

BACHELOR'S OF ARTS (MAJORES ECONOMICS) PROGRAMME

(BAFEC)

ASSIGNMENT 2025-26

For July 2025 & January 2026 Admission cycle

COURSE CODE: BECC-115

INTERMEDIATE MICROECONOMICS



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- 115 Intermediate Microeconomics** 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 as per the following schedule:

1. By 31st March, 2026 by the students who took admission to IInd Year of BAFEC Programme in the Academic Cycle July 2025 and are willing to appear in June 2026 Term End Examination.
2. By 30th September, 2026 by the students who took admission in IInd Year of BAFEC Programme in the Academic Cycle January 2026 and are willing to appear in December 2026 Term End Examination.

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.

BECC -115 INTERMEDIATE MICROECONOMICS
Tutor Marked Assignments

Course Code: BECC-115
Assignment Code: Asst /TMA /2025-26
Total Marks: 100

Assignment 1

Answer the following Descriptive Category questions in about 500 words each. Each question carries 20 marks. Word limit does not apply in case of numerical questions. 2 × 20 = 40

1. (a) What role does the marginal utility of income play in the Lagrangian formulation of consumer equilibrium?

(b) Consider a consumer's utility function

$$u(x_1, x_2) = 300 + \sqrt{x_1} + \sqrt{x_2}$$

Assuming price of good x_1 and good x_2 to be p_1 and p_2 , respectively and income of the consumer be M . Determine the optimal choice of consumption of goods x_1 and x_2 .

(c) Compare and contrast the effects of an income tax and a commodity tax on consumer equilibrium.

2. (a) Consider a market for cars that initially has only one firm operating as a monopolist. The firm has a linear cost function given by $C(q) = 2q$, and the market demand is represented by the inverse demand function $P(Q) = 9 - Q$, where Q denotes the total quantity sold in the market.

Based on the above information, answer the following:

- (i) Determine the price that the monopolist will charge and the quantity of cars it will sell. Based on this output and cost structure, calculate the profit earned by the monopolist.
- (ii) Now suppose a second firm, with an identical cost function, enters the market, forming a Cournot duopoly. Determine the Cournot equilibrium output for each firm.
- (iii) Analyze the Stackelberg duopoly scenario, where the first firm acts as the leader and the second as the follower. Find the Stackelberg equilibrium output for each firm.
- (iv) Calculate and compare the profits earned by each firm under both the Cournot and Stackelberg models.
- (v) Evaluate which of the three market structures—monopoly, Cournot duopoly, or Stackelberg duopoly—would be preferred by consumers, and explain your reasoning.

(b) "Monopolistic competition leads to excess capacity." Discuss with the help of a diagram.

Assignment 2

Answer the following Middle Category questions in about 250 words each. Each question carries 10 marks. $3 \times 10 = 30$

3. (a) Write the general form of a Cobb-Douglas production function. How do you derive the profit function from it?
- (b) Determine the profit function, the supply function, and the (unconditional) input demand functions for a perfectly competitive firm with a production function

$$f(x_1, x_2) = \sqrt{\frac{x_1 x_2}{x_1 + 1}}$$

4. (a) What is the Rawlsian (minimax) social welfare function? How does it differ in philosophy and outcome from utilitarian welfare functions?
- (b) What is a Transformation Curve? How does it represent trade-offs in the allocation of resources between the production of two goods?
5. (a) State the Coase Theorem. How can private bargaining be a solution to externalities? Under what conditions will it work effectively?
- (b) A firm produces 100 units of output. The marginal private cost (MPC) is constant at ₹20. The production generates a marginal external cost (MEC) of ₹10 per unit. The marginal benefit (MB) to consumers is ₹30 per unit.
- i) What is the socially optimal level of output?
- ii) Calculate the Pigovian tax that would internalize the externality.

Assignment 3

Answer the following Short Category questions in about 100 words each. Each question carries 6 marks. $5 \times 6 = 30$

6. What are the key properties of the profit function? Explain the concept of convexity in this context.
7. Under what circumstances can a firm in perfect competition continue producing even when it is making losses in the short run?
8. What is non-price competition?
9. Discuss any one real-world application of game theory in economics or business.

10. Why do firms in monopolistic competition earn only normal profits in the long run?