

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF BUILT ENVIRONMENT

BACHELOR OF QUANTITY SURVEYING (HONOURS) DEGREE

PART I FIRST SEMESTER EXAMINATIONS JANUARY 2008

PRINCIPLES OF MICROECONOMICS - 1104

TIME: 3 Hours

TOTAL MARKS: 100

INSTRUCTIONS:

Answer any four questions

All questions carry equal marks

QUESTION 1

- i) Interpret and illustrate the graphs of the following equations.
- a. $Q_d = f(P_x, \overline{P_g, Y, T, N})$
 - b. $Q_s = f(P_x, \overline{P_g, P_f, P_e, T_y, N})$
 - c. What are the other factors that affect demand? *(6 marks)*
- ii) With the aid of diagrams where necessary define the five categories of elasticity of demand and supply. *(10 marks)*
- iii) By means of graphs, describe and explain the movement along a demand curve and a shift of the supply curve. *(6 marks)*
- iv) Illustrate an equilibrium in the market, highlighting the effects of price ceilings and floors. *(3 marks)*

QUESTION 2

- a) i) In the Utility approach of consumer choice, define “Total Utility”. *(2 marks)*
- ii) Given the table below, define, calculate and present in column form the marginal utility, weighted marginal utility and consumer equilibrium for the two goods, Bread and Meat. *(8 marks)*

	Bread = $P_B = \$3$	Meat = $P_M = \$2$
Units	TU	TU
1	90	66
2	171	126
3	243	180
4	306	228
5	390	270

- b) i) In the Indifference approach of consumer choice, describe and explain the consumer equilibrium positions with the aid of a clearly labelled diagram. *(5 marks)*
- ii) Using the concept of Indifference Curve analysis, separate the Income and Substitution effects following a price change for the following goods.
- a. Normal goods *(5 marks)*
- b. Inferior goods *(5 marks)*

QUESTION 3

- a) With the aid of clear examples, define
- i) Needs
 - ii) Wants
 - iii) Demand *(6 marks)*
- b) Using a clearly labelled Production Possibilities Curve (PPC), describe and explain the concepts of scarcity, choice and opportunity cost. *(6 marks)*
- c) i) Discuss the three central economic questions highlighting how the different types of economic systems respond to or solve these questions. *(9 marks)*
- ii) In these modern times, which economic system would you say is desirable and efficient? Give reasons for your choice. *(4 marks)*

QUESTION 4

Mr. Gumbo, a teacher by profession, left teaching to run his own business. He could have earned a total of \$75 000, 00 in salary and fringe benefits and he would have earned \$5 000, 00 in interest if he had kept his \$50 000.00 in a savings account, instead of using

it to purchase his capital equipment. Assuming that Mr. Gumbo, purchases timber to the value of \$180 000, 00 pays a total of \$60 000, 00 in wages to his employees, purchases hinges, screws, glue, oil, veneer and others to the value of \$15 000, 00, incurs electricity and telephone costs of \$3 000, 00, transport costs of \$17 000, 00 and estimates the depreciation of his capital equipment at \$5 000, 00. Assuming also that Mr. Gumbo used all the inputs during the year and that he sold all the furniture he made.

- (a) Define and calculate
- i) Explicit costs
 - ii) Implicit costs
 - iii) Total economic costs
 - iv) Economic profit
 - v) Normal profit
 - vi) Show the differences between economic and accounting profit. Why are they different? *(12 marks)*
- (b) With the aid of clear diagrams, describe and explain the relationship between a firm's marginal and average product and its marginal and average costs. *(10 marks)*
- (c) Diagrammatically, describe and explain the law of diminishing returns. *(3 marks)*

QUESTION 5

- (a) With the aid of diagrams and examples describe and explain the perfect competition and monopoly market structures, paying particular attention to their characteristics/features. *(12 marks)*
- (b) i) What do you understand by the profit maximization rule? *(3 marks)*
- ii) With the aid of diagrams, illustrate and explain the possible short run equilibrium positions of the firm under perfect competition. *(10 marks)*

QUESTION 6

- (a) In microeconomics, define and give examples of factor and goods markets. *(4 marks)*
- (b) With reference to the circular flow of goods and services as well as income and spending discuss the interaction between households and firms. *(15 marks)*
- (c) Discuss and illustrate the individual labour supply curve, highlighting the substitution and income effect to the curve. *(6 marks)*