

**NATIONAL COLLEGE (AUTONOMOUS), TIRUCHIRAPALLI – 620 001.**

**M.PHIL PROGRAMME STRUCTURE**

Under Choice Base Credit System

(For Candidates Admitted from the academic year 2016 – 2017)

**ECONOMICS**

SEM EST ER	COURSE	Title of the Paper	Hrs./ week	Credits	Exam. Hrs.	Marks		Total
						IA	UE	
I	Course I M16EC1	Research Methodology and Educational Technology	4	4	3	40	60	100
	Course II M16EC2	Statistical Techniques	4	4	3	40	60	100
	Course III M16EC3	Contemporary Issues in Indian Economic Development	4	4	3	40	60	100
	Course IV M16EC4	Guide Paper	4	4	3	40	60	100
II		Dissertation	--	8	--	--	--	200
Total			16	24	--	--	--	600

QUESTION PAPER PATTERN		
Section – A	5 x 4 =20	Five Questions Either or Type (Theory or Problem) – Theory not more than 300 Words.
Section – B	4 x 10 = 40	4 out of 6 – Open Choice – Essay/Problem type – theory not more than 1000 words.

# **Course I – Research Methodology and Educational Technology**

## **Code : M16EC1**

### **Module – I Research Methods**

Social Research – Nature, Scope, significance and limitations – Pure, Applied and Descriptive research- Scientific Method – Steps- Theory and Facts – Formulation of a Research Problem – Hypothesis: Types, Sources and Characteristics of a good Hypothesis.

### **Module – II Research Design**

Need and types of research design – Exploratory, Descriptive, Diagnostic and Experimental Design – Sampling Design: Probability Sampling: Simple Random, Systematic. Stratified and Multistage or Cluster Sampling, Non-Probability Sampling – Purposive, Judgement, Quota and convenience sampling – Case study method – Role of Review of Literature.

### **Module – III Data Sources & Report Writing**

Data Collection – Primary and Secondary methods – Observation, Interview, Pilot survey and pre-testing- Schedule and Questionnaire – Construction of a Good Questionnaire – Mechanics of Thesis writing – Format of a Research Report- Footnotes and reference.

### **Module IV: Educational Technology**

Origin, history and meaning of Educational Technology – objectives, forms and approaches – scope, significance and uses of Educational technology – system concept-types-parameters – steps involved in system approach – Educational system – instructional system.

### **Module V: Information and communicational Technology**

Meaning of communication and Informational technology(ICT) – Definition, features trends, uses and limitation – characteristics of e-learning, advantages and limitations – Integration of ICT in teaching and learning , ICT applications using word processors, spread sheets, power-point slides in the classroom – ICT for research: online journals – e-books, technical reports, thesis and dissertations – computer mediated teaching: Multimedia, e-content.

### **Basic Reading List (For Units I, II and III)**

1. Elhance, D.N., [200], Fundamentals of Statistics, Allahabad: Kitab Mahal.
2. Gupta, S.P., [2001], Statistical Methods, New Delhi: S.Chand & Co.,
3. Kothari, C.R.,[1998], Research Methodology, New Delhi: Wiley Eastern Ltd.,
4. Wilkinson and Bhandarkar [1991], Methodology and Techniques of Social Research, Bombay: Himalaya.
5. Pauline, V. Young., Scientific Social Surveys and Research, McGrawHill Inc.

6. Shanmuga Sundaram, V.[1974], Papers on the Methodology of Research in Social Sciences, Chennai: University of Madras.
7. Kothari, C.R.(2009), Research Methodology: Methods and Techniques, New Age International Publishers, New Delhi.

Additional Reading List:

1. Goode and Hatt [1987], Methods in Social Research, London: McGraw Hill.
2. Ghosh. B.N., Scientific Method and Social Research, New Delhi, Sterling Publishers,1982.
3. Kurien, C.T.,[1973], Research methodology in Economics, Madras: Sangam Publishers.
4. Moser, C.A. and Kolton, C.[1980], Survey Educational Methods in Social Investigation, London: Heinemann Educational Books.
5. Sonachalam, K.S.[1978], Research Methodology in Social Science, Tamilnadu: Kadayam.
6. Shanmuga sundaram.V.[1974] Papers on the Methodology of Research in Social Sciences, Chennai: University of Madras.

**Reference List for Unit IV and V (Common for All M.Phil Programmes)**

1. Mangal, S.K. and Mangal, Uma.[2009], Essentials of Educational Research, PHI, NewDelhi.
2. Sharma, R.A. [2006], Fundamentals of Educational Technology, Meerut: Surya publications.
3. Kumar, K.L. [2008], Educational Technology, New Delhi: New Age International.

## **Course II: STATISTICAL TECHNIQUES**

### **Code : M16EC2**

#### **MODULE - I STATISTICAL MEASURES**

Presentation of data: Tabulation - Diagrammatic and Graphical Representation - Averages: Arithmetic Mean, Median and Mode - Dispersion: Range, Standard Deviation and Co-efficient of Variation - Skewness: Pearsons's co-efficient of skewness - Lorenz curve and Ginni Coefficient.

#### **MODULE - II STATISTICAL METHODS**

Correlation and Regression: Simple, partial and Multiple correlations - Simple Linear and Non-linear regression - Multiple Linear Regression (Three variables only) - Problems in Regression analysis: Auto-correlation, Heteroscedasticity, Multicollinearity and Errors in variables - Qualitative response regression models: Logit, Probit and Tobit models.

#### **MODULE - III STATISTICAL INFERENCE**

Testing of Hypothesis: Testing population mean, testing difference between two means (Large Sample) - Student 't' test: Assumptions and applications - Chi-Square: test of goodness of fit and test of independence - Analysis of variance.

#### **MODULE - IV NON-PARAMETRIC TESTS**

Introduction - Advantages of non-parametric tests - The Sign test - The Mann-Whitney U test - One sample Runs test - The Kruskal-Wallis 'H' test- Spearman Rank correlation test - Limitations of Non-parametric tests.

#### **MODULE - V STATISTICAL PACKAGES**

Microsoft Excel and its uses in statistical applications - Diagnostic analysis of Regression (Two variable case) - Interpretation of Output of a multiple linear regression model - SPSS, its features - Modules /Tools in SPSS - Introduction to Gretl: An Econometrics software - Its features, tools.

#### **REFERENCES:**

1. Elhance D N (2000), Fundamentals of Statistics, Allahabad, Kitab Mahal.
2. Gupta S P (2014), Statistical Methods, Sultan Chand & Sons., New Delhi.
3. Salvatore, Dominic and Reagle, Derrick. (2005), Statistics and Econometrics, 2nd Edition, Tata-McGraw Hill, New Delhi. Chapter 9.
4. Gujarati, Damodar N., Porter, Dawn C., and Sangeetha Gunasekar., Basic Econometrics, 5ed, McGraw Hill Special Indian Edition, 2012, Chapter 15.
5. Dhnansekaran, Dr.K., Computer Applications in Economics, Vrinda Publications (P) Ltd, Delhi, 2010. (Chapter 6).
7. George, Darren and Mallery, Paul., SPSS for Windows STEP BY STEP, Pearson 2013, Chapter 15.
8. [www.surceforge.net](http://www.surceforge.net) (Gretl user's guide)

## **COURSE III: CONTEMPORARY ISSUES IN INDIAN ECONOMIC DEVELOPMENT**

**Code : M16EC3**

### **Module I: Recent Trends in Indian Economy**

Agriculture and its growth, Industrial Development, IT Sector and Economic Development – prime lending/mortgaging – House finance – toxic asset – Reason for Low Agriculture Productivity – MGREP and PURA.

### **Module II: Gender Issues in Indian Development**

Gender Equity – Gender Discrimination – Women and Employment – Women and Law – Women Empowerment – SHGs – Women's Health issues.

### **Module III : Infrastructure and the State**

Infrastructure and Development, Energy and Power – Role of State in Socialistic Society – Rural and Urban inequality - Rural Poverty and Poverty Alleviation Programmes – Food Security.

### **Module IV : India and the World Economy**

India and GATT, WTO and India's Foreign Trade – Globalisation and its impact on India – Recent trends in Macro Economic Policy, Foreign capital and Fiscal Reform.

### **Module V: Human Development in India**

Index of Human Development – Education and HRD – Training – Types – Motivation – Methods – Health Issues – “Health for All” – Rural health promotion in India – Its Challenges.

### **References:**

1. Dreze, J and Sen, A.K.(2003), India: Development and Participation, Delhi: OUP.
2. -----(Ed), (1996), Indian Development:Selected Regional Perspectives, Delhi:OUP.
3. Patnaik, P.(1960, Whatever happened to imperialism? Delhi:Tulika.
4. ----- (1995),Macro Economics, Delhi:OUP.
5. Agarwal., Bina (1994), Afield of one's own, UK: Cambridge university press.
6. Batra, G.S and Kaur, Narindar, Globalisation Strategies and Economic Liberalization.
7. Margrit Pernau, Imtiaz Ahmad and Herlmut Reifeld, Family and Gender: Changing Values in Germany and India.
8. Datt and Sundaram, Indian Economy, S.Chand & Company Ltd, New Delhi.



**Course IV : Guide Paper List**

**Code : M16EC4**

1. Agricultural Economics,
2. Money and Banking.
3. Labour Economics,
4. Economics of Marketing.
5. Gender Issues and Women Development
6. Economics of Social Issues
7. Development Frontiers in Economics – Policy Issues.
8. Economics of Climate Change
9. Any other relevant title as the Researcher decides in consultation with Guide.