

University of Ruhuna - Faculty of Technology

Bachelor of Engineering Technology /Bachelor of Information & Communication
Technology/ Bachelor of Biosystems Technology

Level 2 (Semester 1) Examination, March/April 2021

TCS 2112 – Business Economics

Total Marks: 100

Time allowed: 02 hours

Instructions to candidates (Please Read Carefully):

- 1) All questions should be answered.**
- 2) Answers should be in English, in the booklet provided.**
- 3) Calculators are permitted.**
- 4) Submit all workings and calculations. State clearly assumptions made by you, if any.**

Question 01

Economics is a social science that deals with the production, distribution, and consumption of goods and services. It investigates how individuals, businesses, governments, and nations decide how resources are allocated.

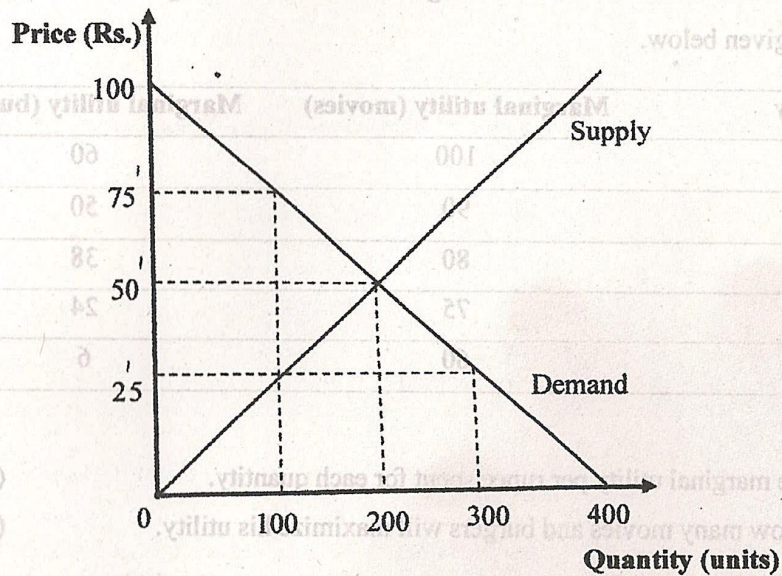
- i. State the factors of production. (2 marks)
 - ii. Explain the following concepts using the Production Possibilities Curve (PPC).
 - a) Scarcity (3 marks)
 - b) Inefficiency (3 marks)
 - c) Opportunity cost (3 marks)
 - iii. State **two (02)** reasons that cause Production Possibilities Curve (PPC) to shift outwards. (2 marks)
 - iv. Describe the difference between positive and normative economic approaches. (3 marks)
 - v. Mention the **three (03)** fundamental economic questions that should be answered by any economic system and explain how the Market, Command and Mixed economic systems answer each one of these questions. (9 marks)
- (25 marks)**

Question 02

- i. State **four (04)** factors other than its price, which may influence the demand of a commodity. (4 marks)
- ii. The current demand and supply conditions of product "X" are given below.
Demand (Q_D) = $400 - 10P$
Supply (Q_S) = $-50 + 5P$
Calculate equilibrium price and quantity of product "X." (4 marks)

- iii. The diagram (figure 2.3) shows the demand and supply curves of the product "Y" in a competitive market.

Figure 2.3



If the government imposes a tax of **Rs. 50 per unit** on the **producers** of this market;

- Calculate the consumer and producer surplus before and after the tax. (4 marks)
- Calculate the tax revenue earned by the government. (2 marks)
- Calculate the dead-weight loss to society. (2 marks)
- List **four (04)** methods that a government can intervene in the market other than imposing taxes. (4 marks)

- iv. The demand schedule for commodity Z is given below.

Price (Rs.)	Quantity demanded (units)
15	100
20	90

- Calculate the price elasticity of demand for commodity Z. (2 marks)
- Discuss the results obtained for part (a) and comment about commodity Z. (3 marks)

(25 marks)

Question 03

- i. Define the term "Utility." (2 marks)
- ii. Dhananjaya has Rs. 1,600 to spend on either movies or burgers and wants to maximize his utility. A movie ticket costs Rs. 300 and a burger costs Rs. 200. Marginal utilities for movies and burgers are given below.

Quantity	Marginal utility (movies)	Marginal utility (burgers)
1	100	60
2	90	50
3	80	38
4	75	24
5	60	6

- a) Calculate the marginal utility per rupee spent for each quantity. (5 marks)
- b) Determine how many movies and burgers will maximize his utility. (4 marks)
- iii. "Economic costs are theoretical constructs that are intended to aid in rational decision-making." Briefly explain the difference between **Explicit** and **Implicit** costs with examples. (4 marks)
- iv. Calculate the values of **TVS**, **ATC**, **AVC**, **AFC**, and **MC** for each output level. (10 marks)

Output	Total cost	TVS	ATC	AVC	AFC	MC
0	24					
1	33					
2	41					
3	48					
4	54					
5	60					

(25 marks)

Question 04

- i. Describe the main difference between short-run and long-run production. (2 marks)
- ii. Describe **two (02)** “barriers to entry” created by a monopolist. (4 marks)
- iii. “A firm operating in a perfectly competitive market is a price-taker.” Discuss this statement using graphs where necessary. (4 marks)
- iv. Describe “Price Discrimination” using a real-life example that you have seen or experienced. (3 marks)
- v. Distinguish the main characteristics of Monopoly and Monopolistic Competition. (6 marks)
- vi. Briefly explain **any two (02)** of the following concepts. (2*3 = 6 marks)
 - a) The Diamond-Water Paradox
 - b) Diminishing Marginal Returns
 - c) Oligopoly
 - d) The law of demand

(25 marks)
