BECC-105

BACHELOR'S OF ARTS (ECONOMICS HONOURS) PROGRAMME

(BAECH)

ASSIGNMENT 2021

COURSE CODE: BECC-105

INTERMEDIATE MICROECONOMICS - I

SCHOOL OF SOCIAL SCIENCES
INDIRAGANDHINATIONALOPENUNIVERSITY
MAIDAN GARHI, NEW DELHI-68

Dear Student,

As we have informed you in the Programme Guide, evaluation at IGNOU consists of two parts: i) continuous evaluation through assignments, and ii) term-end examination. In the final result, assignments of a course carry 30% weightage while 70% weightage is given for term-end examination.

You will have to do three Tutor Marked Assignments (TMA) for a six credit course and two TMAs for a four credit course. This Assignment booklet has TMAs for the core course **BECC-105 Intermediate Microeconomics-I** which is a six credit course. The booklet therefore has three TMAs whose total marks add up to 100 and carry a weightage of 30 %.

Assignment One has Descriptive Category Questions (DCQs). These are meant for writing essay type answers, with an introduction and a conclusion. These are intended to test your ability to describe your understanding/knowledge about the topic in a systematic, to-the-point and coherent manner.

Assignment Two has Middle Category Questions (MCQs). These questions require you to first analyse the topic in terms of arguments and explanations and then write the answers in a concise manner. They are meant to test your ability to distinguish, compare and contrast, or clear understanding of the concepts and processes.

Assignment Three has Short Category Questions (SCQs). These questions are meant to improve your skill of recall in brief the relevant/precise information about persons, writing, events, or clear understanding of concepts and processes.

Before you attempt the assignments, please read the instructions carefully provided in the Programme Guide. It is important that you write the answers to all the TMA questions in your own words. Your answers should be within the approximate range of the word-limit set for a particular section. Remember, writing answers to assignment questions will improve your writing skills and prepare you for the term-end examination.

As mentioned in the Programme Guide, you need to submit all the assignments within the stipulated time for being eligible to appear in the term-end examination. .

The assignments should be submitted to the Coordinator of your Study Centre before 31st October 2021. You must obtain a receipt from the Study Centre for the assignments submitted and retain it. If possible, keep a xerox copy of the assignments with you.

The Study Centre will have to return the assignments to you after they are evaluated. Please insist on this. The Study Centre has to send the marks to the Student Evaluation Division at IGNOU, New Delhi.

We expect you to answer each question as per guidelines for each category as mentioned in the assignment. You will find it useful to keep the following points in mind:

1) **Planning:** Read the assignments carefully, go through the Units on which they are based. Make some points regarding each question and then rearrange them in a logical order.

2) **Organisation:** Be a little selective and analytic before drawing up a rough outline of your answer. Give adequate attention to your introduction and conclusion.

   Make sure that your answer:
   a) is logical and coherent;
   b) has clear connections between sentences and paragraphs, and
   c) is written correctly giving adequate consideration to your expression, style and presentation.

3) **Presentation:** Once you are satisfied with your answer, you can write down the final version for submission, writing each answer neatly and underlining the points you wish to emphasize. Make sure that the answer is within the stipulated word limit.

Course Code: BECC-105
Assignment Code: Asst /TMA /2021
Total Marks: 100

Assignment One

Answer the following Descriptive Category questions in about 500 words each. Each question carries 20 marks

$2 \times 20 = 40$

1. (a) Using appropriate diagrams compare the different forms of Long-run industry supply curves in Perfect competition. (10)

   (b) A perfect competitive industry faces a demand curve represented by $Q = 25{,}000 - 1000P$. Also suppose that an individual firm belonging to that industry faces a total cost function given by

   $$TC\,(q) = 40q - q^2 + 0.01q^3$$

   Here q represents quantity of output produced by an individual firm, Q is the total industry output and P is the price. What would be the equilibrium market price? How much does each firm produce in equilibrium? and also find how many firms would be there in the industry in the long run? (10)

2. (a) Given the utility function of an individual, $U(W) = 20W$, where W stands for wealth. Comment upon the Risk Aversion of such an individual with the help of a diagram. (5)

   (b) Now, let the initial wealth of the individual mentioned above be Rs 400. Suppose this individual runs a factory, the chances of which catching fire is 1/5. The damage that will be caused by such fire is estimated to be Rs 300.

   (i) What is the expected loss due to the fire? (5)

   (ii) What is the expected utility of the individual? (5)

   (iii) If the insurance company asks for a premium of Rs 61, would he pay for it? (5)

Assignment Two

Answer the following Middle Category questions in about 250 words each. Each question carries 10 marks.

$3 \times 10 = 30$

3. (a) Discuss the properties of well-behaved preferences. What kind of preferences can be represented by a utility function? (5)

(b) A monotonic transformation of a utility function representing consumer's preferences preserves the order of the preferences. Do you agree? Explain using an example of a utility function. (5)

4. (a) Consider a pure-exchange economy of two individuals (A and B) and two goods (X and Y). Individual A is endowed with 5 units of good X and 3 units of good Y, while individual B with 3 and 4 units of good X and Y, respectively. Assuming utility function of individual A and B to be $U_A = X_A Y_A^2$ and $U_B = X_B^2 Y_B$, where X_i and Y_i for i = {A, B} represent individual i's consumption of good X and Y respectively, what will be the set of Pareto optimal allocations in this economy? (7)

(b) State the feasibility condition of an allocation in a general equilibrium framework. (3)

5. (a) Consider a Cobb-Douglas production function $Q = AL^\alpha K^\beta$ where the amount produced (Q) is given as a function of the labor (L) and capital (K) used and A, α, β are constants. Show that for such a production function, the marginal product of capital (or labor) is a constant times the average product of capital (or labor). (5)

(b) Show that with a constant returns to scale production function, the marginal rate of technical substitution (MRTS) between labour and capital depends only on the input ratio and not on the scale of production. (5)

Assignment Three

Answer the following Short Category questions in about 100 words each. Each question carries 6 marks.

$$5 \times 6 = 30$$

6. Differentiate between Discrete and Continuous probability distribution.
7. Discuss properties of a Profit function.
8. What is an Intertemporal budget constraint?
9. What is meant by a Neutral technical progress? Compare it with a Labour-deepening technical progress.
10. Discuss Quasi-linear preferences.