

MEC

**MASTER OF ARTS  
(ECONOMICS)**

**ASSIGNMENTS 2020-21**

**Second Year Courses**

**(For July 2020 and January 2021 Sessions)**



**School of Social Sciences Indira Gandhi  
National Open University Maidan  
Garhi, New Delhi-110 068**

# **Master of Arts (Economics)**

**(TMA)**

**(2020-21)**

Dear Student,

As explained in the programme guide for MEC, assignments carry 30 per cent weightage in a course and it is mandatory that you have to secure at least 40 per cent 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 second 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.

## **Submission**

For **July 2020** session, you need to submit the assignments by **March 31, 2021**, and for **January 2021** session by **September 30, 2021** for being eligible to appear in the term-end examination. Assignments should be submitted to the **Coordinator of your Study Centre**. Obtain a receipt from the Study Centre towards submission.

# MEC-006: PUBLIC ECONOMICS

## Assignment (TMA)

Course Code: MEC-006

Assignment Code: MEC-006/AST/2020-21

Maximum Marks: 100

**Note:** Answer all the questions. While questions in Section A carry 20 marks each (to be answered in about 500 words each) those in Section B carry 12 marks each (to be answered in about 300 words each). In the case of numerical questions word limits do not apply.

### Section A

- 1) What is the basic idea behind the “Pure Theory of Public Expenditure”: Discuss briefly. Also, what is the theoretical rationale behind Lindahl Pricing?
- 2) State the ideal conditions for meeting the ‘socially optimum criteria’ for utility pricing. Also, critically discuss the utility pricing rules for ‘best solutions’.

### Section B

- 3) Using different tax rates demonstrate how the deadweight loss could be minimised?
- 4) On what ground did the classical economists oppose public debt? What counterview is proposed by the modern economists in their view on public debt?
- 5) What is a Social Welfare Function? Explain this concept with the help of the Samuelson-Bengson’s Social Welfare Indifference Curves.
- 6) Discuss the Bowen and Black’s models for the identification of ‘Median Voter Preference’.
- 7) State the main problems in international policy coordination. Suggest methods on how they can be solved?

# MEC-106: PUBLIC ECONOMICS

## Assignment (TMA)

Course Code: MEC-106  
Assignment Code: MEC-006/AST/2020-21  
Maximum Marks: 100

**Note:** Answer all the questions. While questions in Section A carry 20 marks each (to be answered in about 500 words each) those in Section B carry 12 marks each (to be answered in about 300 words each). In the case of numerical questions word limits do not apply.

### Section A

- 1) Discuss the welfare concepts, inbred in the different forms of social welfare functions, which form the foundation of policies in public economics.
- 2) Elucidate the two theoretical models attributed to Lindahl and Samuelson in the context of public goods.

### Section B

- 3) Outline how internalisation of negative externalities could be a solution to externalities through the instruments of taxation and property rights.
- 4) State Arrow's impossibility theorem with conditions. Also, illustrate the element of impossibility in Arrow's theorem.
- 5) Highlight the argument behind the 'revenue maximisation' approach to public expenditure.
- 6) Establish how under conditions of 'imperfect competition' government enhances overall social welfare.
- 7) Delineate the 'alternative strategies' available to ensure the required money supply in an economy.

**MEC-007: INTERNATIONAL TRADE AND FINANCE**  
**Assignment**

**Course Code: MEC-007**  
**Asst. Code: MEC-007 / AST-1/2020-2021**  
**Total Marks: 100**

**Note: Answer all the questions. While questions in Section A carry 20 marks each (to be answered in about 500 words each) those in Section B carry 12 marks each (to be answered in about 300 words each). In the case of numerical questions word limits do not apply.**

**SECTION A**

- 1) Critically discuss the Ricardian theory of Comparative Advantage. How is it different from Adam Smith's theory of Absolute Advantage?
- 2) Explain the various concepts of terms of trade. Critically examine the behavior of terms of trade as explained by Prebisch

**SECTION B**

- 3) Explain multilateral framework of international trade. Explain its main features.
- 4) What are the various forms of economic integration? How is trade diversion different from trade creation? Elucidate.
- 5) Describe the evolution of international monetary system. Examine the trends in the international monetary and financial systems.
- 6) Discuss the various instruments of trade protection. Differentiate between quotas and tariffs.
- 7) Critically examine the relative merits and demerits of the fixed and flexible exchange rates.

# **MEC-008: ECONOMICS OF SOCIAL SECTOR AND ENVIRONMENT**

## **Assignment (TMA)**

**Course Code: MEC-008**  
**Assignment Code: MEC-008/AST/2020-21**  
**Maximum Marks: 100**

**Note:** Answer all the questions. While questions in Section A carry 20 marks each (to be answered in about 500 words each) those in Section B carry 12 marks each (to be answered in about 300 words each). In the case of numerical questions word limits do not apply.

## **Section A**

- 1) How does taking the 'income levels' as an indicator of development defeats the objective of tackling the multi-faceted dimensions of development? Explain.
- 2) Discuss the Gordon's contention that the 'optimal size of fishery is one which maximizes sustainable resource rent' with appropriate theoretical justification.

## **Section B**

- 3) Explain the transition to 'institutional economics' from 'neoclassical economics'.
- 4) What are the essential differences in the two approaches of 'shadow prices' and 'hedonic pricing' methods as 'valuation tools of environmental functions'.
- 5) Write a note on the different types of 'common property resource'.
- 6) Bring out the inter-regional variations in 'expenditure on education' in India as it obtained in the early years of 2000s.
- 7) Make a case in favour of levying the 'user fees' for public health facilities. What are the arguments that can be offered 'for and against' such a proposal?

# **MEC-108: ECONOMICS OF SOCIAL SECTOR AND ENVIRONMENT**

## **Assignment (TMA)**

**Course Code: MEC-108**  
**Assignment Code: MEC-108/AST/2020-21**  
**Maximum Marks: 100**

**Note:** Answer all the questions. While questions in Section A carry 20 marks each (to be answered in about 500 words each) those in Section B carry 12 marks each (to be answered in about 300 words each). In the case of numerical questions word limits do not apply.

## **Section A**

- 1) Discuss the various situations of 'market failure' leading to environmental degradation.
- 2) Discuss the significance of 'efficiency wage' in contributing to health and productivity of workers.

## **Section B**

- 3) Explain how 'poverty' is not the sole determinant of malnutrition.
- 4) Specify the fundamental challenges of using the non-renewable resources optimally.
- 5) Derive the results for the optimal use of renewable resources under the discrete and continuous time frames.
- 6) Describe the concept of 'quasi markets' in the provisioning of public services.
- 7) Derive the conditions of optimality for buying health insurance in cases of absence/presence of free riders.

**MEC-109: RESEARCH METHODS IN ECONOMICS**  
**Assignment (TMA)**

**Course Code: MEC-109**  
**Assignment Code: MEC-109/AST/2020-21**  
**Maximum Marks: 100**

**NOTE:**

1. All questions are compulsory.
2. Questions in Section A carry 20 marks each and are to be answered in about 700 words each.
3. Questions in Section B carry 12 marks each and are to be answered in about 400 words each

**Section-A**

1. What are the key features of interpretative philosophy of science? Using a suitable example from economics, select a theme and write a proposal in about 500 words using interpretative research methodology.
2. Distinguish between tools of data collection and methods of data collection. Discuss the various methods of Random Sampling. How will you decide the suitable method of data collection among various random sampling methods?

**Section-B**

3. State the different functional forms of regression model. How do you interpret the estimated slope coefficient  $\beta$  of a log linear regression model?
4. State the properties of Lorenz Curve. When will comparison between two Lorenz curves fail to compare inequality in two distributions?
5. What is correspondence analysis? Explain with example the various steps involved in correspondence analysis.
6. What is participatory research? Identify the various steps involved in data analysis of participatory research.
7. Name the different sources that provide data on employment. Explain the different measures of employment and unemployment used by NSSO in different quinquennial surveys.



# MECE-001: ECONOMETRIC METHODS

(Assignment)

Course Code: MECE-001

Asst. Code: MECE-001/AST/2020-21

Maximum Marks: 100

**Note:** Answer all the questions. While questions in Section A carry 20 marks each, those in Section B carry 12 marks each.

## Section A

1. What do you understand by autocorrelation? What are the consequences of autocorrelation? How do you detect autocorrelation in a data set? Explain the steps you would follow to remove the problem of autocorrelation.
2. Consider the regression equation  $yi = \alpha + \beta xi + u_i$  where  $u_i$  is a stochastic error term.
  - (a) Explain the need of including the  $u_i$  in the model
  - (b) What assumptions regarding the error term are needed to prove the Gauss-Markov theorem?
  - (c) Prove the Gauss –Markov theorem for the estimator of  $\beta$ .

## Section B

3. What is meant by heteroscedasticity? Explain one of the remedial measures for the problem of heteroscedasticity.
4. What is meant by dynamic model? Explain how the following model can be estimated?

$$y_t = \alpha + \beta x_t + \gamma y_{t-1} + u_t$$

where  $|\gamma| < 1$  and  $u_t = \rho u_{t-1} + v_t$ . In the above model  $v_t$  is distributed independent, normal with mean zero and variance  $\sigma^2$  and  $|\rho| < 1$ .

5. What is meant by indirect least squares (ILS) method? Explain how the following model can be estimated using this method?

$$\text{Demand function: } Q_t = \alpha_0 + \alpha_1 P_t + \alpha_2 x_t + u_{1t}$$

$$\text{Supply function: } Q_t = \beta_0 + \beta_1 P_t + u_{2t}$$

where Q = quantity, P = Price, and  $x$  = income.

6. Explain the steps followed in estimation of parameters through the method of Generalised least squares (GLS).
7. Explain the concept of multicollinearity. What are its consequences on estimates? What remedial measures would you suggest for problem of multicollinearity?

# MECE-003: Actuarial Economics: Theory and Practice

## Assignment (TMA)

Course Code: MECE-003  
Assignment Code: MECE-003/AST/2020-21  
Maximum Marks: 100

**Note:** Answer all the questions. While questions in Section A carry 20 marks each (to be answered in about 500 words each) those in Section B carry 12 marks each (to be answered in about 300 words each). In the case of numerical questions word limits do not apply.

### Section A

- 1) (a) Why is it necessary to model interest stochastically? How is a model of 'stochastic interest' developed? (b) Differentiate between the features of 'classical and Bayesian analysis of credibility theory'.
- 2) You are required to demonstrate the interplay between 'finance and insurance principles'. How would you approach this problem with the help of 'unit-linked insurance contracts'?

### Section B

- 3) State Markov's theorem with illustrations. What is the condition required to be met by a random variable  $R$  in order to possess the Markov property?
- 4) How is a 'survival function' defined? In what way is a 'hazard function' different from the 'survival function'?
- 5) How is Lundberg Risk Model formulated? Suggest modifications therein so as to offer an alternative to it.
- 6) State the Optional Stopping Theorem. What technique could be used to analyse the 'collective risk'?
- 7) Write short notes on: (a) Compound-Poisson Process; (b) Black-Scholes Theorem; (c) Panjer Recursion; and (d) Risk neutral evaluation.

## **MECE-004: FINANCIAL INSTITUTIONS AND MARKETS**

### **Assignment**

Course Code: MECE-004  
Asst. Code: MECE-004 / AST-1/2020-2021  
Total Marks: 100

**Note: Answer all the questions. While questions in Section A carry 20 marks each, those in Section B carry 12 marks each.**

#### **SECTION A**

- 1) Describe the nature of the financial system in a modern economy giving the important types of constituent institutions, markets and instruments. Explain the concept of flow-of-funds in the financial markets
- 2) Discuss the Markowitz theory of efficient portfolio selection. How does the Capital Asset Pricing Theory (CAPM) theory build on it?

#### **SECTION B**

- 3) Explain the Arbitrage Pricing Theory.
- 4) Explain the need for, and role of depository systems in secondary markets. Explain the concept of custodial services.
- 5) Give a theoretical model of central banking, bringing out the relationship between the monetary base and monetary aggregates. What are instruments of monetary policy used by central banks?
- 6) Compare the impact of monetary policy under fixed exchange rates with those under flexible exchange rates.
- 7) Discuss the concept of leverage for a firm. Discuss the important financial and leverage ratios used. Explain the Merton-Miller theorem.

**MGSE-009: GENDER ISSUES IN WORK, EMPLOYMENT AND  
PRODUCTIVITY Tutor Marked Assignment (TMA -01)**

**MWG 011 WOMEN IN THE ECONOMY  
Tutor Marked Assignment (TMA -01)**

For Assignments of above mentioned two courses,  
download the assignments from  
**MA programme in Gender and Development Studies (MAGD)**  
(School of Gender and Development Studies)

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**MEDSE-46 : DEVELOPMENT ISSUES AND PERSPECTIVES  
Tutor-Marked Assignment-1 (TMA-1)**

For Assignments of this course, download the assignments from  
**Post Graduate Diploma in Urban Planning and Development  
(PGDUPDL)**  
(School of Extension and Development Studies)