



# G.C.E. A/L Examination June - 2019

Conducted by Field Work Centre, Thondaimanaru

In Collaboration with

Provincial Department of Education Northern Province

Grade :- 13 (2019)

Economics

Marking Scheme

## Part - I

1) 5	11) 2	21) 4	31) 3	41) 3
2) 4	12) 4	22) 2	32) 2	42) 1
3) 3	13) 3	23) 1	33) 5	43) 4
4) 4	14) 5	24) 4	34) 5	44) 2
5) 1	15) 4	25) 5	35) 2	45) 1
6) 5	16) 3	26) 1	36) 4	46) 3
7) 5	17) 1	27) 3	37) 3	47) 1
8) 4	18) 3	28) 2	38) 5	48) 4
9) 1	19) 2	29) 4	39) 4	49) 2
10) 4	20) 5	30) 2	40) 5	50) 3

(50x2=100 marks)

## Part – II

1.

I. Resource Scarcity

The situation where insufficient resources to satisfy unlimited human needs and wants which known as Scarcity.

(1 mark)

Choice

**Economic choices** are decisions which are made by society regarding which needs and want to satisfy using limited resources and they involve in what types economic activities.

(1 mark)

Causes for choice problem

Resource Scarcity

Alternative usage of Resources

(1 mark)

Opportunity Cost

- When selecting one alternative from all other alternatives available, the value of the next best alternative forgone is called opportunity cost.
- It is not financial concept
- It is a real concept

(1 mark)

Resource scarcity and alternative usage of resources create opportunity cost. If there is no scarcity, opportunity cost nil.

(1 mark)

II.

- Anything which provides positive satisfaction or utility is called as good in economics.
  - Eg: garments, Education, Health (1 mark)
- Good can be categorized as follows:
  - Economic good
  - Non Economic Good (1 mark)
- Economic Good  
Goods with scarce supply are called economic goods. There is a resource cost and opportunity cost involved with economic goods.  
Example:-stationary items, garments and motor vehicles. (1 mark)
- Non-Economic good  
Goods with unlimited supply at zero prices are called non-economic goods. There is no resource cost and opportunity cost with non-economic goods.  
Examples :- Sunlight, Air and rain-water. (1 mark)

III. Mechanism or the institutional framework made by people who live within a society to solve basic economic problems is called an economic system or an economic organization.

(1 mark)

Criteria

Decision co - ordination mechanism

Ownership of property

Nature of incentives

(3 marks)

IV. No.

(1 mark)

The sum of allocative efficiency and productive efficiency is known as economic efficiency.

- Production Efficiency
  - Full Employment
  - Full production
- Allocative Efficiency  
Price = Marginal cost (P=MC) or Marginal Cost = Marginal Revenue (MC=MR).

(1 mark)

Productive employment of all resources of an economy within a production process is called full employment.

(1 mark)

It is one criterion for achieving production efficiency. Economic efficiency of resources should have production efficiency and allocative efficiency.

(1 mark)

V.

a) Factor of production doesn't have perfect substitutability.

(1 mark)

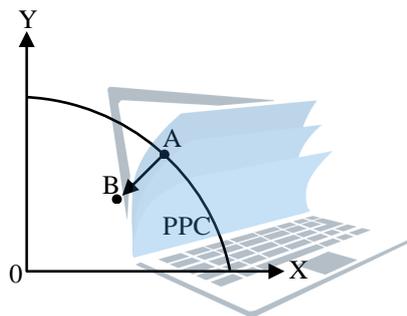
It express increasing opportunity cost

(1 mark)

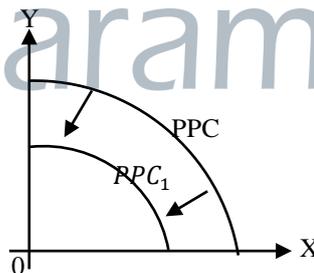
b)

1. Economic recession

(1 mark)



2. Decreasing Economic Growth (1 Mark)



2.

I. Income Effect

When other factors remain constant including the nominal income of consumers, changes of the quantity demanded according to the changes of real income is called income effect.

(1 mark)

Substitution Effect

When other factors remain constant including the price of substitute goods, due to increase or decrease of the price of concerned goods, change of quantity demand of the considering good as a result of increase or decrease in relative price of the good is known as substitute effect

(1 mark)

**Law of Demand**

In a certain period of time, when other factors affecting demand remains constant the inverse relationship between price and the quantity demand of goods, is called the law of demand.

(1 mark)

If occur negative relationship between price of the normal good and consumers real income according to normal goods, income effect creates law of demand.

(1 mark)

If occur negative relationship between relative price and quantity of particular good , substitution effect creates law of demand.

(1 mark)

**II.**

Good	Income effect	Substitution effect
Inferior good	Negative	Negative
Giffen Good	More negative	Negative

(2 mark)

Negative income effect is less than negative substitution effect of Inferior good

(1 mark)

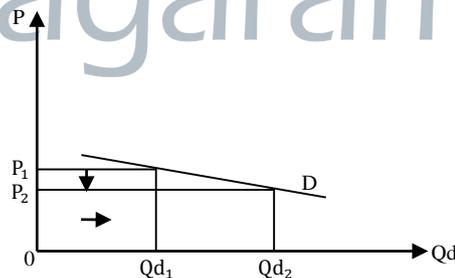
Negative income effect is greater than negative substitution effect of giffen good

(1 mark)

**III. Elastic Demand**

If the percentage change in quantity demanded of a particular good is greater than the percentage change in the price it is known as elastic demand.

(1 mark)



(1/2 mark)

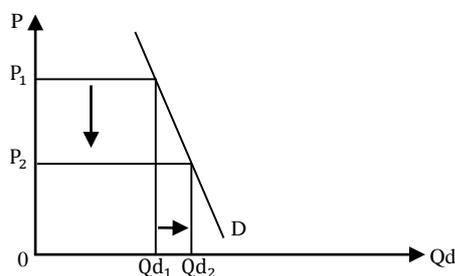
There is a negative relationship between price of particular good and consumer expenditure.

(1/2 mark)

**Inelastic demand**

If the percentage changes of quantity demanded is less than the percentage change of price it is known as inelastic demand.

(1 mark)



(1/2 mark)

There is a positive relationship between price of particular good and consumer expenditure.

(1/2 mark)

IV.

a)

P	Qd	
50	20	1000/50
75	16	1200/75

$$PED = \frac{\Delta Qd}{\Delta P} \times \frac{P}{Qd}$$

In Rs.50 ,

$$PED = \frac{-4}{25} \times \frac{50}{20}$$

$$= -0.4$$

(1 mark)

In Rs.75 ,

$$PED = \frac{-4}{25} \times \frac{75}{16}$$

$$= -0.75$$

(1 mark)

b)  $PED = \frac{\Delta Qd}{\Delta P} \times \frac{P1+P2/2}{Q1+Q2/2}$

$$PED = \frac{-4}{25} \times \frac{50 + 75/2}{20 + 16/2}$$

$$PED = \frac{-4}{25} \times \frac{62.5}{18}$$

$$-0.56$$

(1 mark)

c) Demand for X Good is inelastic.

(1 mark)

V.

a) Alternative Form of Demand Equation

$$Qd=200-5P$$

$$5P=200-Qd$$

$$\frac{5P = 200 - Qd}{5}$$

$$P=40-0.2Qd$$

(1 mark)

$$Qs=-50+5P$$

$$-5P=-50-Qs$$

$$\frac{-5P = -50 - Qs}{-5}$$

$$P=10+0.2Qs$$

(1 mark)

b)  $D_p = S_p$

$$40 - 0.2Q = 10 + 0.2Q$$

$$40 - 10 = 0.2Q + 0.2Q$$

$$30 = 0.4Q$$

$$30 / 0.4 = Q$$

$$75 = Q$$

$$P = 40 - 0.2 \times 75$$

$$P = 40 - 15$$

$$P = 25$$

Equilibrium Price Rs.25

Equilibrium Quantity 75 Units

$$CS = \frac{m_{dp} - p_m \times Q_m}{2}$$



$$CS = \frac{40 - 25 \times 75}{2}$$

$$= \text{Rs. } 562.5$$

(1 mark)

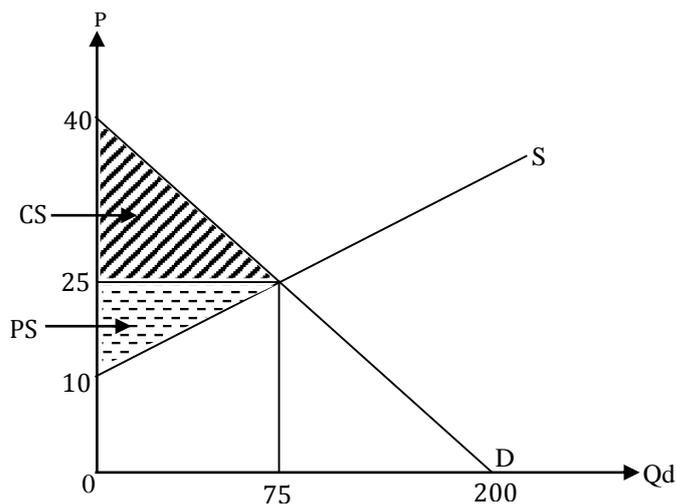
$$PS = \frac{P_m - m_{sp} \times Q_m}{2}$$

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$$CS = \frac{25 - 10 - 75}{2}$$

$$= \text{Rs. } 562.5$$

(1 mark)



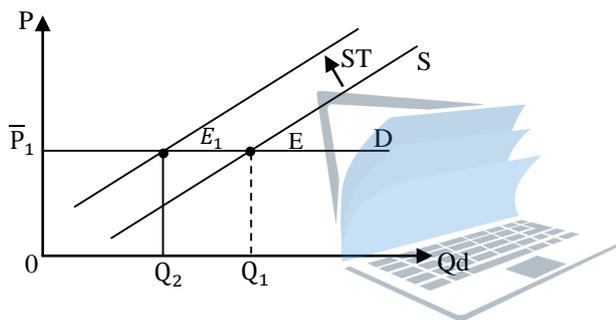
3.

I.

Price	Quantity Supplied before tax	Quantity supplied after tax
1	20	-20
3	40	0
5	60	20
7	80	40
9	100	60
11	120	80

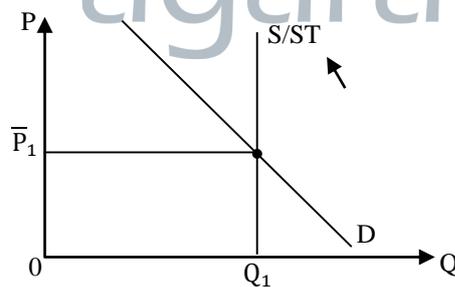
(6X1/2=3 Marks)

II. Price Elasticity of Demand is infinitive. (1 Mark)



(1 mark)

Price elasticity of demand is perfectly inelastic. (1 Mark)



(1 mark)

III.

a)  $Q_d = Q_s$

$$\begin{aligned}
 800 - 4P &= 100 + 6P \\
 800 - 100 &= 6P + 4P \\
 700 &= 10P \\
 P &= 70
 \end{aligned}$$

$$\begin{aligned}
 Q_d &= 800 - 4 \times 70 \\
 &= 800 - 280 \\
 &= 520 \text{ Units}
 \end{aligned}$$

Equilibrium Price before subsidy- Rs,70  
 Equilibrium Quantity before subsidy 520 Units

Supply Equation after subsidy

$$Q_{SR} = 100 + 6(P+20)$$

$$= 100 + 6P + 120$$

$$Q_{SR} = 220 + 60P$$

Equilibrium Price and Quantity after subsidy

$$Q_d = Q_s$$

$$800 - 4P = 220 + 6P$$

$$580 = 10P$$

$$P = 58$$

$$Q_d = 800 - 4 \times 58$$

$$= 800 - 232$$

$$= 568 \text{ units}$$

Equilibrium Price Rs.58

Equilibrium Quantity 568 Units

Consumer willingness to pay Rs.58

(1 Mark)

Producer received Price 58+20

Consumer willingness to pay 58+20 =78

(1 Mark)

b)  $PS = \frac{mQS + Qm}{2} \times SRP$

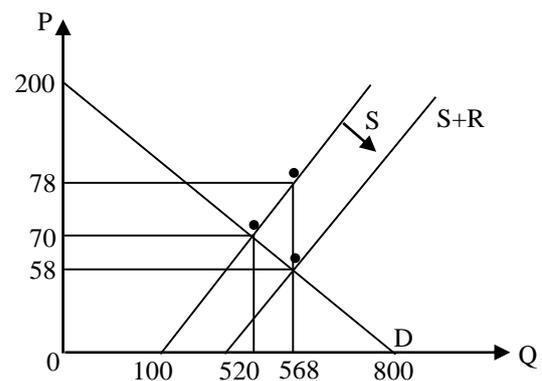
$$PS = \frac{100 + 568}{2} \times 78$$

RS.26052

c)  $DWL = \frac{RX \Delta Q}{2}$

$$DWL = \frac{20 \times 48}{2}$$

$$= \text{Rs. } 480$$



IV.

- Use of ration cards
- Queueing method
- Rationing with bribes
- Distribute connecting with other goods
- Black market price

(4X1=4 marks)

- V. Increases consumer surplus  
Increases producer surplus  
Occurs government expenditure  
Net dead weight loss is less

4.

- I. Remaining technology and capacity of a firm constant the technical relationship between input and output following a change in variable inputs is called a short run production function.

Which means,

$$Q=f(L,L1,L2,L3.....Ln,K)$$

(2 marks)

The relationship between inputs and output of a production process following a change in all relevant inputs is called a long run production function. It can be shown as follows.

$$Q=f(L,L1,L2,L3.....Ln,K,K1,K2,K3.....Kn)$$

(2 marks)

- II. In short run when increasing only variable inputs mixed with fixed inputs, the decrease in marginal product and average product of the variable factor after a certain point is called The Law of Diminishing Marginal Returns.

(2 marks)

Assumptions

- All variable inputs are homogeneous
- Within the relevant production process technology remains constant

(1 mark)

- III. Average Total Cost

The total cost per unit is called average total cost

$$ATC= TC/Q$$

(1 mark)

Average Variable Cost

The total variable cost per unit is called average variable cost.

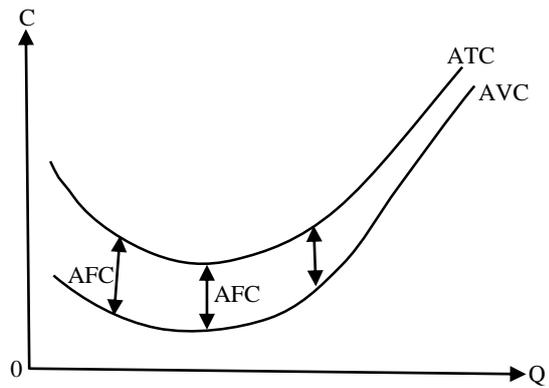
$$AVC=TVC/Q$$

(1 mark)

$$ATC = AVC + AFC$$

$$AFC = ATC - AVC$$

$$AFC = TFC / Q$$



(1 mark)

The average fixed cost is gradually decreases but not equal to zero when the output increases Total fixed cost is same quantity at all output.

(1 mark)

#### IV. Market Structures

1. Perfect Competitive Market
2. Monopoly Market
3. Monopoly Competitive Market
4. Oligopoly Market

(2 Marks)

Following factors affect the various market structures :

1. Number of firms in the market
2. Homogeneity of the product
3. Ability to enter the market and exit from the market
4. The nature of the competition among the firms in the market.

(1/2X4 = 2 marks)

#### V. Yes

$$PXQ = TR$$

$$70 \times 200 = 14000$$

(1/2 marks)

$$TC = TVC + TFC$$

$$16000 = 13000 + 3000$$

(1/2 marks)

According to this data in the situation total variable cost of a firm is Rs 13000 and total revenue is Rs.140000. If here total revenue is enough to cover total variable cost , firm will stay in business ( 2 Marks)

$$TR - TC = \text{Profit / Loss}$$

$$14000 - 16000 = -2000$$

Even if there is a loss in the firm they will continue remain in production because revenue is enough to cover total variable cost

5.

I. Subsidies on products excluding tax

Transportation costs

Trade margin charged by intermediaries

VAT not deductible by the purchaser

(4X1 =4 marks)

II. An institutional unit is an economic entity that is capable, in its own right, of owning assets, incurring liabilities and engaging in economic activities and in transactions with other entities.

(1 mark)

The non-financial corporations sector

The financial corporations sector

The government sector

The non-profit institutions serving households sector

Households sector

(3 marks)

III. Gross Domestic Expenditure = Consumption Expenditure + Investment Expenditure

(1 mark)

Gross National Income = Gross Domestic Expenditure + Net Exports of goods and services + Net Primary income from rest of the world

(1 mark)

Different

Net Exports of Goods and services (1 Mark)

Net Primary Income from rest of the world (1 Mark)

IV.

a)  $Y=C+I+G+NX$

$$Y=400+0.8(Y-NT)+150+200+(80)$$

$$Y=400+0.8(y-50)+350+(80)$$

$$Y=400 + 0.8y-40+350+(80)$$

$$Y=0.8y+630$$

$$Y-0.8y=630$$

$$0.2Y=630$$

$$Y = 630/0.2$$

$$= 3150 \quad (2 \text{ Marks})$$

b)  $SG=NT-G$

$$=50-200$$

$$=150BR \quad (1 \text{ Mark})$$

c)  $SP = Yd-c$

$$=3100 - 2880$$

$$=220BR \quad (1 \text{ Mark})$$

$Yd= Y-NT$

$$3100=3150 -50$$

$$C=400+0.8 \times 3100=2880BR$$

$$\begin{aligned} \text{GDS} &= \text{Sp} + \text{SG} \\ &= 220 + (150) \\ &= 70 \text{ BR (1 Mark)} \\ \text{OR} \\ \text{GDS} &= \text{I} + \text{NX} \\ &= 150 + (80) \\ &= 70 \text{ BR (2 Marks)} \end{aligned}$$

d)  $\text{KI} = 1/\text{mps}$

$$\begin{aligned} &= 1/0.8 \\ &= 5 \text{ (1 Mark)} \\ \text{KI} &= \Delta Y / \Delta I \end{aligned}$$

$$\begin{aligned} \Delta Y &= \text{KI} \times \Delta I \\ &= 5 \times 50 \\ &= 250 \text{ BR (1 Mark)} \end{aligned}$$

e)  $\text{KT} = -\text{mpc}/\text{mps}$

$$\begin{aligned} &= -0.8/0.2 \\ &= -4 \text{ (1 Mark)} \end{aligned}$$

6.

- I. Act as a medium of exchange means that act as an intermediary when exchange the good and services and production factors. (1 Mark)

Common acceptability and liquidity are needed to act as a medium of exchange.

(1 mark)

Importance

Easy transactions

Division of labour and specialization expanded

It paved the way for large scale production.

Motivated international trade activities (2 Marks)

- II. Reserve Money

The direct financial liabilities which supply the basis for the aggregate money supply of a particular country is known as base money. Base money also named as high powered money., and as reserve money.

Component of high powered money are as follows.

- Note and coins of public(Cp)
- Currency of public with commercial banks(Ckb)
- Deposits of commercial; bank with the central bank(RR)
- Deposits of other government institutions maintained at central bank(DOI).

(1 mark)

Money supply

The total stock of money circulates among the general public at a given period is called money supply.

(1 mark)

### Money multiplier

The relationship between total money supply and base money is shown by the money multiplier. It can be shown by an equation as follows.

Money multiplier ( $K_m$ ) = Money supply ( $m$ ) / Reserve Money ( $H$ )

$$M = K_m \cdot H \quad (1 \text{ Mark})$$

Relationship should be explained through the above equation. (1 Mark)

III. Those pressure groups are,

- Organized labour

As a result of the demanding high wages by the organized labour, wages have to be increased and the cost of production increases. As a result, with that, the supply decreases and the general price level increases. This type of situation is considered as a wages push inflation.

(2 marks)

- Activities of oligopoly firms

On the other hand, the general price level increases due to the decrease in the supply as a result of the activities of oligopoly firms due to an increase in the cost of production when they maximize profits. This can be named as profit push inflation.

(2 marks)

IV. A financial system is the sum of markets, financial institutions, financial instruments and financial infrastructure decisions of the main agents of domestic and foreign households, business firms and the government.

(2 marks)

The structure of the financial system in Sri Lanka mainly consists of four types.

- Central Bank of Sri Lanka
- Intermediate financial institutions
- The firms which supply financial services
- Institutions of monetary supervision and regulation

(2 marks)

V.

- a) Average Weighted Call Money Rate (AWCMR) as the operational target

(1 mark)

intermediary target of broad money supply

(1 mark)

- b) Creating multiple deposits by lending excess reserves is known as money creation.

Maximum credit creation = Amount initial excess reserves  $\times$  Deposit multiplier

(1 mark)

Money creation can be done when commercial banks operate as a banking system.

Money creation of commercial banks is based on the following assumption.

- Any bank does not maintain excess reserves.
- After the deposit is made, no inflow of money into the banking system or outflow of money from the banking system.
- All borrowers deposit the total borrowing at another bank.

(1 mark)

7.

I.

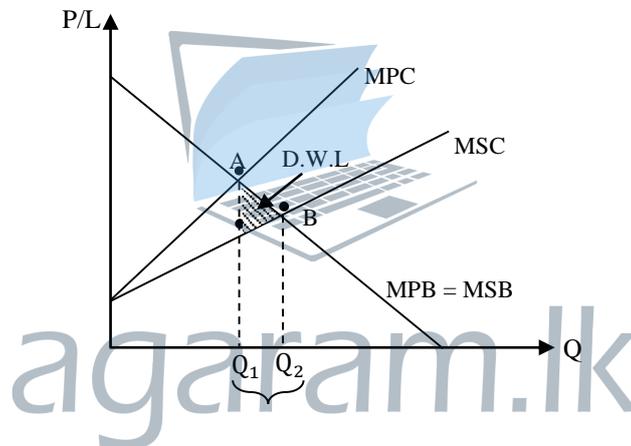
- Efficient allocation of resources
- Fair distribution of income and wealth
- Establishing of macroeconomic stability
- Establishing of economic growth and sustainable development

(4 marks)

II. Marginal social benefit is greater than private benefit when occur positive externality in production. As Market function based on private benefit and private cost, market output level would be less than optimum output level (Under Production). Inefficient resource allocation occurs.

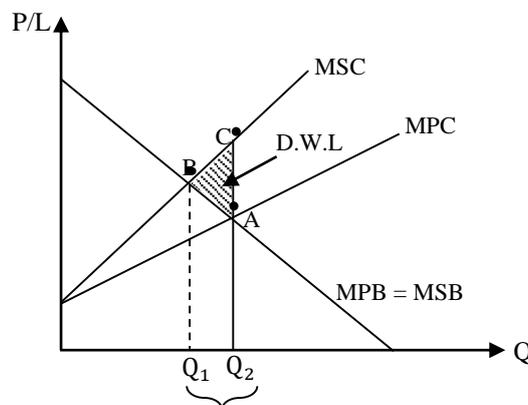
(1 mark)

Market failure occurs with positive externality of production can be explained by a graph as below.



(1 mark)

Marginal social benefit is less than private benefit when occur negative externality in production. Excess production occur.



(1 mark)

Excess Production

(1 mark)

### III. Excess Tax Burden

The excess burden of taxation, also known as the deadweight cost or deadweight loss of taxation, is one of the economic losses that society suffers as the result of taxes

(2 Marks)

Tax compliance

Tax compliance is the definite identification of which person will borne the tax burden after imposing a tax. In other words search of how the tax burden affects over various units of the economy after imposing a tax.

(1 mark)

Following that there are two forms of tax compliance.

1. Legal tax compliance
2. Economic tax compliance

(1 mark)

### IV. Government recurrent expenditure

Recurrent expenditures are the expenditures that should made again and again by the government to conduct administrative activities. Expenditures such as transfer payments and the day to day expenditures at a particular year are included in current expenditures

Components

Current Expenditure of government on goods and services

Current transfers and subsidy

Interest payment for public debt (2 Marks)

Effects of increasing current expenditure

- Decreases government savings
- Decreases investment level due to Decreases domestic savings
- Increases government total expenditure and increases budget deficit
- Show the government tax burden

(2 marks)

### V.

#### a) Appropriate Act

An appropriate act is the act which mentioned the expected expenditures of government for the next financial year separately under departments and ministries and also which includes revenue to meet these expenditures. In addition to that it shows how the gap between revenue and expenditure is fulfilled (1 mark)

#### Vote on Account

Due to an unexpected situation (war, election) if it is difficult to present appropriate act to the parliament and to get the approval from the parliament at the right time till it approves the temporary schedule presented to the parliament to pay the expenditures of each ministry for the next financial year from the government's consolidated fund is called vote on account.

(1 mark)

b) Crowding out effect

As government gets loan to finance budget deficit, Increases government expenditure and decreases government savings thereby decreases domestic savings and increases real interest rate. Increased real interest rate leads to reduce investment .so increased government budget deficit will reduce private investment which is known as crowding out effect.

Due to increase in credit interest rate and due to the absence of the flow of resources to the private sector creating of crowding out effect over the economy.

(2 marks)

8.

I.

a)

Opportunity Cost	Country A	Country B
Opportunity cost for one unit of X	40/50=0.8y	10/25=0.4y
Opportunity cost for one unit of Y	50/40=1.25X	25/10=2.5X

(1 mark)

A Country will specialize in Y Good.

B Country will specialize in X Good.

(1 mark)

b) Exchange rate for one unit of X Should occur greater than 0.4y and less than 0.8Y. (1 mark)

Exchange rate for one unit of Y should occur greater than 1.25X and less than 2.5X. (1 mark)

II. Nominal rate of protection

As a result of increasing import tariff the protection received by the good by with the increased price of imported good is known as nominal rate of protection. By nominal rate of prote ction the price of domestic producer presented as a percentage of domestic price of the imported product.

(1 Mark)

$$NRP = \frac{\text{Changes in market value of domestic product after tarif}}{\text{Market value of domestic production before tari}}$$

(1 mark)

Effective rate of proctionisim

The actual amount of protection received by the domestic producer by the imposition of tariff which is known as effective rate of protection

As imposes tariff on international trade , rate of increase in value added of the domestic product which is known as effective rate of protectionism.

(1 mark)

ERP = Effective Rate of Protection= changes in Value added of the domestic producer after the tariff/Value added of the domestic producer before the tariff

(1 mark)

III. The index that used to measure the import potential of export income is known as income terms of trade

(1 mark)

Income of terms of trade = (Export price index / import price index) X Export volume index X 100

(1 mark)

Effects of increase in income terms of trade

Increase in export earnings·

Increase in export potential

Increase in balance of trade

Overall balance of balance of payments being favorable

Generating of inflationary effects

(2X1=2 marks)

IV. Balance of current account = terms of trade + balance of service account + Balance of primary income account + Balance of secondary account  
-2309 = -9619 +

(1 mark)

Balance of current account differ from terms of trade

Balance of service account

Balance of primary income account

Balance of secondary income account

(1 mark)

Above mentioned sum of balance of three account would be positive and less than deficit in terms of trade.

(1 mark)

That amount is 7310 mil dollars.

(1 mark)

V. Depreciation of foreign exchange rate system happens under a floating exchange rate system. Decreasing the value of domestic currency in terms of a foreign currency is called depreciation.

(1 mark)

- As increase domestic tax on imports, Import expenditure would increase.
- Increase in foreign debt service payment.
- Export earnings can be increased due to increase in demand for exports.
- Balance of service account of balance of payments will be favorable due to increase in the earnings from tourism.

(3 marks)

9.  
I.

Economic growth rate

Continuous increase in real gross domestic product of the economy is called economic growth. An economic growth rate is a measure of economic growth from one period to another using percentage terms.

*Economic growth rate =*

$$\frac{\text{current years real domestic product} - \text{previous real domestic product}}{\text{Previous real domestic product}} \times 100$$

( 2marks)

Importances of economic growth rate are as follows.

- To identify changes on income /product of a country
- To identify the living condition of the people
- To identify changes on percapita GDP
- To plan for government
- To compare the countries internationally

(3 marks)

- II. Government budget deficit is in high  
Government loan burden is in high  
Expands terms of trade deficit  
Domestic savings is in low  
Domestic investment level is in low  
Weakness of good governance  
Insufficient skill development in economic infrastructure facilities

(5 marks)

- III. Human poverty index is a broader is a broader concept which includes many facets of poverty rather than the narrower concept of insufficient income to sustain life.

The amount of money needed for a poor person to escape from consumption poverty is known as poverty gap index.

It includes

- deprivation of longevity, measured as a percentage of the individuals with a life expectancy lower than 40 years .
- deprivation of knowledge, expressed as a percentage of illiterate adults
- deprivation of decent living standards . This last indicator is made up by the simple average of three basic variables:
  - the percentage of the population without access to drinking water
  - the percentage of population without access to health services and lastly,
  - the percentage of underweight children aged less than five

(3 marks)

Poverty Gap Index = Total monthly consumption expenditure of a poor person  
Distance between poverty line

(2 marks)

- IV. Unemployment or joblessness is a situation in which able-bodied people who are looking for a job cannot find a job

(1 mark)

- Non-matching the qualifications of job demanders with needs of labour market.
- Government fails to occur competency which need for labor market.
- The economic growth does not increase compare to growth of labour force.
- Keeping the labour more than firm needed
- There are restrictions to recruit labours for private sector

(3 mark)

10.

I. Economic growth of Sri Lanka is less

Due to this Educational level, training level are low level thereby human capital endowment is low level.

Expenditure on research and development is low

Low competency level of labour and wage level.

Low investment for education, training, research and development

(5 marks)

II.

No Poverty.

Zero Hunger.

Good Health and Well-being.

Quality Education.

Gender Equality.

(5 marks)

III. Build as a prosperous country in Sri Lanka

Change High middle income country

Make housing facility everyone

Confirmation of employment opportunities

To create the highest income and the best living environment for all citizens

A highly competitive social market economy based on knowledge and as a --\_strategic hub in the Sri Lanka Hindu Ocean Region

(5 X 1= 5 marks)

Numbering economically changes

IV. Projects will be completed fast.

It helps to take good decisions according to infrastructures

Increase income on investment of Public private partnership

It helps to reduce government budget deficit

It helps to reduce the public pressure against the privatization

(5X1= marks)