving age. If this is large, labour force will be small.
(vii) The number of people who retire voluntarily before the official retirement age. If more people retire before the official retirement age, labour force will be small and vice versa.
(viii) The number of disabled persons of working age. If this is quite large, labour force will be small and vice versa.
(ix) The number of persons in voluntary unemployment. If this is large, labour force will be small and vice versa.
(x) The net migration. If the number of immigrants is higher than the number of emigrants the labour force will be large and vice versa.
[Any 5 points at 3 marks each]

Award of marks: 5 marks for (a); 15 marks for (b) i.e. 3 marks each for any 5 points: 1 mark for listing, 2 marks for explanation.

SCHEME 5

(a) A demand schedule is a table showing the quantities of a commodity demanded at various prices.

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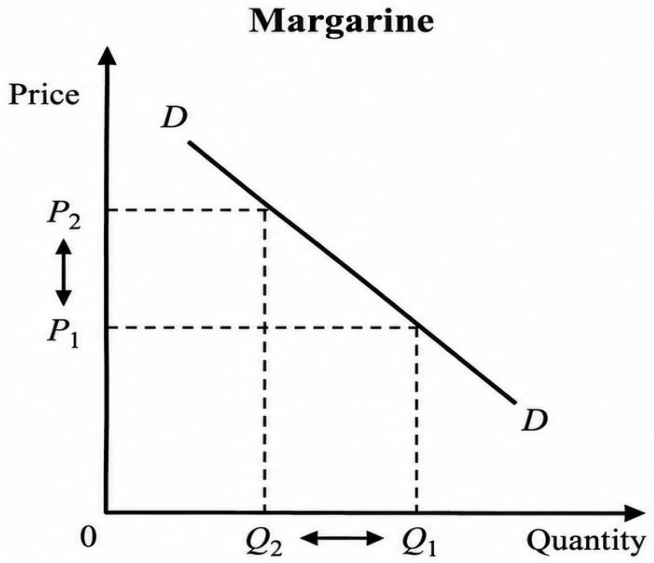
(b)(i) Effective demand refers to the desire for a commodity backed by the ability to pay at a particular price and time.

(ii) Composite demand refers to the demand for a commodity due to its various uses.

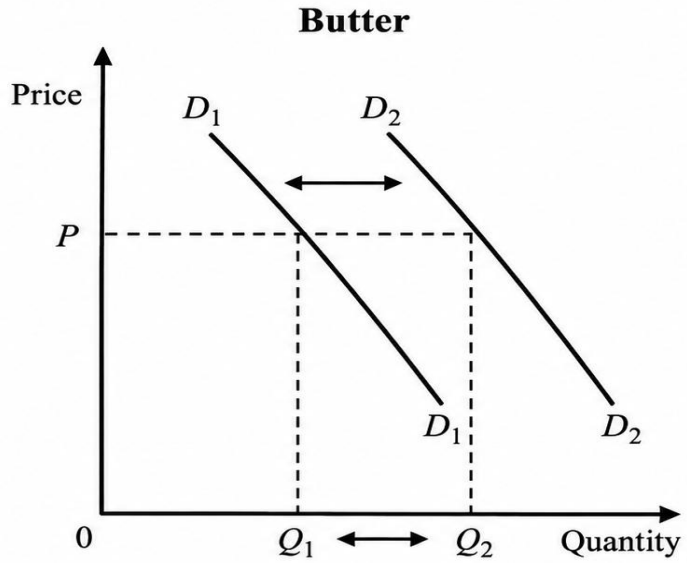
(iii) Derived demand refers to demand for a commodity, not for its own sake, but for the production of another commodity.

(c)(i) In the case where two commodities are substitutes e.g. Margarine and butter.

When the price of margarine increases from P_1 to P_2, its quantity demanded will decrease from Q_1 to Q_2. When this happens, consumers being rational will switch to increasing the demand for butter shown by a rightward shift of the demand curve from D_1D_1 to D_2D_2.

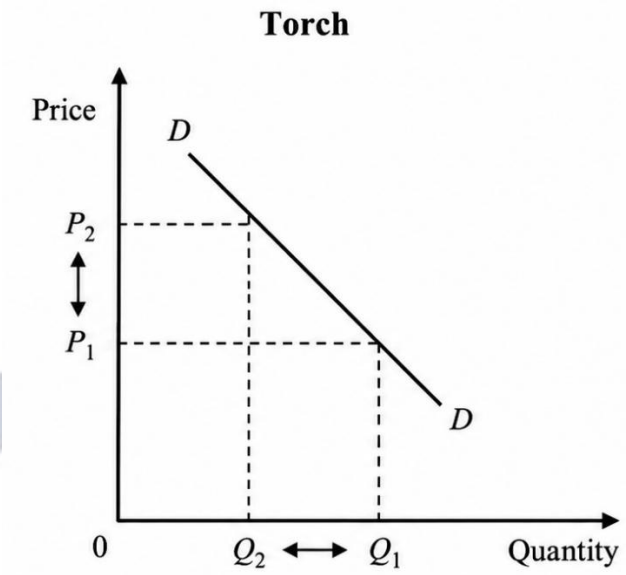


Award: 1 mark for the demand curve and ½ mark for each well labelled axis = 2 marks

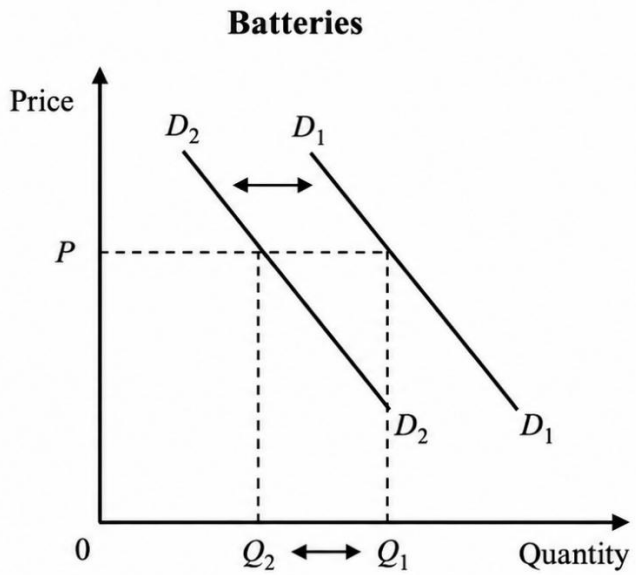


Award: 1 mark for the leftward or rightward shift in demand and ½ mark for each well labelled axis = 2 marks

N.B.: The reverse will be the case with a fall in the price of margarine or any commodity given by the candidate.



Award: 1 mark for the demand curve and ½ mark for each well labelled axis = 2 marks



Award: 1 mark for the leftward or rightward shift in demand and ½ mark for each well labelled axis = 2 marks

In the case where the commodities are complements, e.g., Torch and batteries.

When the price of torch increases from P_1 to P_2, the quantity demanded will fall from Q_1 to Q_2.

As a result, demand for batteries falls, shown by a leftward shift of the demand curve from D_1 to D_2.

N.B.: The reverse will be the case with a fall in the price of a torch or any commodity given by the candidate.

Award of marks: 2 marks for (a); 6 marks for (b) i.e. 2 marks each for (b)(i)–(iii); 12 marks for (c) i.e. 6 marks each for (c)(i) and (c)(ii).

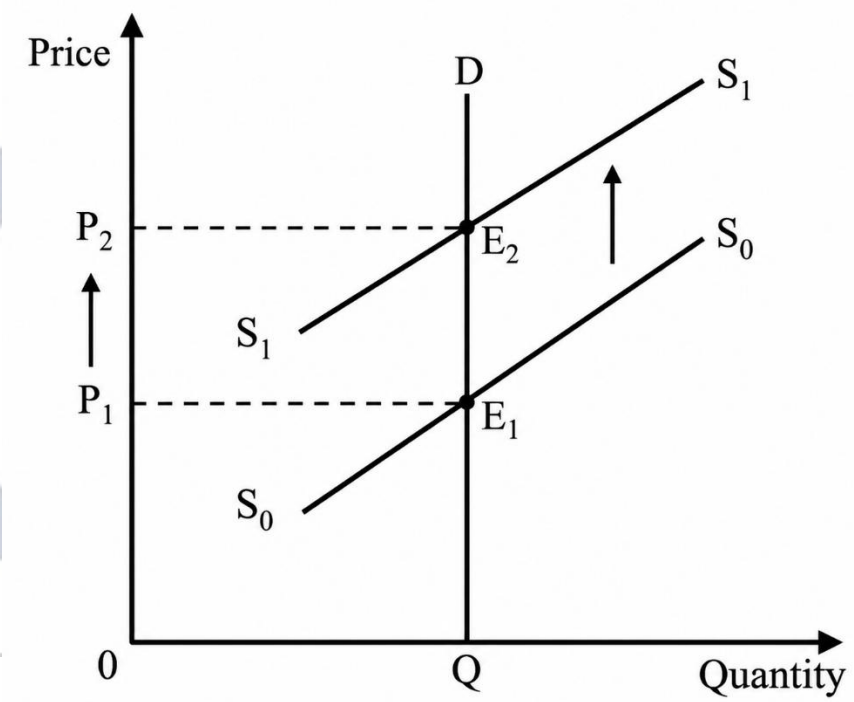
SCHEME 6

(a)(i) Specific tax is an indirect tax levied per unit of an output irrespective of its value.

(ii) Value added tax is an indirect tax levied on value added to a good or service produced. It is levied on the difference between sales revenue and the cost of producing an output.

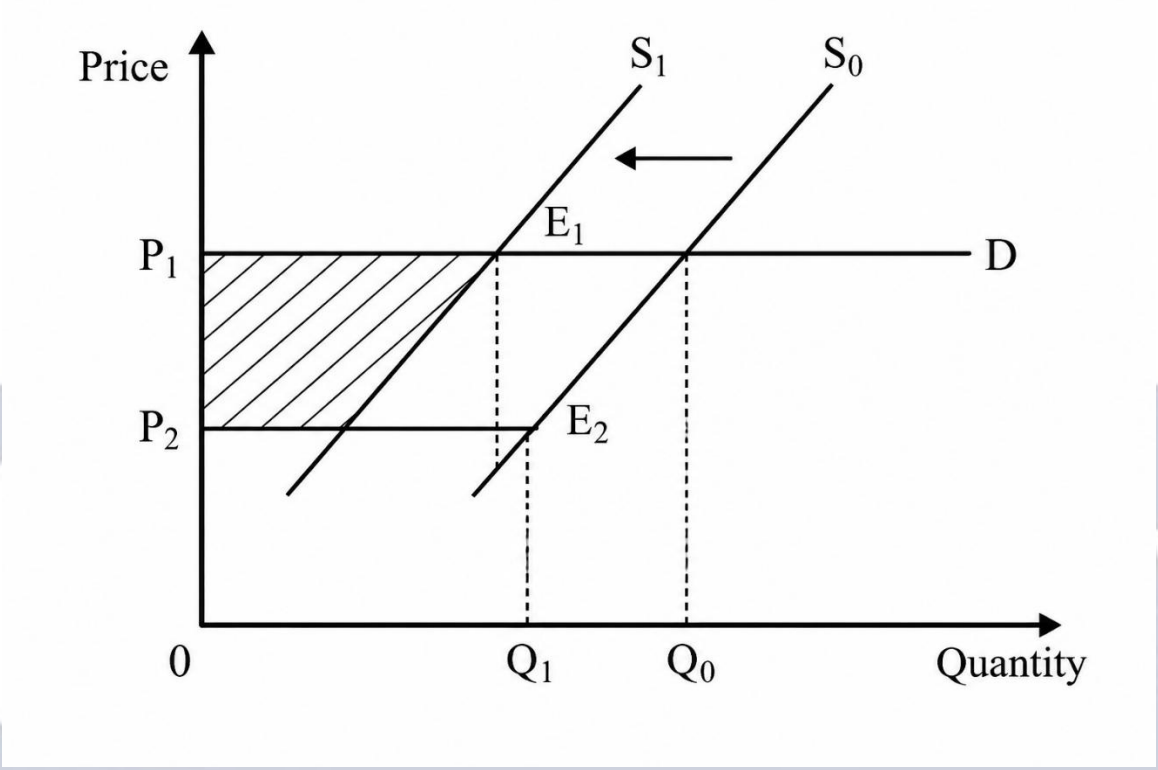
(b)(i) Demand is perfectly inelastic if at every price level, quantity demanded remains the same. The market price of the commodity will rise by the full amount of the tax and the whole burden of the tax rests on the consumer.

SEE DIAGRAM



$0P_1$ was the price before the imposition of an indirect tax and the initial supply curve was S_oS_o. When the tax was imposed, the supply curve shifted from S_oS_o to S_1S_1 forcing the price to rise from $0P_1$ to $0P_2$. The full amount of the tax is $P_1E_1E_2P_2$ above and is borne by the consumer.

(ii) Demand is perfectly elastic if at a given price, consumers are willing to buy all the commodities that are available and none at any price above the market price. Since the producer cannot increase the price of the commodity, price remains the same and the entire burden of the tax rests on the producer.



SEE DIAGRAM

The imposition of an indirect tax results in a leftward shift of the initial supply curve S_0S_0 to a new supply curve S_1S_1. Price remains the same at $0P_1$ and the whole burden of the tax $P_1E_1E_2P_2$ rests on the producer.

Award of marks: 6 marks for (a) i.e. 3 marks each for (a)(i) and (a)(ii); 14 marks for (b) i.e. 7 marks each for (b)(i) and (b)(ii).

SCHEME 7

(a)(i) A mortgage bank is a financial institution that specializes in granting loans to individuals and corporate bodies for building purposes. Such loans are repaid by instalments spread over several years.

While a merchant bank is a financial institution that provides specialized services like acceptance of bills of exchange, corporate finance, portfolio management, equipment leasing and acceptance of deposits.

(ii) Commercial banks are financial institutions that perform the services of accepting deposits and using such money to make loans and other financial services available to customers. The

loans are usually for short and medium terms.
While a development bank is a financial institution set up to provide long term loans to group of individuals and governments for development projects. They provide financial assistance in high risk, low profit and long gestation period investments which are unattractive to commercial banks.

(b)(i) Acceptance of deposit – Customers' money can be kept in any of the different types of commercial banks' accounts – savings, current or demand deposit and time or fixed deposit accounts etc.
(ii) Lending of money – Commercial banks make available loans and over-drafts.
(iii) Commercial banks provide facilities for the safe keeping of valuables.
(iv) Commercial banks provide facilities for domestic and foreign remittances.
(v) Commercial banks provide trust services for individuals and organizations. Trust services include the management of trust funds.
(vi) Commercial banks act as agents for their customers in the purchase and sale of securities.
(vii) Money creation – Deposit received can be given out as credits to customers which in turn creates further deposits.
(viii) Commercial banks offer advisory services to customers.
(ix) Commercial banks discount bills of exchange for their customers.
(x) Commercial banks act as executors of will for their customers.
(xi) Commercial banks help the Central Bank to implement governments' monetary policy.
(xii) Commercial banks sell foreign exchange to their customers.
[Any 4 points at 3 marks each]

Award of marks: 8 marks for (a) i.e. 4 marks each for (b)(i) and (b)(ii); 12 marks for (b) i.e. 3 marks each for any 4 points.

SCHEME 8

(a) Economic integration is a form of international cooperation among nations to achieve a greater efficiency in the production of goods and services for the social and economic welfare of their countries.

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(b)(i) Divided loyalty of member states.

(ii) Ideological differences.

(iii) Inability to create a common currency.

(iv) Differences in levels of development among member states/fear of domination of small countries by big countries.

(v) Political/social instability in the sub-region.

(vi) Inability to differentiate her products. Members produce similar primary products.

(vii) Inadequate infrastructural facilities in the sub-region.

(viii) Lack of political will to implement the policies/agreements of the union.

(ix) Non-payment of dues by some member states.

(x) Negative attitude towards member countries because of language differences.

(xi) Differences in trade policies in member countries.

(c)(i) Removal of custom duties.

(ii) Reduced administrative restrictions e.g. on investment.

(iii) Establishment of common fund for co-operation, compensation and development.

(iv) Mediation among member states.

(v) Formation of the Economic Community of West African States Monitoring Group (ECOMOG).

(vi) Growth and expansion of markets.

(vii) Unity in the sub-region.

(viii) Cooperation in culture and sports.

(ix) Free movement of labour.

[Any 3 points at 3 marks each]

Award of marks: 2 marks for (a); 9 marks for (b) i.e. 3 marks each for any 3 points: 1 mark for listing, 2 marks for explanation; 9 marks for (c) i.e. 3 marks each for any 3 points: 1 mark for listing, 2 marks for explanation.

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WAEC ECONOMICS

PAPER 2 (ESSAY) 2023

Answer four questions in all. One question only from Section A and any three questions from Section B. You are reminded of the importance of clarity of expression and orderly presentation of relevant materials.

All questions carry equal marks.

SECTION A

Answer one question only from this section.

1. Table 1 below shows the distribution of the population of a country in various occupations. Study it and answer the questions that follow.

Table 1

OCCUPATION	TOTAL
Shoe production	30 million
Banking	37 million
Fish processing	19 million
Warehousing	12.2 million
Mining	16.1 million
Fish farming	10.8 million
Food crop production	15.6 million
Baking	19 million
Laundry	10.3 million

(a) Calculate the size of the entire labour force in the country. **[3 marks]**

(b) What percentage of the labour force is engaged in the:

(i) primary sector; **[3 marks]**

(ii) secondary sector; **[3 marks]**

(iii) tertiary sector. **[3 marks]**

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(c) Calculate the ratio of the workers in mining to the workers in shoe production. **[2 marks]**

(d) Calculate the percentage of the people engaged in warehousing. **[3 marks]**

(e) (i) Identify the type of economy depicted in the table. **[1 mark]**

(ii) Give a reason for your answer in 1(e)(i). **[2 marks]**

2. Table 2 below shows the unit prices and quantities of hats produced by a firm. Study it and answer the questions that follow.

Table 2

Quantity	Unit Price ($)	Total Revenue ($)	Marginal Revenue ($)	Average Revenue ($)
10	180	1,800	—	180
20	150	3,000	120	X
30	U	3,600	60	120
40	100	V	W	Y
50	80	4,000	0	80
60	60	3,600	-40	60

(a) Compute the values of U, V, W, X and Y. **[10 marks]**

(b) In what type of market is the firm operating? Explain your answer. **[3 marks]**

(c) If the firm's marginal cost is $60.00 at all levels of output, at what level of output will it be in equilibrium? Explain your answer. **[3 marks]**

(d) If a total cost of $600.00 is incurred when 50 units of hats are produced, determine the margin of profit or loss made. **[3 marks]**

(e) What is another name for marginal cost? **[1 mark]**

SECTION B

Answer three questions only from this section.

3. (a) What is *economies of scale*? **[2 marks]**

(b) Outline **three** internal economies of scale a firm can enjoy. **[9 marks]**

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(c) State **three** factors that can influence where a firm is situated. **[9 marks]**

4. (a) Define *product retailing*. **[2 marks]**

(b) Outline any **three** roles performed by the wholesaler to the manufacturer. **[9 marks]**

(c) Identify any **three** problems associated with distribution of products. **[9 marks]**

5. (a) Define *price elasticity of demand*. **[2 marks]**

(b) Distinguish between *elastic demand* and *inelastic demand*. **[4 marks]**

(c) Using diagrams, explain what happens to a trader's total revenue when his price falls given that demand for his product is:
(i) elastic; **[7 marks]**
(ii) inelastic. **[7 marks]**

6. (a) State **three** characteristics of perfect competition. **[6 marks]**

(b) With the aid of diagrams, explain the equilibrium positions of a perfectly competitive firm in the:
(i) short-run; **[7 marks]**
(ii) long-run. **[7 marks]**

7. (a) Explain how the Central Bank controls money supply through the use of:
(i) open market operations; **[4 marks]**
(ii) bank rate. **[4 marks]**

(b) Outline **four** functions performed by the Central Bank of your country. **[12 marks]**

8. (a) Distinguish between *domestic trade* and *external trade*. **[4 marks]**

(b) Distinguish between *terms of trade* and *balance of trade*. **[4 marks]**

(c) Outline **four** causes of balance of payments deficit in a country. **[12 marks]**

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MARKING SCHEME

WASSCE 2023 ECONOMICS 2 (ESSAY)

SCHEME 1

(a)(i) Equilibrium output level = 50 units

(ii) Equilibrium price = $40.00

(b)(i) Total cost (TC) = AC × Q

= $30 × 50

= $1500

(ii) Total revenue (TR) = AR × Q

= $40 × 50

= $2000

(iii) Profit = TR − TC

= $(2000 − 1500)

= $500

OR

Profit = (AR − AC) × Q

= $(40 − 30) × 50

= $10 × 50

= $500

(c) The firm is operating in the short-run because it is operating in a perfect market and it made abnormal/super normal profit, where its price > average cost and average revenue > average cost.

(d)(i) Perfectly competitive market/perfect market.

(ii) - There are many buyers and sellers.

There is free entry and exit into and from the market.

Sellers are price takers/there is one market clearing price/there is no government intervention.

There is perfect knowledge about the market.

There are no extra transport costs incurred.

Goods sold are homogeneous.

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There is no preferential treatment.

[Any 3 points at 1 mark each]

Award of marks: 4 marks for (a) i.e. 2 marks each for (a)(i) and (a)(ii); 9 marks for (b) i.e. 3 marks each for (b)(i)–(b)(iii); 3 marks for (c); 4 marks for (d) i.e. 1 mark for (d)(i) and 3 marks for (d)(ii).

VISUALLY IMPAIRED CANDIDATES

(a)(i) Tax system X

When the taxable income was $10,000 and the amount paid as tax was $500, then Tax rate = 500/10,000 × 100 = 5%

When the taxable income was $12,000 and the amount paid as tax was $360, then Tax rate = 360/12,000 × 100 = 3%

When the taxable income was $15,000 and the amount paid as tax was $300, then Tax rate = 300/15,000 × 100 = 2%

(ii) Tax system Y

When the taxable income was $10,000 and the amount paid as tax was $500, then Tax rate = 500/10,000 × 100 = 5%

When the taxable income was $12,000 and the amount paid as tax was $600, then Tax rate = 600/12,000 × 100 = 5%

When the taxable income was $15,000 and the amount paid as tax was $750, then Tax rate = 750/15,000 × 100 = 5%

(iii) Tax system Z

When the taxable income was $10,000 and the amount paid as tax was $200, then Tax rate = 200/10,000 × 100 = 2%

When the taxable income was $12,000 and the amount paid as tax was $360, then Tax rate = 360/12,000 × 100 = 3%

When the taxable income was $15,000 and the amount paid as tax was $750, then Tax rate = 750/15,000 × 100 = 5%

(b)(i) Tax system X is regressive.

(ii) Tax system Z is progressive.

Award of marks: 18 marks for (a) i.e. 6 marks for (a)(i)–(a)(iii); 2 marks for (b) i.e. 1 mark each for (b)(i) and (b)(ii).

SCHEME 2

(a)(i) $TC_{18} = 30 + 4(18) = 30 + 72 = \$102$

(ii) $TC_{36} = 30 + 4(36) = 30 + 144 = \$174$

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(b)(i) $AC_{28} = TC_{28}/28 = (30 + 4(28))/28 = 142/28 = \$5.07$ or $\$5.1$

(ii) $AC_{45} = TC_{45}/45 = (30 + 4(45))/45 = 210/45 = \$4.67$ or $\$4.7$

(a)(iii) $MC_{28} = (TC_{28} - TC_{18})/(28 - 18) = ((30+4(28)) - (30+4(18)))/(28-18)$

$= (142 - 102)/10 = \$4.00$

(d) Profit = TR − TC = ($5 × 45) − $210

= $(225 − 210)

= $15

(c) Fixed cost of the firm is $30 when q = 0, C = 30 + 4(0) = $30

or At output 0, Total Fixed Cost incurred is $30.

Award of marks: 6 marks for (a) i.e. 3 marks each for (a)(i) and (a)(ii); 6 marks for (b) i.e. 3 marks each for (b)(i) and (b)(ii); 3 marks for (c); 3 marks for (d); 2 marks for (e).

SECTION B

SCHEME 3

(a)(i) Money cost is the expenses in terms of money incurred to produce or to have a commodity.

While opportunity cost or real cost is the alternative forgone or that which has to be sacrificed to have a commodity.

(ii) A normal good is a good for which its demand increases when income increases and demand decreases when income decreases.

Note: If candidate gives one sided definition, award 1 mark only.

While an inferior good is a good for which its demand tends to fall when income rises and its demand rises when income falls.

Note: If candidate gives one sided definition, award 1 mark only.

(b)(i) When an individual is faced with the problem of limited resources, a scale of preference will enable such an individual to order/arrange his wants according to which one gives the highest amount of satisfaction/is urgently needed/is the most important. He will then allocate his resources to obtain the want that gives the highest amount of satisfaction.

(ii) A firm is also faced with the problem of limited resources needed to produce everything it wants. It will therefore rank its production according to which product will give the highest amount of satisfaction which is measured in terms of profit. The

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firm will therefore allocate its resources according to which product gives the highest amount of profit.

(iii) Government is also faced with the problem of limited resources/revenue. It cannot therefore produce all the goods and services it wants. It will therefore rank the goods and services according to which one will give the citizenry the highest amount of well-being or welfare. It will therefore allocate the resources to produce such goods and services.

Award of marks: 8 marks for (a) i.e. 4 marks for (a)(i)–(a)(ii); 12 marks for (b) i.e. 4 marks each for (b)(i)–(b)(iii).

SCHEME 4

(a) An economic system is the social, legal and institutional framework for the management of resources in an economy.

OR

An economic system is any arrangement adopted by a country to manage the scarce resources of the country effectively.

(b)(i) Aim of production

In capitalism, the aim of production is to make profit so goods and services are being produced on a large scale.

In socialism, the aim of production is to provide for the welfare of the citizens by making goods and services available at low/affordable prices.

(ii) Consumer sovereignty

In capitalism, the consumer is king as it is he who dictates what is to be produced through his purchases. The consumer's taste drives production.

In socialism, consumers' demands are determined by government so they have little or no influence on what is produced.

(iii) Competition

Since profit is the motive in capitalism, competition exists and it ensures efficiency and this leads to production of high quality goods that attract customers.

In socialism, there is no competition since government decides what is to be produced. Government is the sole producer and this can lead to production of low quality goods.

Award of marks: 2 marks for (a); 12 marks for (b) i.e. 4 marks each for (b)(i)–(b)(iii).

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SCHEME 5

(a) A sole proprietorship is a type of business owned and controlled by an individual with the primary aim of maximizing profit.

While, a partnership is a type of business set up by two to twenty members with a common goal of making profits.

(b)(i) It is set up by a single person who bears all risks.

(ii) Capital is provided by only the owner either from his personal savings, inheritance etc.

(iii) He enjoys all the profits since he provides the capital alone.

(iv) He manages and controls the business alone.

(v) It is not a legal entity because the business is not separate from the owner.

(vi) His death or incapacitation may lead to a collapse of the business.

(vii) He has unlimited liability since losses could extend to his private property.

(viii) Decision making is easy and fast because he does not need to consult other people.

(ix) It is easy to establish because not many legal formalities are needed.

[Any 4 points at 1 mark each]

(c)(i) It can raise large capital through the sale of shares.

(ii) It enjoys economies of scale because it can easily expand output or its size of operation.

(iii) It can sue and be sued because it is a legal entity.

(iv) There is continuous existence if a member withdraws or dies because shares are legally transferable.

(v) It enjoys limited liability since shareholders lose only capital invested in times of bankruptcy.

(vi) Shares can be transferred easily through the stock exchange market.

(vii) It is easy for them to get loans from the banks because they have the necessary collateral.

(viii) It can attract highly qualified specialists and experts to ensure efficiency and enjoy economies of scale.

(ix) Ownership is separate from the management to improve corporate governance.

(x) Business risks are shared among many shareholders.

[Any 4 points at 3 marks each]

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Award of marks: 4 marks for (a); 4 marks for (b) i.e. 1 mark each for any 4 points; 12 marks for (c) i.e. 3 marks each for any 4 points.

SCHEME 6

(a) Location of industry refers to the siting of a firm in a particular area to minimize the cost of production based on certain factors.

(b)(i) Raw materials:
If the raw material used is quite bulky or perishable, transporting it over a longer distance is much expensive or risky and so firms will site their factories near the source of raw materials to reduce transportation costs e.g. wood and mining companies, food processing and fish farming firms etc. are located near the raw material.

(ii) Market:
Where finished products are highly perishable, bulky or fragile such that damage will be done to them in the process of transporting them, firms are located very close to the market e.g. glasses, tiles, etc.

(iii) Government policy:
Governments may want to ensure even development or fulfill campaign promises by siting a firm in a particular area through its policies or laws e.g. industrial estates. This choice is often made without giving any consideration to its economic implication.

(c)(i) Labour already employed can easily acquire new skills which will be useful in other firms.
(ii) New firms can tap the expertise of old ones when it comes to training.
(iii) Subsidiary firms that can use the by-products of established firms will emerge.
(iv) Firms can co-operate and buy raw materials in bulk to reduce per unit cost or support one another in times of need.
(v) It facilitates division of labour and specialization where different parts of a product e.g. equipment, is produced by different firms.
(vi) Common problems are identified and a joint research unit can be formed to help solve problems that will arise e.g. internet services, accessibility, security etc.
(vii) More jobs are created for the people where an industry is localized and this helps to improve the standard of living of the people.

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(viii) A localized industry easily attracts government attention for the provision of infrastructure.

(ix) It helps in the development of areas where they are localized through the provision of housing estates, schools, market, electricity etc.

SCHEME 7

(a) Gross domestic product is the total money value of all final output of goods and services produced within the boundaries of a country during a specified period of time, usually a year.

(b) The output approach calculates the Gross Domestic Product of a country by adding together the values of the net contributions of all the various sectors of the economy. To avoid double counting, either the value-added at every stage of production is added together or the value of only the final output of goods and services produced in the economy is considered. The value of exports is included while the value of imports is excluded to arrive at Gross National Product. The value of the physical wear and tear of capital goods used during production called depreciation must be deducted to arrive at the Net National Product at market price. Indirect business taxes are then deducted and subsidies added to arrive at national income which is at factor cost.

(c)(i) Problem of determining the values of all imports and all exports since many transactions do not pass through the official channel.

(ii) There is the problem of double counting as intermediate and final expenditures are sometimes included.

(iii) There is inadequate records of the expenditures of the households and business units in the informal sector.

(iv) Services not paid for such as owner occupied houses and do-it-yourself activities lower national income e.g. communal labour on a project.

(v) Problem of deciding which method of depreciation allowance to be used.

(vi) Frequent changes in price and the value of money make determination of the value of goods difficult.

[Any 3 points at 3 marks each]

Award of marks: 2 marks for (a); 2 marks for (b); 9 marks for (c) i.e. 3 marks each for any 3 points: 1 mark for listing, 2 marks for explanation.

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SCHEME 8

(a) An embargo is an outright ban instituted on the import or export of a good or service.

(b)(i) It is used to protect infant/local industries to be able to stand on their feet and expand.

(ii) It is a means of helping to increase employment in the home country.

(iii) It is a means of raising revenue for the imposing country.

(iv) It helps countries with long-term balance of payments problems to correct them.

(v) It is a measure to control dumping.

(vi) It is used to control the consumption of products considered harmful.

(vii) It can be used as a retaliatory measure against other imposing countries.

(viii) To restrict trade with/act as a sanction against some unfriendly countries.

(ix) For strategic reasons e.g. national security.

(x) Skilled labour is employed by the firms at competitive rates.

[Any 3 points at 3 marks each]

(c)(i) It can lead to possible retaliation from affected countries.

(ii) Protection of local firms do not encourage them to grow, they produce low standard goods since there is little or no competition.

(iii) It may lead to loss of revenue for the imposing country depending on the elasticity of demand for imports and exports.

(iv) It can lead to smuggling of products considered harmful and also of other products to evade tax.

(v) Consumers in the home country are denied the opportunity of choosing from a variety of imports.

(vi) It may lead to contraction of total world output.

(vii) It can cause increase in prices in affected countries/high cost of living/low standard of living.

[Any 3 points at 3 marks each]

Award of marks: 2 marks for (a); 9 marks for (b) i.e. 3 marks each for any 3 points: 1 mark for listing, 2 marks for explanation; 9 marks for (c) i.e. 3 marks each for any 3 points: 1 mark for listing, 2 marks for explanation.

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2024 WAEC ECONOMICS PAPER 2 — THEORY QUESTIONS

SECTION A

1. The graph shows the imposition of tax on the sellers of a product. (SEE DIAGRAM)

(a) Identify the:

(i) price per unit of the product before tax

(ii) quantity demanded and supplied before tax

(iii) price per unit of the product after tax

(iv) quantity demanded and supplied after tax

(b) Determine the:

(i) amount of tax imposed per unit of the product

(ii) amount retained per unit by the sellers after tax

(c) Calculate the percentage of the total tax imposed that is paid by:

(i) buyers per unit

(ii) sellers per unit

2. The management of a fruit juice production company was directed by the shareholders to increase the revenue from the sale of its product. The management decided to increase the price of the fruit juice from $7 to $10 per unit and this led to a fall in quantity demanded from 150 units to 30 units.

(a) Calculate the:

(i) percentage increase in the price

(ii) percentage decrease in the quantity demanded

(iii) coefficient of price elasticity of demand for the fruit juice

(b) Is the demand for the fruit juice price elastic or inelastic? Give a reason.

(c) Did the management of the company achieve its objective of increasing revenue? Explain.

(d) From your answers in 2(a)(iii), was the increase in the price of the fruit juice a rational strategy to employ in order to increase revenue? Explain.

SECTION B

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3. (a) With the aid of relevant diagrams, distinguish between an increase in supply and an increase in quantity supplied. (SEE DIAGRAM)

(b) Explain how a decrease in income tax will affect the demand for a normal good and an inferior good.

(c) Explain how an increase in the supply of a substitute will affect the demand for a commodity.

4. (a) Define the term distribution.

(b) Outline three ways in which the retailer is important to the consumer.

(c) Explain three disadvantages of the operation of middlemen in the distribution process.

5. (a) Explain the following concepts: (i) labour force (ii) over-population (iii) mobility of labour (iv) optimum population

(b) Outline four factors responsible for the rapid growth in the population of a country.

6. Developing countries that are predominantly agriculture-oriented are searching for ways of diversifying their economies. Many of these countries strive to exploit the available solid mineral deposits in their land as a means of promoting industrialization.

(a) Define: (i) industrialization (ii) mineral resources

(b) Apart from promoting industrialization, identify any three benefits of exploiting mineral deposits.

(c) Outline any three benefits of industrialization to a developing country.

7. (a) Define Central Bank.

(b) Outline three ways in which the Central Bank of a country can reduce money supply.

(c) Explain how the Central Bank plays its role as: (i) banker to the government (ii) banker to commercial banks (iii) lender of last resort

8. (a) Define economic development.

(b) Highlight any three characteristics of a developing nation.

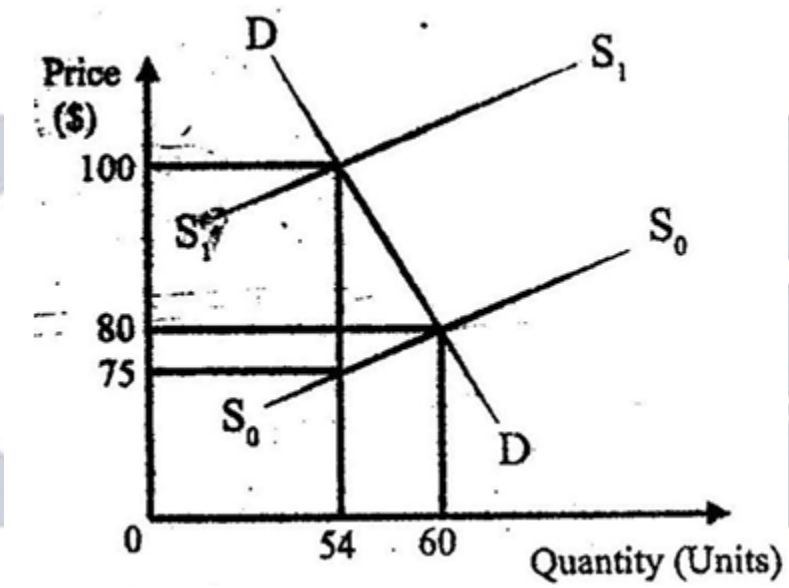
(c) Explain any three measures a country can adopt to facilitate economic development.

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ANSWERS TO WASSCE JUNE 2024 ECONOMICS 2 ESSAY

SECTION A

1(a) From the graph:



(i)Price per unit before tax = $80

(ii) Quantity demanded and supplied before tax = 60 units

(iii) Price per unit after tax = $100

(iv) Quantity demanded and supplied after tax = 54 units

(b)(i) Amount of tax imposed per unit = $(100 − 75) = $25

(ii) Amount retained per unit by sellers after tax = $100 − $25 = $75

(c) Percentage of total tax paid:

(i) By buyers per unit = [(100 − 80) / 25] × 100 = 80%

(ii) By sellers per unit = [(80 − 75) / 25] × 100 = 20%

2(a)(i) Percentage increase in price = [(10 − 7) / 7] × 100 = 42.9%

(ii) Percentage decrease in quantity demanded = [(150 − 30) / 150] × 100 = 80%

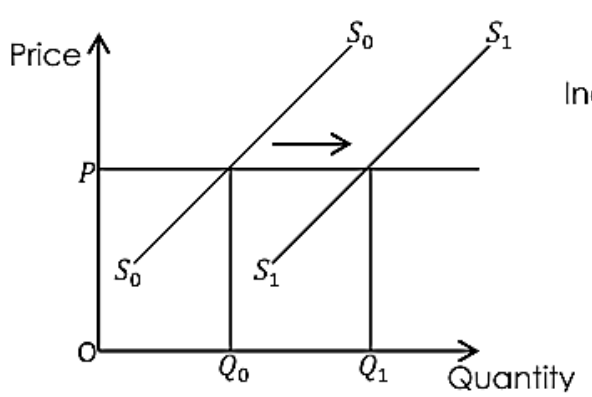
(iii) Coefficient of Price Elasticity of Demand = % change in quantity demanded ÷ % change in price

= 80% ÷ 42.9% = ≈ 1.87

(b) The demand is price elastic, because the coefficient is greater than one (>1) — the percentage change in quantity demanded is greater than the percentage change in price.

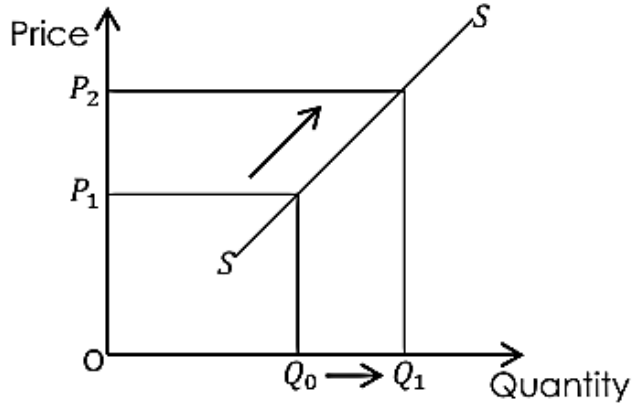
(c) Management did not achieve its objective. When price was $7, Total Revenue = 7 × 150 = $1,050. When price rose to $10, Total Revenue = 10 × 30 = $300. Revenue fell by ($1,050 − $300) = $750.

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Increase in supply

(d) It was not a rational strategy. Since demand for the fruit juice is price elastic, increasing its price led to a greater-than-proportionate fall in quantity demanded, which reduced total revenue rather than increasing it.



SECTION B

3(a)(i) An increase in supply is shown by a rightward shift of the entire supply curve (S_0 to S_1) at a given price, caused by non-price factors (e.g. improved technology).

(ii) An increase in quantity supplied is shown by a movement along the same supply curve, caused by a rise in the price of the commodity itself (P_1 to P_2).

(b) When income tax reduces, disposable income increases, raising purchasing power. For a normal good, demand increases; for an inferior good, demand falls or decreases.

(c) If the supply of a substitute increases, its price falls (ceteris paribus), making it more attractive to buyers. Consumers switch to the substitute, so demand for the original commodity falls.

4(a) Distribution is the process by which goods and services are made available from the producer to the final consumer.

(b) Importance of the retailer to the consumer:

(i) Breaks bulk by selling in small quantities at affordable prices.

(ii) Provides advisory services on product use.

(iii) Stocks a variety of goods, making shopping easier.

(iv) Operates at convenient places and times.

(v) Offers after-sales service.

(c) Demerits of middlemen in distribution:

(i) Repackaging goods to reduce quantity and increase profit.

(ii) Adulterating products, reducing quality.

(iii) Too many middlemen cause delays in distribution.

(iv) Perishable goods may spoil due to delays.

(v) Middlemen can hoard goods, creating artificial scarcity and hiking prices.

5(a)(i) Labour force: The number of people working at the existing wage rate plus those in the active age group actively seeking employment.

(ii) Over-population: Occurs when a state's/nation's population size does not match its available resources and level of technology.

(iii) Mobility of labour: A situation where labour moves from one location to another within the same occupation.

(iv) Optimum population: Occurs when a country's population effectively combines with its available resources and level of technology.

(b) Factors responsible for rapid population growth:

Increase in birth rate.

Early marriages.

Couples having very large families.

Socio-cultural resistance to sex education and family planning.

Relaxed immigration policies.

Low death rate due to improved medical care and sanitation.

Polygamous marriages producing many children.

6(a)(i) Industrialization: The process of transforming an economy from an agricultural economy to a manufacturing economy.

(ii) Mineral resources: Natural resources found on or beneath the earth's surface.

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(b) Benefits of exploiting mineral deposits:

(i) Source of foreign exchange.

(ii) Provision of job opportunities.

(iii) Provision of infrastructural facilities in areas of exploitation.

(iv) Transfer of knowledge and technology.

(v) Production of various minerals-based products.

(c) Benefits of industrialization to a developing nation:

(i) Provision of infrastructure.

(ii) Earns foreign exchange.

(iii) Generates revenue through tax, royalties, and licenses.

(iv) Improves citizens' living standards.

(v) Creates jobs through establishment of firms.

7(a) The Central Bank is the government-owned financial institution that controls and supervises the entire monetary system of a country.

(b) Ways the Central Bank reduces money supply:

(i) Buying and selling government securities in the open market.

(ii) Increasing the bank rate, so commercial banks borrow at higher interest rates.

(iii) Raising the cash reserve ratio, limiting funds available for loans.

(iv) Increasing special deposits, reducing commercial banks' lending ability.

(v) Directing commercial banks to limit lending to specified sectors.

(c)(i) Banker to the government: Operates internal and external banking services for government — keeps government accounts, makes payments, and receives cash on its behalf.

(ii) Banker to commercial banks: Acquires deposits from commercial banks and keeps a percentage as reserves; offers a clearing house system for settling inter-bank indebtedness.

(iii) Lender of last resort: Bails out commercial banks in crisis by lending them money, helping revive such banks and prevent illiquidity.

8(a) Economic development refers to a sustained increase in Gross Domestic Product accompanied by structural change in the economy.

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(b) Characteristics of a developing nation:

(i) Poor health and insufficient medical facilities.

(ii) Low level of literacy.

(iii) High level of poverty.

(iv) High population growth rate.

(v) Low level of industrialisation.

(c) Measures to facilitate economic development:

(i) Reducing the population growth rate.

(ii) Proper economic planning to efficiently allocate scarce resources.

(iii) Accelerating industrialisation via government investment and financial institution support.

(iv) Providing economic and social infrastructure (roads, electricity, water, etc.).

(v) Establishing educational institutions and informal training.

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