# MASTER OF ARTS (ECONOMICS)

MEC

# ASSIGNMENTS 2011-12 Second Year Courses (For July 2011 and January 2012 Sessions)



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

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# Master of Arts (Economics) Assignments (2011-12)

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 2011 session, you need to submit the assignments by March 31, 2012, and for January 2012 session by September 30, 2012 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

Course Code: MEC-006 Asst. Code: MEC-006/AST/2011-12 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. Why does public intervention differ from economy to economy? Which kind of public intervention is not still considered a part of public economics and why?
- 2. Critically explain the Vertical Federal Fiscal Imbalance and Horizontal Federal Fiscal Imbalance. Explain the important reasons for the emergence of Horizontal Federal Fiscal Imbalance.

- 3. Define the following;
  - a) Lindhal pricing
  - b) Pareto efficient tax structure
  - c) Prisoner's Dilemma
- 4. What do you mean by a Social Welfare Function? Explain Samuelson-Bergson's Social Welfare Indifference curves.
- 5. Answer any **two** of the following in about 250 words each:
  - a) What do you understand by the concepts "Horizontal equity" and "Vertical equity"?
  - b) Differentiate between internal and external public debt. What are the main sources of internal public debt?
  - c) Why is Fiscal Federalism efficient in provision of public services?
  - d) Explain briefly the Tiebout Model.
- 6. What are the objectives of public debt management? Write two principles of public debt management as stated by Philip E. Taylor.
- 7. Differentiate between
  - a) Inflation and Deflation
  - b) Internal debt and External debt
  - c) Theory of first best analysis and second best analysis
  - d) Kaldor Compensation Criteria and Hicks Compensation Criteria

### MEC-007: INTERNATIONL TRADE AND FINANCE Assignment

Course Code: MEC- 007 Assignment Code: MEC-007/AST/2011-12 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).

### Section A

- 1. a) Critically discuss the Ricardian theory of comparative advantage. How is it different from the Smith's theory of absolute advantage?
  - b) Discuss the issues behind formation of SAFTA. Shed light on the role played by India in SAFTA.
- 2. Explain the various concepts of terms of trade. Critically examine the behaviour of terms of trade as explained by Prebisch.

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

# MEC-008: ECONOMICS OF SOCIAL SECTOR AND ENVIRONMENT

### Assignment

Course Code: MEC-008 Assignment Code: MEC-008/AST/2011-12 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 trends in inequality, globally as well as within India, with relevant empirical support.
- 2. Discuss with appropriate theoretical justification Gordon's contention that 'the optimal size of fishery is one which maximizes sustainable resource rent'.

- 3. Explain the limitations of taking income levels as an indicator of development.
- 4. Explain the concept of Pareto optimality with its underlying assumptions that are required to ensure the efficiency of market mechanism.
- 5. The difference in the treatment of natural resources and other tangible assets provide misleading signals to policy makers. Explain with an example.
- 6. Critically examine the debate concerning education as consumption versus investment.
- 7. Discussing the concept of 'purchasing' in the context of 'financing of healthcare needs', outline the alternatives considered for evolving a suitable purchasing mechanism in a country?

### MEC-009: RESEARCH METHODS IN ECONOMICS Assignment

Course Code: MEC-009 Assignment Code: MEC-009/AST/2011-12 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 a paradigm? How does it lead to convergent thinking? Give an account of Kuhn's philosophy of science in this regard.
- 2. Distinguish between random and non-random sampling? How would you choose an appropriate sampling method? Give practical examples in support of your answer.

- 3. How do you interpret the coefficients of a multiple regression model? What is the relevance of R-square and how is it different from adjusted R-square?
- 4. What is an index number? Compile a chart of the types of consumer price index numbers showing the agency who prepares it, index formula, target group, groups of items covered and the weights given.
- 5. Explain the concept of qualitative research. What tools and techniques would you use to collect primary data under qualitative research?
- 6. List the data sources covering the industrial sector, financial markets and education sector.
- 7. Make a distinction on any three of the following:
  - a) ampling and non-sampling errors.
  - b) Time-series and cross-sectional data
  - c) Inductivism and Hypothetico-Deduction (H-D) model
  - d) Census and Sample survey method with two illustrations of each.

## MECE-001 ECONOMETRIC METHODS Assignment

Course Code: MECE-001 Asst. Code: MECE-001/AST/2011-12 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. Consider the Cobb-Douglas production function given by  $Q = A K^{\alpha} L^{\beta} e^{u}$  (standard notations apply) where *u* is the stochastic error term. i) Find OLS estimators for  $\alpha$  and  $\beta$ .

ii) Find standard error of the OLS estimator  $\hat{\beta}$ .

iii) Prove that OLS estimator  $\hat{\beta}$  is BLUE.

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

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

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

where Q = quantity, P = price and X = income.

### Section B

- 5. What is meant by multicollinearity. What are its consequences on estimates? What remedial measures do you suggest for the problem?
- 3. Consider the two variable regression model where the error term follows  $u_t = \varphi_1 u_{t-1} + \varepsilon_t$

where  $\varepsilon_t \sim N(0, \sigma^2)$ 

- i) What are the problems encountered by data in the above model?
- ii) Explain one of the procedures you would follow to estimate the model.
- 5. Explain the steps you would follow in estimation of parameters through the method of Generalised Least Squares (GLS).
- 6. What is meant by Gauss-Markov theorem? What assumptions are required to prove Gauss-Markov theorem? For the regression model  $Y_i = \alpha + \beta X_i + u_i$  show that the theorem is true for the estimate of  $\beta$ .
- 7. Write short notes on the following:a) Rank and Order Conditionsb) Maximum Likelihood Method of Estimation

# **MECE-003: Actuarial Economics: Theory and Practice**

### Assignment

# Course Code: MECE-003 Assignment Code: MECE-003/TMA/2010-11 Marks: 100

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

#### Section A

- 1. (a) Show that the nominal rate of interest convertible once in every four years is to a nominal rate of discount convertible quarterly.
  - (b) John buys a 10-year bond, of face and redemption amount, x, with 10% annual coupons at a price to yield 10% effective annual rate. The coupons, when received, are reinvested immediately at 8% effective annual rate. Immediately after the receipt (and reinvestment) of the 4<sup>th</sup> coupon John sells the bond to Smith for a price that will yield effective annual rate i to the buyer. The yield rate that John earns on his investment is 8% effective annual value of i.
- 2. (a) Discuss the Bayesian approach to credibility theory
  - (b) Let  $X_1$  be the outcome of a single trial and let  $E(X_2 X_1)$  be the expected value of the outcome of a second trial. You are given the following information:

Outcome = T	$P(X_1 = T)$	Bayesian estimate For E $[X_2   X_1 = T]$
1	5/8	1.4
4	2/8	3.6
16	1/8	-

Determine the Bayesian estimate for  $E[X_2 | X_1 = 16]$ .

### Section B

### Medium Answer questions

- 3. What is the fundamental principle of equivalence used in insurance? Do you think some changes have come up recently in applying that principle due to inclusion of financial valuation practices? Give reasons in support of your answer.
- 4. Explain how the valuation in financial markets has influenced the valuation in insurance market. Do you think such influence has changed the principle of equivalence used in insurance problems?
- 5. Explain the concept of ruin probability.
- 6. Consider a binomial market model and discuss how a market in this formulation admits an arbitrage opportunity. Also, suggest a trading strategy which explains the arbitrage.
- 7. Write Short notes on
  - i. Black-Scholes Theorem
  - ii. Panjer Recursion
  - iii. Reinsurance Pricing
  - iv. Insurance Regulation

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

Course Code: MECE-004 Asst. Code: MECE-004 / AST-1/2011-2012 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. 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 Model (CAPM) theory build on it?

- 3. Critically examine the major theories that have been put forward to explain the term structure of interest rates.
- 4. Discuss the Black-Scholes formula on derivative pricing.
- 5. Discuss the concept of leverage for a firm. Discuss the important financial and leverage ratios used. Explain the Merton-Miller theorem.
- 6. Explain the need for, and the role of, depository systems in secondary markets. Explain the concept of custodial services.
- 7. Compare the impact of monetary policy under fixed exchange rates with those under flexible exchange rates.

# **MPA-015: PUBLIC POLICY AND ANALYSIS**

### Assignment

### Course Code: MPA-015 Assignment Code: MPA-015/Asst/TMA/2010-11 Marks: 100

This Assignment consists of Sections I and II. There are five questions in each section. You have to answer a total of five questions in about 500 words each, selecting at least two questions from each section. Each question carries 20 marks.

### <u>SECTION – I</u>

- 1. "Policy Science is facing crisis at the normative and empirical levels". Examine the statement.
- 2. Discuss the role of Planning Commission in policy formulation.
- 3. Highlight the challenges before civil society organisations and analyse their role in policy making.
- 4. Analyse the role of UNESCO in policy making.
- 5. Write a note on the major constraints in policy formulation.

### **SECTION - II**

- 6. Justify the need for following multiple approaches in the study of policy implementation.
- 7. Highlight the different approaches to policy monitoring.
- 8. Describe the modes of policy delivery with special reference to the role of civil society.
- 9. 'Simulation models are more appropriate than optimisation models'. Examine.
- 10. Analyse the telecom policy and highlight the effects of privatisation on increase in operational efficiency.

# **MPA-017: E-GOVERNANCE**

### Assignment

Course Code: MPA-017 Assignment Code: Asst/TMA-017/2010-11 Marks: 50

This Assignment consists of Sections I and II. There are five questions in each Section. You have to answer a total of five questions in about 400 words each. It is necessary to attempt at least two questions from each Section. Each question carries 10 marks.

## **SECTION - I**

- 1. There are various e-governance models that can be used as a guide in designing e-government initiatives. Discuss.
- 2. Management Information System is the study of the design, implementation, management and use of information technology applications in organisations. Explain.
- 3. ICT transforms the traditional functioning of government departments to an electronically sophisticated one. Discuss.
- 4. Highlight the role of ICT in agriculture development.
- 5. Discuss the e-panchayat project in the State of Andhra Pradesh.

### **SECTION - II**

- 6. Write a note on 'Edusat,' the Indian satellite in education programme.
- 7. ICT plays an important role in delivering citizen services. Discuss
- 8. Highlight the powers and functions of Information Commission under RTI Act 2005.
- 9. Briefly discuss the challenges in effective implementation of ICT in governance.
- 10. Write a note on National E-governance Plan.