THE OPEN UNIVERSITY OF SRI LANKA
ENTREPRENEUSRSHIP AND SMALL BUSINESS MANAGEMENT
PROGRAMME
FINAL EXAMINATION – 2006/2007
MCC 1103 – BASIC STATISTICS & ECONOMICS
DURATION : TWO (02) HOURS

Date : 20ᵗʰ January 2008   Time : 10.am and 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

(1) (a) How will a country with,
   (i) An Open/Liberal Economic System
   (ii) A Mixed Economic System, will find answers to the three basic micro economic questions?

   (10 marks)

   (b) (i) What are the assumptions of Production Possibility Curve Analysis?
   (ii) What factors affect the shift of Production Possibility Curve of a country?
   (iii) Suppose a country produces more of consumer goods in comparison to capital goods, using the available resources. How will this affect the economic growth of the said country?

   (5 x 3 = 15 marks)

(2) (a) What are the disadvantages of Barter System?

   (04 marks)

   (b) "Demand curve for some goods contradicts the law of demand" Do you agree? Explain with an example.

   (06 marks)

   (c) Using the demand and supply analysis explain the likely changes in the market, under following given conditions. Use illustrations.
   (i) More and more people have started Banana cultivation. Market condition for Banana.
   (ii) Government provides a subsidy for paddy farmers. Market condition for paddy.

1

(iii) The price of Butter has increased. Market condition for Margarine.

(iv) The price of electricity has gone up by a big margin. Market condition for Electric Cookers.

(v) Production of good X is highly labour intensive. Wage rate of labour has gone up recently. Market conditions for good X.

(vi) Media has given a wide coverage on adverse health effects of eating meat. Market condition for meat.

(15 marks)

(3) (a) What are the similarities and differences of Perfectly Competitive and Monopolistic Competitive markets?

(08 marks)

(b) Explain with examples how the knowledge you have gained in relation to market structures help you, in setting up a business.

(17 marks)

(4) Distinguish between,
(i) Positive and Normative Economic Analysis
(ii) Fixed and Increasing Opportunity Cost
(iii) Income and Substitution effect
(iv) Movement along the Supply Curve and shift of the Supply Curve

(25 marks)

PART - B

(5) (i) If $\log_a b = 3$ and $\log_a 64 = 2$ what is the value of "a" ?

(ii) If $x^2 = y^2 \sqrt{2vu}$; find the value of v.

(iii) Simplify $\dfrac{n+1}{\left\lvert (n+1) - n \right\rvert n}$

(25 marks)

(6) Solve the following equations

(i) $9x + 5 = 2(8 - x)$

(ii) $\dfrac{5x + 4y}{20} = 22 \quad and \quad \dfrac{4x + 5y}{20} = 23$

(iii) $96 - 24y + 2y^2 = 12y - y^2$

(iv) The cost in rupees (C) of a telephone per year is given by the equation C=A + nk where "n" is the number of calls made and "A" is the fixed annual rental while "K" is the charge per call. The cost for 1200 and 1500 calls are Rs.960/- and Rs.1050/- respectively. Find the value of "A" and "K" and the cost for 800 calls.

(25 marks)

(7)   The sales of shirts of different collar sizes are given in the following table.

Collar size (cm)	36	37	38	39	40	41	42
Number sold	5	7	17	27	26	12	6

(i)   Draw a suitable diagram to represent the above data.

(ii)   Calculate the mean($\bar{x}$), median and mode for the above data.

(iii)   What central tendency measurement do you recommend? Why?

(iv)   Calculate the standard deviation(SD)

(v)   Calculate $(\bar{x} - SD)$ and $(\bar{x} + SD)$ and find the percentage that falls into this range.

(25 marks)