



THE OPEN UNIVERSITY OF SRI LANKA

CERTIFICATE IN ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT

FINAL EXAMINATION – 2009

BASIC STATISTICS AND ECONOMICS – MCC 1103

DURATION : TWO (02) HOURS

DATE : 06.12.2009

TIME : 10.00. a.m. – 12 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

1. (a) (i) What are the assumptions of Production Possibility Curve analysis ?
(ii) “If the production level of a country is inside its production possibility curve, it is always possible to increase the production of one good with out reducing the production of the other good” Do you agree ? Explain using illustrations.
(iii) What are the factors that will shift the production possibility curve outwards ?
(b) Using examples explain the difference between Positive and Normative Economic analysis.
2. (a) Using illustrations explain the following
(i) Movement along and the shift of the Demand Curve.
(ii) Movement along and the shift of the Supply Curve.
(b) Using illustrations, explain how the market condition will change, under following given situations.
(i) The price of wheat flour increases, market for bread.
(ii) Price of bread increases, market for rice.

- (iii) Government impose a tax on milk powder, market for milk powder.
 - (iv) Government provides a subsidy for rice farmers, market for rice.
 - (v) People expect the price of building materials to rise in a rapid rate in the near future, market for building materials.
- (c) Using an example explain the difference between individual demand curve and market demand curve.
3. (a) Explain the main characteristics of following markets.
- (i) Perfect Competition.
 - (ii) Monopolistic Competition.
- (b) Explain in what type of market the following business operate.
- (i) Soft Drink manufacturing firm.
 - (ii) Insurance firm
- Justify your answer.
4. Write brief notes
- (i) Basic Economic Questions.
 - (ii) Specialization and its advantage.
 - (iii) Barter system and its disadvantages.
 - (iv) Substitution Effect.
 - (v) Monopoly.

PART B

5. (i) Find the simplest value of $256 \times (64)^{-\frac{2}{3}}$
- (ii) (a) Evaluate $(3.8)^2$
- (b) Evaluate $\frac{\boxed{8}}{\boxed{10}}$

(iii) Solve the following questions

(a) $2x+3+\frac{8-4(2x-3)}{4} = 13 - x$

(b) $2x - 3y = 5$
 $x + 5y = 22$

(c) $3x^2 - 6x = 72$

(d) A project required a few identical tasks to be completed. A man can do two such tasks per hour. If he can do three such tasks per hour, then he will be able to save 2 hours in completing the project. How many such tasks are there in the project ?

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

(a)	Mark	30	40	50	60	70
	Frequency	X	11	13	20	10

Find X if the median is 55.

(b)	Mark	1	2	3	4	5
	Frequency	2	2Y	4	Y	1

Find Y if mean is 2.7.

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

10	11	6	8	3	1	4	9	7	2
3	8	7	5	12	9	4	1	3	5
6	9	2	8	11	4	3	7	10	4

- (a) Construct a frequency distribution for above data.
(b) Find the mean and the median.
(c) Find the standard deviation (S.D) of the data.
(d) Interpret the results.

7. Write short notes on the following

- (a) Pictogrammes
(b) Bar charts
(c) Stratified sampling
(d) Graphs