

ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA

LEVEL I EXAMINATION - AUGUST 2023

(103) Economics

Mathematical Related Questions

Question No.01
Demand and Supply

- a) The following Demand function and Supply function are given related to Product Z.

$$Q_d = 100 - 4P$$

$$Q_s = -20 + 8p$$

Using the above information.

Calculate the following of production Z.

- i. The equilibrium price and quantity.
 - ii. Producer Surplus and Consumer Surplus.
- b)
- i. Calculate the new equilibrium price and quantity after the unit tax if the government imposes a unit tax Rs. 6 on suppliers of the above commodity.
 - ii. Calculate the new equilibrium price and quantity after the unit subsidy if the government imposes a unit subsidy Rs. 3 on suppliers of the above commodity.
-

Question No. 02
Theory of Production

- a) You are given following with the following Cost information of a firm for a month.

Direct Cost = 180000

Indirect Cost = 45,000

The firm produced and Sold 2500 units during the month and selling price is Rs. 100/- each. Based on the above calculation.

Calculate

- i. Total Revenue (TR)
- ii. Accounting Profit
- iii. Economic Profit.

b) Calculate the following based on the given below table.

<u>Quantity</u>	<u>TC</u>	<u>TFC</u>	<u>TVC</u>
0	1000		
10	1250		
20	1500		
30	1750		
40	2000		

Question No. 03
National Income Accounting

a) You are given the following hypothetical data related to national of an accounts economy for a given period of one year.

Compensation of Employees	1200
Gross Operation Surplus	800
Mixed Income	1400
Other taxes Less Subsidies on production	740
Tax on production	250
Subsidy on product	200
Foreign Primary Income Receipts	1100
Foreign Primary Income Payments	1300
Foreign Secondary Income payments	300
Foreign Secondary Income Receipts	800

You are required to,

Calculate the following using Income Approach.

- i. Gross Value Added (GVA) at basic price
- ii. Gross Domestic Product (GDP) at Market Price
- iii. Gross National Income (GNI) Market Price
- iv. Disposable GNI at Market Price

b)

Private Consumption Expenditure	2100
Government Consumption Expenditure	4700
Gross Domestic fixed Capital formation	3500
Change in Stocks	1450
Imports	1600
Exports	1270
Net primary Income from ROW	-920
Net Secondary Income from ROW	480

You are required to,

Calculate the following.

- i. Gross Domestic Expenditure (GDE) at Market Price
- ii. Gross Domestic Production (GDP) at Market Price
- iii. Gross National Income (GNI) at Market Price
- iv. Disposable GNI at Market Price

Question No. 04
International Trade

Switzerland and Germany produce Clock and Television. The following table shows the number of unit of Clock and Television can be produced by one unit of labour by the both countries.

Country \ Product	Clock	Television
Switzerland	4	10
Germany	20	6

- Explain which country has the absolute advantage in the production of each product.
- Explain which country has the comparative advantage in the production of each product.

Question No. 05
MCQ Questions

- (1) For a certain commodity, the quantity demanded decreases from 20 to 10 when the price increases from Rs.20/- to Rs.40/-. The price elasticity of demand of that commodity would be:
- (1) Perfectly inelastic.
(2) Unitary elastic.
(3) Inelastic.
(4) Perfectly elastic.
- (2) When the price of commodity Y increases from Rs.75/- to Rs.125/-, the quantity demanded of commodity X decreases from 4,000 to 2,500. If X and Y are complementary goods, the cross price elasticity of demand between commodity X and Y would be:
- (1) 0.5625.
(2) - 0.5625.
(3) -1.778.
(4) 1.778.
- (3) When the percentage (%) change in quantity demanded is less than the percentage change in the price of the given good, then the demand of the given good is:
- (1) Inelastic.
(2) Elastic.
(3) Unitary
(4) Perfectly Elastic.
-