# **UNIVERSITY OF RUHUNA**



## Faculty of Engineering

End-Semester 3 Examination in Engineering: August 2015

Module Number: IS3306 (O/C) Module Name: Basic Economics

## [Three hours]

[Answer all questions, each question carries ten marks] [Use separate booklets for Section A and Section B]

#### **SECTION A**

O1.

a) What do you mean by Gross Domestic Product and Gross National Product?

[2.0 Marks]

- b) Which of the following are included for calculating the Gross Domestic Product? Explain why.
  - i. Sale of goods produced by a manufacturing firm
  - ii. Your used bicycle is sold to your friend
  - iii. Selling your car to a used car dealer who sells your car to someone else for a higher price
  - iv. Selling a stock or bond

[4.0 Marks]

c) The value of aggregate output is same even though it can be measured by three different production, income and expenditure approaches. Explain this statement by emphasizing the circular flow of national income of a four sector economy.

[4.0 Marks]

Q2.

a) What do you mean by labor force participation rate?

[2.0 Marks]

b) What are the basic types of unemployment? Explain.

[3.0 Marks]

- c) What are the demand and supply side policies to reduce the unemployment of a country? [5.0 Marks]
- Q3. Write short notes about five of the following
  - a) Inflation and disinflation
  - b) Demand-pull inflation and cost-push inflation
  - c) Comparative advantage theory and absolute advantage theory
  - d) Improving versus depreciating the terms of trade
  - e) The current account of the balance of payments

[2.0 x 5 Marks]

#### SECTION B

04.

a) Production possibility frontier illustrates three concepts; choice, scarcity and opportunity cost. Explain these concepts separately.

[3.0 Marks]

b) Explain the terms "substitutes in production" and "complements in production".

[2.0 Marks]

c) Explain the Ceiling Price and Floor Price.

[2.0 Marks]

d) Explain the difference between a movement along a supply curve and a shift in the supply curve.

[3.0 Marks]

Q5 a) What do you mean by an "Indifference Curve"?

[1.0 Mark]

b) Explain the steps that relate Marginal Utility to Marginal Rate of Substitution along an indifference curve.

[3.0 Marks]

c) Assume a consumer buys only two goods, X and Y. "An increase in money income causes a parallel outward shift in the budget line. An increase in the price of X causes the budget line to pivot backward around the original vertical intercept." Explain this with the aid of graphs.

[2.0 Marks]

d) While shopping you discover that you have only Rs.200. You have planned to consume two products A and B. A list of marginal utility you expect to receive from various levels of A and B is given. Prices of A and B are Rs. 25 and Rs.20 per unit respectively. Using this information find how to get the maximum utility from consuming A and B. (Explain your answer)

[4.0 Marks]

Unit	Marginal Utility of A	Marginal Utility of B
1	200	600
2	150	400
3	125	200
4	100	160
5 .	75	80
6	50	40

a) State and explain 5 factors that affect a consumer's demand schedule.

[2.0 Marks]

- b) Given the demand curve is fixed, what effect will each of the following have on the supply of product X? Explain your answer.
  - i. There is a technological advance in the methods of producing X.
  - ii. There is a decline in the number of firms in the industry that produces X.
  - iii. There is an increase in the prices of resources required to produce X.
  - iv. There is an expectation that the equilibrium price of X will be lower in the future than it is at present.
  - v. There is a decline in the price of product A, a good whose production requires substantially the same techniques and resources as does the production of X.

    [5.0 Marks]
- c) What are the major determinants of the price elasticity of demand? Briefly explain them. [3.0 Marks]