MEC

MASTER OF ARTS

(ECONOMICS)

ASSIGNMENTS 2024-25

First Year Courses

(For the students who took admission prior to January 2023 or January 2023)

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

Master of Arts (Economics)

(TMA)

(2024-25)

Dear Student,

As explained in the programme guide for MEC, assignments carry 30 percent weightage in a course and it is mandatory that you have to secure atleast 40 percent marks in assignments to complete a course successfully. Note that you have to 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 year**. In each course there is a Tutor Marked Assignment (TMA). You have to do the assignment for those courses for which you have registered. Do remember that you have to 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**.

The assignments should be submitted to the Coordinator of your Study Centre:

1. **By 31st March 2025,** for the students willing to appear in June 2025 term-end examination.
2. **By 30th September 2025,** for the students willing to appear in December 2025 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.

MEC 001/101: MICRO ECONOMIC ANALYSIS
Tutor Marked Assignments

Course Code: MEC-001/101
Assignment Code: Asst /TMA /2024-25
Total Marks: 100

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. The production function of a small factory that produces and sells toys is:

$$Q = 5.\sqrt{L.K}$$

Where Q is the number of toys produced each day, L is the labour hours and k is the machine hours. Suppose 9 labour hours and 9 machine hours are used every day, what is the maximum number of toys that can be produced in a day? Calculate the marginal product of labour when 9 labour hours are used each day together with 9 machine hours.

Suppose the firm doubles both the amount of labour and machine hours used per day. Calculate the increase in output. Comment on the returns to scale in the operation.

b. Define the term 'Shepard's lemma'. Assume that the production function of a producer is given by $Q=5L^{0.5} K^{0.3}$, where Q,L and K denote output, labour and capital respectively. If labour cost ₹ 1 per unit and capital ₹2, find the least cost combination of inputs (L&K)

2. Consider a Cobb-Douglas utility function

$$U(X, Y) = X^{\alpha} Y^{(1-\alpha)},$$

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 $\alpha = 1/2$, $P_x =$ ₹ 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 12marks.

5 X 12=60

3. a.) What do you mean by market failure? What are its causes?
   b) What are the two principles of justice as mentioned by the philosopher Rawls?

4. a.) Define games of complete and incomplete information

   b.) From the following pay-off matrix, where the payoffs (the negative values) are the years of possible imprisonment for individuals A and B, determine:

   (i) The optimal strategy for each individual.

   (ii) Do individuals A and B face a prisoner's dilemma?

	Individual B		
Individual A		Confess	Don't Confess
	Confess	(-5, -5)	(-1, -10)
	Don't Confess	(-10, -1)	(-2, -2)

5. a) What are the conditions of Pareto optimality?

   b) Suppose an investor is concerned about a business choice in which there are three prospects. The probability and returns are given below:

Probability	**Returns**
0.4	100
0.3	30
0.3	-30

   What is the expected value of the uncertain investment? What is the variance?

6. 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.

7. Write short notes on following:
    a) vNM expected utility theory
    b) Slutsky's theorem
    c) Arrow prat measure of risk averseness
    d) Bergson-Samuelson Social welfare function

MEC-002: MACROECONOMIC ANALYSIS
Tutor Marked Assignments
(For the Students who have taken admission up to July 2022 Academic Cycle)

Course Code: MEC-002
Assignment Code: MEC-002/AST/2024-25
Maximum Marks: 100

Note: Answer all the questions.

Section A

Answer the following questions in about 700 words each. Each question carries 20 marks. 2X20=40

1. In the context of the Solow model, explain the condition under which an economy attains steady state. Use appropriate diagram and equation to illustrate your answer.

2. What are the implications of IS and LM curves? What are the factors on which the position and the slope of IS and LM curves depend?

Section B

Answer the following questions in about 400 words each. Each question carries 12marks 5X12=60

3. Explain the mechanism through which internal and external balance takes place under flexible exchange rate.

4. What does the Phillips curve signify? How do you reconcile the difference in the shape of the curve in the short run and the long run?

5. Critically evaluate the endogenous growth theory.

6. Classify various theories of unemployment based on the possible responses of the firm.

7. Write short notes on the following:

   a) Menu cost

   b) Permanent income hypothesis

MEC-102: MACROECONOMIC ANALYSIS
Tutor Marked Assignments

Course Code: MEC-102
Assignment Code: MEC-002/AST/2024-25
Maximum Marks: 100

Note: Answer all the questions.

Section A

Answer the following questions in about 700 words each. Each question carries 20 marks. 2X20=40

1. Specify the Lucas Supply Function. What are its implications? In what respects is it different from the classical aggregate supply function?

2. What are the implications of IS and LM curves? What are the factors on which the position and the slope of IS and LM curves depend?

Section B

Answer the following questions in about 400 words each. Each question carries 12marks. 5X12=60

3. Explain the mechanism through which internal and external balance takes place under flexible exchange rate.

4. What does the Phillips curve signify? How do you reconcile the difference in the shape of the curve in the short run and the long run?

5. Bring out the salient features of real business cycle models. What are its implications?

6. Classify various theories of unemployment based on the possible responses of the firm.

7. Write short notes on the following:

   a) Capital asset pricing model

   b) Permanent income hypothesis

MEC 103: QUANTITATIVE METHODS
Tutor Marked Assignments

Course Code: MEC-103
Assignment Code: Asst /TMA /2024-25
Total Marks: 100

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 × 20 = 40

1. a. Consider the following utility maximization problem, in which the utility function of the consumer is given by $U(x,y)=x^{0.5}y^{0.5}$. The consumer income is I=100 and p_x=2 and p_y=3. Find the utility maximizing x and y when the budget constraint of the consumer may or may not bind. (Apply Kuhn-Tucker method)

   b. Explain the theorem of second order optimum.

2. Given the input matrix and the final demand vector:

$$A = \begin{bmatrix} 0.05 & 0.25 & 0.34 \\ 0.33 & 0.10 & 0.12 \\ 0.19 & 0.38 & 0 \end{bmatrix} d = \begin{bmatrix} 1800 \\ 200 \\ 900 \end{bmatrix}$$

   a) Explain the economic meaning of the elements 0.33,0 and 200

   b) Explain the economic meaning of (if any) of the third column sum

   c) Explain the economic meaning of (if any) of the third row sum

   d) Write out the specific input-output matrix equation for this model

   e) Find the solution output levels of the three industries using Cramer's rule.

Section B

Answer the following questions in about 400 words each. The word limits do not apply in case of numerical questions. Each question carries 12marks

3. Using Simplex method solve the problem:
   Maximise $\pi = 6x_1 + 2x_2 + 5x_3$

Subject to $\begin{pmatrix} 2 & 3 & 1 \\ 1 & 0 & 2 \\ 1 & 2 & 5 \end{pmatrix} \begin{pmatrix} x_1 \\ x_2 \\ x_3 \end{pmatrix} \leq \begin{pmatrix} 10 \\ 8 \\ 19 \end{pmatrix}$

$x_1, x_2, x_3 \geq 0$

4. a.) A salesman has 50% chance of making a sale. If two customers enter the shop, what is the probability that the salesman will make a sale?

   b.) If the events A and B are independent, then show that A^c, B^c, A and B are pair wise independent.

5. a) Discuss the nature of the following time path: $y_t = 3^t + 1$

   b) Solve equation: $y_{t+1} - \frac{1}{3} y_t = 6 \; for \; y_0 = 1$

6. Examine the following functions for maxima and minima:

   a) $z = 2x^2 + xy + 4y^2 + xz + z^2 + 2$

   b) $z = e^{2x} - e^y + e^{2z} - 2(x + e) + y$

7. Write short notes on following:
   e) Euler's theorem
   f) Riemann Sum
   g) Point of inflexion
   h) Chi square test of goodness of fit

MEC-004: ECONOMICS OF GROWTH AND DEVELOPMENT

Course Code: MEC-004
Asst. Code: MEC-004 / AST-1/2024-2025
Total Marks: 100

Answer all the questions.

Section A

Answer the following questions in about 700 words each. Each question carries 20 marks
2 × 20 = 40

1) Discuss the main sources of economic growth. Discuss the main adverse repercussions on the economy that the process of economic growth can have.

2) What do you understand by technical progress? What is the relationship between technical progress and growth of total factor productivity? Discuss the various conceptions of neutral technical progress as put forward by Hicks, Harrod and Solow.

Section B

Answer the following questions in about 400 words each. Each question carries 12marks **5X12=60**

3) Describe the Mankiw-Romer-Weil extension to the neoclassical model to include human capital. Explain why diminishing returns to capital do not take place in the AK model.

4) What are the main propositions of the Real Business Cycle model? Describe the basic structure of a prototype Real Business Cycle model.

5) Compare and contrast Adam Smith's theory of development with that of Ricardo's.

6) Discuss the Harris-Todaro model of migration. What has been the impact of this model? What is its relevance for developing nations?

7) Explain the meaning of cost-benefit analysis. Describe briefly the usual steps taken in a typical cost-benefit exercise.

MEC-105: INDIAN ECONOMIC POLICY
Tutor Marked Assignment
(TMA)

Course Code: MEC-105
Assignment Code: MEC-105/AST/2024-25
Maximum Marks: 100

Note: Answer all the questions.

Section-A

Answer the following questions in about 700 words each. Each question carries 20 marks.
2 × 20 = 40

1. "In a poor country like India, being unemployed itself does not ensure a decent standard of living"- Do you agree? Give reasons in support of your answer.

2. How are the inequalities of income measured in an economy? Examine the policy implications of income inequalities for wider spread poverty in India. Do you think that social protection can play important role in this regard?

Section B

Answer the following questions in about 400 words each. Each question carries 12marks.
5X12=60

3. Distinguish between economic growth and economic Development. Explain with illustration how economic development is a better measure of economic welfare.

4. Explain any four major issues of concern in Indian agriculture. To what extent the diversification towards high value agriculture will be helpful to address these issues of concern?

5. What do you mean by 'fiscal imbalance?' Which measures would you like to suggest to correct the fiscal imbalances?

6. Identify the barriers coming on the way of growth of the services sector in India? Which steps would you like to suggest to overcome these barriers?

7. Write short note on the followings:
   i) Food security
   ii) Pricing paradox
   iii) Public private partnership
   iv) Employment elasticity

MEC-205: INDIAN ECONOMIC POLICY
Assignment (TMA)

Course Code: MEC-205
Assignment Code: MEC-205/AST/2024-25
Maximum Marks: 100

Note: Answer all the questions. While questions in Section A carry 20 marks each (to be answered in about 700 words each) those in Section B carry 12 marks each (to be answered in about 500 words each).

Section-A

1. The demographic dividend is one time opportunity and is expected to last 25 years. In the light of this statement, explain the challenges coming on the way of reaping demographic dividend in India.
2. Differentiate between governance and government. Go through the website http.//info.worldBank.org/governance/wgi of world vide governance indicators project. Identify the aggregate indicators for India. How has India fared in these different dimensions?

Section B

3. What is fiscal imbalance? What are its measures? How far FRBM has been effective to correct fiscal imbalances?

4. What do you mean by climate change? Has it affected Indian Agriculture? Which initiatives have been taken to mitigate the adverse effects of climate change?

5. What is informal sector? Discuss the major challenges being encountered by the informal sector.

6. Give an account of the trends and challenges of India's balance of payments since 2014-15.
7. Write short note on the following:
   (i) Regional disparity
   (ii) Employment elasticity
   (iii) Inclusive growth
   (iv) Inter State Council