INSTITUTE OF DISTANCE AND OPEN LEARNING

Gauhati University

H O M E A S S I G N M E N T

M. A. Economics

(1st Semester)

Session: 2012-2013

***Guidelines for Submission*:**

1. Write your name, session, roll number, the topic selected and the title of the answer *clearly on the top.*
2. Each topic given in each paper will be answered in *not more than 800 words each*. There will be negative marking for writing in excess of the word-limit.
3. Each answer (essay) carries a weightage of 2**0 marks**.
4. Keep a margin of about 1 inch on each side of the page.
5. You can submit the essay written in your own hand-writing on clean, foolscap sheets, or A-4 sized paper on one side of each page.
6. In case you prefer to submit type-written answers, make sure that there are no typing errors which will deduct from the overall impression.
7. Do not submit commercially purchased answers as such a practice is deemed to be unfair.
8. Please submit your assignment by **31st October, 2012**.

Paper 1: Microeconomic Theory

1. Explain how the cost function can be derived from the production function. 20

or

2. Explain the process of derivation of a firm's individual demand curve and the market demand curve in a competitive factor market when the factor is a single variable factor and when it is one of the variable factors. 20

Paper 2: Macroeconomic Theory

1. Explain the relationship between output and investment implied by the 'accelerator theory'. 20

or

2. What are the implications of the life cycle hypothesis for the effectiveness of monetary policy? 20

Paper 3: Mathematical Methods for Economic Analysis

1. a) Solve the following national income model with crammer's rule. 10

$Y=C+I+G$

$C=a+b(Y-T)$; $(a>0; 0<b<1)$

$T=c+dY$; $(c>0; 0<d<1)$

b) A consumer has a utility function $U=U(Q) = ab^c$ $(a>0, 0<b<1)$

Does the utility function display diminishing marginal utility? 10

or

2. a) Prove that Constant Elasticity of Substitution (CES) production function being linearly homogeneous satisfy the Euler's theorem. 14

b) Distinguish between Partial differentiation, Total differentiation and Total differential. 6

Paper 4: Statistics and Econometrics

1. a) Discuss the relation between Laspayre's and Paasche's index numbers. 14

   b) What is base shifting, splicing and deflating of index numbers. 6

or

2. Discuss the theory of Log-normal income distribution. 20

* * *