SUGGESTED SOLUTIONS

03104 – Management and Business Economics
Certificate in Accounting and Business I Examination
March 2013

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

PAPER 'A'

ANSWERS FOR MULTIPLE CHOICE QUESTIONS

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

(2)

PAPER 'B'

Answer No. 01

(a) (i) **Comparative advantage -** ability to produce a particular good or service **at a lower 'opportunity' cost over the other.**

(ii) Country X is efficient in manufacturing both products in absolute terms. When the Country Y manufactures 4A, the country X manufactures 20 A. i.e. **5 times of the ability of Y. Similarly**, when the country Y manufactures 2B, the Country X manufactures 4B. i.e **2 times of the ability of Y.**

(iii)

Opportunity Cost. (**O/C**)	Country X		Country Y
O/C of Product **A** in terms of Product **B**	**0.2 B**	<	0.5 B
O/C of Product **B** in terms of Product A	5.0 A	>	**2.0 A**

Accordingly, the Country **X** can manufacture the product **A** at a **lower opportunity cost**, than that of the Country Y. i.e. **0.5 B > 0.2 B**. Therefore, the Country **X** has comparative advantage in the product '**A**'.

(iv) As regards the **Product B**, opportunity cost of the Product B, in terms of product A, in Country **Y** is lower than that of the Country X.
i.e. **2.0 A < 5.0 A**. Therefore, the country Y should produce the product '**B**'.

(v) Assume that both countries are having 2 workers. On that basis, if both countries get involved in the production of both products to be self-sufficient, by allocating resources equally for each product, the total production would be **24A + 6B** as follows.

	Country X	Country Y	Total
Product A.	20 A	4 A	24 A
Product B.	4 B	2 B	6 B

If each country specializes in the product for which it has comparative advantage, the total production would be **40 A + 4B** as follows

	Country X	Country Y	Total
Product A.	40 A	-	40 A
Product B.	-	4 B	4 B

Accordingly, total production of **40 A + 4B is much higher than 24A + 6B**

(b) **Law of Equi Marginal Utility (law of EMU)**

The law of EMU explains us as to the **number of units in various commodities to be purchased** by the consumer by **spending his limited income** to secure the **maximum utility**.

Accordingly, in order to secure the maximum utility, the consumer **will have to equate the marginal utility of a Rupee spent (MUORS) for each product.**

(3)

The marginal utility of a Rupee spent for **each product** is to be calculated by dividing the Marginal Utility of the Product by the Price of the product concerned.

Accordingly, if there are more than two products, maximization of utility is to be made by equating the **MUORS of each product as** follows.

MUORS for Product A= MUORS of product B = MUORS of Product C = …= MUORS of product 'n'.

MU(A) – means Marginal Utility of product 'A'
P(A) - means price of the product 'A'

<u>Or alternatively,</u>

$$\frac{MU(A)}{P(A)} = \frac{MU(B)}{P(B)} = \frac{MU(C)}{P(C)} = ... = \frac{MU(n)}{P(n)}$$

(Total 12 marks)

Answer No. 02

(a). (i) The law of diminishing returns states that in all production processes, **adding more of one factor of production, while holding all others constant** (*'ceteris paribus'*)   the <u>output</u> <u>per</u> <u>unit</u> of the <u>variable</u> factor will eventually, (**at some point**) <u>diminish</u>.

(ii). The **marginal product** is the additional output that can be produced by using one more unit of the input, while other factors are remaining unchanged.

Alternative answer.
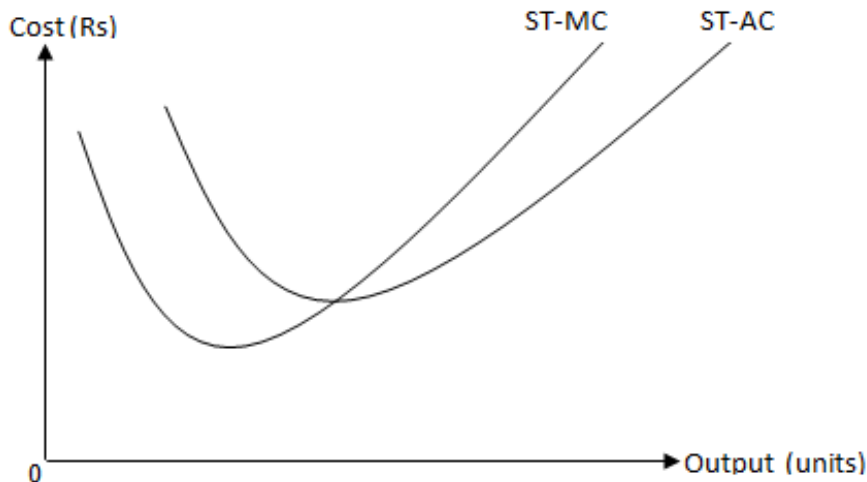The marginal product of a given input can be expressed, as follows..

$$MP = \frac{\Delta Y}{\Delta X}$$ while other factors are remaining unchanged.

Where ΔX is the change in the input (conventionally a one-unit change)   and ΔY is the change in the quantity of output produced.

(iii). In terms of the definition given, under (i) above, up to a certain point, marginal product increases resulting an increase in the total production at a higher proportion and decrease in the '**average cost of production per unit.**' After passing that point, due to the decrease in the marginal product, rate of increase in the total production would gradually come down resulting a gradual increase in the average cost of production per unit.

In the circumstances, '**Average Cost Curve'**   would be a Curve which slopes downward first, towards its right, and after reaching the said turning point, it tends to move upward , showing an increase in AC per unit. i. e. '**U'**   shaped curve.

In keeping with this behavior, the Marginal Cost Curve also takes similar shape, by sloping downward at a faster rate than that of AC Curve until it reaches the corresponding turning point, and thereafter, moves upward at a faster rate than that of AC Curve, resulting the MC Curve crossing the AC Curve at its lowest point.

(**ST-MC = Short term Marginal Cost Curve. ST-AC = Short term Average Cost Curve).**

(b).

Long-Run Equilibrium.	
A Firm in Perfect Competition	A Monopolist.
(i). Determination of Equilibrium Price.	
(a) Equilibrium is reached when Price = AC = MC = MR of the Firm	**(a)** Equilibrium is reached when MC = MR of the Monopolist.
(ii). Determination of Profit.	
(b) The firm does not earn economic profit and earns only normal profit.	(b) The Monopolist earns Economic profit, due to Price > M C and A C
(iii) Allocation efficiency	
(c) **MC = Price**, both parties, suppliers and customers, get exactly what they want. Therefore, allocative efficiency takes place.	**(c) As MC < Price**, the monopolist earns a super normal profit. Therefore, no allocative efficiency is to be witnessed here.
Allocative efficiency occurs, when the value consumers put on the good or service equals the cost of producing the product or service. In other words, when Price = Marginal Cost.	

(c)   (i) Δ Income = Rs. 75,264- Rs. 67,200 = Rs. 8,064

It is as percentage =   (8,064 / 67,200) $\times$100 = 12%

Δ Quantity of demand = 504- 450 = 54. It is as a percentage   = (54 $\div$ 450) $\times$ 100   = 12%

income elasticity of demand for X   is = (% change in Quantity) $\div$ (% change in Income) = 1

(ii)   Any percentage change in income of consumers of this product would create a new demand for this product in the same percentage. E.g. Public / private sector salary increases announced. Accordingly, the manufacturer could make use of such information to increase the production in the same percentage, giving due consideration to other factors to be taken into account.

(Total 12 marks)

Answer No. 03.

(a). (i)   New advanced technology.
    (ii)   Proper training given for workers (quality of labour).
    (iii)   Usage of high quality raw materials.
    (iv)   Proper working environment.

(b) (i).   Income per person in a population.
    Per capita Income is often used to measure a country's standard of living.

    (ii).   It is calculated, having divided the '**Total National Income'** by '**Total Mid-Year Population'**. In place of the '**Total National Income',** GDP or Gross national Income (GNI) may be used.

    (iii).   In order to adjust it for inflation, at the first instance, total impact of the overall price changes that has taken in the economy when compared with a base year is to be removed by adjusting the GDP by applying the **GDP Deflator**.
    (GDP Deflator is an economic measure that tracks the cost of goods produced in an economy relative to the purchasing power of the Currency of that Country).

(c) (i).   **Fiscal policy:** Government **revenue and spending policies** that influence macroeconomic conditions. In other words it is the means by which a government adjusts its levels of spending in order to monitor and influence a nation's economy. The Fiscal policies (coupled with monetary policies) are used in various combinations **in an effort to direct a country's economic goals**.

    (ii).   a.   Taxation.
    b.   Government spending.
    c.   Government Budget Deficit.
    d.   Public Debts. (Borrowings)

    (iii)   a.   Tax system was simplified by abolishing several nuisance taxes and replacing multiple taxes on the same industry in to one single tax. E.g. Introduction of single Rate of VAT of 12%.
    b.   Tax incentives were provided to encourage private investment and to attract foreign direct investments to support high economic growth.
    c.   Tax holidays of 5 years for investments in fishing , production of agricultural seeds, and planting material.
    d.   Three year tax holidays for new undertakings with investment exceeding Rs. 50/- million.
    e.   Seven year tax holidays for new undertakings with investments of more than USD 3 million.
    f.   New depreciation allowances to encourage new investments.

(Total 12 marks)

(a)   (i).   a.   Total value of GDP.
               b.   Employment Indicators.
               c.   The Consumer Price Index.
               d.   The Balance of Payment position.
               e.   Interest Rates

       (ii)   a.   **BOP Problem**.   The country is encountered with a prolonged BOP problem with a shortfall in the Trade Balance (.i .e. Exports – Imports), due to low volume of exports made against the heavy import bill.

               b.   **Volatile Exchange Rate situation.**   This is also related to the BOP problem. The main reason is the heavy demand for foreign currencies due to heavy imports. The volatile high exchange rate situation has affected the economy in a number of ways. High cost of imports.

               c.   **High interest rate structure**.   This situation has affected the new investments in view of high cost of funds and also to the profitability of the existing industries.

               d.   **Heavy Public debt servicing cost**.   Specially, due to high exchange rate in servicing the foreign debts along with local public debts the government is compelled to set apart a major part of the Annual budget for it leaving almost nothing for investment purposes and also compelling to make new borrowings for new investments.

(b)   (i)   a   Make borrowings by issuing Government Securities.
               b.   Make borrowings from international financial markets/ lending institutions.
               c.   Selling of government assets is an alternative method to borrowings.

       (ii)   Certain borrowings made by a government to raise funds in order to finance the deficit would cause to have a secondary effect to expand the money supply. For instance, if a Government resorts to make borrowing from the Banking Sector as against the non - banking sector, due to creation of the money for lending, total money supply would go up resulting an inflationary situation. (Purchasing of Government securities by CBSL is also an expansionary source, as it is similar to printing money).

       (iii)   Some methods of financing the deficit   E.g. make borrowings from the general public or from captive sources like Employees Provident Fund, ETF, by issuing Government securities, are considered as non-expansionary sources of financing. It is because, such financing methods would not cause to increase the money supply, not like in the case of expansionary sources as explained above.   The main advantage is the non-existence of the inflationary effect.

(c).   VAT is a '**consumption tax'** which is **levied at each stage based on the value added** to the product **at each stage**. The **'Value Added'** is the difference between the 'sales price of the product' and the 'cost of material and other inputs' included in the product.   It is considered as an Indirect tax, as the ultimate tax payer is not the manufacturer who sells the product. It is the consumer who bears the full burden of the tax, as it is transferred by the manufacturer to the consumer.

                                                                                        (**Total 12 Marks**)

Answer No. 05

(a)   Supply-side economics, is an economic theory whereby government policies intentionally stimulate the economy by creating incentives for businesses to produce more goods and services.

Accordingly, inflation can be controlled by stimulating the aggregate supply. E.g. Infrastructure development by the Govt., offer Tax holidays to investors in certain fields, training Grants given by BOI to business firms to enhance the productivity.

(b)   Economic development can be referred to as the **quantitative and qualitative changes** in the economy. It promotes the **standard of living and economic health.** It refers to the adoption of **new technologies, transition from agriculture-based to industry-based** economy.

Economic development differs from economic growth.
Economic growth is a phenomenon of productivity and rise in GDP etc. Consequently, as economists point out: "economic growth is one aspect of the process of economic development".
Economic growth is sustained increase in the real GNP or an increase in per capita real GNP.

(c)   (i)   Increase the availability of labour in quantitative and qualitative terms.
(ii)   Investment in physical capital, e.g. in plant and machinery to enhance the productivity.
(iii)   Investment in social capital, e.g. improvements made in infrastructure facilities.
(v)   Technological advancement.
(vi)   Better management practices to achieve optimum production, productivity, minimize wastages etc.
(vii)   Investor friendly Government policies. E.g. lover taxation rates, lower interest rates, suitable subsidy policies etc.
(viii)   Conducive external economic environment. E.g. Recovery from global recession.

(d)   (i)   Progressive taxation **reduces absolute income inequality**. E.g. Higher taxes for high income earners.
(ii)   By spending such revenue for the betterment of lower income earners, it permits **to re-distributes   wealth** from the rich to poor. .i.e. for the Social justice.
(iii)   It can **change the pattern of consumption** in the economy. E.g. High sales taxes on luxury goods.
(iv)   As direct taxes cannot be shifted to others, direct taxes are **less inflationary than indirect taxes**.

(e)   (i)   In the context, Govt. debt sustainability means the existence of the total stock of public debt at a manageable level, from the point of servicing the debts at their maturity. Higher the total sum to be set apart for servicing of public debts, the residual of total govt. revenue available for other expenditure purposes would be very low. Such situation would badly affect the expenditure program, especially for capital expenditure. Then, it would be compelled to make more borrowings to service debts while maintaining other expenditures.

(ii)   As stated above, higher the debt ratio in terms of GDP, higher the burden in servicing the cost, in terms of GDP as well. Therefore, this ratio provides a guidance to maintain the total debt stock at an optimum level.

(Total 12 marks)

Answer No. 06

(a)   Environmental analysis is the study of the **organizational environment** to pinpoint **interna**l and **externa**l environmental factors that can significantly **influence organizational operations**.

        E.g. (i)   Global economic situation. Economic recession would badly affect the tourism industry.
            (ii)   International competition.
            (iii)   Government's tourism promotion strategy.
            (iv)   Political stability in the country and the law and order situation in the country.
            (v)   Infar structure facilities in the country.
            (vi)   The nature of the existing regulatory framework.

(b)   (i)   The organizational mission and goals provide **a clear direction** to the organization as to what is to be achieved.

        (ii)   It provides Top management a rational basis to evaluate competing demands and scarce corporate resources and to make **rational allocation of resources** among the different divisions and departments.

        (iii) It helps the organization to set up control standards against which **performance could be evaluated**.

        (iv) It emphasizes the need to achieve harmony between higher and lower level goals. i.e. **Goal Congruence.**

        (v)   It compels a firm to do an appraisal of **environmental challenges** as well as its own capabilities. It enables a firm to adopt **proactive** rather than reactive stance.

(c)   Narrow span of control: Narrow Span of control means a single manager or supervisor oversees few subordinates. This gives rise to a tall organizational structure.

        (i)   Close supervision and better control
        (ii)   Better coordination of subordinate's activity.
        (iii) Managers are not overburdened with too many problems.
        (iv) Faster information flow and communication for decision making.

(d)   'Efficiency' refers to doing things at minimum cost and minimum times.

"Effectiveness" refers to the degree of achievement of organizational goals.

E.g. Producing a higher number of units of a product within a given period of time leads to minimizes the per unit cost i.e. production had been carried out very efficiently. However, it was found later that some of the goods produced were not up to the marketable standards, and therefore, production process was not that effective.

                                                     (**Total 12 marks**)

Answer No. 07

(a)   Ethical behavior in senior management can have a **positive effect** on the organization as a whole. It **encourages subordinate employees also to behave ethically** and report any suspected wrongdoing to their manager. This open **and communicative environment allows managers to resolve smaller company problems before they become larger ones.**

(b)

        (i)   **Line Structure** (decision-makers interact directly with their staff, and decisions are implemented quickly).

        (ii)   **Line and Staff Structure** (Line and staff organizational structures are more centralized. Managers of line and staff have authority over their subordinates, but staff managers have no authority over line managers and their subordinates**.**

        (iii)   **Functional Structure ,** for example, placing employees displaying excellent interpersonal skills in a customer service department.

        (iv)   **Geographic Structure -** Large organizations have offices at different place

        (v)   **Bureaucratic Organizational Structures,** where decision-making is implemented from the top-down.

        (vi)   **Network Organizational Structures -** Network structures are concerned with outsourcing jobs, tasks and/or activities to outside entities to better achieve their goals; reduce operating costs

        (vii)   **Matrix Organizational Structures -** A combination of functional and line organizational structures.

(c)   'Line Function' refers to the main function of the Bank, i.e. Banking and related Functions. e.g. Accepting Deposits, Giving Loans and other Credit facilities, Opening LCC etc.

    'Staff function' refers to all other specialized functions provided for smooth functioning of the Bank i.e. Functions related to Financial and Accounting Services, IT services etc.

(d)   (i)   Most people **do not** inherently dislike work. Work can be as natural as play and rest.

        (ii)   People will exercise self-direction and self-control to reach goals to which they are committed.

        (iii)   Commitment to goals is a function of the rewards available, particularly rewards that satisfies that satisfy the esteem needs.

        (iv)   When conditions are favorable the average person learns not only to accept but also to seek responsibility.

        (v)   Many people have the capacity to exercise the high degree of creativity and innovation in solving organizational problems.

        (vi)   Intellectual potentials of most individuals is only partially utilized in most organizations.

(**Total 12 marks)**

Notice of Disclaimer