MASTER OF ARTS

(ECONOMICS)

ASSIGNMENTS 2023-24

First Semester Courses

(For July 2023 and January 2024 Sessions)

ignou
THE PEOPLE'S
UNIVERSITY

SCHOOL OF SOCIAL SCIENCES
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
MAIDAN GARHI-110068

Master of Arts (Economics)

(TMA)

(2023-24)

Dear Student,

As explained in the programme guide for MAEC, assignments carry 30 per cent weightage in a course and it is mandatory that you must secure at least 40 per cent marks in assignments to complete a course successfully. Note that you must submit the assignments before appearing in Term End Examination of a course.

Before attempting the assignments, please read the instructions provided in the programme guide sent to you separately. In this booklet, we have included the assignments for all the courses pertaining to the First semester. In each course there is a Tutor Marked Assignment (TMA). You must do the assignment for those courses for which you have registered. Do remember that you must prepare and submit the assignments separately for each course. Make sure that you submit the assignments well in time for those courses in which you plan to appear in the Term End Examination.

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.

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 to the **coordinator of your study centre**. This assignment is valid for two admission cycles (**July 2023** and **January 2024**).

The assignments should be submitted to the Coordinator of your Study Centre:
1. **By 30ᵗʰ April 2024,** for the academic session **July 2023**
2. **By 31ˢᵗ October 2024,** for the academic session **January 2024**

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.

MEC 101: MICRO ECONOMIC ANALYSIS
Tutor Marked Assignments

Note: Answer all the questions.

SECTION A

Answer the following questions in about 700 words each. The word limits do not apply in case of numerical questions. Each question carries 20 marks.

$$2 \times 20 = 40$$

1. a. A monopolist uses one input X, which she purchases at the fixed price p=5 in order to produce output q. Her demand and production functions are:

   P=85-3q and **q= 2x$^{1/2}$** respectively.

   Derive the equilibrium output and equilibrium profit.

   b. "In real world, sometimes it is not possible to achieve optimum welfare." Comment and discuss the obstacles in attaining Pareto optimum.

2. Given a Cobb-Douglas utility function

   $$U (X, Y) = X^{1/2} Y^{1/2},$$

   Where X and y are the two goods that a consumer consumes at per unit prices of P_x and P_y respectively. Assuming the income of the consumer to be ₹M, determine:

   a. Marshallian demand function for goods X and Y.

   b. Indirect utility function for such a consumer.

   c. The maximum utility attained by the consumer where α =1/2, P_x =₹ 2, P_y = ₹ 8 and M= ₹ 4000.

   d. Derive Roy's identity.

SECTION B

Answer the following questions in about 400 words each. Each question carries 12 marks.

5 X 12=60

3. a.) How is Cournot's model of oligopoly different from Bertrand's model of oligopoly?
   b.) Suppose the demand for a product is given by p=d (q)=−0.8q+150 and the supply for the same product is given by p=s(q)=5.2q
   For both functions, q is the quantity and p is the price. Find out producer surplus and consumer surplus.

4. a.) Differentiate between Cooperative and non-cooperative game theory.
   b.) From the following pay-off matrix, determine:
   (i) The optimal strategy for each individual.
   (ii) Value of the game.

		Player 2				
	Strategies	**I**	**II**	**III**	**IV**	**V**
	I	9	3	1	8	0
Player 1	**II**	6	5	4	6	7
	III	2	4	3	3	8
	IV	5	6	2	2	1

5. a.) Do you agree that by paying higher than the minimum wage, employers can retain skilled workers, increase productivity, or ensure loyalty? Comment on the statement in the light of efficiency wage model.

   b.) There are two firms 1 and 2 in an industry, each producing output Q_1 and Q_2 respectively and facing the industry demand given by P=50-2Q, where P is the market price and Q represents the total industry output, that is Q= Q_1 + Q_2. Assume that the cost function is C = 10 + 2q. Solve for the Cournot equilibrium in such an industry.

6. a.) Do you think that a risk-averse individual gamble or will a risk lover purchase insurance? Explain your answer.

   b) Radha has assets worth 10,000 rupees and is facing a loss of 3,600 with a probability of 0.002. She is indifferent between paying G rupees for insurance protection and assuming the risk of loss personally. She values total assets of amount w≥0 according to the utility function u (w) = $w^{1/2}$. Determine G.

7. Write short notes on following:
   a) Different types of price discrimination
   b) Bilateral monopoly
   c) Economies of Scale
   d) Pooling and separating equilibrium

MEC-102: MACROECONOMIC ANALYSIS
Tutor Marked Assignments

Note: Answer all the questions.

Section A

Answer the following questions in about 700 words each. The word limits do not apply in case of numerical questions. Each question carries 20 marks.

1. Discuss how an economy achieves equilibrium in the IS-LM model. What do the points outside the IS curve signify? Highlight the factors that influence the IS and the LM curves.

2. Discuss the important features of new-classical macroeconomics. What are the major policy issues highlighted by new-classical economics?

Section B

Answer the following questions in about 400 words each. Each question carries 12 marks.

3. Specify a loss function and interpret it. What is meant by dynamic inconsistency?

4. Differentiate between adaptive expectations and rational expectations. Explain why the shape of the Phillips curve changes when we introduce expectations in our analysis.

5. Bring out the factors that lead to rigidity in wages and prices.

6. Describe the importance of public debt in an economy. Under what conditions is public debt not sustainable in an economy?

7. Write short notes on the following.
   i) Inter-temporal utility maximization
   ii) New-Keynesian macroeconomics

MEC-203: QUANTITATIVE METHODS
Tutor Marked Assignment

Note: Answer all the questions.
Questions in Section A carry 20 marks each (to be answered in about 500 words each)
Questions in Section B carry 12 marks each (to be answered in about 300 words each).
Word limits do not apply to the numerical questions.

Section A

1. a) Explain the necessary and sufficient conditions in case of unconstrained optimisation.

b) Consider a consumer who buys two goods, x and y with utility function $u(x, y) = 2\sqrt{x} + y$. The consumer's income is 20 and price of y is 4. Compute the optimal consumption bundle when the price of x is equal to 1 using constrained optimisation.   (10 + 10 = 20)

2. With respect to the applications of dynamic optimisation, explain the optimal rate of extraction of exhaustible resources by monopoly.

Section B

3. What is a discontinuous function? Discuss the two types of discontinuous functions along with their diagrams.

4. Explain the concept of a stationary point and inflexion point. Is a stationary point always a point of inflexion? Why or why not?   (6 + 6 = 12)

5. What do you understand by the term 'joint distribution' and 'marginal distribution'? Discuss with the help of an example.

6. What is a sample? Explain with the help of an example. Discuss any two types of sampling techniques.   (6 + 6 = 12)

7) Write short notes on the following: (3 X 4 = 12)
   (i) One-tailed and two-tailed tests
   (ii) One to one and onto functions
   (iii) Hyperbola
   (iv) Local minima