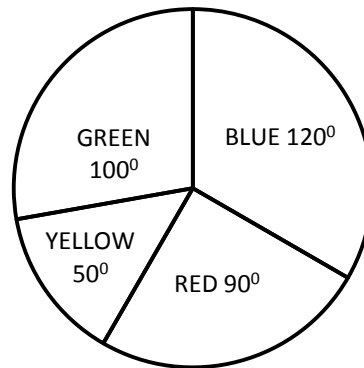


ECONOMICS (003) MAY/JUNE 2007

QUESTION 1

The pie-chart below represents a collection of 720 balls of different colours in a basket. Use the chart to answer the following questions.



- a. Calculate the number of
 - I. Red balls
 - II. Blue balls
 - III. Green balls
 - IV. Yellow balls
- b. Find the mean for the balls in the basket
- c. Which colour has a lower numbers of balls than the mean and by how many?

Ans.

- a. i. The number of red balls
$$\frac{90}{360} \times \frac{720}{1} = 180 \text{ red balls}$$
- ii. The number of blue balls
$$\frac{120}{360} \times \frac{720}{1} = 240 \text{ blue balls}$$
- iii. The number of green balls
$$\frac{100}{360} \times \frac{720}{1} = 200 \text{ green balls}$$
- iv. The number of yellow balls

$$\frac{50 \times 720}{360 \times 1} = 100 \text{ yellow balls}$$

- b. The mean for the balls
 Total number of balls = 720
 The mean = $\frac{720}{4} = 180$

- c. i. The yellow balls

ii. $180 - 100 = 80$

QUESTION 2

Below is the costs and revenue table of a firm. Answer the questions below it.

Output	TC	MR	AC	MC
1	8	-	8	-
2	X	6	7	6
3	18	6	6	4
4	24	6	6	Y
5	35	6	Z	11
6	48	6	8	13

- Calculate the values of letters x, y and z in the table
- What is the output at which the firm maximizes profit?
- Give the reason for your answer in (b)
- Beyond the output of 4 units. What happens to the average cost
- Under which type of market is the firm operating
- Give the reason for your answer in (e)

Ans.

- The value of letters x, y, z
 $X = Q \times AC = 2 \times 7 = 14$
 $Y = 24 - 18 = 6$
 $Z = 35 \div 5 = 7$
- The firm maximizes profit at output 4
- It is the output at which $MC = MR$
- The average cost begins to rise
- The firm operates under perfect market/perfect competition
- The marginal revenue for the firm is the same for all levels of output
 $MC = MR = AC$

QUESTIONS 3

- a. What is Economics
- b. Mention and explain five reasons why the study of economics is important.

Ans.

- a. Economics is a social science which studies human behaviour as a relationship between ends and scarce means which have alternative uses.
- b.
 - i. To enable consumers make the best use of their resources so as to obtain maximum satisfaction.
 - ii. It guides firms and government in the allocation of scarce resources
 - iii. Economics provides the training ground for critical thinking
 - iv. The study of economics enables people to pick up a career in life
 - v. Economics creates a sense of objectivity in the individual thereby eliminating sentiments and partiality in making judgments.
 - vi. The knowledge of economics helps individuals to advise policy makers on the best economic policies to follow thereby helping to improve the economics well being of the society.
 - vii. The knowledge of economics provides a clear understanding of the interrelationships between the various units in the society.

QUESTION 4

- a. Briefly explain Malthus theory of population.
- b. Highlight the factors responsible for rapid population in Nigeria

Ans.

- a. Thomas Malthus wrote his essay on the principle of population at a time when population was growing rapidly in England. He argued that population was growing at a geometric rate while the means of livelihood was growing at an arithmetic rate which was a dangerous trend. He maintained that unless the trend was reversed through moral restraints of birth control measures such as late marriages, standard of living will fall and starvation will be the end result.
- b. Factors responsible for rapid population growth in Nigeria
 - i. Increase in birth rate occasioned by such factors as early marriages, polygamy, sexual immoralities and lack of ineffective birth control measures.
 - ii. Reduction in death rate
 - iii. Migration

QUESTIONS 5

Mention and explain the advantages that sole proprietorship has over the limited liability company

ANSWER

The advantages of the sole proprietorship over the limited liability company are:

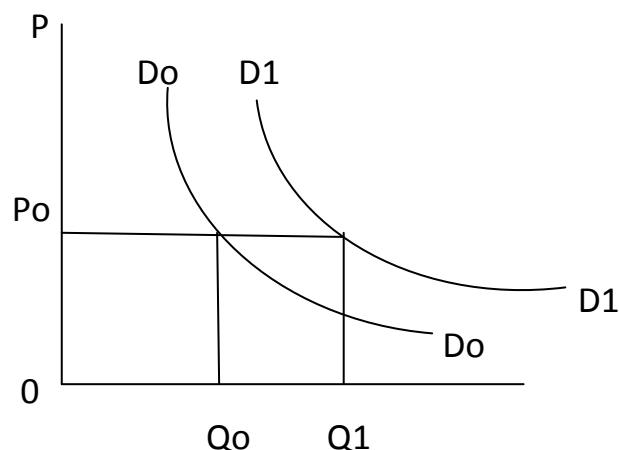
- i. Personal interest: The sole proprietor has personal interest in the business which is not so with shareholders
- ii. Efficiency: Commitment of the owner guarantees higher efficiency.
- iii. Decision can be easily and quickly taken devoid of bureaucratic tendencies.
- iv. Privacy- The sole proprietor does not have to make public his account
- v. There is personal contact with the workers and customers
- vi. The sole proprietor is independent of other people hence he can take action without any consultation
- vii. Its formation requires little capital

QUESTION 6

- A. Explain the term "increase in demand"
- B. Mention and explain three factors that can lead to an increase in the demand for bread.

Ans.

- a. Increase in demand implies a right-ward shift of the demand curve with a constant price.



At the same price OP_0 , the shift in demand curve from D_0 to D_1 leads to increase in demand from OQ_0 to OQ_1

- b. The demand for bread can increase due to the following factors
 - i. Increase in the number of consumer population.
 - ii. Increase in the price of substitute
 - iii. Advertisement

- iv. Increase in income of consumers
- v. A change in taste in favour of bread.

QUESTION 7

- a. Explain the law of diminishing marginal returns.
- b. What is the economic significance of the law?

Ans.

- a. The law of diminishing marginal returns states that if increasing units of variable factors of production are combined with a given quantity of another fixed factor, returns are on the increased up to a point after which the marginal returns falls.

LAND	UNITS OF LABOUR	TOTAL OUTPUT	MARGINAL OUTPUT	AVERAGE OUTPUT
5 Hectres	1	10	10	10
5 Hectres	2	22	12	11
5 Hectres	3	39	17	13
5 Hectres	4	52	13	13
5 Hectres	5	60	8	12
5 Hectres	6	66	6	11

From the table above, successive applications of units of labour to the fixed quantity of land brings about increasing marginal returns up to the third unit of labour. With the introduction of the Fourth unit of labour, Marginal returns falls from 17 to 13 hence the diminishing marginal returns sets in with the 4th unit of labour.

- b. The economic significance of the law:
 - 1. It guides the producer in deciding the appropriate quantity of a variable factor to be combined with fixed factor of production in order to enjoy increasing returns.
 - 2. The law also helps the entrepreneur to determine the wages to be paid to workers as this is based on the value of the marginal product/profit.

QUESTION 8.

- A. Explain The Term “Monopoly”

- B. Describe THREE ways by which the power of the monopolist can be controlled.

Ans.

- a. Monopoly is a market structure where a single production unit controls the production of a commodity or service that has no close substitute. The firm is also the industry. There is no competition and he can influence the price or the quantity.
- b. The ways by which the power of the monopolist can be controlled
 - i. Encouragement of competitors by the government
 - ii. Nationalization
 - iii. Price control
 - iv. Enactment of laws setting standards for the monopolist and making mergers illegal
 - v. Imposition of higher taxes on monopoly profits may curb profiteering
 - vi. The discovery of substitutes will reduce the power of the monopolist.

QUESTION 9

- a. Distinguish between division of labour and specialization
- b. Mention and explain five merits of specialization

Ans.

- a. Division of labour is the breaking down of the production process into distinct operations with each operation being handled by different people or a group of people whereas specialization is the concentration of labour on a particular economic activity.
- b. The advantages of specialization are
 - i. Increase in output
 - ii. Increase in the skill of labour
 - iii. It reduces fatigue
 - iv. Specialization saves time
 - v. Specialization eventually makes labour to become a specialist in the chosen field
 - vi. Production is standardized: Goods are identical in size, quality, weight, colour e.t.c.

QUESTION 10

- a. Define the law of comparative advantage
- b. Using illustrations, explain how specialization takes place between countries.

Ans.

- a. The law of comparative advantage states that a country should concentrate on the production of the goods and services in which she has a higher comparative advantage over others.
- b. Specialization between countries is based on relative cost advantage. A country should specialize on the production of the commodity she can produce at a cheaper cost than other country.

COUNTRY	LABOUR	COCOA	COTTON	COUNTRY	COCOA	COTTON
GHANA	10 hours	70	100	GHANA	140	-
NIGERIA	10 hours	40	90	NIGERIA	-	180
				TOTAL	140	180

The table above shows the productive capabilities of two countries before specialization. Ghana can produce 70 bags of Cocoa with 10 hours of labour and 100 bags of Cotton. Nigeria can produce 40 bags of Cocoa and 90 bags of Cotton with the same 10 hours of labour, Ghana should concentrate on Cocoa production because she can produce Cocoa more cheaply than Nigeria while Nigeria should specialize on Cotton for it is cheaper to produce Cotton in Nigeria than in Ghana.

QUESTION 11

- a. What is capital market?
- b. Describe the THREE main types of accounts a customer can keep with a bank.

Ans.

- a. A capital market is a market for medium and long term loans and investments
- b. The main types of account with a commercial bank
 - i. Savings account: It is an account operates with a pass-book. A little amount of money is required to open a savings account it earns monthly interest. The account is popular among low income earners.
 - ii. Current Account: Money is normally paid in with a pay-in-slip. Money is withdrawable by cheque. The account is usually operated by business men and workers. The account does not

earn interest, instead the owner pays some commission to the bank.

- iii. Fixed Deposit Account: this is an account for large sums of money which people and organizations do not need for present use. The account earns a high rate of interest and money is withdrawable only on due date.

QUESTION 12

- a. Define factors of Production
- b. Enumerate five features of land.

Ans.

- a. Factors of production are the resources or inputs that must be combined in certain proportions to produce goods or services.
- b. Features of land:
 - i. Land is geographically immobile
 - ii. It is fixed in supply
 - iii. Land is a free gift of nature
 - iv. The quality and value of land vary with its location
 - v. It is subject to the law of diminishing marginal returns
 - vi. The reward is rent.