# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY 

 FACULTY OF INDUSTRIAL TECHNOLOGYDEPARTMENT OF TECHNICAL TEACHER EDUCATION
BACHELOR OF EDUCATION HONOURS DEGREE IN ACCOUNTING MACROECONOMICS ANALYSIS AND APPLICATION
[CBA 2104]
GENERAL EXAMINATION
MAY 2011

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATES

- Answer any FOUR [4] questions
- $\quad$ Start the answer to each question on a fresh page of the answer sheet.
- $\quad$ Show all your workings
- Questions may be written in any order, but must be legibly numbered.

INFORMATION FOR CANDIDATES

- The paper contains FOUR [4] questions
- All questions carry equal marks [25 marks]
$\qquad$

Turn over

## QUESTION 1

(a) Given: $\quad$ Qd ${ }_{1}=10-2 P_{1}+P_{2}$

$$
\begin{array}{ll}
\text { Qs }_{1} & =-2+3 P_{1} \\
\text { Qd }_{2} & =15+P_{1}-P_{2} \\
Q s_{2} & =-1+2 P_{2}
\end{array}
$$

(i) Determine the equilibrium quantities.
(ii) Determine the equilibrium prices.
(iii) Illustrate these diagrammatically.
(b) What are the assumptions underlying General Equilibrium in a $2 \times 2 \times 2$ economy?

TOTAL
[25 MARKS]

## QUESTION 2

Mr. SODHLAM consumes $X$ tubes of milk and $Y$ packs of mfushwa per month. His income is $\$ 400$. His utility function is given by:

$$
U \quad=U(x, y)=x^{34} Y^{1 / 4}
$$

And the price of milk is $\$ 10$ per pint and the price of mfushwa is $\$ 30$ per packet.
Assuming Mr. SODHLAM spend all the income he receives on milk and mfushwa.
(a) Calculate the maximum amount of each good that Mr. SODHLAM must consume in order to maximize his utility given his budget constraints.
(b) Depict the consumer equilibrium on a diagrammatic sketch.

## QUESTION 3

a) Write brief notes on the following:
(i) Technical efficiency [3 marks]
(ii) Economic efficiency [3 marks]
(iii) Uncertainty and bounded rationality [5 marks]
iv) Uncertainty and transaction costs
b) What is the difference between Static equilibrium and Partial Equilibrium?

TOTAL

## QUESTION 4

a) State the three (3) states of information.
b) Explain the difference between, certainty risk and uncertainty.
c) Write brief notes on the concept of "The market lemons"
d) Given the utility function: $U=x y+x+2 y$ subject to the constraint: $2 x+y=B_{0}$, where $B_{0}=100$.
(i) Write the lagrangean function of the above utility function.
(ii) Find the optimal levels of consumption of $x$ and $y$.

TOTAL
[25 MARKS]

## QUESTION 5

a) What do you understand by "The problem of moral hazard"?
[10 marks]
b) Using examples discuss the maximin, minimax and maximax regret technique of coping with uncertainty.

## QUESTION 6

a) What is meant by market failure?
b) Evaluate ways in which a government may deal with externalities.
[15 marks]

TOTAL
[25 MARKS]
END OF EXAMINATION

