

Uva Wellassa University

Faculty of Management

Degree of Bachelor of Business Management and Entrepreneurship

Year 2 Semester II Examination – June/July 2009

EMG 241-3 Economic Thinking in Business

Section III

Answer Three (3) Questions only

Total marks 60

01. Anoma's utility function for good X and Y is represented as $U(X, Y) = X^{0.2} Y^{0.8}$. Assume, her income is Rs. 100 and the price of X and Y is Rs. 10 and Rs. 20, respectively.
- i. Express her marginal rate of substitution (MRS) between good X and Y.
 - ii. As the amount of X increase relative to the amount of Y along the same indifference curve, does the MRS increases or decrease? Explain.
 - iii. What is her optimal consumption bundle (X^*, Y^*) , given her income and prices of the two goods?
 - iv. How will this bundle change
 - a) When all prices double and income hold constant?
 - b) When all prices double and income doubles?
 - v. Derive the demand curve for good X and demand curve for good Y.



Now a government subsidy program lowers the price of Y from Rs.20 per unit to Rs.10 per unit.

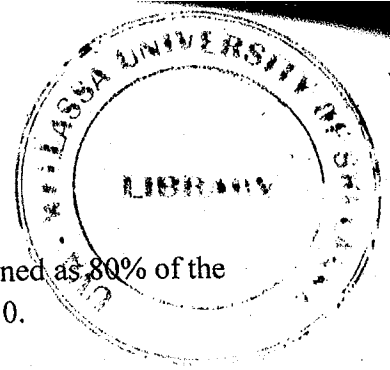
- vi. Calculate and graphically show the change in good Y consumption resulting from the program.

(20 marks)

02. Suppose a firm in a perfectly competitive market faces a cost function of $C = 8 + 4Q + Q^2$ and market price for the good is Rs.100.

- i. What is the formula for the firm's marginal cost, MC?
- ii. What is the firm's fixed cost, F?
- iii. What is the formula for the firm's variable cost, VC?
- iv. What is the formula for the average cost, AC?
- v. What is the formula for the average variable cost, AVC?
- vi. On a diagram, draw the AC, AVC, and MC curves.
- vii. What is the profit maximizing output level?
- viii. Calculate and show the amount of economic profit or loss.

(20 marks)



03. In a closed economy without a government sector, consumption is determined as 80% of the income available to households. Investment is autonomous at a level of Rs. 450.

- i. Calculate consumption and aggregate demand.
- ii. What is the equilibrium level of income?
- iii. What would be the equilibrium income if investment increased by Rs. 50?
- vi. Calculate the value of the multiplier, given the change in investment.

Now suppose that the government levies direct taxes of 10% of income and undertakes expenditure of Rs. 250, with investment back at Rs.450;

- v. Calculate disposable income, consumption and aggregate demand.
- vi. What is the equilibrium level of income?
- vii. What is the size of the government budget deficit?
- viii. Calculate the value of the multiplier if investment increased by Rs. 50.

(20 marks)

04. Which of the following are counted in the year's measurement of GDP?

Explain your answer in each case.

- i. Toyota car-dealer sells a second-hand Tata car.
- ii. A Toyota dealer earns a commission for selling a second-hand Tata car.
- iii. Mrs. Bandaramanike cooks a meal for her family.
- iv. Mrs. Ranmenike takes her family to "Dulsara Restaurant" for a meal.
- v. A Toyota dealer's unsold new car.
- vi. Mr. Rajadasa purchased 100 shares from the Commercial Bank of Sri Lanka.
- vii. Mr. Danapala received Rs.2000 as his Mahapola Scholarship.
- viii. Air and water pollution increase in Sri Lanka.
- ix. Prostitution is legalized in Sri Lanka.
- x. A retired worker receives a pension payment from the government.

(20 marks)

05. Write short notes on **Four (4)** of the following topics

- i. Regression Techniques and Demand estimation
- ii. Economic Recession and its Impact on Sri Lanka
- iii. Price discrimination of Monopoly Producer
- iv. Fuel Hedging Agreement of Sri Lanka
- v. Philip's curve and its practical usability
- vi. Maximin Strategies

(20 marks)