



**Department of Examinations - Sri Lanka**  
**G.C.E. (A/L) Examination - 2018**

**21 - Economics**  
**Marking Scheme**

Economic reforms have become an urgent need for  
Sri Lanka



The complex institutional framework within Sri Lanka's public sector, which lacks coordination and capacity, and is worryingly bloated.

This has been prepared for the use of marking examiners. Some changes would be made according to the views presented at the Chief Examiners' meeting



**ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව**  
இலங்கைப் பரீட்சைத் திணைக்களம்

**අ.පො.ස. (උ.පෙළ) විභාගය/ க.பொ.த. (உ.யர் தர)ப் பரீட்சை - 2018**

විෂය අංකය  
பாட இலக்கம்

21

විෂය  
பாடம்

ECONOMICS

**ලකුණු දීමේ පටිපාටිය/புள்ளி வழங்கும் திட்டம்**

**I පත්‍රය/பத்திரம் I**

ප්‍රශ්න අංකය வினா இல.	පිළිතුරු අංකය விடை இல.	ප්‍රශ්න අංකය வினா இல.	පිළිතුරු අංකය விடை இல.	ප්‍රශ්න අංකය வினா இல.	පිළිතුරු අංකය விடை இல.	ප්‍රශ්න අංකය வினா இல.	පිළිතුරු අංකය விடை இல.	ප්‍රශ්න අංකය வினா இல.	පිළිතුරු අංකය விடை இல.
01.	4	11.	3	21.	3	31.	1	41.	3
02.	5	12.	2	22.	3	32.	4	42.	2
03.	3	13.	3	23.	1	33.	2	43.	1
04.	1	14.	3	24.	2	34.	5	44.	4
05.	4	15.	4	25.	1	35.	2	45.	2
06.	5	16.	3	26.	4	36.	5	46.	3
07.	4	17.	2	27.	1	37.	2	47.	3
08.	5	18.	1	28.	2	38.	1	48.	2
09.	3	19.	5	29.	4	39.	5	49.	5
10.	5	20.	1	30.	1	40.	2	50.	2

❖ විශේෂ උපදෙස්/ விசேட அறிவுறுத்தல் :

එක් පිළිතුරකට/ ஒரு சரியான விடைக்கு 02 ලකුණු දීමට/புள்ளி வீதம்

මුළු ලකුණු/மொத்தப் புள்ளிகள் 2 x 50 = 100

මෙය සියලුම අයිතිවාසිකම් (Copyright) ප්‍රතිපාදිතය. (All Rights Reserved)

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 Department of Examinations, Sri Lanka  
 ශ්‍රී ලංකා විශ්ව විද්‍යාලීය පරීක්ෂණ දෙපාර්තමේන්තුව  
 Department of Examinations, Sri Lanka  
 අධ්‍යයන මට්ටම: අධ්‍යයන මට්ටම (පොදු මට්ටම) පරීක්ෂණ, 2018 අගෝස්තු  
 අංශය: பொதுக் கல்வியைப் பரீட்சை (அடி நிலைப் பரீட்சை) 2018 ஓகஸ்ட்  
 General Certificate of Education (Adv. Level) Examination, August 2018

අංකිත විද්‍යාව II  
 பொருளியல் II  
 Economics II

21 E II

07.08.2018 / 1300 - 1610

විෂය කාලය  
 மூன்று மணித்தியாலம்  
 Three hours

අමතර කියවීමේ කාලය - මිනිත්තු 10 යි  
 மேலதிக வாசிப்பு நேரம் - 10 நிமிடங்கள்  
 Additional Reading Time - 10 minutes

Use additional reading time to go through the question paper, select the questions and decide on the questions that you give priority in answering.

#### Instructions:

- \* Answer five questions only, selecting minimum of two questions from Sub-section 'A' and two questions from Sub section 'B'
- \* Graph papers will be provided.

01

#### Sub section 'A'

(Select minimum of two questions from this section)

- (i) What distinguishes entrepreneurship from labour as a factor of production? (04 marks)
- (ii) Explain "The Law of Increasing Opportunity Cost". What causes opportunity costs to increase? (04 marks)
- (iii) List the three fundamental questions any economic system must answer and outline briefly the three basic economic systems that have evolved to answer these questions. (04 marks)
- (iv) Using production possibilities curves, explain separately the impact on the economy of the rise in the unemployment rate and an increase in the working-age population. (04 marks)
- (v) "If you are not charged a price for the consumption of a good, that good must be a free good". Do you agree with this statement? Explain your answer. (04 marks)

- (i) - Entrepreneurship refers to the particular talent some people have for organizing the resources of land, labour, and capital to produce goods and services. (01 mark)

- Labour refers to physical and mental effort of people that could be used in the production of goods and services. (01 mark)

- Reward for entrepreneurship is called profits or dividends. Reward of labour is called salary or wage.

- The entrepreneur is an innovator who attempts to introduce on a commercial basis new products, new productive techniques, or even new forms of business organization. A labourer is not a person who is involved in introducing innovations on commercial basis.

- Entrepreneurs are risk bearers and they thrive on risk. On the other hand, workers avoid risk.

- The entrepreneurs make basic business policy decisions, that is those non-routine decisions which set the course of a business enterprise. Entrepreneurs hire labour to carry out their decisions.

**(01 mark each for any two differences Total 02 mark;)**

- (ii) - On the production possibilities curve, when you increase the production of one good by equal quantities, the quantity of the other good that you have to sacrifice (opportunity cost) will increase gradually.

**(02 marks)**

**[ An alternative answer: When all available resources have been fully utilized, the increase in the production of one good results in an increase in its opportunity cost or the quantity of other good that has to be sacrificed.]**

- There are three causes for increasing opportunity cost.

Resources are not homogeneous. Therefore, one type of resource is not perfectly substitutable to another.

Techniques of production used to produce different goods and services are different.

- A resource that is more appropriate to produce a particular good or service is not so appropriate to produce another good or service.

**(01 mark each for any two causes)**

- (iii) - What goods and services are to be produced and in what quantities? ( or What to produce?)

- By what method is the nation's output of goods and services to be produced? (or How to produce it?)

- For whom is output produced? (or who gets it?)

**(01 mark for the three fundamental questions)**

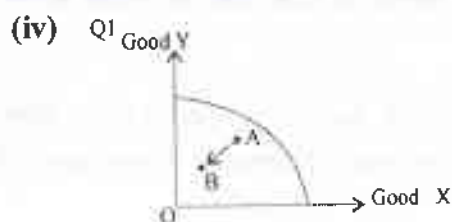
- Three basic economic systems:

- Market system **(01 mark)**

- Command system **(01 mark)**

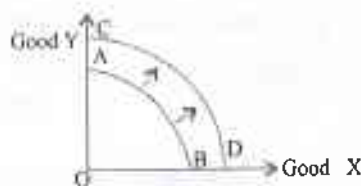
- Traditional system **(01 mark)**

**(No marks are given to identifying economic systems as 'capitalist system' and 'Socialist system').**



When the rate of unemployment rises, utilization of available resources in the economy further contracts. Therefore, the actual output should shift to the left or below point A as shown in the diagram. Point A should be inside the PPC.

**01 mark for the correct diagram and  
01 mark for the correct explanation)**



When the working-age population in the economy increases, the size of the resource endowment of the economy expands. As a result, the production capacity or the potential output of the economy increases. This can be shown in the diagram by shifting the PPC to the right. (From AB to CD)

**01 mark for the correct diagram and  
01 mark for the correct explanation)**

- (V) - A good that is not scarce is called a **free good**. If a good is free, it is available in sufficient abundance that it fills all our wants. Therefore, a free good is one that can be acquired without sacrifice, without giving something up.

**(02 marks for the definition of free goods)**

- Whether a good is charged a price or given it free of charge is not the criterion to determine the scarcity of goods. For reasons such as improving social welfare or business promotions, some economic goods and services may be given to public free of charge. Their production requires scarce resources which have alternative uses. Therefore, they are not free goods. Their production involves opportunity cost.

**(02 marks for the explanation)**

02

2. (i) Distinguish between individual demand curve and market demand curve. (02 marks)
- (ii) "A Giffen good is an inferior good, but an inferior good is not necessarily a Giffen good". Explain. (04 marks)
- (iii) What is meant by price elasticity of demand? (02 marks)
- (iv) Consider that farmers who cultivate pumpkins in a certain country are having a hard time making a living selling pumpkins. The current demand and supply conditions in the pumpkin market are given by the equations below
- Demand ( $Q_D$ ) =  $350 - 10P$       Supply ( $Q_S$ ) =  $-40 + 5P$
- P is price in Rupees per kg. and Q is quantity in metric tons.
- (a) What are the market equilibrium price and quantity? (02 marks)
- (b) Suppose the government decides to help farmers by implementing a deficiency payment scheme. Under this scheme, the government will guarantee farmers that they will receive Rs. 30 per kilogram of pumpkin, and just asks that they sell all of the pumpkins they produce at whatever price they can get it from the market. How much pumpkins will the farmers supply to the market now? (02 marks)
- (c) What price do farmers need to charge in order to sell the entire supply? (02 marks)
- (d) How much will farmers receive from the government as deficiency payment? (02 marks)
- (e) Calculate the consumer surplus and producer surplus after the introduction of deficiency payment scheme. (04 marks)

2. (i) - Individual demand curve is a simple graph showing the various amounts of a product an individual consumer is willing and able to purchase at each price in a series of possible prices during a specified period of time, all other things remain unchanged.

(01 mark)

- Market demand curve is a graph showing the total quantities of a product all consumers are willing and able to purchase at each price during a specified period of time, all other things remain unchanged.

(01 mark)

[Alternative answer: The market demand curve is the horizontal sum of the individual demand curves and is formed by adding the quantities demanded by each individual at each price.]

- (ii) - The effect of a change in price of an inferior good is different. For an inferior good, the income effect is negative. Thus for an inferior good, a lower price does not always lead to an increase in the quantity demanded.

- The lower price has a substitution effect that always increases quantity demanded. This substitution effect is offset to some degree by the negative

income effect. The final result depends on the relative strengths of the two effects.

- Thus, for some inferior goods, the negative income effect only partially offsets the substitution effect, and therefore, quantity demanded increases as a result of the price decrease, though not as much as for a normal good. This is the typical pattern for inferior goods, and it too leads to negatively sloped demand curves.
- When the negative income effect actually over weighs the substitution effect, and thus leads to a positively sloped demand curve. This is the case of Giffen goods. For this to happen, the good must be inferior. But that is not enough; the change in price must have a negative income effect strong enough to more than offset the substitution effect. Therefore all inferior goods are not Giffen goods.

**(01 mark for each step and total marks 04)**

- (iii) - Price elasticity of demand is the measure of the responsiveness of the quantity demanded of a good to changes in its own price.

- It is calculated by dividing the percentage change in quantity demanded by the percentage change in price which brought it about. It is defined by the following formula:

$$\text{Price Elasticity of Demand} = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}}$$

**(01 mark for the definition and 01 mark for the formula or method of calculation; total marks 02)**

- (iv) - (a) Market equilibrium price and quantity:

$$\begin{aligned} Q_D &= Q_S; & 350 - 10P &= -40 + 5P \\ 390 &= 15P \\ P &= \text{Rs. 26 per} & & \text{(01 mark)} \\ Q_D &= 350 - 10(26) \\ Q_D &= 350 - 260 \\ Q_D &= 90 \text{ metric tons} & & \text{(01 mark)} \end{aligned}$$

- (b) - At the price of Rs. 30 per kg, market supply will be:

$$\begin{aligned} Q_S &= -40 + 5P \\ Q_S &= -40 + 5(30) \\ Q_S &= -40 + 150 = 110 \text{ metric tons} & & \text{(02 marks)} \end{aligned}$$

- (c) - Price to be charged in order to sell the total farm supply:

$$Q_d = 350 - 10P$$

$$Q_d = 110$$

$$\text{Therefore: } 110 = 350 - 10P$$

$$10P = 350 - 110$$

$$10P = 240$$

$$P = \text{Rs. 24 per kg.} \quad (02 \text{ marks})$$

- (d) - The amount of the deficiency payment received by the farmers from the government:

Deficiency payment per kg. =

Guaranteed price (Rs. 30 per kg.) – Market price (Rs. 24 per kg.) = Rs. 6 per kg

Total deficiency payment = Rs. 6 per kg. x (110 metric tons)

$$= 6 \times 110,000 = 660,000$$

$$= \text{Rs. 660,000} \quad (02 \text{ marks})$$

[Alternative answer: 660]

- (e) - Consumer surplus and Producer surplus after the deficiency payment scheme:

Consumer surplus =

Maximum demand price – market price x (Quantity purchased) ÷ 2

$$35 - 24 \times (110,000) \div 2$$

$$= 1210,000 \div 2 = 605,000$$

$$\text{Rs. 605,000} \quad (02 \text{ marks})$$

[Alternative answer: 605]

Price received by the farmer – Minimum supply price x (Quantity sold)

Producer surplus = \_\_\_\_\_

2

$$\text{Producer surplus} = \frac{30 - 8 (110,000)}{2} = \frac{22 \times 110,000}{2} = 1210,000$$

Rs. 1210,000

(02 marks)

[Alternative answer: 1210]

03

3. (i) State whether the following statements are true or false and give reasons for your answer.
- (a) Total product starts falling when diminishing returns set in.
  - (b) Property taxes, building insurance payments and amortization payments are fixed costs.
  - (c) Diminishing returns and decreasing returns to scale are different ways of saying the same thing.
  - (d) If marginal cost is above the average variable cost, marginal cost must be falling. (08 marks)
- (ii) Explain, using **two** examples, what is meant by 'barriers to entry' to an industry. (04 marks)
- (iii) What is the connection between the supply curve and its marginal cost curve of a perfectly competitive firm? (04 marks)
- (iv) Distinguish between economic rent and transfer earning. (04 marks)

3. (i) (a) - False : When diminishing returns set in, total product (TP) tends to rise at a decreasing rate. The slope of the TP curve is positive but its value diminishes.
- (b) - True: These costs do not vary with the level of output in the short run. They are unavoidable because they are incurred whether or not the plant is operating.
- (c) - False: They are two different events. Diminishing returns occur in the short run when increasing quantities of a variable factor are used, in combination with a fixed factor. Returns to scale occur in the long run when all factors of production are varied. Then scale changes but factor proportions are held constant.
- (d) - False: When the marginal cost is above the average variable cost, marginal must be rising. If marginal cost is rising then average variable cost must also be rising.

**(02 marks each; no marks are given for mentioning merely 'true' or 'false' without explanation.)**

- (ii) - The term 'barriers to entry' refers to hindrances that an individual or a firm may face while trying to gain entrance into a profession or trade or an industry. Barriers to entry restrict competition in an industry.
- Barriers can be many types: artificial or natural, legal, locational, or related to cost conditions. They are of immense importance in deciding the long-run competitiveness of different industries.

**(02 marks)**

Two examples:

- Economies of scale
- Natural monopolies - Public utilities
- Legal barriers: Patents, Licenses
- Ownership or controlling of essential raw materials

(01 mark each for two examples; total marks 02)

- (iii) - A firm's supply curve shows the desired level of output that the firm is willing to supply at different prices in the market. A profit maximizing firm under conditions of perfect competition, supplies the output which equates marginal cost to price. This follows that the marginal cost curve of a perfectly competitive firm is that firm's supply curve.

(02 marks)

- The firm's supply curve is made up of its marginal cost curve at all points above the average variable cost curve and the vertical axis at all prices below that cost.

(02 marks)

**[Alternative answer:**

Perfectly competitive firm's supply curve is its marginal cost curve for those level of output for which marginal cost is above average variable cost.]

- (iv) - Transfer earnings represent the amount that a unit of a factor must earn in order to prevent it from transferring to another use. Transfer earnings are essentially the opportunity cost of employing a factor in its present use. They are the minimum necessary to retain it.

(02 marks)

- Economic rent is the excess over transfer earnings that a factor receives.

(02 marks)

(Diagrams are not necessary to answer this question)

**04**

4. (i) State whether the following items are included or excluded in the measurement of current year's GDP in a country and explain your answer in each case.

- (a) A housewife grows vegetables in her home garden during the current year and the entire harvest is used for home consumption.
- (b) A retired worker receives a pension payment from the government.
- (c) A motor vehicle dealer earns a commission for selling a second-hand car.
- (d) A mother helps her daughter to learn a lesson in mathematics at home.

(04 marks)

(ii) Assume you have been given the following data for a hypothetical economy.

Item	Value (Rs. Million)
Gross Domestic Fixed Capital Formation	800
Private Consumption Expenditure	3 000
Net Primary Incomes from abroad	100
Government purchases	900
Changes in stocks	-50
Exports	450
Imports	600
Net Taxes on production	150

Calculate the GDP at market price.

(04 marks)

(iii) What are the limitations of GDP as a measure of people's living standards of an economy?

(04 marks)

(iv) Explain the following terms:

- (a) Value added
- (b) Inventory investment
- (c) GDP deflator
- (d) Non-produced non-financial assets

(08 marks)

4. (i) (a) - Included: All goods produced by households are within the production boundary.

(b) - Excluded: Retired worker is not in the current labour force and the productive value of his past service cannot be included in current year's GDP.

Further, the pension payment is a transfer payment which does not represent a factor income. Therefore, it is not included either in GDP or GNI.

(c) - Included: The commission earned by a second-hand car dealer represents a payment for a productive service - trade. Value addition in trade is counted in GDP.

(d) - Excluded: The production of services by members of the household for their own final consumption is excluded from measured production in national accounts.

(01 mark each and total marks 04)

(ii) - GDP at market price: (Expenditure Approach)

$$GDP = C + I + G + X - M$$

$$= 3000 + 800 + (-50) + 900 + 450 - 600$$

$$= \text{Rs. 4,500 million}$$

(01 mark)

(03 marks)

- (iii) - Limitations of GDP as a measure of living standards: GDP is a measure of physical volume of goods and services produced within the country and it does not cover the qualitative changes (i.e. peaceful environment, freedom of expression, good governance, freedom of choice etc.) in the society which are relevant to the living standards of people.

GDP per capita may not correctly measure even the actual physical production of goods and services because of the prevalence of informal economic activities in many countries. Estimated GDP data could be an undervalued figure due to absence of correct information on the informal sector.

GDP ignores distribution of income. GDP statistics mask income inequalities within countries.

Gross domestic product and its related concepts (such as real GDP, per capita GDP, and per capita real GDP) are incomplete measures of a country's standard of living. There are many productive activities that are not included in GDP. For example, do-it-yourself home production such as painting, house work and gardening are not included.

Production in the unobserved economy (for example, the production of illegal drugs) is not included in GDP due to non-availability of accurate data.

GDP does not consider how output contributes to the quality of people's lives. It simply measures how much output a country produces. For example, people who live in urban areas spend a portion of their incomes on products to help them cope with urban problems. For example, urban residents buy more alarm systems for their homes and cars, self-defense classes, and stress medication.

GDP does not measure the quality of the environment. A country might be able to increase its output (and GDP) if it eases pollution regulations. Yet, having higher per capita real GDP might not mean people have a better quality of life if the air, water, and other resources are more polluted.

- GDP does not consider how leisure contributes to the quality of life. A country could increase its output (and GDP) if its people worked 12 hours per day, seven days per week. However, having more products might not mean people are better off if they have no leisure time to enjoy it.
- GDP counts "bads" as well as "goods." When an earthquake hits and requires rebuilding, GDP increases. When someone gets sick and money is spent on their care, it's counted as part of GDP. But nobody would argue that we're better off because of a destructive earthquake or people getting sick.
- GDP statistics fail to fully capture the benefits of technology. Think of a free app on your phone that you rely upon for traffic updates, directions, the weather, instantaneous information and so on. Because it's free, there's no way to use prices -- our willingness to pay for the good -- as a measure of how much we value it.

**(01 mark each and total marks 04)**

- (iv) - Value added is the output of the firm minus all inputs that it buys from other firms. It is thus the amount added to the value of the product in question by the firm's own activities. The sum of the values added by all the firms in the economy is the nation's total output, its national product.

**(02 marks)**

- Inventory investments are additions to stocks of raw materials, semi-finished goods, and finished goods held by the firm.
- The level of inventory investment by a firm will depend upon its forecasts about future demand and its resulting output plans. Inventory investment tends to be closely related to changes in production. Higher levels of output require more inventory investment in order to maintain the production process smoothly.

**(02 marks)**

- GDP deflator is a measure of the level of prices of all final goods and services produced in the economy. GDP deflator measures the ratio of nominal (or current prices) GDP to the real (constant prices) GDP.

$$\text{GDP deflator} = \frac{\text{Nominal GDP (GDP at current prices)}}{\text{Real GDP (GDP at constant prices)}} \times 100$$

**(02 marks)**

- In national accounts, non-financial non-produced assets consist of assets that have not been produced within the production boundary, and that may be used in the production of goods and services.
- This is a component of Gross Domestic Capital Formation
- Non-financial non-produced assets consists of natural resources (e.g. land, mineral and energy reserves, non-cultivated biological resources such as virgin forest, water resources, radio spectra and others), contracts, leases and licences as well as goodwill and marketing assets.

(02 marks)

05

5. (i) Distinguish between induced consumption and autonomous consumption. (04 marks)
- (ii) Consider the following macroeconomic data for an economy.
- $$C = 60 + 0.8 Y_D \quad I = 100 \quad G = 200 \quad T = 150 \quad Tr = 75$$
- $Y_D$  = Disposable National Income       $C$  = Consumption  
 $I$  = Investment       $G$  = Government purchases  
 $T$  = Taxes       $Tr$  = Transfers
- (a) What is the savings function of this economy? (02 marks)
- (b) When  $Y_D = 500$ , calculate the average propensity to consume and average propensity to save? (04 marks)
- (c) What is the equilibrium level of National Income? (04 marks)
- (d) What is the value of the investment multiplier? (02 marks)
- (iii) Assume in a hypothetical economy that government purchases (G) are Rs. 400 billion, taxes (T) are Rs. 300 billion, private savings (S) are Rs. 200 billion and private investment (I) is Rs. 250 billion.
- What is the value of net exports of this economy? (04 marks)

5. (i) - The level of consumption that does not depend on the level of income is called autonomous consumption. This indicates the minimum amount of consumption expenditure an individual requires to sustain life. Even his current income is zero, he has to consume this minimum amount to survive. In a consumption function graph, the intercept point of the consumption function with the vertical axis indicates the level of autonomous consumption.

(02 marks)

- Consumption expenditure is a function of disposable income. Consumption expenditure is induced by change in disposable income. The amount by which consumption expenditure exceeds its autonomous value is called induced consumption. For example, when total consumption is Rs. 2000, and autonomous consumption is Rs. 800, so that induced consumption is Rs. 1200.

(02 marks)

- (ii) (a) - Savings function:  $S = -60 + 0.2 Y_D$  (02 marks)

(b) - Average Propensity to Consume (APC) =  $C/Y_D$   
 When  $Y_D = 500$ , then  $C = 60 + 0.8(500) = 460$  (01 mark)  
 $APC = 460/500 = 0.92$  (01 mark)

- Average Propensity to Save (APS) =  $S/Y_D$   
 When  $Y_D = 500$ , then  $S = -60 + 0.2(500) = 40$  (01 mark)  
 $APS = 40/500 = 0.08$  (01 mark)

(c) - Equilibrium level of National Income:  
 $Y = C + I + G$   
 $Y = 60 + 0.8Y_D + 100 + 200$  (01 mark)  
 $Y = 60 + 0.8(Y - T + Tr) + 300$   
 $Y = 360 + 0.8(Y - 150 - 75)$  (01 mark)  
 $Y = 360 + 0.8Y - 120 + 60$   
 $Y = 300 + 0.8Y$   
 $Y - 0.8Y = 300; \quad 0.2Y = 300; \quad Y = 1500$  (02 marks)

(d) - Investment multiplier (k) =  $\frac{1}{1 - MPC} = \frac{1}{1 - 0.8} = \frac{1}{0.2} = 5$  (02 marks)

(iii) -  $S + T + M = I + G + X$   
 $S + T - (I + G) = X - M$  (= Net Exports)  
 $200 + 300 - (250 + 400) = (X - M)$  (= Net Exports)  
 $500 - 650 = 150$  (= Net Exports) (04 marks)

[Alternative answer: Gross Domestic Savings ( $S_D$ ) =  $I + (X - M)$   
 $S_D = S_p + S_g = I + (X - M)$   
 $200 + (T - G) = 250 + (X - M)$   
 $200 + (300 - 400) = 250 + (X - M)$   
 $200 + (-100) - 250 = (X - M)$   
 $-150 = (X - M)$  (= Net Exports)]

06

**Sub section 'B'***(Select minimum of two questions from this section.)*

6. (i) What are the measures currently used in Sri Lanka to indicate the changes in general price level? (03 marks)
- (ii) What are the adverse effects of inflation? (04 marks)
- (iii) The following is a simplified balance sheet for one of the banks in a commercial banking system in a country.

Liabilities	Value (Rs. Million)	Assets	Value (Rs. Million)
Deposits	100 000	Required reserves	10 000
Shareholders' equity	25 000	Excess reserves	5 000
		Securities	30 000
		Loans	80 000
<b>Total liabilities</b>	<b>125 000</b>	<b>Total assets</b>	<b>125 000</b>

- (a) What is the required reserve ratio? (02 marks)
- (b) Assume that a customer withdraws Rs. 2000 million from his current account at this bank. By how much will this bank's reserve change based on this cash withdrawal? (02 marks)
- (c) Assuming that the required reserve ratio remains unchanged, what is the maximum amount of new loans that this bank could make after the withdrawal of Rs. 2000 million deposits? (02 marks)
- (iv) What is meant by monetary policy? (03 marks)
- (v) Distinguish between quantitative and qualitative credit control methods of the Central Bank of Sri Lanka. (04 marks)

6. (i) - Colombo Consumers Price Index
- National Consumers Price Index
- Producers Price Index
- GDP deflator

**(01 mark each for any three price indices)**

- (ii) - Cost of living goes up resulting lower living standards for the general public
- Inflation distorts many types of economic behavior and imposes costs upon economic agents.
- Unfair income distribution: Weaker social groups in society such as old people on fixed pensions lose, while others in stronger bargaining positions gain.
- Inflation tends to redistribute wealth from lenders or creditors to borrowers or debtors.
- Causes overvaluation of exchange rate resulting an adverse trade balance.

- Uncertainties affect the behavior of firms and imposes costs upon them. Long term planning becomes very difficult. Firms may be tempted to divert investment funds out of productive investment into commodity hoarding and speculation.
- Shoe leather and menu costs: In a period of rapid inflation, consumers spend more time and effort shopping around checking on which price have or have not risen. Menu costs are incurred by firms or producers as a result of having to adjust printed price, costs, vending machines, etc. more quickly.

(01 mark each for any four adverse effects)

(iii) (a) - Required reserve ratio =  $\frac{10,000}{\text{Deposits}} = \frac{10,000}{100,000} = 10\%$  (02 marks)

(b) - Rs. 2000 (02 marks)

(c) Amount of excess reserves after the cash withdrawal:

Actual reserves	=	10,000 + 5000 - 2000	=	13,000
Required reserves	=	98,000 × 10%	=	9,800
Excess reserves	=	13,000 - 9800	=	3,200
Maximum amount of new loans = Rs. 3,200				(02 marks)

- (iv) - Monetary policy is the manipulation of the amount of money and credit available, and the cost of credit to borrowers (i.e. interest rates) in an attempt to influence aggregate demand for the purpose of achieving macroeconomic objectives. Monetary policy is administered by a country's Central Bank. (03 marks)

**[Alternative answer:** Monetary policy is the process by which Central Bank manages the supply and the cost of money in an economy with a view to achieve the macroeconomic objective of price stability.

Central Bank of Sri Lanka is responsible for conducting monetary policy in Sri Lanka, which mainly involves setting the policy interest rates and managing the liquidity in the economy.]

- (v) - The credit control methods used to regulate the volume and cost of credit in the entire economy are called quantitative credit control methods. They are non-discriminatory in nature and affect the entire economy.

- Types of quantitative methods include policy interest rates (i.e. standing deposit facility rate, standing lending facility rate, the Bank Rate), open market operations and statutory reserve requirement.

(02 marks)

- Qualitative credit control methods are used to regulate the flow and direction of credit in certain selective sections of the economy. They are discriminatory in nature.

- Types of qualitative methods include quantitative restrictions on credit, ceilings on interest rates, refinance facilities, imposing margin requirements, loan to value ratios, moral suasion etc.

(02 marks)

07

7. (i) Determine whether the following items are private goods, public goods or common resources:
- (a) Fish in the ocean
  - (b) Broadcast television signals
  - (c) Basic research on lifestyle and cholesterol levels
  - (d) Specific research on cholesterol lowering drug for which patent can be obtained (04 marks)
- (ii) How do you justify the government interventions in a free market economy? (04 marks)
- (iii) Distinguish between vertical equity and horizontal equity of taxation. (04 marks)
- (iv) Why do some economists argue that budget deficits contribute to increased market rates of interest and reduced private investment? (04 marks)
- (v) "The government debt-to-GDP ratio in Sri Lanka still remains very high when compared to other countries in the region." Outline briefly the measures taken by the government of Sri Lanka to ensure sustainable debt level in the medium and long term. (04 marks)

7. (i) (a) Fish in the ocean - Common resource
- (b) Broadcast television signals - Public good
- (c) Basic research - Public good
- (d) Specific research - Private good
- (01 mark each and total 04 marks)

- (ii) **Justification for the government intervention in a free market economy:**

- Establishment of legal framework required for the efficiently functioning market economy (enforcement of law and contracts)

- Improving efficiency in resource allocation (externalities, merit goods, public goods)
- Ensure fair distribution of income and wealth
- Ensure macroeconomic stability
- Improving economic growth and stability
- Promoting infrastructure facilities
- Regulations to ensure competition
- Protection of environment

**(01 mark each for any four reasons. Total marks 04)**

- (iii) - For the purpose of taxation, the concept of horizontal equity means treating people alike if they are in the same or similar economic situations – 'equals be treated equally'.

**(02 marks)**

- Vertical equity means treating people differently according to the differences in their income, wealth, or other measures of ability to pay – 'unequals be treated unequally'. Progressive income taxes are often justified on the basis of vertical equity.

**(02 marks)**

- (iv) - An increase in the government budget deficit reduces public saving. Assuming the private saving does not change, the reduction in public saving will reduce national saving. This is reflected in the loanable funds market. Supply of savings decreases causing real interest rates to increase and private investment to decrease.

- In economic terms, the government has dipped further into the pool of private savings to borrow the funds to finance its budget deficit. The government extra borrowing forces investors to compete for a smaller quantity of available saving, driving up the real interest rate. The higher real interest rate makes investment less attractive, assuring that investment will decrease along with national saving. The tendency of increased government deficits to reduce private investment is called 'crowding out' effect.

**(04 marks)**

- (v) - Government has set targets to bring the overall central government deficit down to at least 3.5% of GDP by 2020, while lowering the central government debt to about 70% of GDP.

- Over the past few years, the government has taken several steps to revamp tax policies and bolster tax administration, focusing on the areas of (a) broadening

the tax base (b) rationalizing the tax system, (c) augmenting capacity for revenue administration and strengthening public financial management.

- Rationalizing expenditure and reducing contingent fiscal risk from State Owned Business Enterprises (SOBE) have been given due attention.
- Transforming SOBEs to enable them to operate as commercially viable enterprises via restructuring, improving transparency, ad accountability.
- Enacting the Value Added Tax Act in 2016 to raise the rate, broaden the tax base and eliminate exemptions.
- Introduction of New Inland Revenue Act in 2017
- Amending Board of Investment (BOI) Act in 2016 restricting its ability to grant tax exemptions.
- Introduction of a new IT system (RAMIS) for major domestic taxes, including web-based tax filings for income tax and VAT.

**(01 mark each for any four measures. Total marks 04)**

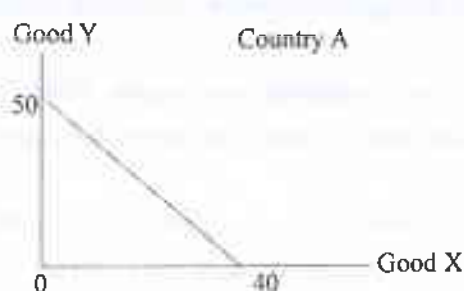
08

8. (i) Let country A's endowment of labour equal 200 units and country B's endowment of labour equal 200 units. The labour requirement for the production of one unit of good X and good Y in each country is given in the Table below.

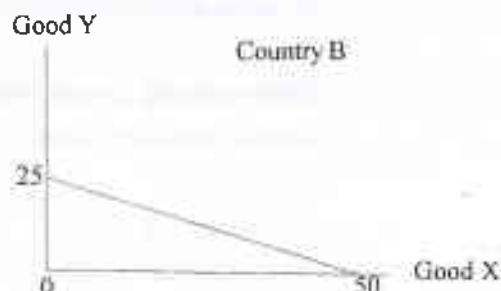
Country A		Country B	
Good	Labour units	Good	Labour units
X	5	X	4
Y	4	Y	8

- (a) Draw separately production possibilities frontier for each country and label them correctly. (04 marks)
- (b) Which country has an absolute advantage in which good? Explain your answer. (02 marks)
- (c) Which country has a comparative advantage in which good? Explain your answer. (02 marks)
- (ii) State any two sources of comparative advantage. (02 marks)
- (iii) Name the main components of the current account of the Balance of Payments statement? (02 marks)
- (iv) Distinguish between nominal exchange rate and the effective exchange rate. (04 marks)
- (v) What are the arguments for free trade? (04 marks)

8. (i) (a) - Production possibilities frontier graphs for each country:



(02 marks)



(02 marks)

- (b) - Country A has absolute advantage in the production of good Y because its cost of production is lower than the country B.

(01 mark)

Country B has absolute advantage in the production of good X because its cost of production is lower than the country A.

(01 mark)

- (c) - Country A has a comparative advantage in the production of good Y, because the opportunity of producing good Y is lower than the opportunity cost of producing good X.

$$\text{Opportunity cost of producing good X} = 5/4 = 1.25$$

$$\text{Opportunity cost of producing good Y} = 4/5 = 0.8 \quad (01 \text{ mark})$$

Country B has a comparative advantage in the production of good X, because the opportunity of producing good X is lower than the opportunity cost of producing good Y.

$$\text{Opportunity cost of producing good X} = 4/8 = 0.5$$

$$\text{Opportunity cost of producing good Y} = 8/4 = 2.0 \quad (01 \text{ mark})$$

- (ii) - Factor endowments  
 - Technology  
 - Specialization (labour productivity)  
 - Preferences (Tastes)  
 - Location  
 - Initial conditions (first mover advantage)  
 - Economies of scale

(01 mark each for any two sources. Total 02 marks)

(iii) Main components of BOP current account:

- Goods and Services account
  - Goods
  - Services
- Primary income account
- Secondary income account

(02 marks)

**(If all three components are not listed, no marks awarded)**

(iv) - Nominal exchange rate is the bilateral exchange rate between two currencies. It is the value of one currency in terms of another currency.

There are two ways of expressing a nominal exchange rate: Direct quote and Indirect quote. Under direct quote it is expressed as the price of one unit of foreign currency in terms of domestic currency units (i.e. \$ 1 = Rs. 160). Under indirect quote, the price of the domestic currency unit is expressed in terms of foreign currency units (i.e. Rs. 1 = \$ 0.006).

(02 marks)

Effective exchange rate is an index that describes the strength of a currency relative to a basket of other currencies. Bilateral exchange rate involves currency pair, while an effective exchange rate is a weighted average of a basket of foreign currencies and it can be viewed as an overall measure of the country's external competitiveness.

There are two versions of the effective exchange rate: nominal effective exchange rate and real effective exchange rate. Nominal effective rate is an unadjusted index for price level changes in trading partner countries whereas the real effective exchange rate adjusts by the appropriate foreign price level and deflates by the home country price level.

(02 marks)

(v) **Arguments for free trade:**

Efficiency: With free trade, domestic firms face competition from abroad and therefore there will be more incentives to cut costs and increase efficiency.

Specialization: Free trade leads to specialization, where a country only produces goods that they are efficient at, i.e. in which they have a lower opportunity cost. Specialization leads to higher levels of output.

- Consumption: Free trade enables an increase in consumption as countries can consume combinations of goods outside their PPC.
- Market power: Without trade barriers, free trade decreases the market power of monopolies as they are competing at a global level. It may also prevent domestic monopolies from charging too high prices.
- Price: Local firms now have to compete against firms from all across the world. Competition is a win for consumers who can enjoy the lowest of prices.
- Technology: Technology can cross over borders more easily with free trade, and this often accelerates improvements in technology.
- Economies of scale: If countries can specialize in certain goods they can benefit from economies of scale and lower average costs
- Variety: Provides consumers with greater variety of goods as they can gain access to products from different countries.
- Rising living standards and a reduction in poverty: A growing body of evidence shows that countries that are more open to trade grow faster over the long run and have higher per capita income.

**(01 mark each four any for arguments. Total 04 marks)**

09

- 9 (i) Define 'economic growth' and state most important sources of economic growth. (05 marks)
- (ii) Is economic growth a sufficient condition for poverty alleviation? Explain your answer. (05 marks)
- (iii) What do you mean by 'sustainable development'? (05 marks)
- (iv) Why is increasing female labour force participation important for Sri Lanka? Explain your answer. (05 marks)

9. (i) - Economic growth is a steady process by which the productive capacity of the economy is increased over time to bring about rising level of national output and income

**(02 marks)**

**Main sources of Growth:**

- Increase in resource endowment: Physical capital, natural capital, human capital and social capital
- Increase in productivity: Improvement in technology, innovations, increase in R&D and improvement in management

- Economic stability (Desirable macroeconomic fundamentals)
- Entrepreneurial ability
- Openness to trade and investment
- Incentives
- Good governance

**(01 mark each for any three sources. Total 03 marks)**

(ii) - Economic growth has proven to be a most powerful force in the fight against poverty across the world.

- Growth can generate virtuous circles of prosperity and opportunity. Strong growth and employment opportunities improve incentives for parents to invest in their children's education by sending them to school.

- But under different conditions, similar rates of growth can have very different effects on poverty, employment prospects of the poor, and broader indicators of human development. The extent to which growth reduces poverty depends on the degree to which the poor participate in the growth process and share in its proceeds. Thus both pace and pattern of growth matter for reducing poverty.

**(02 marks)**

- Economic growth associated with increased income inequality can dampen the impact of growth on reducing poverty.

- Although critical, economic growth alone will not be sufficient to reduce poverty level, unless it is accompanied by policies to ensure that the poorest benefit from growth and the job creation process.

- The pace and pattern of growth are critical in providing opportunities for many who are excluded from the growth process so that all members of society could contribute to and benefit from growth.

- It is important to combine growth promoting policies with policies that allow the poor to participate fully in the opportunities unleashed. This includes policies to work labour markets work better, remove gender equalities, and increase financial inclusion.

- Also social safety nets to insure the poor and vulnerable against emerging risks have proven essential for poverty alleviation.

**(01 marks)**



- (iii) - Sustainable development is the process of development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

**(02 marks)**

- At the core of sustainable development is the need to consider three pillars together: society, economy and the environment.

No matter the context, the basic idea remains the same: people, habitats and economic systems are inter-related.

**(02 marks)**

- Sustainable development is a conceptual framework: a way of changing the predominant world view to one that is more holistic and balanced.

- Sustainable development is a process: a way of applying the principle of integration across space and time – to all decisions.

- Sustainable development is an end goal: identifying and fixing the specific problems of resource depletion, health care, social exclusion, poverty, unemployment etc.

**(01 mark for any explanation)**

- (iv) Importance of improving female labour force participation:

- Sri Lanka has been a trend setter in the region in advancing gender parity in education and health. Yet, this has not been reflected in more active female labour force participation which is low compared to its emerging market peers and even some low income developing countries in the region. The labour force participation rate in Sri Lanka was 37% for women compared to 75% for men in 2017.

- Improving the female labour force participation is specially important as Sri Lanka faces an aging population with a labour force that could start shrinking as early as 2026. With a lower share of population in the labour force, real GDP per capita growth in Sri Lanka would decline, everything else held equal. However, it may be possible to reverse this trend by integrating the pool of educated women in the labour force, especially those with A-level or lower.

- Sri Lanka is currently losing out on a significant share of income due to gender gaps in the labour market. The cost associated with gender gaps in labour force participation and entrepreneurship are currently as high as 20% of income per capita compared to the situation where women have the same level of labour force and entrepreneurship participation as men.

Eliminating gender gaps in the labour force participation could also offset the negative demographic effects. With the country's transition from demographic bonus era to aging population era, dependency ratios are expected to increase in the future, with one out of every four people is expected to be above 60 years of age. Income generated by a smaller number of persons will be insufficient to provide for a greater number of dependents. Hence improving female labour force participation is critical at this time.

(02 marks for any one reason. Total marks 05)

10	
10. (i) What are the appropriate policy measures for Sri Lanka to improve its competitiveness within global market?	(05 marks)
(ii) Examine the poverty and income inequality trends in Sri Lanka during the period 2002–2016.	(05 marks)
(iii) What were the key features of the economic liberalization reforms introduced in Sri Lanka in 1977?	(05 marks)
(iv) What are the main challenges that Sri Lanka needs to address in order to achieve a sustained rapid economic growth?	(05 marks)

10. (i) **Measures to improve competitiveness in global markets:**

- Need for a consistent national development policy
- Improving the quality of infrastructure
- Removal of bureaucratic constraints
- Encourage knowledge intensive enterprises by promoting R&D and innovation
- Improving macroeconomic stability
- Improving productivity

(01 mark each and total marks 05)

(ii) **Poverty and income inequality trends:**

Indicator	2002	2006/07	2009/10	2012/13	2016
Poverty Headcount Index (%)	22.7	15.2	8.9	6.7	4.1
Gini coefficient for monthly household income	0.48	0.49	0.49	0.48	0.45
Income received by richest 20%	53.7%	54.7%	54.1%	52.9%	50.8%
Income received by poorest 20%	4.8%	4.6%	4.5%	4.5%	4.8%

National poverty level has continued to decline over the period 2002 – 2016

(01 mark)

- Poverty indicators for any two years (02 marks)
- Income disparity appears to be slowly declining after 2010 (01 mark)
- Income disparity indicators for any two years (01 mark)

**(Marks are awarded only when values for more than one year are given)**

**(iii) Features of Economic Liberalization in 1977:**

- Quantitative restrictions on imports were largely dismantled and replaced by import tariffs.
- Exchange controls were relaxed and the multiple exchange rates (FEEC scheme) were unified at a much devalued rate.
- The value of domestic currency was placed on a managed float.
- Number of restrictions on imports, travel abroad and foreign education were relaxed.
- Direct controls and regulations and certain subsidies were either eliminated or substantially reduced.
- Subsidies on wheat flour, fertilizer, milk products, and petroleum products were reduced.
- In order to attract foreign capital, restrictions on foreign participation at the Colombo Stock Exchange by foreigners were relaxed.
- Extended facilities were granted to foreigners investing under the BOI (earlier known as Greater Colombo Economic Commission).
- Actions were taken to eliminate restrictions on entry into banking system
- Interest rate structure was liberalized.

**(01 mark each for any five features, Total marks 05)**

- (iv)** - Economic growth has exhibited notable structural failings: Growth in recent years has primarily been through non-tradable activities driven by government infrastructure spending based on heavy commercial borrowing. Persistent fiscal deficits, and external current account deficits have resulted

in poor investor confidence and low level of FDI and private domestic investment.

- Export performance has been weak. Sri Lanka's exports are still concentrated on a few, mainly low technology products. The strong anti-export bias in the economy is a result of often uncompetitive exchange rates and high effective protection rates.
- Public finances have been a constraint on growth: A steady decline in government revenue generation over time has resulted in a steady increase in public debt accumulation, particularly high risk non-concessional foreign borrowing.
- Growth also hampered by regulatory barriers: These barriers constraint both foreign and domestic investors.
- Skills profiles of the current workforce not being aligned with the needs of a globally integrated economy.
- Inadequate infrastructure in terms of access, quality and pricing of energy, transport and telecommunication, and access to finance especially for Sri Lanka's SME enterprises.
- The fragile financial standing and the poor quality of public service delivery of SOEs are additional constraints to productivity and growth.
- Uncertainty in long term economic policies

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NOTES