THE OPEN UNIVERSITY OF SRI LANKA
CERTIFICATE IN ENTREPRENEURSHIP AND
SNALL BUSINESS MANAGEMENT PROGRAMME
FINAL EXAMINATION – 2008/2009
MCC – 1103 - BASIC STATISTICS & ECONOMICS
DURATION : TWO (02) HOURS

Date : 14th December, 2008 Time : 10.00 a.m. to 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 question carry equal marks.**

PART A

01. (i) What are the fundamental economic problems faced by a country ?
(ii) Explain how a country that has a mixed economic system solve these problems.
(iii) What is economic growth ? Explain with the help of Production Possibility Curve?

02. i. What is the law of supply ?

ii. "Change in supply and change in quantity supplied do not mean the same"
Do you agree ? Explain using illustrations.

iii. Using demand and supply analysis explain the out come of the market under each of the following situations.
a) Good x is produced by using more labour, and the wage rate increases. What is the market for x ?
b) Price of computers declines. What is market for software?
c) Government provides a subsidy for paddy farmers. What is the market for rice ?
d) Price of bread declines. What is market for rice?
e) Income of people increases. What is the market for black and white T.V ?

03. In which markets the following firms operate ?Are the firms price takers or price makers Give reasons for your answer.

(i) A firm providing insurance service.

(ii) A firm manufacturing shoes.

04. Write brief notes on the following

(i) Barter system and its disadvantages.

(ii) Income and substitution effect.

(iii) Perfectly competitive market.

(iv) Scarcity and opportunity cost.

PART B

05. (i) Find the simplest value of $243 \times (27)^{-4/3}$

(ii) (a) Evaluate $(5.7)^2$ by considering 5.7 as $(5 + 0.7)$

(b) Evaluate $\left|\begin{array}{c|} 12 \\ \hline 8 \end{array}\right|$

(iii) Solve the following questions

(a) $7x - 5[x - \{7 - 6(x-3)\}] = 2x + 5$

(b) $3x + 5y = 19$

$x + 3y = 9$

(c) $15x^2 - 10x = 40$

(d) A man moves from A to B at the rate if 4 km an hour. Had he moved at the rate of 3 2/3 km an hour, he would have taken 3 hours more to move from A to B. Find the distance between A and B.

06. (i) Explain each of the following briefly.

(a) Stratified sampling

(b) Cluster sampling

(c) Multistage sampling

(ii) Which of the following is the odd one out ?
Mean, median, mode, range. Explain briefly.

(iii) The following tables show the scores of two groups of students in a test question.

(a)

Mark	0	1	2	3	4
Frequency	10	5	8	x	3

Determine the value of "x" if the median of these marks is 1.5.

(b)

Mark	0	1	2	3	4
Frequency	10	5	8	y	3

Determine the value of "y" if the mean of these marks is 1.5.

07. (i) Explain the following data presentation methods

(a) Pictogrammes
(b) Pie-charts
(c) Bar charts

(ii) Listed below is the number of items purchased by 30customers from a super market.

15	8	6	9	9	4	18	10	10	12
12	7	7	8	12	10	10	11	9	13
5	6	11	14	5	6	6	5	13	5

(a) Organize the number of items into a frequency distribution.

(b) Find the mean and the median.

(c) Find the standard deviation (S.D) of the data.

(d) Interpret the results.