

**THE OPEN UNIVERSITY OF SRI LANKA**  
**ENTREPRENEURSHIP AND SMALL**  
**BUSINESS MANAGEMENT PROGRAMME**  
**FINAL EXAMINATION – 2005/2006**  
**MCC 1103 – BASIC STATISTICS & ECONOMICS**  
**DURATION : TWO (02) HOURS**



**Date : 19<sup>th</sup> February 2006**

**Time: 10.00 a.m. – 12.00 noon**

**GENERAL INSTRUCTIONS.**

1. Answer TWO (02) questions from PART 'A' and TWO (02) questions from PART 'B'.
2. It is advisable to spend one hour for each part.
3. Provide answers for each part separately in separate answer books and hand over them separately.
4. Graph papers will be provided.
5. Non programmable calculators are allowed.
6. All questions carry equal marks.

**PART - A**

01. a) "An opportunity cost arises due to scarcity of resources" Discuss with examples. (10 marks)
- b) i. What are the assumptions in relation to production possibility curve analysis? (05 marks)
- ii. When a country produces at a level which is inside its production possibility curve (P.P.C) explain whether it is necessary to reduce the production of one good to increase the production of the other, using P.P.C. Analysis. (10 marks)
02. Write brief notes on the following to clearly bring out the meaning.
- a) Specialization
  - b) Income and substitution effect
  - c) The determinants of supply
  - d) Monopolistic competition
- (25 marks)
03. a) Can paddy farmers influence the price in the market? Explain. (15 marks)
- b) Under what kind of market will the providers of cellular phone service operate? Justify your answer. (10 marks)

04. a) i. What is the Law of demand? (05 marks)  
 ii. "Demand curve is not always negatively sloped" Do you agree? Explain. (08 marks)
- b) i. What are the conditions that create a monopoly? (05 marks)  
 ii. What kind of a demand curve does a monopolist face? Why? (07 marks)

**PART - B**

05. a) Explain the terms 'population' and 'sample' as used in statistics.  
 b) Why does a statistician resort to sampling instead of studying the full population? Explain giving examples.  
 c) Explain the difference between discrete and continuous data. (25 marks)

06. Two salesmen were posted in different areas by a company. The number of units of commodity 'X' sold by them are as follows.

Sales	A	30	33	38	39
Men	B	35	42	40	31

- a) Find the mean and standard deviation of the number of items sold by both A and B.  
 b) Who is the most consistent salesman? Explain. (25 marks)
07. a) Evaluate  $\frac{12}{4 \times 8}$   
 b) Show that  $\log b^u \times \log_a b = 1$   
 Solve the following equations.  
 c)  $\frac{6x}{22} - \frac{2x}{8} = 6$   
 d)  $2x^2 - 8 = 0$   
 e) The sum of two numbers is 92. Their difference is 54. Find the two numbers.

(25 marks)