SOLUTIONS ECONOMICS MAY 2012

SOLUTION 1

(a) A planned economy is an economy in which the basic functions of resource allocation are carried out by a centralized administrative process. (*2 marks)*

A market economy on the other hand is an economy where question concerning what and how much to produce (resource allocation) are decided in an open market through the competitive forces of supply and demand. *(2 marks)*

(b) Some features of a market economy are:

(i) Private ownership and control of property or productive resources. Productive resources are owned by individuals therefore what to produce, how much and for whom are determined in a decentralized manner.

(ii) Competition among economic agents dominates the system. This competition enhances efficiency in resource allocation as resources owners seek the best market for their resources while buyers attempt to buy from low cost market.

(iii) It makes possible a high degree of exchange because people must have property rights before those rights can be transferred.

(iv) It strongly influences the distribution of wealth and income by allowing people to accumulate assets and pass on to others.

(v) The price mechanism plays a vital role in the working of the system. All the central economic problems concerning what, how and for whom are resolved through the price mechanism.

(Four points for 3 marks each. Total 12 marks)

(c) Some demerits of the market economic systems are:

(i) It does not ensure maximum social satisfaction at minimum social cost. This is because goods are distributed according to the ability to pay of the people rather than their needs. Maximum social satisfaction can occur only if goods produced go to those consumers who will desire the greatest satisfaction from them.

(ii) It does not ensure a high and stable level of employment. Neither does it guarantee stable prices. As a result of the free working of the market mechanism, there take place cyclical fluctuations in levels of economic activities with ups and downs in the level of employment and prices.

(iii) Market mechanism and free enterprise cannot ensure rapid and sustained economic growth. Private enterprise guided by market forces will not invest

(iv) In areas such as railways and transport systems which are vital for the growth of the economy.

(v) Concentration of wealth and income as a result of the free working of the price system is another weakness of the market system. The free working of the private enterprise market system has been that the more efficient, very smart entrepreneurs as well as those who enjoy large monopolistic power have been able to accumulate large amounts of wealth and property. These inequalities of wealth and property have been accentuated through time by th3e right of inheritance. *(Two points for 2 marks each. Total 4 marks)*

SOLUTION 2

(a) In equilibrium Qs = Qd

$$-32 + 10p = 40 - 2p$$
$$10p + 2p = 40 + 32$$
$$12p = 72$$
$$p = 72/12 = ¢6$$ *(2 marks)*

Putting 6 into both equations

$$-32 + 10(6) = 40 - 2(6)$$
$$-32 + 60 = 40 - 12$$
$$28 = 28$$ *(2 marks)*

Equilibrium Price = GH¢6
Equilibrium Quantity = 28 bags

(b) (i) Qs = Qd

$$-20 + 10p = 40 - 2p$$
$$10p + 2p = 40 + 20$$
$$12p = 60$$
$$P = ¢5$$ *(2 marks)*

Equilibrium

$$-20 + 10(5) = 40 - 2(5)$$
$$-20 + 50 = 40 - 10$$
$$30 = 30$$ *(2 marks)*

Equilibrium price = GH¢5
Equilibrium quantity = 30 bags

(ii)

Price	**Before** Qs	**After** Qs_1	Qd
3	-2	10	34
4	8	20	32
5	18	30	30
6	28	40	28
7	38	50	26
8	48	60	24

(6 marks)

(c) (i) Quantity supplied will exceed quantity demanded (surplus) by 36 bags. *(2 marks)*

(ii)

- The government can buy and store the excess supply to be sold when quantity supplied fall in future.
- The government has to find new uses for maize locally or to find export market for it
- Limit producers to quotas.

(Two points for 2 marks each. Total 4 marks)

SOLUTION 3

(a) (i) Opportunity cost is the value of the alternative or opportunities which have to be forgone in order to achieve a particular thing with the same amount of resources. It is concerned with the real sacrifice involved in achieving something. *(2 marks)*

(ii) Normal profit is the least or minimum payment that the owner of an enterprise will accept as compensation for his entrepreneurial function, including risk taking and management. Or it is the payment that the owner of a firm must receive in order to keep him from withdrawing his capital and managerial skills and shifting them into alternative use. This occurs if in equilibrium, the firm’s total revenue equals total cost or average revenue equals average cost. *(2 marks)*

(b) 1. (i) Explicit costs

	GH¢
• Cost of fruits	10,000.00
• Cost of truck	8,000.00
• Cost of converting building	1,000.00
• Cost of labour	2,000.00
• Cost of water and electricity	4,000.00
Total explicit cost	25,000.00

(6 marks)

(ii) Total fixed costs

	GH¢
Cost of truck	8,000.00
Cost of converting building	1,000.00
	9,000.00

(3 marks)

2. (i) Economic profit = Total revenue – (explicit + implicit costs)

		GH¢
Total revenue	=	35,500.00
Explicit costs	=	-25,000.00
Implicit costs	=	-12,600.00
Economic profit	=	-2,100.00

(4 marks)

(ii) Yes, Yao should continue production. *(1 mark)*

His total revenue of GH¢35,500.00 exceeds his explicit cost. He is making an accounting profit. More technically, Yao's total revenue of GH¢35,500 exceeds his total variable cost of GH¢16,000.00, meaning Yao is making a contribution towards the recovery of his fixed cost. Hence, Yao's total loss of GH¢2,100 is less than the fixed cost of GH¢9,000.00. *(2 marks)*

SOLUTION 3

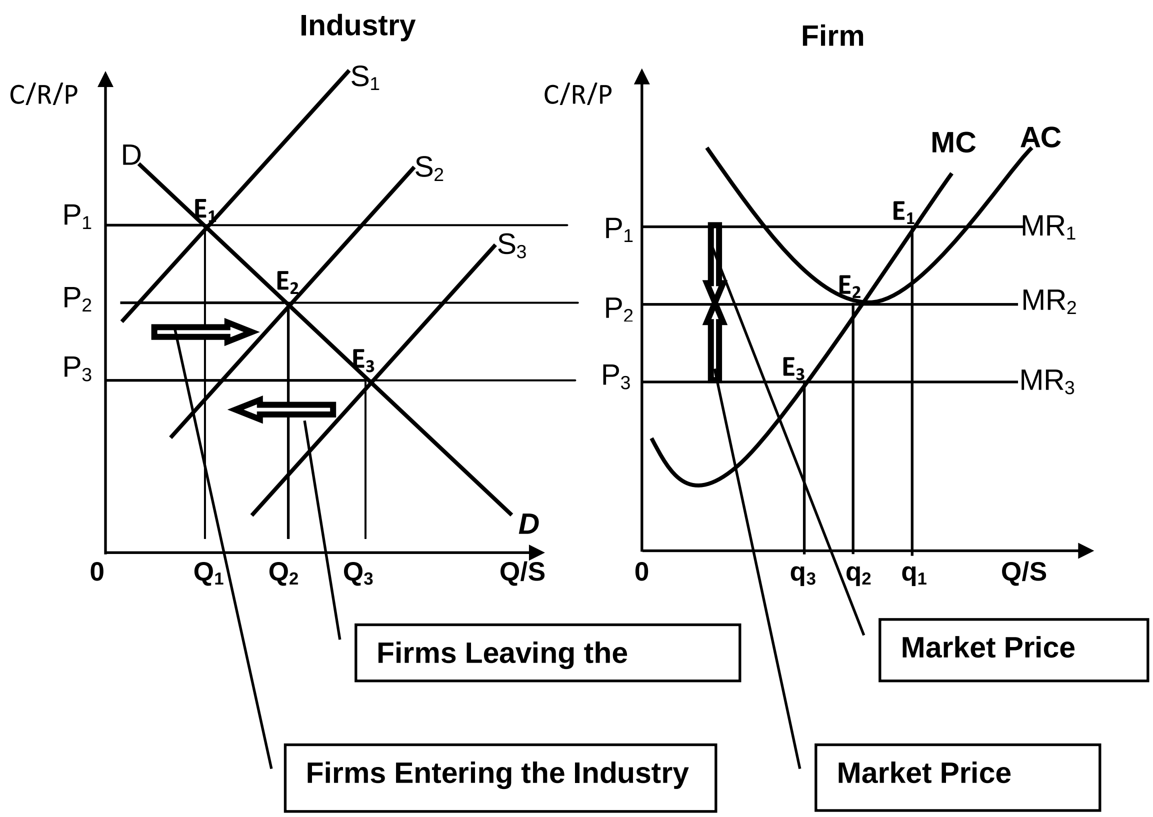
(a) The short-run is a period so short that some inputs in production cannot be varied or are fixed. *(2 marks)*

The long-term is a period long enough for all inputs to be variable. All changes in production can be made in the most economically efficient manner. *(2 marks)*

(b) The market price signals firms whether abnormal profit, normal or loss is made.

The existence of abnormal profit will provide the desire or stimulus for new firms to enter the industry and in a similar way; existing loss will create the incentive for firms to leave. This phenomenon is illustrated in Figure 4 below *(3marks)*

Figure 4: The Adjustment Process towards a Long-run Equilibrium



(Diagram: 7 marks)

In Figure 4, the left panel captures the Industry. The right panel shows the representative firm. At P_1, the representative firm makes abnormal profit, because $P_1 > AC_1$ when q_1 level of output is produced. This incites new firms to enter the industry. The industry supply curve (S_1) shifts rightwards owing to an increase in supply, and the ruling market price falls. *(2 marks)*

At the market price P_3, the representative firm produces q_3 and incurs loss because $P_3 < AC_3$. This causes departure of firms from the industry. The market supply curve shifts leftward from S_3 to S_2 and market price rises from P_3 to P_2. *(2 marks)*

The Long-run equilibrium will occur when there is no incentive for firms to enter or leave the industry. This is shown by Q_2 level of output at price of P_2. At P_2, P = AC, and the representative firm earns normal profit. The industry and representative firm are in long run equilibrium. *(2 marks)*

SOLUTION 5

(a) Nominal national product values each year's output at the market prices (current prices) ruling in that year. The result is referred to as national income or product valued at current prices or money national income or nominal national income. *(2 marks)*

Real national income on the other hand, values each year's output at the set of prices ruling in some particular year called the base year. This is also known as national income at constant prices or real national income. *(2 marks)*

(b) (i) GDP at market prices

	GH¢	
Agriculture	1,151.0	
Industry	1,035.0	
Services	1,170.0	
	3,356.0	*(4 marks)*

(ii) NDP at factor cost
GDP + subsides – indirect tax – depreciation
3,356 + 350 – (390 + 150) = GHS3,266.0 *(4 marks)*

(iii) The output/product approach *(2 marks)*

(iv)

- One problem of the output method is evaluating subsistence production. In Ghana a significant fraction of agriculture in particular is on subsistence basis therefore national income accountants have to guess the volume of subsistence production and impure a value on it.

- Poor record keeping or the complete absence of records on production is another problem. Because people do not keep records of their activities, it is difficult to get output figures from not only agricultural production but the manufacturing as well as other sectors.

- There is also the problem of dividing which activity constitute production and therefore must be included in the estimate. For example while the services of a paid house-help is included in the estimate, the same activity performed by a housewife is not counted.

- Intermediate products must be excluded to avoid double or multiple counting but this is not always easy.

- There is also the problem of estimating depreciation of capital and other fixed assets. Because of technological changes some capital assets may become obsolete earlier than their engineering life span.

(Three points for 2 marks each. Total 6 marks)

SOLUTION 6

(a) (i) Any eight of the sources listed in a (ii) below. *(4 marks)*

(ii)

Direct taxes	Indirect taxes	Non-tax
• Personal income tax PAYE) • Self employed • Companies tax • Gift tax	• Value Added Tax • Petroleum tax • Excise duty • Import duty • Export duty	• Grants • Fees and income • Divestiture and NPART collection • Royalties

(4 marks)

(b) The government budget is in balance when current receipts (taxes on income and expenditure etc.) are equal to current expenditure (payment for goods and services, invest on the national debit etc.) while a budget deficit refers to a situation where current payments exceed current receipts. *(3 marks)*

a. (i) Government can finance the budget deficit by borrowing from the public. This it can do by selling treasury bills and other government bonds.

(ii) Government may also finance the budget deficit by borrowing from the central bank.

(iii) Government can also borrow from the international financial market. This has the tendency of increasing the national debt.

(iv) The Government may also ask for donor support to bridge the gap between its receipts and payments.

(Three points for 3 marks each. Total 9 marks)

SOLUTION 7

(a) (i) Demand pull inflation is a situation where aggregate demand persistently exceeds aggregate supply at current prices so that prices are being "pulled upwards" by the continuous upward shifts of the aggregate demand curve.

(ii) Cost push inflation is a situation where there is a sustained rise in the general price level as a result of increasing costs of production pushing up the aggregate supply curve continuously.

(b) (i) Causes of demand pull inflation

- Increase in government expenditure not matched by corresponding increase in taxation. If the deficit is financed by borrowing from the banks it means that the additional expenditure is being financed by an increase in the money supply.

- Autonomous investment might increase where there is no corresponding increase in current savings. The additional funds may come from past savings. If there is no corresponding increase in taxation there will be excess demand and an upward pressure on prices.

- Excess demand may arise from an increasing surplus on the balance of payments. If an export surplus is not balanced by increasing taxation or saving, domestic spending would be greater than the value of domestic output at current prices and the price level would be pushed up.

(Two points for 3 marks. Total 6 marks)

(ii) Causes of cost push inflation:

- Trade unions may decide to demand wage increase that is not warranted by increases in their productivity. Since the unions are powerful, employers may give in. this increases the cost of production and to maintain their level of profits businesses would raise their prices.

- Costs of raw materials may also cause the general price level to rise. The increases in crude oil price since the early 1970s caused general price level to rise.

- Natural occurrences such as drought may cause supply to fall.

- Higher indirect taxes

- Removal of subsidies on some vital inputs like fertilizers, chemicals etc. may cause cost of production to increase particularly in food production.

(Two points for 3 marks. Total 6 marks)