

ASSOCIATION OF ACCOUNTANCY BODIES IN WEST AFRICA
ACCOUNTING TECHNICIANS SCHEME, WEST AFRICA
PART I EXAMINATIONS – SEPTEMBER 2021

ECONOMICS

Time Allowed: 3 hours

SECTION A: PART I MULTIPLE-CHOICE QUESTIONS (30 Marks)
ATTEMPT ALL QUESTIONS

Write ONLY the alphabet (A, B, C, D or E) that corresponds to the correct option in each of the following questions/statements

1. Which of the following is **NOT** a feature of a capitalist economy?
 - A. Private ownership of properties
 - B. Existence of competition
 - C. Freedom of enterprise
 - D. Consumer sovereignty
 - E. Resource allocation by a central authority

2. Which of the following basic economic concepts **CANNOT** be illustrated with a production possibilities curve?
 - A. Full employment
 - B. Unemployment
 - C. Opportunity cost
 - D. Inflation
 - E. Economic growth

2. If a 6% increase in price results in more than 6% increase in quantity supplied, supply is said to be
 - A. Price elastic
 - B. Unit price elastic
 - C. Perfectly price inelastic
 - D. Perfectly price elastic
 - E. Fairly price inelastic

4. If $P = \frac{1}{2}(Q_s + 15)$, what is the quantity supplied (Q_s) at price $P = \text{N}9.00$?
- A. 33.0
 - B. 12.0
 - C. 3.0
 - D. 1.5
 - E. 15.5
5. One of the assumptions of the marginal utility theory is that, utility is
- A. Psychologically observable
 - B. Cardinally measurable
 - C. Ordinally measurable
 - D. Qualitatively measurable
 - E. Numerically indeterminable
6. Production costs such as rent, depreciation, interest, and insurance are examples of
- A. Marginal costs
 - B. Total cost
 - C. Real costs
 - D. Average costs
 - E. Fixed costs
7. The divorce of ownership from control is a major disadvantage of
- A. Partnership
 - B. Sole proprietorship
 - C. Private limited companies
 - D. Public limited companies
 - E. Cooperative societies
8. Which of the following is obtained from a primary production activity?
- A. Electronic item
 - B. Crude oil
 - C. Machineries
 - D. Furniture item
 - E. Banking service

9. Which of the following is a method of measuring national income?
- A. Marginal efficiency method
 - B. Expenditure method
 - C. Multiplier method
 - D. Accelerator method
 - E. Price index method
10. The indifference curve theory is developed to
- A. Explain the downward sloping demand curve
 - B. Derive the upward sloping supply curve
 - C. Explain circular flow of income
 - D. Confirm linear consumption function
 - E. Prove income consumption line
11. The monopolist power can be controlled by the government through
- A. Labour union
 - B. Price legislation
 - C. Import restriction
 - D. Export promotion
 - E. Price discrimination
12. If the marginal revenue (MR) and marginal cost (MC) functions of a firm are estimated as $2q + 4$ and $3q - 9$ respectively. The quantity that will maximise the firm's profit is
- A. 4
 - B. 5
 - C. 9
 - D. 13
 - E. 20
13. The term for a maximum legal price is
- A. Price ceiling
 - B. Price floor
 - C. Profit-maximising price
 - D. Shut-down price
 - E. Mark-up price

14. If total revenue of a firm is unaffected by a price change, then demand is
- A. Price elastic
 - B. Price inelastic
 - C. Unit price elastic
 - D. Perfectly price elastic
 - E. Perfectly price inelastic
15. In a two-sector economy, if the Marginal Propensity to Consume (MPC) is 0.75, the multiplier is equal to
- A. 5
 - B. 4
 - C. 3
 - D. 2
 - E. 1
16. The Gross National Product (GNP) for a given year expressed in the market prices of some previous year is called
- A. Nominal GNP
 - B. Relative GNP
 - C. Absolute GNP
 - D. Real GNP
 - E. Per capita GNP
17. Which of the following is **NOT** a fundamental function of deposit money banks?
- A. Granting loan and advances
 - B. Providing brokerage services
 - C. Creating demand-deposit money
 - D. Formulating monetary policies
 - E. Accepting deposits of funds
18. Money whose face value is greater than the actual value of the material of which it is made is referred to as
- A. Legal tender
 - B. Quasi money
 - C. Fiat money

- D. Token money
 - E. Near money
19. The instrument of persuasion that the Central Bank uses to get other financial institutions adopt a pattern of behaviour favourable to effective conduct of the monetary policy is
- A. Selective credit control
 - B. Moral suasion
 - C. Special deposits
 - D. Reserve requirements
 - E. Credit ceiling
20. The principle of taxation which enables the taxpayer to know in advance the exact amount to pay and when to make the payment is referred to as
- A. Convenience
 - B. Certainty
 - C. Equity
 - D. Economy
 - E. Flexibility
21. A tax that takes lower percentage of income as income rises is a/an
- A. Proportional tax
 - B. Regressive tax
 - C. Progressive tax
 - D. Personal income tax
 - E. Indirect tax
22. Credit facility which one country grants to another country can be described as
- A. Multilateral credit
 - B. Bilateral credit
 - C. London Club credit
 - D. Paris Club credit
 - E. IMF loan

23. Which of the following is appropriate to reduce inflationary pressure in an economy?
- A. Budget deficit
 - B. Reduction in tax rate
 - C. Surplus budget
 - D. Devaluation of domestic currency
 - E. Increase in transfer payments
24. The excess of visible exports over visible imports is described as
- A. Unfavourable balance of trade
 - B. Favourable balance of payments
 - C. Favourable balance of trade
 - D. Unfavourable balance of payments
 - E. Trade disequilibrium
25. Which of the following is **NOT** an argument for trade restrictions?
- A. Protection of infant industries
 - B. National security
 - C. Prevention of dumping
 - D. Correction of balance of payments deficit
 - E. Promotion of import
26. Taxes levied on goods which are manufactured within a country are called
- A. Excise Duties
 - B. Export Duties
 - C. Import Duties
 - D. Sales Tax
 - E. Value-Added Tax
27. Which of the following is **NOT** an objective of International Monetary Fund?
- A. Assist members in efficient utilisation of foreign exchange resources
 - B. Help member countries in overcoming foreign exchange deficit
 - C. Settlement of legal disputes among members
 - D. Provide technical advice on debt management

- E. Provide strategy on currency stabilisation at the international market.
28. Suppose the population of a country and the per capita Gross National Product (GNP) are given as 32 million and \$4687.5 respectively, the estimated gross national income product (GNP) is
- A. \$68 billion
 - B. \$150 billion
 - C. \$180 billion
 - D. \$200 billion
 - E. \$215 billion
29. Which of the following is **NOT** a determinant of economic growth?
- A. Natural resources endowment
 - B. Technological progress
 - C. Labour productivity
 - D. Market structure
 - E. Capital accumulation
30. Which of the following is **NOT** an objective of the Organisation of Petroleum Exporting Countries (OPEC)?
- A. Stabilisation of oil prices
 - B. Stabilisation of exchange rates of currencies of member countries
 - C. Co-ordination and harmonisation of oil policies of member countries
 - D. Provision of financial assistance to poor non-oil producing countries
 - E. Provision of relatively cheaper supply of oil to developed countries

SECTION A: PART II SHORT-ANSWER QUESTIONS (20 Marks)

ATTEMPT ALL QUESTIONS

Write the correct answer that best completes each of the following questions/statements:

1. In economics, a generalisation made to describe observed regularity in human behaviour is called
2. Assuming that commodities X and Y are by-products; a decrease in the supply of X will cause a in the supply of Y
3. The technical relationship between the quantity of input in a production process and the amount of output produced by a firm is known as
4. An illegal trading arrangement in which buyers and sellers do business at prices higher than the legally imposed price ceiling is called
5. The concept that describe how output responds to variations in the quantity of inputs used in a production process is referred to as
6. The concentration of industries in a geographical area, locality or region is referred to as
7. The form of business organisation in which the death of the owner may terminate the existence of the business is referred to as
8. The rules and regulations that governs the operations of a limited liability company are listed in the
9. The market structure in which a seller has the opportunity to sell all what he can sell at the prevailing market price is
10. The equation, $I + G + X = S + T + M$, where I = investment, G = government expenditure, X = export, S = savings, T= taxes and M = import, expresses the determination of equilibrium national income using approach.
11. The method of measuring national income that excludes transfer payments is called

12. Incomes accruable to the government from mining rights are known as
13. A specialised financial institution established primarily to contribute to the development of the housing sector of an economy is the
14. A sustained fall in the general price level in an economy is called
15. The policy that involves reduction of government spending and increase in taxation is called
16. The type of unemployment that affects people with mental and physical disabilities is
17. An increase in the value of a country's domestic currency relative to foreign currencies resulting government official decision is called
18. The component account of the balance of payments which shows how foreign reserves have changed in response to current and capital transactions is called
19. An increase in the capital stock of a country can be described as
20. A document containing quantitative and qualitative descriptions of the current economic potentials of the economy, specific objectives, policies and macroeconomic projections of the country is called

QUESTION 3

- a. i. Define the term 'monopoly'. (1½ Marks)
 - ii. Draw the demand curve of monopoly firm, explaining the reason for its shape (2 Marks)
 - b. i. What is meant by 'price discrimination'? (1½ Marks)
 - ii. State **TWO** market conditions that will make it possible and easier for the monopolist to engage in price discrimination. (3 Marks)
 - iii. Briefly explain **THREE** sources of monopoly power (4 ½ Marks)
- (Total 12½ Marks)**

PART II:

MACROECONOMICS

ATTEMPT ANY TWO QUESTIONS

QUESTION 4

- a. Distinguish between the concepts of demand-pull inflation and cost-push inflation using the appropriate diagrams. (5 Marks)
 - b. State and explain **THREE** major economic effects of inflation. (7½ Marks)
- (Total 12½ Marks)**

QUESTION 5

- a. Explain briefly each of the following types of national budget:
 - i. Deficit budget (2½ Marks)
 - ii. Surplus budget (2½ Marks)
 - b. Identify and explain **THREE** sources of finance for a deficit budget. (7 ½ Marks)
- (Total 12½ Marks)**

QUESTION 6

- a. Briefly explain each of the following:
- i. Foreign exchange
 - ii. Foreign exchange market
 - iii. Foreign exchange rate (4½ Marks)
- b. Assuming market-determined exchange rate, use supply and demand diagrams to explain how each of the following circumstances will affect the value of a country's currency, other things being equal:
- i. Increase in the supply of exports
 - ii. Increase in the demand for imports. (8 Marks)

Hint: Let the vertical axis represents the price of US\$1 in terms of the domestic currency, and the horizontal axis to represent the amount of US dollar traded in the forex market.

(Total 12½ Marks)

SOLUTION TO QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. E
2. D
3. A
4. C
5. B
6. E
7. D
8. B
9. B
10. A
11. B
12. D
13. B
14. C
15. B
16. D
17. D
18. D
19. B
20. B
21. B
22. B
23. C
24. C
25. E
26. A
27. C
28. A
29. D
30. B

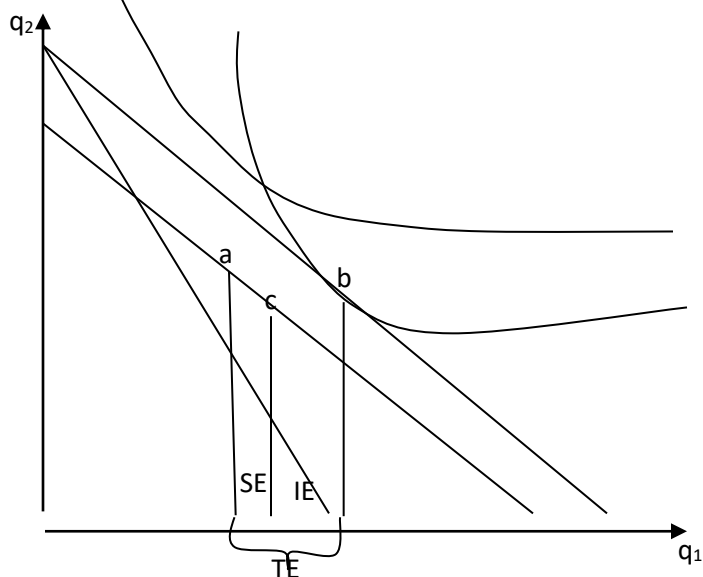
SHORT – ANSWER QUESTIONS (SAQ)

1. A Theory
2. Decrease
3. Production function
4. Black market
5. Returns to scale
6. Localisation of Industries
7. Sole proprietorship
8. Memorandum of Association
9. Perfect competitive market
10. Injections – leakages/Withdrawals approach
11. Income method
12. Royalties
13. Mortgage bank
14. Deflation
15. Contractionary fiscal policy
16. Residual unemployment
17. Revaluation
18. Official reserve account
19. Capital accumulation/ Capital formation
20. Development plan

ESSAY QUESTIONS

QUESTION 1

1(a) conventionally, there exist an inverse or indirect relationship between quantity demand and price of a commodity. This is due to the total effect of a change in price. This total effect can be decomposed into substitution and income effect. The effect on quantity demanded of the generalized increase in purchasing power is the income effect. The substitution effect is always negative while income effect has a negative sign for normal goods and positive sign for inferior goods. The income effect is the effect of the changes in the real income (purchasing power on the consumption pattern of the consumer price changes) **(2 marks)**



(2 ½ marks)

SE:- Substitution effect

IE:- Income effect

The normal good obeys the fundamental law of demand. The higher the price of a commodity the lower the quantity demanded, the higher the income (compensated Income) the more the quantity demanded. **(2 marks)**

$$(b) (i) PES = \frac{\% \text{ change in qty SS}}{\% \text{ change in price}}$$

$$= \frac{150-100}{100} \times \frac{100}{1} \%$$

$$= \frac{40-30}{30} \times \frac{100}{1} \%$$

$$= \frac{50\%}{33.3\%} = 1.5 \text{ (relatively elastic supply since P. E.S} > 1) \quad (1 \text{ mark})$$

$$ii) PES = \frac{\% \text{ change in qty SS}}{\% \text{ change in price}}$$

$$= \frac{160-150}{150} \times \frac{100}{1} \%$$

$$= \frac{50-40}{40} \times \frac{100}{1} \% \quad (2 \text{ marks})$$

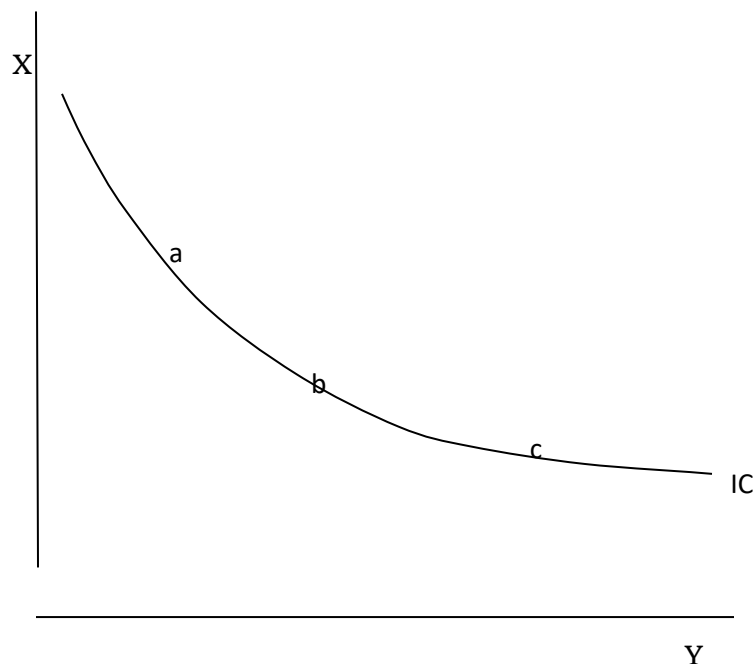
$$= \frac{6.67\%}{25\%}$$

$$= 0.26\% \text{ (Relative inelastic because PES} < 1) \quad (2 \text{ marks})$$

(Total 121/2 Marks)

QUESTION 2

(a) (i) An indifference curve is the locus of combination of two goods which a consumer buys/consumes to obtain the same level of satisfaction.



(2 ½ marks)

IC = Indifference Curve

a, b, c are the points on the indifference curve that give the consumer the same level of satisfaction.

X and Y are the goods consumed.

ii) The budget line is the locus of expenditure constraints which a consumer faces with a given level of income and a given set of commodity prices. It is geometrical device representing the budget constraint.

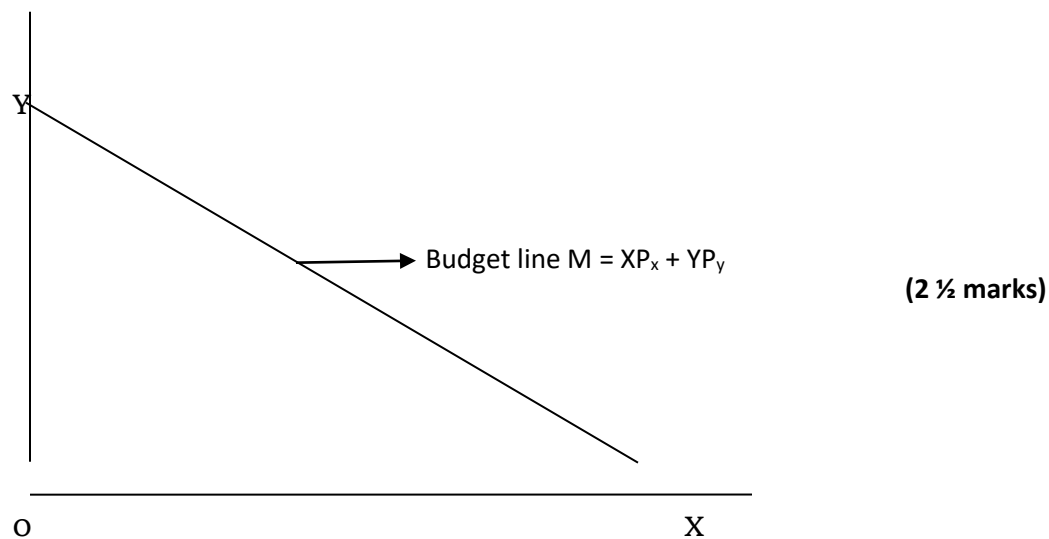
$$M = XP_x + YP_y$$

M = budget constraint / consumer income

P_X = price of commodity X

P_Y = price of commodity Y

X and Y are the quantity of X and Y consumed respectively

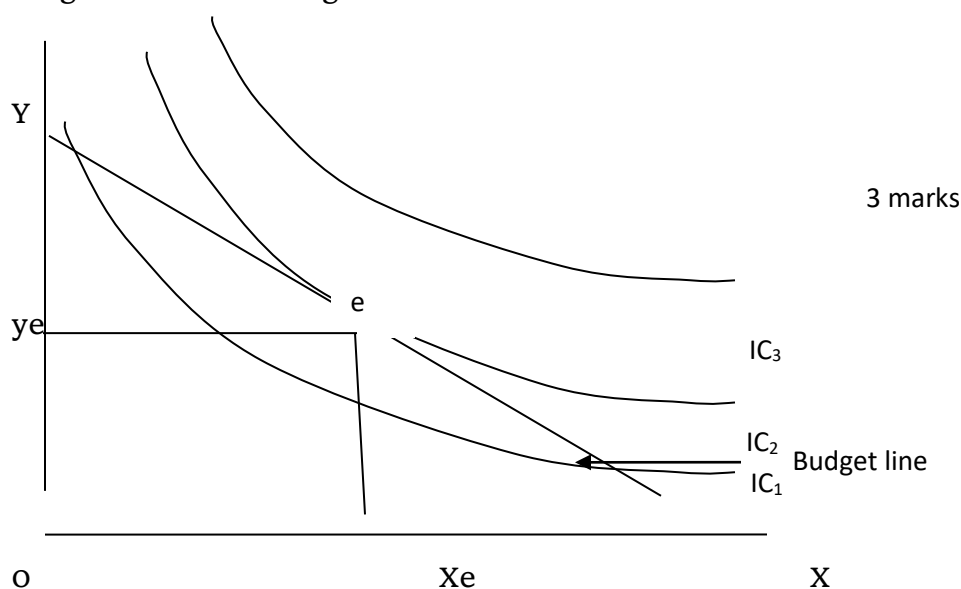


(b) The properties/axioms/ characteristics of indifferences are:-

- (i) It is downward sloping/negatively sloped
- (ii) It is everywhere dense (i.e. it is a continuous curve with no break in its curve)
- (iii) Indifference curve cannot intersect
- (iv) It is convex to the origin
- (v) The slope of indifference curve is the marginal rate of commodity substitution.

(4 Marks)

(c) Under the indifference curve approach, consumer attains equilibrium and maximizes utility at the point of combination where the indifference curve is tangential to the budget line.



At the point 'e' where X_e X and y_e combination are consumed, the consumer attains equilibrium.

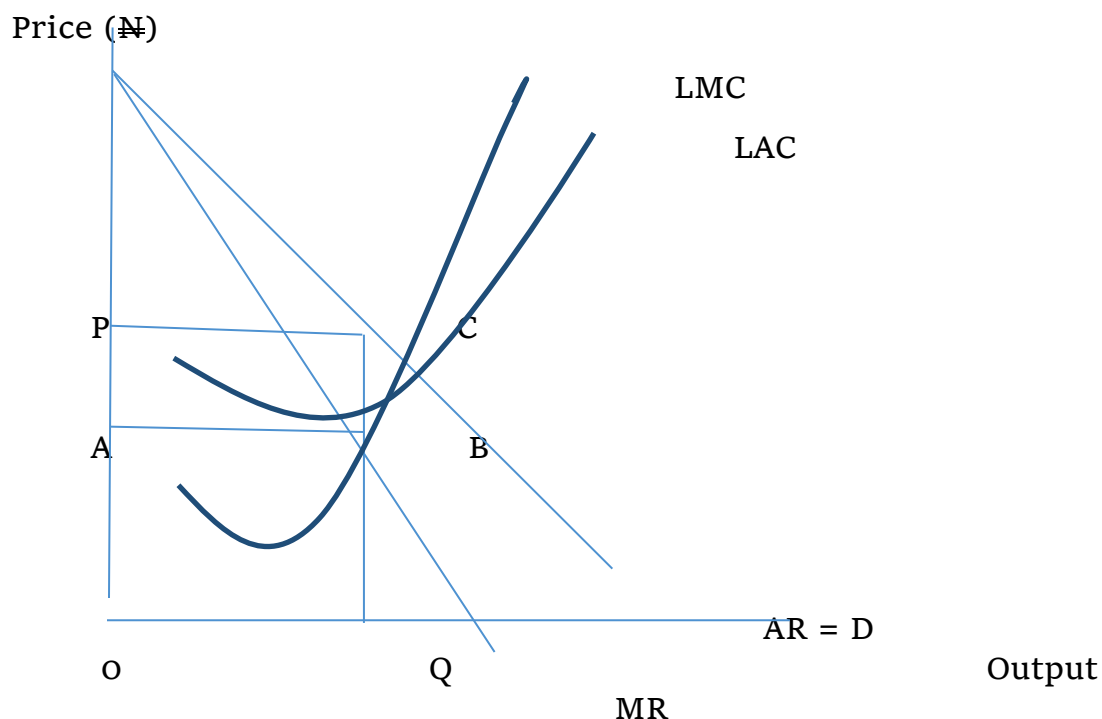
(1/2 marks)

(Total 12 1/2 Marks)

QUESTION 3

ai. Monopoly is a market structure which is an extreme opposite of perfect competition. It is a form of market organisation in which there is a single firm producing a commodity for which there is no close substitute. The monopolist is a price setter or price maker because the single firm constitutes the industry. Monopolist can earn abnormal profit both in the short run and in the long run. The monopolist influences output or price but cannot determine the two at the same time. The monopolist can fix the price and allow the market situation to determine the output or vice-versa. Most often he prefers maintaining a higher price to enjoy greater profit. **(11/2 Marks)**

(aii)



The demand curve of a monopolist firm is also the market curve which is downward sloping. This is because lower prices are charged of the commodity are to be sold. That is, each successive additional unit of output will be sold at a lower price. Also, marginal revenue is less than the price at each level of output. This explains why both the demand curve and the marginal revenue curve are downward sloping with the marginal revenue falling below the demand curve. **(2 Marks)**

- bi.** Price discrimination is a practice whereby the monopolists are privileged to charge different prices for the same services rendered to different consumers. In other words, price discrimination occurs when the same type of commodity or services is sold to different buyers at different prices even when the costs of production are equal for the commodities or services. This is often possible in separated markets such as domestic and foreign market. **(11/2 Marks)**

ii. Possible conditions for the monopolists to engage in price discrimination are:

- The price elasticity of demand for the products must be different between classes of buyers or in different markets. This may be due to differences in income level, differences in taste or in the availability of substitutes.
- The monopolists must be able to segregate buyers into classes among which resale or transfer of the commodity or service is either impossible or very costly. The barrier between buyers or markets may be geographical with transport cost preventing resale or the monopolist providing service that cannot be transferred.
- The cost of segregating the market or buyers into different classes with different price elasticity of demand for the product must be too high as to wipe off the intended profit of price discrimination.

(3 Marks)

iii. Sources of monopoly power are:

- Control of the entire supply of a basic input. If the entire supply of the basic raw materials for the production of a commodity is supplied by a single firm or a country, such a firm or country will monopolise the supply of the product.
- Large scale production and economies of scale. Monopoly may arise as a result of economies of large scale. This may occur based on the cost advantages gained from the use of cost-saving technology which enables it to sell at a lower price than any other small competitor.
- Franchise and patents (Legal monopoly). If a firm invests on a machine after huge cost have been incurred on research and development efforts, the government may therefore grant the firm patent right that prevents other firms from producing the same type of machine. This makes the firm automatically become a

monopolist. Also, authors of textbooks, songs are protected by copyrights in order to enable them enjoy the fruits of their research efforts and creativity.

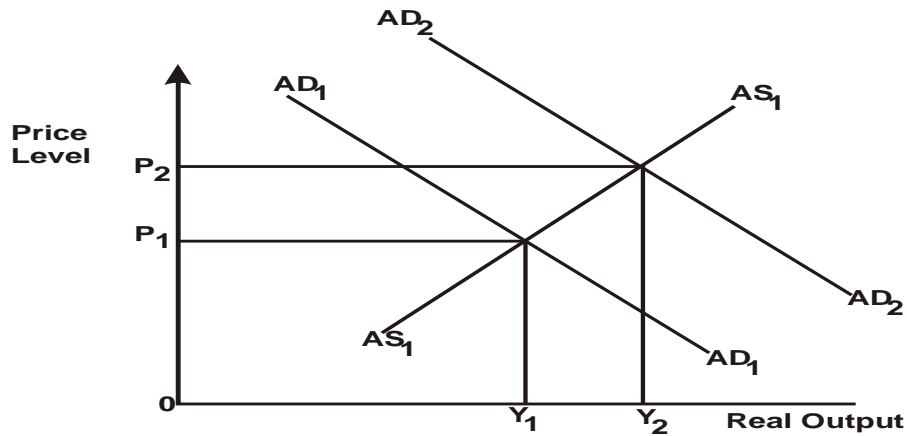
- State monopoly. The government can assume a monopoly power in the production of social goods in order to prevent exploitation by the private individuals and also promote even development and social welfare of the people. For example, public utilities such as PHCN.
- Merger and acquisition. When big firms enter into collusion to control the market supply, they establish strong monopoly power driving away other potential competitors. Also, it is possible for big firm to acquire a small firm that can no longer operate profitably to gain total control of the market supply.
- Natural monopoly. This occurs as a result of the concentration of the natural resources or factor endowment in a particular environment. This makes that region to monopolise the supply of such raw materials.

(41/2 Marks)

(12 ½ Marks)

QUESTION 4

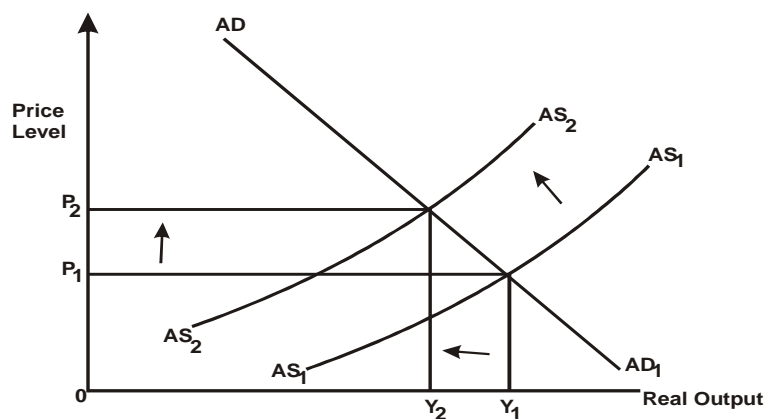
- (a) Demand-pull inflation:** Demand-pull inflation occurs when a sustained rise in the general price level is caused by a sustained rise in aggregate demand. In other words it exists when aggregate demand exceeds the aggregate supply. Demand-full inflation is demonstrated in the diagram below..



An increase in aggregate demand shifts the AD curves to the right (AD_1 to AD_2). At the original price level OP_1 , there is excess demand which pulls the price level to OP_2 . (2½ Marks)

Cost-Push inflation: Cost-push inflation, on the other hand, occurs if the rise in general price level is induced by rising costs of production. Therefore, cost-push inflation arises when higher production costs are successfully passed on to the consumers in form of higher prices. This is also referred to as wage-push inflation especially where the increase in cost of production is mostly caused by increase in salaries and wages.

Cost-push inflation is demonstrated in the diagram below.



Rising production costs shift the aggregate supply (AS) curve to the left (AS_1 to AS_2); and with an unchanged aggregate demand (AD) curve, the price level is pushed up from OP_1 to OP_2 .

(2¹/₂ Marks)

(b) The major economic effects of inflation are:

1. **Effect on fixed-income earners.** Inflation reduces the standard of living of fixed-income earners, such as the pensioners, salary earners, rent receivers, savings with fixed rates of interest and others on social security. Their fixed incomes will buy smaller baskets of goods and services.
2. **Effect on lenders and borrowers:** Lenders will suffer a loss while borrowers gain because when debts are repaid, their real value will be less than that prevailing when the loans were granted.
3. **Effect on businesses:** Wage-push inflation causes a fall in the profits of the firms if entrepreneurs are unable to pass on the full rise in costs to their customers in the form of higher prices. Furthermore, businessmen will suffer on goods sold out on credits because unanticipated inflation makes it difficult for them to accurately project future cost of production of inputs and profits.
4. **Effect on government:** One positive effect of inflation is that tax revenue of government increases during inflation. In a country with a progressive tax system, as prices rise, your money income also rises. Conversely, inflation acts as a constraint upon government policy with regard to the management of the economy. A public policy meant to cure inflation may raise the level of unemployment in the economy.

5. **Effect on national output and overall standard of living:** Since money loses its value during inflation, people are discouraged from saving. This will further reduce the level of investment in the economy. The resultant fall in the level of investment would mean a lower level of employment as well as shortage of goods and services which will result to a fall in the overall standard of living in the country.
6. **Effect on international trade:** Domestic inflation has the effect of raising export prices in the process, making exports less competitive and imports relatively more competitive. If demand abroad for the country's range of exports is price inelastic, domestic inflation will be passed on to the foreign countries. The foreign countries will therefore encounter what is known as *imported inflation*. This suggests that the fall of export volume will be less; the more price-inelastic is the foreign demand for exports.

(2¹/₂ for any 3 points mentioned and explained i.e 2¹/₂ x 3 = 7 ¹/₂ Marks)

(Total 12¹/₂ Marks)

QUESTION 5

- a) The explanations of given types of national budget:
- i) **Deficit budget:** This is a budget where the planned government expenditure exceeds planned or estimated government revenue. This budgetary system is embarked upon to stimulate economic growth especially during depression so that the problem of unemployment, low national output and low aggregate demand would be ameliorated.

Most countries (whether less developed or advanced) do have deficit budgets.

(2½ Marks)

ii) **Surplus budget:** This is a budget where the government estimated revenue exceeds the estimated expenditure. This budget is embarked upon to reduce inflation. This is achieved through reduction of government expenditure and increase in taxation to broaden revenue base of the government.

(2½ Marks)

b) The various sources of financing deficit budget include:

- (1) Increasing revenue base of the government. This could be done by increasing taxes, diversification of the economy, etc.
- (2) Loans and aids. Government can secure loans and aids (internal and external) to finance deficit budget. Internal borrowing takes the form of issuing of bonds while external could be in form of borrowing from foreign countries, international financial institutions such International Monetary Fund (IMF), International Bank for Reconstruction and Development (IBRD), African development Bank (AfDB), London Club of Creditors, Paris Club, etc. The loans should be invested in capital projects
- (3) Reduction of some expenditure items. The government should eliminate items in the expenditure lists that are not economically productive. For instance, cost of governance should be minimized.
- (4) Resort to printing of money. The government can resort to printing of money for settle some domestic debts or execute some capital projects. This is not the best option since it fuels inflation rate in the economy.

(5) Sales of government properties. This could be adopted to raise money to finance some important capital project.

(2½ marks for any 3 points mentioned and briefly explained i.e 2½ x 3 = 7½ Marks)

(Total 12½ Marks)

QUESTION 6

a. (i) Foreign exchange

This is also known as foreign currency required for payment for goods and services traded between countries. For instance, if a Nigerian importer wants to import goods from United State of America, he/she needs US\$ dollar to pay for the goods. The US\$ to the Nigerian importer is foreign exchange. Similarly, the naira which an American importer requires to pay a Nigerian exporter is also foreign exchange.

(1½ Marks)

(ii) Foreign exchange market

Foreign exchange market is the market in which different currencies are bought and sold for another. For example, US Dollars are traded for Nigeria Naira, British Pounds sterling for Japanese yen, and so on. Thus national currencies of all countries are the stock-in-trade in the foreign exchange market.

The major participants in the foreign exchange market are the banks, foreign exchange dealers, brokers, firms and central bank. There are also Authorized money Changers who are issued licenses to transact foreign exchange business of issuing and encashing travelers' cheques and foreign currencies. There are types of markets in the foreign exchange market – the spot exchange market and the forward exchange market.

(1½ Marks)

(iii) Foreign exchange rate

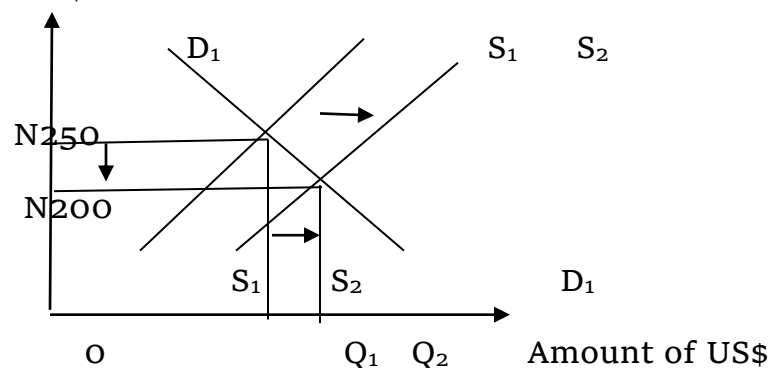
The exchange rate is the price of a unit of foreign currency that may be bought for one unit of domestic country's currency. It is simply the price at which one country's currency can be traded for another. If the US dollar sells for ₦420, this defines the exchange rate between the US dollar and the Nigerian naira.

The exchange rate is determined either by the forces of demand and supply of foreign currency in the floating exchange rate system or by explicit government policy in fixed exchange rate system.

(1½ Marks)

(bi) An increase in the supply of exports implies increase in supply of foreign currency. This increase, with demand for foreign currency remaining unchanged, will make the supply curve to shift rightwards causing the domestic currency to appreciate relative to the foreign currency. This effect is shown in the diagram below.

Naira Price of \$1

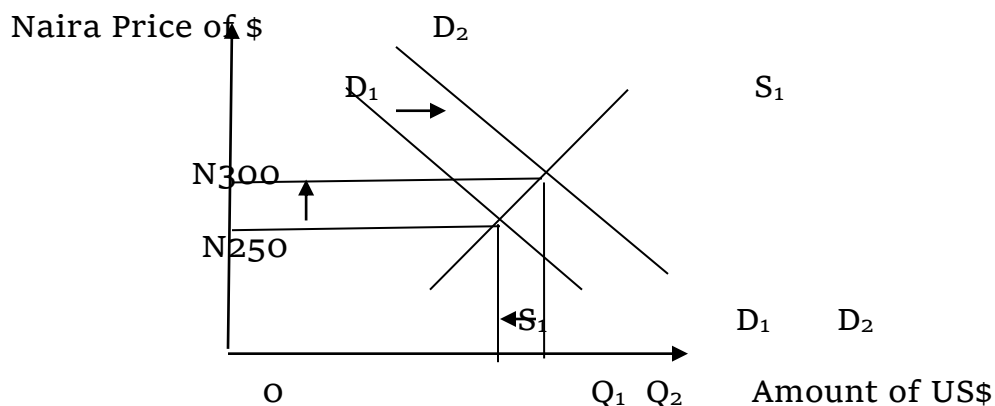


Given the originally the demand and supply curves as D_1 and S_1 respectively, and the initial exchange rate of \$1 = ₦250, an increase in the supply of foreign exchange shows a rightward shift in the supply curve from S_1 to S_2 leading to a fall in the exchange rate or an appreciation of Naira from \$1=250 to \$1=₦200.

(4 Marks)

(bii) An increase in the demand for import implies an increase in the demand for foreign currency.

This increase, with supply of foreign currency remaining unchanged, will make the demand curve to shift rightwards causing the domestic currency to depreciate relative to the foreign currency. This effect is shown in the diagram below.



Given the original demand and supply curves as D_1 and S_1 respectively, and the initial exchange rate is $\$1 = \text{N}300$, an increase in demand for foreign exchange causes a rightward shift in the demand curve from D_1 and D_1 leading to a rise in the exchange rates or a depreciation of the Naira from $\$1 = \text{N}80$ to $\$1 = \text{N}100$.

(4 Marks)

(Total $12\frac{1}{2}$ Marks)