**CENTRE FOR FUTURES STUDIES** 

**Ph.D. FUTURES STUDIES** 

# COURSE WORK SYLLABUS (2015 -2016)



GANDHIGRAM RURAL INSTITUTE - DEEMED TO BE UNIVERSITY GANDHIGRAM

## GANDHIGRAM RURAL INSTITUTE - DEEMED TO BE UNIVERSITY

## GANDHIGRAM

## **CENTRE FOR FUTURES STUDIES**

## Ph.D. COURSE WORK

Course	Course Title	Exam Hours	ESE	TOTAL
Course Work - I	Research Methodology	3	100	100
Course Work - II	Principles to Futures Studies	3	100	100
Course Work - III	Area of Specialization on Thrust Area	3	100	100

\*Detailed Syllabus for Area of Specialization may be prepared by the respective Doctoral Committee

### **Course work -1**

## **Research Methodology**

### Unit I:

Types of Research, Scientific basis of research – methods of acquiring knowledge - Scientific methods and its applications –Need for conceptual analysis, selection of a problem for Research, Review of related literature, formulation of hypotheses, types of variables and Measurement levels.

### Unit II:

Research Design and Methods: Purpose and dimensions of research design, steps in formulation of a design. Types of research design – Historical, Descriptive, Experimental designs. Field surveys, diagnostic and evaluation research. Qualitative and quantitative methods in research, Need and relevance of Inter-disciplinary research.

#### Unit III :

Population and sample, Probability and non-probability sampling techniques, requisites of a good sample. Tools and techniques of data collection– Observation, interview, Schedule and questionnaire – Psychological tests, Projective techniques, , Focus Group discussion, PRA.

### Unit IV:

Data Processing and Analysis of Data: Descriptive statistics – Central measures, Dispersion measures, Skewness and kurtosis. Bivariate Analysis: Correlation and regression analysis, Analysis of attributes, Analysis of Time – series, Index Numbers and Trend analysis.

Testing of hypothesis, basics in hypothesis testing; Standard Error; Type I and Type II errors, large sample and small sample tests. Tests of significance for attributes.

### Unit V:

Report writing: Need and significance of writing research report, types and format. Qualities of a research report, Dissemination of research findings, Evaluation of research report.

Reference Materials: Bibliography, Foot notes, Appendix, Glossary

### **REFERENCES:**

- 1. Arunkumarsingh, Tests, Measurements and Research Methods in Behavioural Sciences, New Delhi: Tata McGraw Hill, 1986.
- 2. BritahaMikkelson, Methods for Development work and Research and a Guide for Practitioners. New Delhi: Sage Publications, 1995.
- 3. N.Kerlinger, Foundations of Behavioural Research, New Delhi: Surject Publications, 1983.
- 4. R.S.Dwivedi, Research Methods in Behavioral Sciences, New Delhi: Macmillan, 1997.
- 5. Runyon, R.Petal, Fundamentals of Behavioural Statistics, New Delhi: McGraw Hill, 1996.
- 6. Y.P.Aggarwal: Statistical Methods: Concepts, Applications and Computations, New Delhi: Sterling Publishing Company, 1988.
- 7. P.Vijayalakshmi and C.Sivapragasam, Research Methods: Tips and Techniques, MJP Publishers, Chennai, 2009.
- 8. S.K. Mangal, *Statistics in Psychology and Education Prentice*, New Delhi, Hall of India Private Limited, 2002.
- 9. S.P.Gupta, Statistical Methods, New Delhi, Sultan and Chand Publishers.
- 10. C.R.Kothari, Research Methodology, Methods and Techniques, New Age International Private Limited, New Delhi, 2014.

## **Course Work -2**

## **Principles of Futures Studies**

### **Unit** I

## **Introduction to Futures Studies**

Introduction - future concepts -characteristics of futures - attributes of futures - uses of future studies-futurology: concepts and views-relevance of futuristic thinking - technology forecasting: definition, types of planning levels, signals of technological change.

### **Unit II**

## **Early Warning System**

Introduction - future scanning needs Early Warning System (EWS) - threat and opportunity inventory- social change: meaning of social change, theories of social change -factors of social change: biological factor, environmental factor, cultural factor, psychological factor, technological factor. Effect of Family life-Effect of Economic life -Effect of Social life - Effect of State -Effect of Religious life.

### Unit III

## **Technology Assessment**

Introduction- Technology Assessment (TA) and Environmental Impact Analysis (EIA): Description and distinction - Uses of TA/EIA- Assessment objectives-Validity: cause effect understanding, balance, and methodological soundness. Utility: relevance, timeliness, credibility, communicability. Types of TA/EIA: Project Assessment, Problem Oriented Assessment and Technology Oriented Assessment- Family of Assessment Studies: macro assessment, mini assessment, micro assessment, monitoring, and evaluation. Components of assessment: problem definition, technology, social description, impact identification, impact analysis, policy analysis and communication of results.

### **Unit IV**

## A Manifesto for Change and Vision for India

A manifesto for Creative School Education for Generating Quality Input: empowered education system, choice of subjects, course curriculum..., recommendations for teachers' education etc.

Research Oriented Higher Education with skill and knowledge development: higher education system, decoupling the controlling institutions...., Multidisciplinary research universities

Independent Evaluation: Creation Of Independent University Ranking, Admission procedure choice based system, curriculum development ... ..., etc.

Affordable and Quality Health Care: Life style diseases in India, Medical Education, Cardiac diseases management and prevention, Strengthening Public Health Systems in Rural Areas, Pharmaceuticals and Drug Price Regulation .... etc.

Distinctive profile for a developed India.

#### Unit V

## **Environmental Management**

Basic concepts and elements of environment-scope of environmental biology: environmental analysis, ecosystem analysis, population biology, community studies, environmental degradation, Environmental Monitoring. Environmental pollution: land, water, air, Desertification, Soil erosion. Environmental challenges of the world and India. Types of conservation, Agencies of Conservation, Environmental Programmes-Scope of Environmental Education.

### References

Ayres, R.U., 1969, Technological Forecasting and Long-Range Planning, McGraw-Hill, New York.

Kusumaker, H., 1976, Several Cultural Changes Likely- India in 2000 AD, The Times of India, 1<sup>st</sup> March.

Bright, J.R., 1970, Evaluating Signals of Technological Change, Harvard Business Review, January/February pp. 62-70

Subramaniyam Naidu T., "An introduction to Futurology: Forecasting and Assessment, theory and practice", New Century Book House (P) Ltd., Madras.

Port A. L., Rossin F.A A Guidebook for Technology and Assessment and Impact Analysis

A.P.J Abdul Kallam and V.Ponraj, A Manifesto For Change A Sequel To India 2020 pp 182-250.

### Textbooks

Environmental Studies by R.Murugeshan

Environmental Education by M.P Mishra