SUGGESTED SOLUTIONS

03104 – Management and Business Economics

Certificate in Accounting and Business I Examination
September 2013

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

PAPER 'A'

ANSWERS FOR MULTIPLE CHOICE QUESTIONS

1.	3	11.	2
2.	2	12.	1
3.	3	13.	4
4.	3	14.	3
5.	3	15.	2
6.	2	16.	2
7.	3	17.	4
8.	3	18.	4
9.	3	19.	4
10.	1	20.	3

Answer No. 01

(a) $Q(d) = 200-1.25P$
$Q(s) = -60 + 2P$

At the market Equilibrium Price, Q (d) = Q(s)
Therefore, at the marker equilibrium price, $200 - 1.25P = -60 + 2P$
$2P+1.25P = 200 + 60$
$3.25 P = 260$
Market Equilibrium Price, P = Rs. 80.00

Market Equilibrium quantity, (by substituting the value of P to Q(d) or Q(s) above);
Market Equilibrium quantity, $Q = 200 – 1.25(80.00) =$ 100 Kgs. **(3 marks)**

(b) The custom duty imposed on a kilogram of potatoes = Rs. 16.25

Before the custom duty, $2P(s) = Q + 60$
$P(s) = 0.5Q + 30$

Similarly, $1.25P(d) = 200 - Q$
$P(d) = (200 / 1.25) – (Q / 1.25)$
$P(d) = 160 – 0.8Q$

After the custom duty, $P1(s) = P(s) + \text{Rs. } 16.25$
$P1(s) = (0.5Q + 30) + 16.25$

After the custom duty, at the market equilibrium, P1(s) = P (d)
At that equilibrium, Market Equilibrium quantity, $(0.5 Q + 30) + 16.25 = 160 – 0.8Q$
$0.5Q + 0.8Q = 160 – 30 – 16.25$
$1.3Q = 113.75$
$Q = 113.75 / 1.3 =$ 87.5 Kgs. (Market Equilibrium quantity)

At the market equilibrium point, equilibrium Price (by substituting the new value of Q to P(d) or P1(s):

Market equilibrium price, after custom duty = $(0.5)(87.5) + 30 + 16.25 =$ Rs. 90.00

(3 marks)

(c) **Reasons for fluctuation of vegetable prices.**

Given the market price elasticity of demand is fairly in-elastic in the vegetable market;

(i) Favourable or unfavourable weather conditions that may cause to have a good or bad harvest, as the case may be, resulting seasonal increases of aggregate market supply of vegetables or seasonal decreases in the market supply of vegetables accordingly.

(ii) Heavy rainfalls causing to experience flood situations during harvesting periods causing to have an adverse effect on the overall supply situations and also to the transportation system, resulting an unexpected heavy shortages of vegetables in the market places.

(iii) When certain vegetables fetch good prices in the market, farmers are generally tempted to take individual decisions to go for such vegetables over some other crops at the next season, resulting an increased supply in certain vegetables in the market places over the other vegetables.

(iv) Pests and diseases that affect the cultivation.

(v) Perishable nature of the vegetable produce and the inherent time gap prevailing between the '**production decision making'** and the '**actual production being supplied'** to the market places.

(3 marks)

(d) (i) **Price Mechanism** – The price mechanism refers to the manner in which the market prices of goods and services are determined through the interaction of two market forces, namely, the 'Demand' and 'Supply' or in other words, the two parties, 'Buyers' and 'Sellers / Suppliers'.

(ii) **Advantages of Price Mechanism.**

a. Efficiently allocates resources to produce the right amount of the right kind of products.
i.e. DEMANDERS GET THE MOST FOR THEIR MONEY AND SUPPLIERS GET A GOOD PRICE FOR THEIR PRODUCT.
b. The price mechanism leads to consumer sovereignty, as the consumer needs and preferences would directly make an impact on the market demand and thereby he plays a key role in the determination of the product, its quality, prices etc.
c. The market gives producers an incentive to produce goods that consumers want.
d. The market provides an incentive to acquire useful skills.
e. The price system encourages producers and consumers to conserve scarce resources.
f. The competition pushes businesses to be efficient: keeping costs down and production high.

(iii) **Disadvantages of Price Mechanism.**

a. Some goods would not be produced at all. These goods are usually called public goods. If the price mechanism is allowed to allocate resources, producers will have no incentive to offer a service such as public goods.

b. Some goods would be under-produced. Services such as education and health care are usually classified as merit goods. If the price mechanism was used to determine whether or not these services should be offered, then there would not be a lot of people who would be able to afford for such services. However, that does not indicate that it is still not desired by many people.

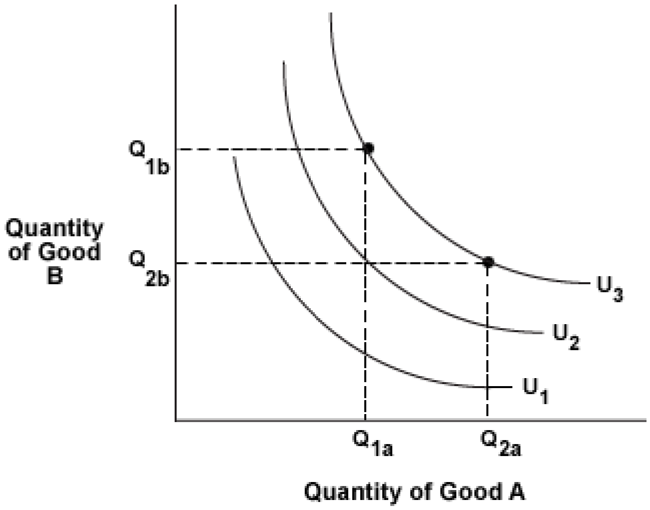
However, only those who can afford the cost of the service will receive it. The good ends up being under-produced.

c. Resources would be less equally distributed. Since only those who are able to earn sufficient income will be able to afford for the goods produced and therefore, those who get sufficient income will always end up having substantially more than those with lesser purchasing power.

(3 marks)
(Total 12 marks)

Answer No. 02

(a) Given below is a diagram depicting three levels of utility (satisfaction) for a consumer faced with various combinations of goods from Good 'A' and 'Good 'B'.



Accordingly, U1, U2 and U3 are depicting different utility (satisfaction) levels and therefore, the utility (satisfaction) the consumer gets with any combination of goods from 'A' and 'B' at any point over the Indifference curve U3 is very much higher than the satisfaction he gets with any combination of goods from A and B at any point over the Indifference curve U1 or U2. In other words, the satisfaction levels he gets at various combinations of goods from A and B at any point over the three curves could be ranked as follows;

Satisfaction level he gains with any combination of A and B at any point of U3 > U2 > U1.

Therefore, if two indifference curves intersect each other that would denote that the satisfaction levels of any combination of goods at any point over the two curves are equal to each other. According to the aforementioned ranking, it would be impossible to happen.

(3 marks)

(b) Indifference curves depict different levels of satisfaction that any consumer would get, if the two goods considered are made available to him for his consumption, in different combinations. Therefore, the said levels of satisfaction would only be gained by him depending on his ability to pay for the two goods considered, at the given market prices. Therefore, the actual consumption would be determined on the basis of the '**budget**' he could set apart for the purchase of the two goods considered. Accordingly, the '**budget**' is the main '**limiting factor'** in this exercise. Therefore, it is called as the '**Budget Constraint'.**

If the prices of the two goods considered, namely, A and B are Rs. 5/= and Rs. 10/= respectively and the total budget available is Rs. 100/=, the consumer would be constrained in acquiring the two goods by his budget of Rs. 100/=. Therefore, he would never be able to acquire any combination of goods from A and B going beyond the said budget constraint.

For example, the combination from two goods, say, 10A + 10B could not be reached by him, as it needs to have a budget of Rs. 150/=. Therefore, in order to determine the actual consumption pattern, it is essential to consider the size of the budget available or the '**Budget constraint'**.

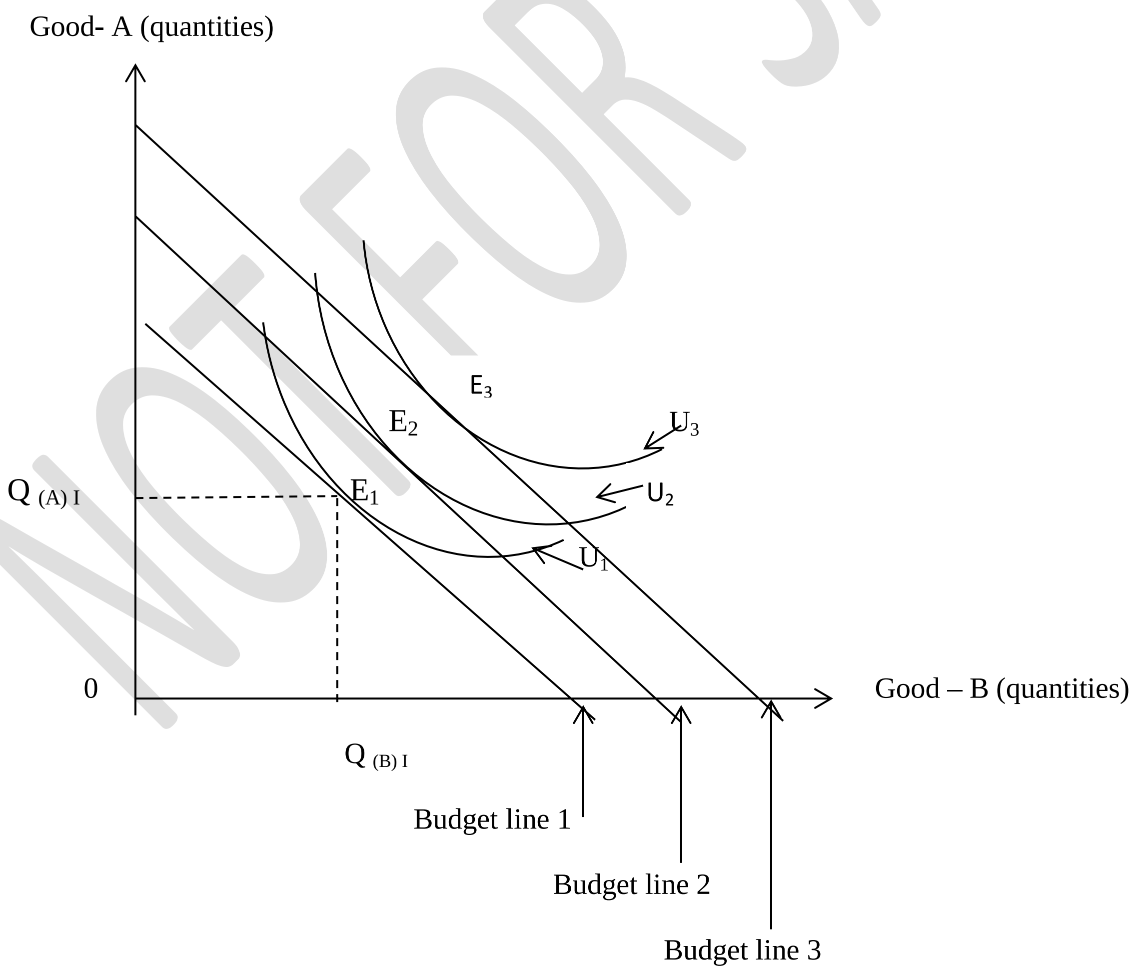
(3 marks)

(c) **The budget constraint** could be depicted in a diagram showing a set of indifferent curves by introducing the '**Budget Line'**. The budget line gives all the possible combinations of the two goods that could be purchased under the prevailing market prices, with the available budget.

Once it is drawn in a diagram, it is shown as a straight line. At the point where this straight line touches any indifference curve, the best possible combination of goods from the two products considered is determined. Therefore, it is the equilibrium point, as the situation would remain unchanged until any change takes place either in the prices of the two goods and / or in the budget available. Therefore, that point where the budget line touches a particular indifference curve would give the best possible consumption level from the two goods for the consumer.

As the level of income of the consumer increases or in other words, the available budget gets increased, the budget line drawn in the diagram would shift to the right and touch a different indifference curve giving higher satisfaction level than the satisfaction level he had gained prior to the increase of his income.

This situation is illustrated in the following diagram.
Where, Budget Line No.1 represents a budget of Rs. 100/=
Budget Line No.2 represents a budget of Rs. 120/=
Budget Line No.3 represents a budget of Rs. 140/=



(where U denotes utility curve and E denotes equilibrium point) **(3 marks)**

(d) (i) **Cross elasticity of Demand**.

In economics, the cross elasticity of demand or **cross-price elasticity of demand** (**CPED**) measures the '**responsiveness of the demand for a good'** to a '**change in the price of another good**'. It is measured as the percentage change in demand for the first good that occurs in response to a percentage change in price of the second good. For example, if, in response to a 10% increase in the price of wheat flour, the demand (quantity) of rice, as a close substitute, increased by 15%, the cross elasticity of demand would be: (15% / 10%)= +1.5.

A positive cross elasticity denotes that the two products are substitutes, while a negative cross elasticity denotes that the two products are complementary products. Unrelated products have a **zero cross elasticity,** for example, the effect of changes in bus fares on the market demand for rice.

(ii) **The importance of the concept of CPED in economic analysis**.

If a business can accurately estimate cross elasticity of demand, then it can evaluate the impact of the pricing strategies of their rivals on their products. Similarly, that information could be used in formulating pricing strategies of complementary products. For example, a firm can formulate pricing strategies, if they have complementary products, in order to increase sales and improve profitability by analyzing the cross elasticity of demand for the relevant products.

It is also useful for government to study the impact of indirect taxes on the complementary and substitute products. For example if government, say, introduces an indirect tax on tobacco, then it can study the price changes on complementary and substitute products and therefore evaluate the effectiveness of indirect taxes to curb tobacco products and reduce health problems.

In addition, it is also useful to classify products in to substitutes and complimentary products so that it can be studied separately.

(3 marks)
(Total 12 marks)

Answer No. 03

(a)

	Perfect Competition.		Monopolistic competition.
	The two market situations have the following similarities.		
1	The number of firms is huge .	1	The number of firms is huge.
2	The freedom of entry and exit of firms is there.	2	The freedom of entry and exit of firms is there.
3	Firms compete with each other.	3	Firms compete with each other.
4	The breakeven point is established where marginal cost and marginal revenue are equated.	4	The breakeven point is established where marginal cost and marginal revenue are equated.
5	Firms can earn super normal or abnormal profits and can also incur short run loses. Whereas in the long run, firms earn only normal profits	5	Firms can earn super normal or abnormal profits and can also incur short run loses. Whereas in the long run, firms earn only normal profits.
	The two market situations have the following dis- similarities.		
1	Each firm produces and sells a standardized product, so that no buyer has any likings for the commodity of any individual seller over others.	1	There is product disparity under monopolistic competition. The commodities may be similar or more likely to each other however they are not identical. They are close substitutes.
2	price is determined by the influences of demand and supply for the entire industry. Every firm has to sell its product at that price. Thus every firm is a price taker and quantity adjuster.	2	Every firm has its own price policy under monopolistic competition. It cannot control more than a diminutive segment in the market.
3	Graphically, the demand curve of a firm is perfectly elastic under perfect competition and the marginal revenue MR curve coincides with it.	3	The demand curve of a firm is elastic and downward inclining under monopolistic competition and its corresponding MR curve lies below it.
4	At the equilibrium under perfect competition MC = MR, price also equals them since price AR = MR.	4	Since the AR curve inclines downward to the left, the MR curve is below it under monopolistic competition. So price, AR > MR = MC
5	There is no problem with regards to selling under perfect competition since products are standardized and hence no selling costs. The firm can sell the ruling market price any quantity of its product.	5	The product is diversified and selling costs are obligatory to promote sales. They are incurred to influence a purchaser to buy one commodity in choice to other.
6	The output of the firm under perfect competition is higher and the price is lower than under monopolistic competition.	6	The output of the firm under monopolistic competition is lesser and price is higher than under perfect competition.

(6 marks)

(b) **Price Discrimination**.

Price discrimination is a **pricing strategy** that charges customers **different prices for the same product or service.** In pure price discrimination, the seller will charge each customer the maximum price that he or she is willing to pay.

Conditions under which Price discrimination can be successfully practiced.

Price discrimination is possible under imperfect competition. The extent of price discrimination practice depends upon the degree of imperfections in the market. That is why, price discrimination is more likely to occur, when there is monopoly of the product by a single firm or when there is agreement among the various firms selling the same product or service.

i. **There must be Monopoly Power.**
For price discrimination to be possible and successful, the producer must control the supply and distribution of the commodity. This is to ensure that the commodity cannot possibly be obtained elsewhere in the same market. If consumers can get the commodity elsewhere, the discrimination cannot be successful.

ii. **No possibility of re-sale**.
It should not be possible for those buying at lower prices to resell to those buying at higher price. If this were the case, those group of buyers at which the discrimination is targeted would get the commodity from those buying at lower prices. This condition is particularly applicable to those services which must be consumed on the spot rather than goods that can be resold. For example, medical services provided by doctors in private practice.

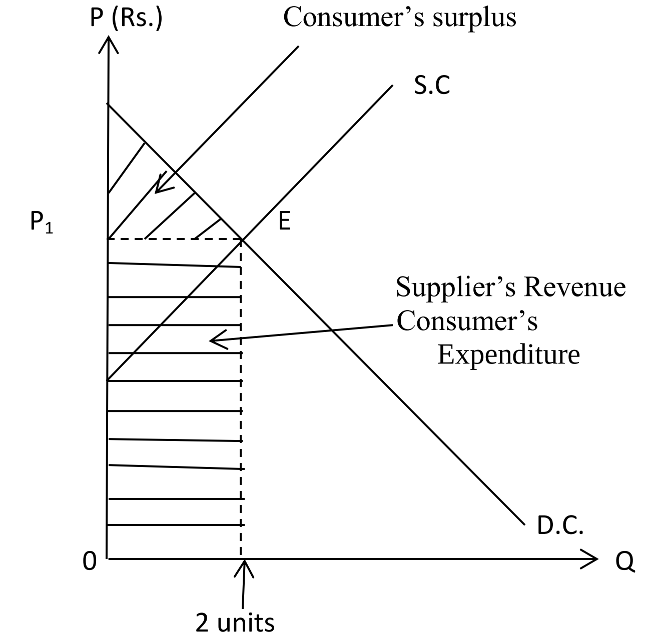
iii. **There must be no leakage of information between the markets.**
For price discrimination to be successful, information must not be leaked to those buying at higher prices that others are buying the same commodity at lower prices. If this should be the case, the consumer paying a higher price would buy the commodity through those paying lower prices or he may refuse to buy the commodity altogether.

iv. **The markets must be separated.**
The markets need to be separated mainly, by differences in income. This would enable the monopolist to sell the same commodity at different prices to consumers in the different markets. Markets can be possibly separated even in the same area so long as differences in income exist. For example expensive doctors in private practice frequently charge lower prices to less well-off patients but charge reasonably high prices to the very rich whose demand for the best medical care is very inelastic. A producer who has a domestic and foreign market can practice price discrimination by selling at different prices in the two markets, separated by distance.

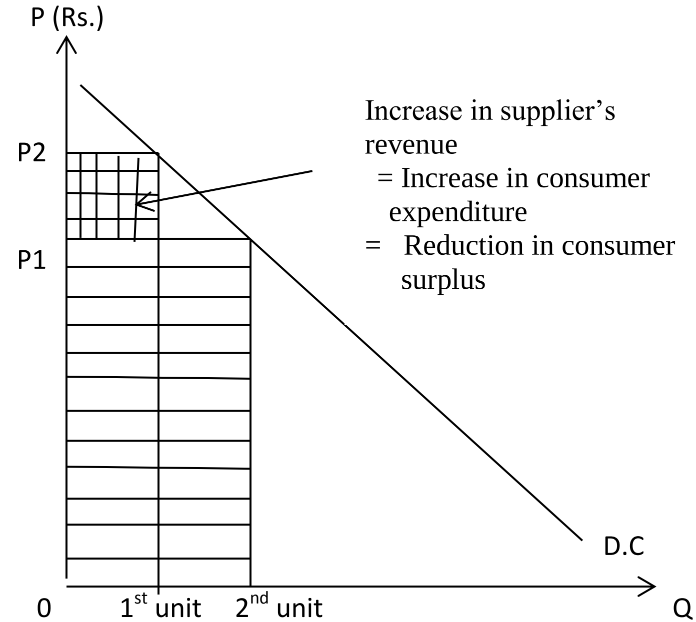
v. **There must be different price elasticity of demand in the different markets.**
Price elasticity of demand in the markets into which the monopolist sells, must be different. i.e. the demand in one market is elastic and the demand in the other market could be comparatively less.

(3 marks)

(c). **Price discrimination and Consumer's surplus**.



Market without price discrimination. Two units sold at the same price.



Two units sold at two different prices.

(3 marks)
(Total 12 marks)

<u>Answer No. 04</u>

(a) Macroeconomic objectives are goals which the government aims to fulfil. These objectives ensure that the economy is in a healthy position. These objectives can be categorized into main two categories, namely,

(i) Growth related objectives. Example: **Economic growth.** By means of higher rate of economic growth the problem of unemployment can also be solved.

(ii) Stability related objectives. Example: Maintain external stability or exchange rate stability and internal stability or control inflation.

(4 marks)

(b)
i. Limit the public sector role to regulatory and supervisory role.
ii. Curtailing wasteful expenditure on unproductive activities and limiting welfare programs to the needy.
iii. Improve productivity through efficiency of the public sector.
iv. Encourage foreign direct investments (FDI) and public – private partnership in major infrastructure development projects.

(3 marks)

(c) Reduction of budget deficit could be achieved in two ways, namely, by reducing government expenditure and increasing the government revenue. By taking these measures, the following macro-economic objectives could be achieved.

(i) Due to the reduction of government borrowings, **the rate of increase in the total volume of public debt would come down**. If the reduction of government expenditure takes place in recurrent expenditure, some more resources could be diverted for capital expenditures.

(ii) New revenue measures e.g. new taxes, and the curtailment of expenditure will result in the **reduction in the aggregate demand in the economy and as a result, inflation would come down.**

(iii) Reduction in the aggregate demand will be reflected in the **reduction in the demand for imports** as well and due to the curtailment of inflation, (i.e. reduction in prices of goods produced) **demand for exports would go up** depending on the price elasticity of demand of goods exported. And as a result, the **balance of payment problem will be eased.**

(iv) Borrowings made by the Government would come down due to the reduced budget deficit and as a result credit available in the economy could be made available for the private sector investments (i.e. reduction in the **crowding out effect**) and that situation in turn would help to create more employment opportunities, increase the availability of goods etc.

(v) Due to the reduction in the government borrowings, pressure on the interest rates would come down and as a result, Treasury bill and Treasury bond rates also would come down, creating a situation to have a low interest regime.

(vi) If the government is to impose **new direct taxes** for collecting more revenue or steps taken to eliminate tax evasion, level of the anomaly in the distribution of the income would be reduced to a certain extent.

(3 marks)

(d) Heavy losses sustained by certain public enterprises, namely, Ceylon Electricity Board, Ceylon Petroleum Corporation etc. (most of them are nationally important PEs meant to provide important utility services), would be a burden on the government budget and as a result, either the budget deficit would go up further or certain important capital expenditure projects will have to be abandoned or postponed, as available resources will have to be diverted to these enterprises for maintaining their uninterrupted services. These steps would no doubt bring about inflationary effects or would pave the way to slow down the economic development.

(2 Marks)
(Total 12 Marks)

Answer No. 05

(a) **Financial Institutions coming under the Financial System in the context given**.

(i) Commercial Banks and
(ii) Other specialized Banks.
(iii) Finance Companies.
(iv) Leasing Companies.

(3 marks)

(b) (i) **Fixed Exchange Rate.**

A country's exchange rate regime under which the Government or Central Bank ties the official exchange rate to another country's currency. E.g. US Dollars. The purpose of a fixed exchange rate system is to maintain a country's currency value within a very narrow band. Also known as pegged exchange rate.

(ii) **Floating Exchange Rate.**

A country's exchange rate regime where its value of currency is set by the foreign-exchange market through supply and demand for that particular currency relative to other currencies. Thus, floating exchange rates change freely and are determined by trading in the forex market.

(2 marks)

(c) (i) **Capital markets** are financial markets for the buying and selling of long-term debt or equity -backed securities. These markets channel the wealth of savers to those who can put it to long-term productive use, such as companies or governments making long-term investments.

(ii). (a) Stocks (Shares).
(b) Debentures.
(c) Bonds. **(2 marks)**

(d) **In a circular flow of income model,** the state of equilibrium is defined as a situation in which there is no tendency for the levels of income (Y) / expenditure (E) / output (O) to change, that is: Y = E = O. A modern monetary economy comprises a network of four sector economy, namely, i. **Household sector**, ii. **Firms or Producing sector**, iii. **Government sector** and iv. **Rest of the world sector**.

In a modern economy with that four sectors, in a circular flow of income model, there take place certain injections and withdrawals as well. A situation, where the **aggregate of injections equals the aggregate of withdrawals,** is considered as an equilibrium situation. In this model with four sectors, injections are Investments (**I**), Government Expenditure (**G**) and Exports (**X**). Withdrawals are Savings (**S**), Taxes (**T**) and Imports (**M**). When the aggregate of the injections equals aggregate of withdrawals, i.e. I+G+X = S+T+M, the said equilibrium point in the circular flow of income reaches.

(3 marks)
(Total 12 marks)

<u>Answer No. 06</u>

(a) i. High employee turnover.
ii. Absenteeism.
iii. Low output.
iv. Lack of punctuality.
v. Tardiness (go slow)
vi. Poor quality of work and waste.
vii. Poor inter-personnel relationships and conflicts.
viii. Industrial unrest / strikes. **(4 marks)**

(b)
i. Physiological needs. E.g. The need for food, clothing, shelter and rest.
ii. Safety needs. E.g. Personnel safety and job safety (job security).
iii. Social needs. E.g. Need for companionship.
iv. Esteem needs. E.g. Need for respect and recognition.
v. Self-actualization. E.g. Sense of self fulfilment.

(4 marks)

(c)
i. **Job enrichment** is defined as a way to motivate employees by **giving them more responsibilities and variety in their jobs**. It is an attempt **to motivate employees** by giving them the opportunity to **use the range of their abilities**. Job enrichment has been described as **'vertical loading'** or **vertical expansion** of a job. It introduces high level motivators into the work such as, job responsibility, recognition, learning, achievement and opportunity for growth**.**

(2 marks)

ii. **Job enlargement** means increasing the scope of a job through extending the range of its job duties and responsibilities generally within the same level and periphery. Job enlargement has been described as **'Horizontal loading'** or **Horizontal expansion** of a job. This contradicts the principles of specialisation and the division of labour whereby work is divided into small units, each of which is performed repetitively by an individual worker and the responsibilities are always clear. With job enlargement, the employee rarely needs to acquire new skills to carry out the additional task, and the motivational benefits of job enrichment are not usually experienced. A typical approach might be to replace assembly lines with modular work; instead of an employee repeating the same step on each product, they perform several tasks on a single item. The continual enlargement of a job over time is also known as **'job creep**,' which can lead to an unmanageable workload.

(4 marks)
(Total 12 marks)

Answer No. 07

(a) **Elements in a Strategic Control System.**

(i) **Determine what to control**. *What are the objectives the organization hopes to accomplish?*
(ii) **Set control standards**. *What are the targets and tolerances?*
(iii) **Measure performance**. *What are the actual standards?*
(iv) **Compare the performance with the standards**. *How well does the actual match the plan?*
(v) **Determine the reasons for the deviations**. *Are the deviations due to internal shortcomings or due to external changes beyond the control of the organization?*
(vi) **Take corrective action**. *Are corrections needed in internal activities to correct organizational shortcomings, or are changes needed in objectives due to external events?*

(4 marks)

(b)

(i) **Supervisory control** deals with behaviour of the supervisor in relation to his subordinates. Control is maintained through supervision of behaviour by someone in authority. The manager's primary function, in his capacity as a supervisor, is to observe another's behaviour (i.e. subordinates) giving direction, guidance and monitoring.

(ii) In the supervisory control environment, there are mainly two parties, namely, the supervisor and subordinates. If the intended supervisory control to be effective, the supervisor needs to have greater knowledge and competence in the tasks performed, awareness, his physical presence, communication skills, and performance evaluation skills. On the other hand, for the exercise to be effective, it requires that the subordinates to recognize and accept this relationship. If the subordinates become more knowledgeable, the supervisory control tends to diminish.

(4 marks)

(c) **Factors considered in designing a Control System.**

(i) The degree of control that is physically possible.
(ii) Cost / Benefit situation. The degree of control one can afford and be cost effective.
(iii) The nature of the people employed for the task. Self-control rather than supervisory control is preferred when people employed are reliable and have reasons to support organizational goals, as people appreciate autonomy. Self-control contributes to personnel growth as well as job satisfaction.
(iv) The impact of the control system. A control system can affect employee job satisfaction, morale, attitudes towards management, loyalty to the organization, etc.
(v) Acceptance by the affected employees regarding the legitimacy of the control system. i.e. (i.) Degree of control, (ii.) Domain of control and (iii.) Manner of control.
(vi) Goal congruence or match between the control system and the organization's goal priorities and values.

(4 marks)
(Total 12 marks)

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