CENTRAL UNIVERSITY OF PUNJAB



Ph.D. Course Work

Batch : 2022

Department of Economic Studies

School of Social Sciences

Programme Graduate Attributes

The graduates will acquire necessary analytical and critical skills that will prepare the students for further research and for work as professional economists. They will learn to do research in economics with the help of various econometric tools. Graduates will perform carrying out cutting-edge research in theoretical as well as applied economics in various branches of Economics.

COURSE STRUCTURE AND SYLLABUS

Ph.D. Course Work in Economics

Course Code	Course Title	Course	L	Т	Р	
	Course Thie	Туре				Credit
ECO.701	Research Methodology in Economics Core		4	0	0	4
ECO. ###	Students to choose a course from the list of elective courses given below	Elective	4	0	0	4
ECO.751	Research and Publication Ethics	Core	2	0	0	2
ECO.752	Teaching Assistantship	Core	1	0	0	1
UNI.753	Curriculum, Pedagogy and Evaluation	Core	0	0	2	1
	TOTAL		11	0	2	12
List of Electi	ves (Students to choose a course from these ele	ctive courses)			
ECO.702	Advanced Agricultural Economics		4	0	0	
ECO.703	Issues of Trade and Development		4	0	0	
ECO.704	Discontents of Development		4	0	0	
ECO.705	Financial Economics		4	0	0	
ECO.706	Economics of Human Resources		4	0	0	
ECO.707	Advanced Industrial Economics		4	0	0	
ECO.708	Advanced Economic Growth and Development		4	0	0	
ECO.709	Econometric Theory & Applications		4	0	0	
ECO. 710	Economics of Education and Development		4	0	0	
ECO. 711	Agrarian Change and Policy	1	4	0	0	

SEMESTER-I

Т	Р	R	Cr
4	0	0	4

Course Name: Research Methodology in Economics Course Code: ECO.701 Course type: Core Course Total Hours: 60 *Course Learning Outcomes:*

On completion of this course, students will be able to:

CLO1: Understand the various methods of fundamental and empirical research,

CLO2: Analyse the various sources of data sources used in social science research,

CLO3: Evaluate the various statistical tools used in research,

CLO4: Prepare a research report.

Units/Hours	Contents	Mapping with Course Learning Outcome
I 15 Hours	Introduction to Research : Meaning and objectives of research, Foundation and Philosophy in Research-Epistemology, Positivism, Empiricism and Interpretivism, Types of Research, Steps in Research Process, Identification and Defining the Research Problem, Setting Objectives, Formulation of Research Hypothesis. Research Design, its Nature and Classification, Concept of Literature Review and its role in research, Qualitative research: Deductive and Inductive, Introduction to ethnography, social research methods	CLO1
	Learning Activities: Brain-storming and Problem Solving	
II 15 Hours	Collection of Data: Primary and secondary data, Methods of collection of Primary Data; Pilot Survey, Personal Investigation, Indirect oral investigation, Information received through local agents and correspondents, mailed questionnaire, Field survey methodology, questionnaire design, difference between questionnaires and schedules, measurement scale in social science research, sampling design-sample size and its determination, collection of sensitive information, and Case study method of Research.	CLO2

	Secondary data Sources, Limitations of Secondary Data,	
	precautions in the use of Secondary Data, Coverage of	
	secondary data available from Census, NSSO, CSO, NFHS,	
	RBI, etc. and other national and international sources.	
	Deflating, Deseasonalizing and Decycling data, Unit	
	adjustment.	
	Learning Activities: Brain-storming and Problem Solving	
	Processing and Analysis of Data and Testing of	
	Hypothesis: Editing, coding, classification, tabulation,	
	Analysis of quantitative and qualitative data; Research	
III	questions and hypothesis, problems in formulating	CLO3
15 Hours	Hypothesis, prerequisites for testing of Hypothesis, testing	CLOJ
10 110015	of Hypothesis (t-test, Z-test, F-test and Chi-square test),	
	Goodness of fit, Types of errors in testing of Hypothesis,	
	level of significance.	
	Learning Activities: Brain-storming and Problem Solving	
	Report Writing : Reporting requirements and mechanics of	
	dissertation writing, significance of report writing, and	
	different steps in writing report. Foot note and end note,	
IV	Rules for bibliography and references writing-APA,	CLO4
15 Hours	MLA and other styles, Steps for writing dissertation, Method	
	of writing research papers for seminars, and for publication	
	in journals, Introduction to Poster Presentation.	
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture, case study, problem solving, group discussion & demonstration, self-study, blended learning.

- 1. Anderson, J. (2001). Thesis and Assignment writing, 4th ed., Wiley, USA
- 2. Babbie, E. R. (2007). *The Basics of Social Research*.(4th Ed.).Australia: Thomson/Wadsworth (4th Ed.).
- 3. Berg, Bruce L. (2008). *Qualitative Research Methods for the Social Sciences*. 7th edition Boston, MA: Allyn & Bacon.
- 4. Bernard, H. R. (2010). Analysis of Qualitative Data, Sage, UK.
- 5. Bhaumik, S.K (2007). 'Methodological Issues in Field Surveys' in K K Bagchi (ed.).
- Bryman, Alan (2004). Social Research Methods, 2nd Edition, Oxford University Press, Oxford.

- 7. DeMarrais, Kathleen B. and Stephen D. Lapan. (2004). *Foundations for Research: Methods of Inquiry in Education and the Social Sciences*. Mahwah, NJ: L. Erlbaum Associates.
- 8. Dooley, David. (2001). *Social Research Methods*. 4th ed. Upper Saddle River, NJ: Prentice Hall.
- Fink, Arlene and Kosecoff, J. (1998), How to Conduct Surveys A Step by Step Guide, Sage, UK.
- Glicken, Morley D. (2002). Social Research: A Simple Guide. Boston, MA: Allyn and Bacon.
- 11. Gray, David E. (2004). *Doing Research in the Real World*. London, UK: Sage Publications.
- 12. Gupta, S. C. (2012). *Fundamentals of Statistics*. New Delhi: Himalaya Publishing House Pvt. Ltd.
- 13. Gupta, S. C., and Kapoor, V. K. (2009). *Fundamentals of applied statistics*. New Delhi: Sultan Chand and Sons.
- Gupta, S.P. (2012). *Statistical Methods* (28th Edition). New Delhi: Sultan Chand and Sons.
- 15. Guthrie, Gerald. (2012). Basic Research Methods, Sage, New Delhi.
- Jonker, J & B J W Pennink. (2009). *The Essence of Research Methodology*, Springer Publishing Company.
- 17. Kanji, G.K. (2006). 100 Statistical Tests, Sage Publications, USA
- 18. Kemple, Mary. (2000). *Review of the Good Research Guide for Small Scale Social Research Projects*, by Martyn Denscombe. *Journal of Advanced Nursing* 31:733.
- Kothari, C.R. and G. Garg (2014). *Research Methodology*: Methods and Techniques, 3rd ed., New Age International Pvt. Ltd. Publisher.
- Kumar, R. (2014). Research Methodology A Step-By-Step Guide for Beginners, 4th ed., Sage Publications.
- 21. Miller, Delbert C., and Neil J. Salkind. (2002). *Handbook of Research Design and Social Measurement*. 6th ed. Thousand Oaks, CA: Sage Publications. XXII.
- 22. Neuman, W. Lawrence. (2006). *Social Research Methods: Qualitative and Quantitative Approaches*. 6th ed. Boston, MA: Allyn & Bacon.
- 23. Outhwaite, W., & Turner, S. P. (2007). *The SAGE Handbook of Social Science Methodology*. Los Angeles (Calif.); London: SAGE.
- 24. Seale, Clive (2004). Social Research Methods: A Reader, London: Routledge.

- 25. Sen, A. (1987). On Ethics and Economics. Oxford: Basil Blackwell.
- 26. Somekh, B. and Lewin, C. (2012). Theory and Methods in Social Research, 2nd ed., Sage Publications.
- 27. Todd, Roy. (1999). Review of the Good Research Guide for Small-Scale Social Research Projects, by Martyn Denscombe. Sociology -The Journal of the British Sociological Association 33:839.
- 28. Walliman, Nicholas. (2011). Research Methods: The Basics; Routledge.

L	R	Р	Credit
2	0	0	2

Course Name: Research and Publication Ethics Course Code: ECO.751 Course type: Core Course Total Hours: 30 *Course Learning Outcomes:* On completion of this course, students will be able to:

CLO (1,2,3,4): Familiarise the students with the ethics of research and publishing research outcomes.

Units/Hours	Contents	Mapping with Course Learning Outcome
	Introduction to Philosophy: Definition, Nature & Scope,	
	Concept, Branches.	
	Ethics: Definition, Moral Philosophy, Nature of Moral	
	Judgements & Reactions.	
	Scientific Conduct: Ethics with regard to science &	
I 08 Hours	Research, Intellectual Honesty & Research Integrity,	CLO1
00 110013	Scientific Misconducts: Falsification, Fabrication &	
	Plagiarism (FFP), Redundant Publications, Duplicate &	
	Overlapping Publications, Salami Slicing, Selective	
	Reporting & Misrepresentation of Data.	
	Learning Activities: Brain-storming and Problem Solving	
	Publication Ethics: Definition, Introduction& Importance,	
	Best Practices/Standards Setting Initiatives &Guidelines:	
II 07 Hours	COPE, WAME etc. Conflicts of Interest, Publication	
	Misconduct: Definition, Concept, Problems that lead to	CLO2
	unethical behaviour & vice versa, types. Violation of	
	Publication Ethics, Authorship & Contributorship,	

	Identification of Publication Misconduct, Complaints &	
	Appeals, Predatory Publishers & Journals.	
	Learning Activities: Brain-storming and Problem Solving	
	Open Access Publications & Initiatives, SHERPA/RoMEO	
	Online Resource to check publisher copyright &self-	
	archiving policies. Software tools to identify predatory	
	publications developed by SPPU, Journal Finder/Journal	
	Suggestion tools viz. JANE, Elsevier Journal Finder,	
III	Springer Journal Suggester etc.	CLO3
08 Hours	Group Discussion: Subject Specific Ethical Issues, FFP,	
	Authorship, Conflicts of Interest, Complaints & Appeals:	
	Examples and Fraud from India & Abroad.	
	Software Tools (2 Hours): Use of Plagiarism Software like	
	Turntin, Urkund & other Open-Source Software tools.	
	Learning Activities: Brain-storming and Problem Solving	
	Databases: Indexing Databases, Citation Databases: Web of	
	Science, Scopus etc.	
IV	Research Metrics: Impact Factor of Journal as per Journal	CLO4
07 Hours	Citation Report, SNIP, SJR, IPP, Cite Score. Metrics: h-	
	index, g index, i10 index, altmetrics	
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Class Room Teaching, Guest Lecture, Blended Learning, Group Discussions & Practical Sessions.

- 1. Loue Sana. (2019). Text book of Research Ethics: Theory & Practice, Springer.
- 2. Bryman & Bell. (2018). Business Research Methods, Oxford.

Course Name: TEACHING ASSISTANTSHIP

Course Code: ECO.752

L	Т	Р	Credit
1	0	0	1

Course Type: Core

Total Hours: 30 Learning Outcome:

At the end of this skill development course, the scholars shall be able to

CLO1: familiarize themselves with the pedagogical practices of effective class room delivery and knowledge evaluation system

CLO2: manage large and small classes using appropriate pedagogical techniques for different types of content

Units/Hours	Contents	Mapping with Course Learning Outcome
I 15 Hours	 Activities and Evaluation: The scholars shall attend Master degree classes of his/her supervisor to observe the various transaction modes that the supervisor follows in the class room delivery or transaction process one period per week. The scholars shall be assigned one period per week under the direct supervision of his/her supervisor to teach the Master degree students adopting appropriate teaching strategy(s). The scholars shall be involved in examination and evaluation system of the Master degree students such as preparation of questions, conduct of examination and preparation of results under the direction of the supervisor. 	CLO1,2

 At the end of the semester, the supervisor shall conduct an examination of teaching skills learned by the scholar as per the following evaluation criteria: The scholars shall be given a topic relevant to the Master degree course of the current semester as his/her specialization to prepare lessons and deliver in the class room before the master 	
degree students for one hour (45 minutes teaching + 15 minutes interaction).	
• The scholars shall be evaluated for a total of 50 marks comprising <i>content knowledge</i> (10 marks), <i>explanation and demonstration skills</i> (10 marks), <i>communication skills</i> (10 marks), <i>teaching techniques employed</i> (10 marks), and classroom interactions (10).	

Course Title: CURRICULUM, PEDAGOGY AND EVALUATION

L	Т	Р	Credit
0	0	2	1

Course Code: UNI.753

Course Type: CORE

Total Hours: 15

Learning outcomes:

After completion of the course, scholars shall be able to:

CL01: analyze the principles and bases of curriculum design and development

CL02: examine the processes involved in curriculum development

CL03: develop the skills of adopting innovative pedagogies and conducting students' assessment

CL04: develop curriculum of a specific course/programme

Units/Hours	Contents	Mapping with Course Learning Outcome
Ι	Bases and Principles of	
4 hours	Curriculum	
	1. Curriculum: Concept and	
	Principles of curriculum	
	development, Foundations	
	of Curriculum Development.	
	2. Types of Curriculum	
	Designs- Subject centered,	
	learner centered, experience	
	centered and core	
	curriculum. Designing local,	
	national, regional and global	
	specific curriculum. Choice	
	Based Credit System and its	
	implementation. Learning Activities: Brain-storming	
	and Problem Solving	
II	Curriculum Development	CL02
4 hours		0202
	1. Process of Curriculum	
	Development: Formulation	
	of graduate attributes,	
	course/learning outcomes,	
	content selection,	
	organization of content and	
	learning experiences,	
	transaction process.	
	2. Comparison among	
	Interdisciplinary,	
	multidisciplinary and trans-	
	disciplinary approaches to	
	curriculum. Learning Activities: Brain-storming	
	and Problem Solving	
III	Curriculum and Pedagogy	CL03
3 hours	1. Conceptual understanding of	
	Pedagogy.	
	2. Pedagogies: Pedagogy,	
	Cybergogy and Heutagogy	
	with special emphasis on	
	Blended learning, Flipped	
	learning, Dialogue,	
	cooperative and	
	collaborative learning	

	3. Three e- techniques: Moodle, Edmodo, Google classroom	
	Learning Activities : Brain-storming and Problem Solving	
IV 4 hours	 Learners' Assessment Assessment Preparation: Concept, purpose, and principles of preparing objective and subjective questions. Conducting Assessment: Modes of conducting assessment – offline and online; use of ICT in conducting assessments. Evaluation: Formative and Summative assessments, 	CL04
	Outcome based assessment, and scoring criteria. Learning Activities: Brain-storming and Problem Solving	

Transaction Mode

Lecture, dialogue, peer group discussion, workshop

Evaluation criteria

There shall be an end term evaluation of the course for 50 marks for duration of 2 hours. The course coordinator shall conduct the evaluation.

- Allyn, B., Beane, J. A., Conrad, E. P., & Samuel J. A., (1986). *Curriculum Planning and Development*. Boston: Allyn & Bacon.
- Brady, L. (1995). *Curriculum Development*. Prentice Hall: Delhi. National Council of Educational Research and Training.
- Deng, Z. (2007). Knowing the subject matter of science curriculum, *Journal of Curriculum Studies*, 39(5), 503-535. <u>https://doi.org/10.1080/00220270701305362</u>
- Gronlund, N. E. & Linn, R. L. (2003). *Measurement and Assessment in teaching*. Singapore: Pearson Education
- McNeil, J. D. (1990). *Curriculum: A Comprehensive Introduction*, London: Scott, Foreman/Little
- Nehru, R. S. S. (2015). *Principles of Curriculum*. New Delhi: APH Publishing Corporation.
- Oliva, P. F. (2001). *Developing the curriculum* (Fifth Ed.). New York, NY: Longman
- Stein, J. and Graham, C. (2014). *Essentials for Blended Learning: A Standards-Based Guide*. New York, NY: Routledge.

Web Resources

- <u>https://www.westernsydney.edu.au/__data/assets/pdf_file/0004/467095/Fundamentals</u> of Blended Learning.pdf
- <u>https://www.uhd.edu/academics/university-college/centers-offices/teaching-learning-excellence/Pages/Principles-of-a-Flipped-Classroom.aspx</u>
- <u>http://leerwegdialoog.nl/wp-content/uploads/2018/06/180621-Article-The-Basic-Principles-of-Dialogue-by-Renate-van-der-Veen-and-Olga-Plokhooij.pdf</u>

Course Name: Advanced Agricultural Economics

L	Т	Р	Cr
4	0	0	4

Course Code: ECO.702 Course type: Elective Course

Total Hours: 60

Course Learning Outcomes:

On completion of this course, students will be able to:

CLO1: Understand the pattern of and problems in agricultural development,

CLO2: learn agricultural marketing and instruments of agricultural price policy in India,

CLO3: understand role of agricultural finance in agriculture,

CLO4: analyse cost concepts, monitor and evaluate agricultural projects.

Units/Hours	Contents	
I 15 Hours	Agriculture Development in India Role of Agriculture in Indian and Punjab's Economy, Agriculture and Allied Sectors in Five Year Plans, Capital Formation in Agriculture, Regional Disparities in Agricultural Growth and	CLO1

	Dreductivity Form Size and Dreductivity Deletionship, Land	
	Productivity, Farm Size and Productivity Relationship; Land	
	Reforms; Emerging Environmental Issues in Agriculture; Recent	
	issues in agri. development: Farm laws and impact of COVID-19.	
	Learning Activities: Brain-storming and Problem Solving	
	Agricultural Marketing in India	
	Agricultural Marketing and Price Policy: Economic Costs of Food	
	Grains, Criteria for Fixation of MSP, Swaminathan Report (Main	
II	Findings); Food Security Issues; Agricultural Marketing: Need for	CLO2
15 Hours	Reforms, Marketing Integration, Efficiency, Costs and Price	
	Spread; Emerging Marketing Channels: Contract Farming, Apni	
	Mandi, Retail Chains etc.	
	Learning Activities: Brain-storming and Problem Solving	
	Agricultural Finance	
	Growth, Role of Agencies, Tests of Farm Credit Proposal;	CL O2
III	Interlinked Agrarian Credit Markets, Indebtedness; Agricultural	CLO3
15 Hours	Subsidies: Role and Distributional Implications;	
	Learning Activities: Brain-storming and Problem Solving	
	Monitoring and Evaluation of Agricultural Projects: Shadow	
IV 15 Hours	Prices, Comparing Costs and Prices, Sensitivity Analysis,	
	Financial and Economic Rate of Return; Farm Management and	CLO4
	Business Analysis: Cost Concepts, Measures of Farm Efficiency,	
	Planning and Budgeting: Concepts.	
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture, case study, problem solving, group discussion & demonstration,

self-study, blended learning.

Suggested Readings:

1. Acharya, S.S. and Agarwal, N.L. (1998). *Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd.*, New Delhi.

2. Bansil, P.C. (2002). *Economic Problems of Indian Agriculture*. *CBS Publishers and Distributers*, New Delhi.

3. Carter, M.R. (1984). Identification of the Inverse Relationship between Farm Size and

Productivity: An Empirical Analysis of Peasant Agricultural Production. Oxford Economic Papers, New Series, 36 (1): 131-145.

4. Chand, R. (2004). *India's national agricultural policy: a critique. Indian Journal of Agricultural Economics*, 64(2): 164-187.

5. Chand, R. (2012). *Development Policies and Agricultural Markets*. Economic and Political Weekly, 47 (52): 53-63.

6. Chand, R., Raju, S. S, Garg, S. and Pandey, L. M. (2011). *Instability and Regional Variation in Indian Agriculture*, NCAP, New Delhi.

7. Cramer, G.L., Krishna, P.P. and Schmitz, A. (2018). *Handbook of Agricultural Economics*, Routledge.

8. Dev, S. M. and Rao, N.C. (2010). *Agricultural Price Policy, Farm Profitability and Food Security*. Economic and Political Weekly, 45 (26 & 27): 174-182.

9. Fan, S., Gulati, A., and Thorat, S. (2008). *Investment Subsidies and Pro Poor Growth in Rural India*. Agricultural Economics, *39*(2): 163-170.

10. Gill, A. (2004). *Interlinked Agrarian Credit Markets*: Case Study of Punjab. Economic and Political Weekly, 39 (33): 3741-3751.

11. Gittinger, J.P. (1982). *Economic Analysis of Agricultural Projects*, 2nd ed. John Hopkins Univ. Press, Baltimore.

12. Johl, S.S. and Kapur, T. R. (2006). *Fundamentals of Farm Business Management*, Kalyani Publishers, Ludhiana.

13. Kahlon, A. S., and Tyagi, D. S. (1983). *Agricultural Price Policy in India*. Allied Publishers Ltd., New Delhi.

14. Kahlon, A.S. and Singh, K. (1984). *Managing Agricultural Finance: Theory and Practice*. Allied Publisher Ltd., New Delhi.

15. Kahlon, A.S. and Singh, K. (1992). *Economics of Farm Management in India: Theory and Practice*, Allied Publisher Ltd., New Delhi.

16. Krishna, R. (1982). *Some Aspects of Agricultural Growth, Price Policy and Equity in Developing Countries.* Food Research Institute Studies, (03).

17. Lekhi, R. K. and Singh, J. (2006). *Agricultural Economics*, 2nd Edition, Kalyani Publishers, Ludhiana.

18. Rao, C. H. (2001). *WTO and Viability of Indian Agriculture*. Economic and Political Weekly, 36(36), 3453-3457.

19. Reddy, S. S. and Ram, P. R. (2000). *Agricultural Finance and Management*. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi.

20. Singh, S. (2004). *Crisis and Diversification in Punjab Agriculture*: Role of State and Agribusiness. Economic and Political Weekly, 39 (52): 55835589.

21. Singh, S. (2005). *Political Economy of Contract Farming in India*. Allied Publishers, New Delhi.

22. Singh, S. and Singla, N. (2011). *Fresh Food Retail Chains in India: Organisation and Impacts*, Allied Publishers, New Delhi.

23. *Swaminathan Reports* (various years). National Commission on Farmers, Ministry of Agriculture, Govt. of India.

L	R	Р	Credit
4	0	0	4

Course Name: Discontents of Development Course Code: ECO.704 Course type: Elective Course Total Hours: 60 *Course Learning Outcomes:*

On completion of this course, students will be able to:

CLO1: Define the origin and evolution of ideas about development,

CLO2: Understand the different issues of development in the context of economic, political, and social perspectives,

CLO3: Analyze the emerging problems associated with development,

CLO4: Discuss the various interdisciplinary problems of development.

Units/Hours	Contents	Mapping with Course Learning Outcome	
	Advancement and Asymmetry in Development:		
	Evolution of Development Doctrine, Turning Points and		
	Different Approaches of Development, Externalities in		
Ι	Economic Development, Inclusive Growth. Asymmetries in	CLO1	
15 Hours	Global Economy, Impact of Global Crisis, MDGs, New		
	Great Transformation; Education – Accessibility Vs.		
	Affordability with respect to WTS.		
	Learning Activities: Brain-storming and Problem Solving		
	Distribution and Economic Growth: Population and		
	Development, Growth and Poverty, Decomposing Growth,		
	Inequality and Poverty, Human Capital: Role of Education		
II 15 Hours	and Health. Gender Biasin Achievements, Ingredients of	CLO2	
10 110015	Pro-Poor Growth. Social Issues of Development: Child		
	Labour, Trafficking etc.		
	Learning Activities: Brain-storming and Problem Solving		
	Transformation and Development: Uneven development,		
	Agrarian Transformation and Rural Development,		
III	Industrial Transformation and Sustainable Development,	CLO3	
15 Hours	Development and Displacement Issues, Urbanization and		
	Rural-Urban Migration. Current Food Security Issue.		
	Learning Activities: Brain-storming and Problem Solving		
	Growth vs. Environment: Rural Poverty and Environment		
	Destruction, Industrialization and Environment Pollution,		
IV	Land Acquisition: Active and Salient Discontentment.		
	Inverted U Shape in Environment Degradation, Global	CLO4	
15 Hours	Warming and Climate Change, Rising Urbanization and its		
	Environment Impacts, Fast Growth versus the Economic		
	Sustainability, Man-made disaster.		
	Learning Activities: Brain-storming and Problem Solving		

Transaction Mode: Presentation, lectures, Blended Learning, case study, debates, brainstorming, simulation and role playing.

- 1. Acemoglu, Daron. (2008). Introduction to Modern Economic Growth. Princeton UP.
- 2. Aghion, Philippe and Durlauf, Stephen. (2005). *Handbook of Economic Growth*, North Holland.
- 3. Cohen, Jessica and Easterly, William., (2009). *What Works in Development? Thinking Big and Thinking Small. Washington DC*: Brookings Institution Press.
- Daniels, Joseph P. and Hoose, David Van. (2011). *Global Economic Issues and Policies*, Rotledge publications.
- De, Long, J. Bradford. (2002). *Macroeconomics*. Burr Ridge, IL: McGraw Hill.
- 6. Hayami, Yujiro And Godo Yoshihisa. (2012). *Development Economics from the Poverty to the Wealth of Nations*.
- 7. Helpman, Elhanan. (2005). *Mystery of Economic Growth*. Harvard University Press.
- 8. Hollis B. Chenery and T. N. Srinivasan. (1988). *Hand Book of Development Economics, North, Hdland Elsevier,* Amestertion.
- 9. Parente, Stephen L. and E.C. Prescott. (2000). Barriers to Riches MIT Press. D 330.34
- Perkins, Dwight H., Steven Radelet and David L. Lindauer. (2006). Economics of Development. Norton.
- 11. Piketty, T. (2014). Capital in the 21st Century, Cambridge Belknap Press
- 12. Ray, Debraj. (1998). Development Economics. Princeton University Press.
- 13. Rodrik, Dani. (2011). Globalization Paradox, Oxford University Press
- 14. Rodrik, Dani. (2003). In Search of Prosperity: Analytical Narratives on Economic Growth, Princeton University Press.
- 15. Stiglitz, J.E. (2013). *The Price of Inequality*: How Today's Divided Society Endangers our Future, W.W. Norton and Company.
- 16. Stiglitz, J. E. (2002). Globalization and its Discontents. London: Penguin.
- 17. Todaro, Michael P. and Stephen C. Smith. (2011). *Economic Development*.11th ed. *Pearson*.

L	R	Р	Credit
4	0	0	4

Course Name: Financial Economics

Course Code: ECO.705 Course type: Elective Course Total Hours: 60 *Course Learning Outcomes:* On completion of this course, students will be able to:

CLO1,2,3,4: Understand theoretical and policy dimensions of financial economic thought.

Units/Hours	Contents	Mapping with
		Course

		Learning	
	Introduction to financial system: Financial markets,	Outcome	
	instruments and services; optimal asset allocation – trade off		
	between risk and return (the Markowitz model), equilibrium		
	in the financial market – the Capital Asset Pricing Model,		
	Market Efficiency – The efficient markets hypothesis,	CLO1	
Ι	financial system and economic development; theories of the		
15 Hours	impact of financial development; Models of security prices		
	in financial market – single factor security market and single		
	index model; Fixed income securities – fixed income		
	markets, risk and term structure of interest rates.		
	Learning Activities: Brain-storming and Problem Solving.Banking and Non-Banking Services: Importance and		
	functions of banks; mobilization, lending and investment of		
	funds by banks; reforms in the banking system; micro-	CL 0.2	
	finance and financial inclusion; insurance as nonbanking		
	services, insurance in economic development - insurance		
	institutions as financial intermediaries - insurance		
II 15 Hours	institutions as investment institutions and capital market;	CLO2	
10 110415	worldwide risk sharing - concept of reinsurance, reinsurance		
	markets in developing countries; mutual funds as non-		
	banking services – resource mobilization functions of mutual funds in India.		
	Learning Activities: Brain-storming and Problem Solving. Indian financial system- issues of financial inclusion:		
	Centre-State Financial Relations and 15 th Finance		
III 15 Hours	Commission. Critical review of financial sector reforms in		
	India. Regulatory and Promotional Institutions: Reserve		
	bank of India – functions and role; objectives of money	CLO3	
10 110010	policy and instruments; commentary on current monetary		
	policy; securities exchange board of India – functions and		
	role in security market; insurance regulatory development		
	Tote in security market, insurance regulatory development		

	authority of India – functions and role in insurance market.	
	NPAs in Banking System.	
	Learning Activities: Brain-storming and Problem Solving.	
	International Financial Market: nature and organization	
	of participants, exchange rate, devaluation and depreciation;	
	working of floating exchange rate since 1973; role of	
IV	International Monetary Fund, World Bank, International	CLO4
15 Hours	Development Association, International Financial	
	Corporation, Asian Development Bank, and India Euro	
	Currency Market Development, Role and Regulations.	
	Learning Activities: Brain-storming and Problem Solving.	

Transaction Mode: Presentation, lectures, case study, blended learning, debates, brainstorming, simulation and role playing.

- 1. Avadhani, V.A. (2000). *Financial Economics*, Theory and Practice, Himalaya Publications.
- Bhole, L. M. and J. Mahukud. (2011). *Financial Institutions and Markets*, Tata McGraw Hill, 5th edition.
- Bodie, Zvi, Alex Kane and Alan J. Marcus. (2013). *Investments*, 10th Edition, McGraw-Hill Education.
- 4. Bodie, Zvi, Robert C. Merton, David C. Cleeton. (2011). *Financial Economics*, 2/e, Pearson Education.
- Buckley, Adrian. (2003). *The Essence of International Money*, 2nd Edition, Prentice-Hall India.
- 6. Dionne, G. and S.E. Harrington (Eds). (1997). *Foundations of Insurance Economics*, Kluwer Academic Publishers, Boston.
- Elton, E. J. and M.J. Gruber. (1995). Modern Portfolio Theory and Investment Analysis, Wiley, London.
- 8. Harker P. T. and S. A. Zenios (Eds). (2000). *Performance of Financial Institutions*, Cambridge University Press, Cambridge.
- 9. Johnson, H. J. (1993). Financial Institutions and Markets, McGraw Hill, New York.
- 10. Khan, M.Y. (2008). Indian Financial System, Tata McGraw Hill, New Delhi.

- Machiraju, H.R. (2006). *Indian Financial Systems*, 4th Edition, Vikas Publishing House Pvt. Ltd, New Delhi.
- 12. Mishkin, F.S. and S.G. Eakins. (2009). *Financial Markets and Institutions*, Pearson Education, 6th edition.

Research Papers

- 1. Ansari, Mohd. Samim. (2012). *Indian Capital Market Review: Issues, dimensions and performance analysis,* UTMS Journal of Economics, *3(2),* 181–191.
- Ashraf, S. H. and Faiz, A. (2008). India's Insurance Sector in PostPrivatization Period: Emerging Financial Issues, The Journal, July December, 74-83.
- 3. Cebula, R. (2011). *Current Issues in Financial Economics*: An Overview, Atlantic Economic Journal, 39, 1-5.
- 4. Chakraborty, Indrani. (2010). *Financial Development and Economic Growth in India: An Analysis of the Post-Reform Period*, South Asia Economic Journal, 11(2), 287-308.
- Mishra, P. K. (2011). Dynamics of the Relationship between Mutual Funds Investment Flow and Stock Market Returns in India, Vision – The Journal of Business Perspective, 15(1), 31-40.
- 6. Mishra, P. K. (2012). *The Nexus between Resource Mobilization by Mutual Funds and Economic Growth in India,* Global Business Review, 13(1),123-136.
- Nasir, S. (2013). *Microfinance in India: Contemporary Issues and Challenges*, Middle-East Journal of Scientific Research, 15 (2), 191-199.
- Plande, P. S. et al. (2003). Insurance in India: Changing Policies and Emerging Issues, Response Books, New Delhi, 118-123.
- Schich, Sebastian. (2007). Indian Financial System Reform: Selected Issues, Financial Market Trends, No.93, Vol.2007/2, OECD, 167-198
- Sharma, A. K. and Vashishtha, Ashutosh. (2007). Dynamics and regulatory system of Indian financial markets: A dialectic view, Journal of Financial Regulation and Compliance, 15(3), 275 – 302.
- 11. Varma, J. R. (1997): *Indian Money Market: Market Structure, Covered Parity and Term Structure,* The ICFAI Journal of Applied Finance, 3(2),1-10.

L	Т	Р	Credit
4	0	0	4

Course Name: Economics of Human Resources Course Code: ECO.706 Course type: Elective Total Hours: 60 *Course Learning Outcomes:* On completion of this course, students will be able to:

CLO1: Understand the basic theories of human capital and employment,

CLO2: Understand the basic theories of wages, and recent issues and problems,

CLO3: Familiar with contemporary labour market issues and theories on migration,

CLO4: Aware of the past and current human resource policies.

Units/Hours	Contents	Mapping with Course Learning Outcome
I 15 Hours	 Human Resource Development and Employment: Investing in Human Capital: Becker's Model, Concept of 'On the Job Training' and Re-training; Endogenous Growth: Role of education, Research and Knowledge: Arrow, Romar and Lucas Models; Market for Human Resource: Demand for and supply of human resources; Choice of technology; Asymmetric Information, and Agency problem; Issues relating to employment, rationalization, technological change and modernization; Concepts, measurement employment and recent issues on employment and skill development in India. Learning Activities: 	CLO1
	Lectures, Brain storming and problem solving.	
II 15 Hours	 Human Resource Compensation and Benefits: Theories of wages and : Neoclassical Approach, Behavioural Approach, Game Theoretic Approach, Exogenous and Endogenous Bargaining Models; Theories of wage determination: Marginal Productivity Theory, Comparative Advantage (Self Selection) Theory, Compensating Difference Theory, Human Capital Theory, Job-Matching Theory, Agency Theory, and Efficiency Wage Theory; Concepts and Measurement of wage differentials; Wage discriminations and returns to human capital endowments; Problems of implementation of minimum wages; wages and compensation policies of the Government of India. Learning Activities: Lectures, Brain storming and problem solving. 	CLO2
III 15 Hours	Brain-Drain, Reverse Brain-drain and Migration: Internal and International labour migration; Theories of labour migration: Gravity model, Lewis model, Harris-Todaro model, and New Economics of Labour migration models, Role of push and pull factors, human capital and social networks in the process of labour migration; Internal and International migration laws in India; Demographic dividend driving international migration; Trends and patterns of labour migration (internal and international) in India; Short duration (Seasonal) and permanent migration,	CLO3

	and their determinants in India; and Trends and patterns of
	remittance receipts.
	Learning Activities: Lectures, Brain storming,
	Presentations, Case studies
	Industrial Relations and Policy: Growth of
	Industrialization and emergence of Unionism; Theories of
	Labour movement: growth structure and pattern of trade
	union in India; Achievements and failures of trade union
	movements; determinants of industrial disputes, steps to
	achieve peace, methods of settling industrial disputes,
	collective bargaining, conciliation, arbitration, adjudication CLO4
IV 15 II	and grievance settlements; exit policy, child labour policy in
15 Hours	India, problems and policy of female workers in India,
	labour relations in India, contract labour, employment in
	organised and unorganised sector, formal and informal
	employment and social security and employment policy
	under the five-year plans in India.
	Learning Activities: Lectures, Brain storming,
	Presentations, Case studies

Transaction Mode: Class Lectures & Blended Learning & Presentations, Assignments & Term Papers.

- 1. Blaug, M. (1970). *An Introduction to the Economics of Education*, Allen Lane Publishing.
- 2. Borjas, G. J. (1989). *Economic Theory of International Migration*. International Migration Review, 23(3), 457-485.
- 3. Cahuc, P. Carcillo, S. and Zylberberg, A. (2015) Labor Economics. New Delhi-PHI
- 4. Hajela, P. D. (1998). *Labour Restructuring in India: A Critique of the New Economic Policies*, New Delhi: Common wealth Publishers.
- 5. Harris, J. R. and Todaro, M. P. (1970). *Migration, Unemployment and Development: A Two Sector Analysis.* American Economic Review, 60 (1), 126-138.
- 6. IOM (2005). Labour Migration in Asia: Protection of Migrant Workers, Support Services and Enhancing Development Benefits.
- 7. Organisation for Migration (IOM), Dept. of International Development (DFID), Asian Development Bank (ADB).
- 8. Lewis, W.A. (1954). *Economic Development with Unlimited Supplies of Labour*. Manchester School of Economic and Social Studies, 22, 139-191.
- Massey, D.S. Arango, J. Hugo, Kouaouci, A. Pellegrino, A. and Taylor, J. E. (1993). *Theories of International Migration: A Review and Appraisal*. Population and Development Review, 19(3), 431-466.

- 10. McConnell, Brue, S. Macpherson, D. (2015). *Contemporary Labor Economics* (11th Edition). New York: McGraw-Hill Education.
- 11. McConnell, C.R. and Brue, S.L. (1986). *Contemporary Labour Economics*, New York: McGraw-Hill.
- 12. Papola, T.S. Ghosh, P. and Sharma, A.N. (1993). *Labour Employment: Industrial Relation in India*, New Delhi: B.R. Publishing Corporation.
- 13. Ramaswamy, K. V. (2015). *Labour, Employment and Economic Growth in India*, Cambridge University Press.
- 14. Romesh, V. (2006). *Human Resources, the Labour Market and Economic Performance*. Special Report, Manpower Human Resources Lab, London School of Economics and Political Science (Free web resource).
- 15. Ronald, E. and Smith, R. (2014). *Modern Labor Economics: Theory and Public Policy*. (12th Edition), Pearson.
- 16. Stark, O. (1991). The Migration of Labor. Cambridge, Mass: Basil Blackwell.
- 17. Stark, O. and Bloom, D. E. (1985). *The New Economics of Labour Migration*. American Economic Review, 75(2), 173-178.
- 18. Taylor, J. E. (1999). *The New Economics of Labour Migration and the Role of Remittances in the Migration Process*. International Migration, 37(1), 63-88.
- 19. Whalen, Charles J. (2010). *Human Resource Economics and Public Policy: Essays in Honour of Vernon M. Briggs Jr.* (ed.) Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Web links:

https://www.youtube.com/watch?v=1BSkamH8TS4&feature=youtu.be https://www.youtube.com/watch?v=g33gM2M1Odg&feature=youtu.b Theories of wages and their impact on industries - iPleaders

L	R	Р	Credit
4	0	0	4

Course Name: Advanced Industrial Economics

Course Code: ECO.707 Course type: Elective Course Total Hours: 60 Course Learning Outcomes: On completion of this course, students will be able to:

CLO1,2,3,4: Understand the issues related to productivity, efficiency, capacity utilization,

and debates involved in the industrial development of India.

Units/Hours	Contents	Mapping with Course Learning Outcome	
	Introduction to organisational theory: Strategy,		
	operations, technology, environment and power & politics,		
	Types and choice of form of organization, Entrepreneurship,		
	Entrepreneurial perspectives, Creating and starting the		
	venture, Financing the new venture Managing, growing, and		
Ι	ending the new venture, Business motives, Evaluation of	CLO1	
15 Hours	goals, Market structure: Seller's concentration, Product		
	differentiation, Profitability, Innovation, Industrial		
	productivity – measurement, Partial and total trends. Effects		
	of Climates change. Skill Development, Competitive		
	structure of market.		
	Learning Activities: Brain-storming and Problem Solving		
	Theories and approaches of industrial location and		
	pattern: General determinants of industrial location, Alfred	CLO2	
	Weber's theory, Sergeant Florence's theory, Market area		
	theory, Central place theory of Losch, Industrial imbalances		
	- causes and remedies, Market conduct- theories of product		
II 15 Hours	pricing, Theories and empirical evidence on Merger &		
15 110015	Acquisition and Diversification; Economic efficiency-		
	Meaning, Factors determining efficiency and firm size,		
	Limits and obstacles to the size of firm, Efficiency and		
	decision making process.		
	Learning Activities: Brain-storming and Problem Solving		
	Principles & Practice of Management: Planning,		
III 15 Hours	Organising, Staffing, Directing, Controlling, Management		
	control systems, Financial management – financing,	CLO3	
	investment and rewards, Project management, Project		
	identification, selection, and planning, PERT and CPM,		
	Project risk and quality management, Project performance		
	measurement and evaluation, Project execution and control,		

Transaction Mode: Presentation, lectures, case study, debates, blended learning, brainstorming, simulation and role playing.

- 1. Ahluwalia, I. J. (1985). Industrial Growth in India, Oxford University Press, New Delhi.
- Anthony, Robert N. and Govindarajan, Vijay. (2014). Management Control Systems, McGraw-Hill Publishers, New Delhi.
- 3. Barthwal, R. R. (1985). Industrial Economics, Wiley Eastern Ltd., New Delhi.
- Cherunilam, F. (1994). Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
- Desai, B. (1999) *Industrial Economy in India* (3rd Edition), Himalaya Publishing House, Mumbai.
- 6. Dessler, Gary. (2012). *Human Resource Management*, Prentice Hall Publishers, New Delhi.
- Divine, P. J. and Jones, R. M. et. al. (1976). An Introduction to Industrial Economics, George Allen and Unwin Ltd., London.

- Hay, D. and D. J. Morris. (1979). *Industrial Economics: Theory and Evidence*, Oxford University Press, New Delhi.
- 9. Hisrich, R., Peters, M., and Shephered, D. (2012). *Entrepreneurship* (9th Edition), McGraw-Hill Education, New Delhi.
- Koontz, Harold and O'Donnell Cyril. (2008). Principles of Management: An Analysis of Managerial Functions, McGraw-Hill Publishers, New Delhi.
- 11. Kotler, Philip T and Keller, Kevin Lane. (2011). *Marketing Management*, Prentice Hall Publishers, New Delhi.
- 12. Kuchhal, S.C. (1980). *Industrial Economy of India* (5th Edition), Chaitanya Publishing House, Allahabad.
- 13. Larson, Erik W. (2005). *Project Management: The Managerial Process*, McGraw-Hill Publishers, New Delhi.
- Robbins, Stephen P. (2009). Organisation Theory Structure Design and Applications, Pearson Education Ltd., Noida.
- 15. Ross, Stephen; Westerfield, Randolph and Jordan, Bradford. (2012). *Fundamentals of Corporate Finance*, McGraw-Hill Publishers, New Delhi.
- Singh, A. and Sadhu, A. N. (1988). *Industrial Economics*, Himalaya Publishing House, Bombay.

Additional Readings

- 1. Bains, J. S. (1996). Industrial Organization, Cheltanham, U.K.
- 2. Bhagwati J. and P. Desai. (1972). *India: Planning for Industrialization*, Oxford University Press, London.
- 3. Chakravarty, S. (1987). *Development Planning: The Indian Experience*, Oxford University Press, New Delhi.
- 4. Datta, B. (1992). *Indian Planning at the Crossroads*, Oxford University Press, New Delhi.
- 5. Khan, M.Y. (2014). Indian Financial Systems, Allied Publishers, New Delhi.
- 6. Jalan, B. (1996). India's Economic Policy, Viking, New Delhi.
- Joshi, V. and I.M.D. Little. (1999). India: Macro Economics and Political Economy: 1964-1991, Oxford University Press, New Delhi.

- Kamien, M. T. and N. L. Schwartz. (1982). *Market Structure and Innovation*, Cambridge University Press, Cambridge.
- 9. Kelkar, V. L. and V. V. Bhanoji Rao (Eds.). (1996). *India Development Policy Imperatives*, Tata McGraw Hill, New Delhi.
- Kirkpatrick, C. M., Lee, N. and Nixon, E.I. (1984). *Industrial Structure and Policy in* Less Developed Countries, ELBS/George Allen and Unwin, London.
- 11. Koutsoyiannis, A. (1979). Modern Microeconomics, Macmillan, New York.
- 12. Mamoria and Mamoria. (2000). *Dynamics of Industrial Relations in India* (15th Edition), Himalaya Publishing House, Mumbai.
- 13. Menon, K. S. V. (1979). *Development of Backward Areas through Incentives*, Asia Publishing House, Bombay.
- 14. Rama Murti, R. and Vernan R. (Eds.). (1991). *Privatization and Control of Stateowned Enterprises*, The World Bank, Washington.
- 15. Sandesara, J. C. (1982). *Industrial Growth in India: Performance and Prospects*, Lala Lajpat Rai College, Bombay.
- Sandesara, J. C. (1992). Industrial Policy and Planning 1947-1991: Tendencies, Interpretations and Issues, Sage Publications, India Pvt. Ltd., New Delhi.

Research Papers

- Bain J. (1951). Relation of Profit Rate to Industry Concentration: *Quarterly Journal of Economics*, 65, 293–324.
- Bain, J. S. (1951). Relation of Profit Rate to Industry Concentration: American Manufacturing, 1936-1940: *Quarterly Journal of Economics*, 65 293-324.
- 3. Baumol W. (1982). Contestable Markets: An Uprising in the Theory of Industry Structure, *American Economic Review*, 72, 1–15.
- Bikker J. A., Shaffer S., Spierdijk L. (2012). Assessing Competition with the Panzar– Rosse Model: The Role of Scale, Costs, and Equilibrium, *The Review of Economics and Statistics*, 94, 1025–1044.
- Bikker J., Haaf K. (2002). Competition, Concentration and their Relationship: An Empirical Analysis of the Banking Industry, *Journal of Banking & Finance*, 26, 2191– 2214.
- 6. Demsetz H. (1973). Industry Structure, Market Rivalry and Public Policy, *Journal of Law and Economics*, 3, 1–9.

- 7. Demsetz, H. (1973). Industry Structure, Market Rivalry, and Public Policy, *Journal of Law and Economics*, 16, 1-10.
- 8. Grether, E. T. (1970). Industrial Organization: Past History and Future Prospects, *American Economic Review*, 60, 83-89.
- 9. Grobbelaar N. (2004). Can South Africa Business Drive Regional Integration on the Continent?, *South African Journal of International Affairs*, 1, 91–106.
- 10. Holcombe R. G. (2009). Product Differentiation and Economic Progress, *The Quarterly Journal of Austrian Economics*, 12, 17–35.
- Lau L. (1982). On Identifying the Degree of Competitiveness from Industry Prices and Output Data, *Economics Letters*, 10, 93–99.

L	R	Р	Credit
4	0	0	4

Course Name: Advanced Economic Growth and Development

Course Code: ECO.708 Course type: Elective Course Total Hours: 60 *Course Learning Outcomes:*

CL01: Comprehend the contemporary theoretical and empirical issues in economic growth and development in developing and developed economies,

CL02: Articulate the importance of economics of knowledge in innovation and entrepreneurship,

CL03: Determine the factors of economic growth and development,

CL04: Financing planning for development.

Urbanization; Education, Health and Human Capital; Capital Formation, Investment Choice, Information Technology and Technical Progress; Entrepreneurship, Organization and Innovation; Natural Resources and the Environment for sustainable development; Social Security and Development, Structural Change and Economic Growth, Political Economy of Growth.	Units/Hours I 15 Hours	Contents Economic Growth and Development: Cross-country income differences, conditional convergence, correlates of economic growth, from correlates to fundamental causes, The Solow Growth Model, Growth Accounting, Solow Model and Regression Analysis, Solow Model with Human Capital, Fundamental determinants of differences in economic performance – proximate vs. Fundamental causes; Poverty alleviation and income distribution – Poverty, Malnutrition and Income Inequality; Rural poverty and agricultural transformation; Factors of Growth – Population and development; Employment, Migration and	Mapping with Course Learning Outcome
Learning Activities: Brain-storming and Problem Solving		Malnutrition and Income Inequality; Rural poverty and agricultural transformation; Factors of Growth – Population and development; Employment, Migration and Urbanization; Education, Health and Human Capital; Capital Formation, Investment Choice, Information Technology and Technical Progress; Entrepreneurship, Organization and Innovation; Natural Resources and the Environment for sustainable development; Social Security and Development, Structural Change and Economic Growth, Political Economy of Growth.	CLO1

	Economics of Knowledge: Concept of technology,		
	characteristic of knowledge as a commodity and its		
	e i		
	economic implications; empirics of education and economic		
	growth; Innovation and Entrepreneurship – role of		
II	entrepreneur as an innovator, in generation of employment	CLO2	
15 Hours	opportunities, in complementing and supplementing		
	economic growth, in bringing social stability and balanced		
	regional growth, in export promotion, in import substitution,		
	in augmenting and meeting local demand.		
	Learning Activities: Brain-storming and Problem Solving		
	Rural and Urban Interaction: Structural approach of		
	development - structure of rural and urban economy -		
	formal and informal sectors - rural and urban interaction -		
	Lewis model - rural and urban migration - Harris and		
III	Todaro model; Natural Resources and Development -	CLO3	
15 Hours	dynamic resource allocation problem; economics of		
	exhaustible/non-renewable resources, economics of		
	renewable resources, natural resources and sustainable		
	development.		
	Learning Activities: Brain-storming and Problem Solving		
	Financial Sector and Economic Growth: Role of money		
	market (banks and non-banks), capital market, mutual funds,		
	insurance sector, pension funds, micro-finance, and venture	CLO4	
	capital funds in economic growth; importance of FDI, FPI,		
IV	FIIs in economic growth and development; Financing		
15 Hours	Development – concept and need for financing; financial		
	planning for development, budgetary provisions; role of		
	public and private expenditures; planned and unplanned		
	expenditure; sources of financing - internal and external		
	sources.		
	Learning Activities: Brain-storming and Problem Solving		

Transaction Mode: Lecture, problem solving, blended learning, discussion & demonstration

- 1. Acemoglu, D. (2007). Introduction to Modern Economic Growth, 1st edition, MIT.
- 2. Aghion, P. and Howitt P. (1998). Endogenous Growth Theory, The MIT Press.
- 3. Banerjee, Abhijit and Esther Duflo. (2011). *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. Public Affairs, USA.
- Banerjee, Abhijit, Roland Benabou, and Dilip Mookherjee (eds). (2006). Understanding Poverty, Oxford University Press.
- 5. Barro, R. (1998). *Determinants of Economic Growth: A Cross-country Empirical Study*, The MIT Press.
- 6. Barro, R. J., and Martin S. I., X. (2004). Economic Growth, 2nd Edition, The MIT Press
- 7. Bergstrom, J. C. (2010). *Resource Economics*, Edward Elgar.
- Chenery, H. And Srinivasan, T.N. (1988). *Handbook of Development Economics*, Vol.I and II, Elsevier, Imprint: North Holland.
- 9. Conrad, M. J. And W Colin Clark. (1987). *Natural Resource Economics*, CUP, Cambridge.
- 10. David Phillips. (1994). Health and Development, Taylor & Francis.
- 11. Deaton, Angus. (2013). *The Great Escape: Health, Wealth, and the Origins of Inequality*, Princeton University Press.
- 12. Debdas Banerjee. (2009). *Economic and Human Development in Contemporary India*, Routledge.
- 13. Dubey, M. K. (2000). *Rural and Urban Development in India*, Common Wealth publications, New Delhi.
- Duflo, E., M. Kremer, and R. Glennerster. (2007). Using Randomisation in Development Economics Research: A Toolkit, in Handbook of Development Economics, 4: 3895– 3962, Elsevier-North Holland.
- 15. Durlauf, S. N. and Quah, D. T. (1998). *The New Empirics of Economic Growth*, NBER Working Paper Series, No.6422.
- Galor, O. (2010). *Economic Growth in the Very Long Run*, In Economic Growth, ed. by S. N. Durlauf, and L. E. Blume, pp. 57–67. Palgrave Macmillan.
- 17. Grossman, G. M., and Helpman, E. (1991). *Innovation and Growth in the Global Economy*. MIT Press, Cambridge.
- 18. Harms, Louise. (2011). Understanding Human Development, Oxford University Press
- 19. Hisrich (2011). Entrepreneurship, Tata McGraw-Hill Education, 6/e, India

- Jones, C. I. (2001). Introduction to Economic Growth, 2/e, W. W. Norton & Company, New York.
- 21. Momsen, J. H. (2004). Gender and Development, Routledge, London and New York.
- 22. Nafziger, E. W. (2006). Economic Development, 4th Edition, Cambridge University Press.
- Ray, D. (1999). *Development Economics*. Oxford University Press, New Delhi. Chapter 6, 7 and 8.
- 24. Rodrik, D. (2008). *The New Development Economics: We shall Experiment, But How Shall We Learn?*, Working Paper 2008-0142, Weatherhead Centre for International Affairs, Harvard University.
- 25. Romer, P. M. (1990). *Endogenous Technological Change*, Journal of Political Economy, 98(5): s71–s102.
- Sakhdher, M. M. (2004). Social Security, Welfare and Polity, Deep and Deep Publications, New Delhi.
- 27. Sen, Amartya. (1999). Development as Freedom, Oxford University Press.
- 28. Thirlwall, A. P. (2005). Growth and Development, New York: Palgrave McMillan.
- Todaro, M. P. and Smith, S. C. (2012). *Economic Development*, 12th edition, Pearson Education.
- 30. UNDP (various issues). Human Development Reports, 1990 to 2020, UNDP
- 31. William Easterly. (2002). The Elusive Quest for Growth. MIT Press.

Course Name: Econometric Theory and Applications

L	Т	Р	Credit
4	0	0	4

Course Code: ECO.709

Course type: Elective Course

Total Hours: 60

Course Learning Outcomes:

On completion of this course, students will be able to:

CLO1: Understand the basic of regression models and derivation of parameters,

CLO2: Familiar with the practical/empirical aspects of regression modelling,

CLO3: Do regression modelling using qualitative dependent variables,

CLO4: Perform dynamic regression modelling using Panel/Pooled data.

Units/Hours	Contents	Mapping with Course Learning Outcome
I 15 Hours	Basics of Linear Regression Model: Simple (two variable) and Multiple Linear Regression Models: Assumptions, Estimation, Properties (Gauss-Markov Theorem (BLUE) and Consistency); Interval estimation and Testing of hypothesis of individual coefficients (t-statistics); overall significance of the model (F-statistics), Coefficient of Determination and Goodness of fit through R-square and Adjusted R-square, Predictions. Extension of regression models: regression through origin, Scaling and units of measurement, and functional forms in regression models: log-linear, and semi-log models; Choice of functional forms (MDW test); Dummy variable models: Dummy variable trap, Introduction to Non-Linear Regression Models, Dummy variable Models - ANOVA and ANCOVA, Applications including seasonal analysis, and checking for structural stability.	CLO1
	Learning Activities : Lectures, Problem solving and Practical Hands on exercises with Eviews and Stata using data sets.	
II 15 Hours	Relaxation of Assumptions of CLRM and Time Series Modelling: Multicollinearity: Meaning, nature, causes, consequences and remedial measures (Ridge Regression); Heteroscedasticity: Meaning, nature, causes, consequences and remedial measures (Methods of weighted least square and generalised least square regression); Autocorrelation:	

	Meaning, nature, causes, consequences and remedial measures; Econometric Modelling: Model Specification and Diagnostic Testing. Basics of Time Series and Dynamics Models-Time series basic concepts: Stochastic Process (stationary and non-stationary process), Unit root process, Integrated Stochastic Process; Test of Stationarity: Graphical Analysis, and Unit root tests; Dynamic Econometrics Models: Autoregressive and Distributed lag	
	 models; Simultaneous Equation models: Structural and reduced form equations, Identification (Rank and Order conditions) and Estimation problems; Methods of estimation: ILS and 2SLS methods. Learning Activities: Lectures and Practical Hands on 	
	exercises with Eviews and Stata using data sets.	
III 15 Hours	Limited Dependent variable Models and Panel data modelling: Nature of qualitative response Models; Linear Probability Model and its applications; Bivariate and Multinomial Logit and Probit Models: Assumptions, Estimation (grouped and un-grouped models), interpretations and applications; Tobit model: Assumptions, Estimation, interpretations and applications; Conditional logit and probit models; Instrumental variable logit and probit models and their applications. Introduction to quintile regression. Learning Activities: Lectures and Practical Hands on	CLO3
IV 15 Hours	exercises with Eviews and Stata using data sets. Panel Data Modelling: Basics of panel data analysis and Panel Unit root tests; Estimation of panel data regression models: Pooled regression method, fixed effect Approach, and Random effect models; Dynamic Panel data modelling; Panel co-integration, Panel Vector Auto-regression (VAR) and Panel Vector Error Correction Models (VECM), Fully Modified Ordinary Least Square (FMOLS) regression, Dynamic OLS models; Limited dependent variable models using Panel data; GMM estimations.	CLO4
	Learning Activities : Lectures and Practical Hands on exercises with Eviews and Stata using data sets.	

Transaction Mode: Class Lecture, Blended Learning, Practical/hands on with econometric software like stata and e-views.

Suggested Readings:

- 1. Arora, A. (2015). Computer Fundamentals and Applications, Vikas Publishing, India.
- 2. Asteriou, Dimitrious. (2006). Applied Econometrics, Palgrave Macmillan, New York.
- 3. Baltagi (2005). *Econometric Applications of Panel Data*, John Wiley and Sons, England.
- 4. Cameron, A.C. and Trivedi. P.K. (2010). *Microeconometrics Using STATA*, Revised Edition, Stata Press, USA.
- 5. Cheng, Hsian. (1986). Analysis of Panel Data. Cambridge University Press.
- 6. Cryer J.D. and Chan KS. (2008). *Time Series Analysis with Applications in R*, 2nd edition. Springer-Verlag, NY.
- 7. Enders, W. (2014). Applied Econometric Time Series, 4th ed., Wiley Publications, USA.
- 8. Goel, A. (2010). Computer Fundamentals, Pearson Education, India.
- 9. Granger, C.W.J., Newbold, P. (1986). *Forecasting Economic Time Series*, 2nd Edition, Academic Press.
- 10. Greasley, P. (2008). *Quantitative Data Analysis using SPSS: An Introduction for Health and Social Science*, McGraw Hill, US.
- 11. Greene, W.H., Econometric Analysis, 4th edition, Prantice Hall, 2000.
- 12. Griffiths, W.E., R.C. Hill and G.C. Lim. (2011). Using EViews for Principles of Econometrics, 4th ed., Wiley, USA.
- 13. Gujarati, D. (2014). Econometrics by Example, 2nd ed., Palgrave Macmillion, USA.
- 14. Gujarati, D. N., (2004). *Basic Econometrics*, 4th Edition, TATA McGraw Hill Publishing.
- 15. Hsiao, C. (2003). Analysis of Panel Data, 2nd ed., Cambridge University Press, UK.
- 16. Intriligator, M.D. *Econometric Models, Techniques and Applications*, 1978, North Holland (330.0182/I8E).
- 17. Johnstone, J. (1999). Econometrics Methods, 3rd Edition, McGraw Hill, New York.
- 18. Longest, K.C. (2014). Using STATA for Quantitative Analysis, 2nd ed., Sage Publications, USA.
- 19. Maddala, G.S. (2012). *Limited Dependent and Qualitative Variables in Econometrics*, Cambridge University Press.
- 20. McGrath, R.E. (2014): *Creating and Verifying Data Sets with Excel*, Sage Publications, USA.
- 21. Pattersan., Kerry. (2000). An Introduction to Applied Econometrics: A Time Series Approach, Palgrave Macmillan.
- 22. Pindyck, Robert S. and Daniel L. Rubinfeld, *Econometric Models and Economic Forecasts*, 1976, International Student edition, McGraw-Hill (330.0182/P65E).
- 23. Ram, B. (1997). *Computer Fundamentals*, Second Edition, New Age International, New Delhi.
- 24. Ramanathan, Ramu, *Introductory Econometrics with Applications*, Harcourt Academic Press, 2002 (IGM Library Call No. 330.0182 R14I).
- 25. Wooldridge, Jeffrey M., *Introductory Econometrics: A Modern Approach*, Third edition, Thomson South-Western, 2007.

Web links:

- 1. https://davegiles.blogspot.com/
- 2. https://www.stata.com/links/

3. https://www.eviews.com/Learning/index.html

Course Name: Economics of Education and Development **Course Code:** ECO. 710

L	Т	Р	Credit
4	0	0	4

Course type: Elective Course Total Hours: 60

Course Learning Outcomes:

On completion of this course, students will be able to:

CLO1: Understand the application of economic theory in education,

CLO2: Understand the relationship between education and labour market,

CLO3: Understand higher and vocational education in India,

CLO4: Develop deep insight on development of education after liberalization in India.

Units/Hours	Contents Theory of Economics of Education: Economics of	Mapping with Course Learning Outcome
I 15 Hours	Education, Human Capital and Growth-Neo Classical Approach, theories of endogenous growth, human capital and rate of return approach. Education and development, capability approach, freedom, equity, Social Choice, social welfare and social justice Demand for and supply of Education, Technological change and supply of education.	CLO1
	Learning Activities: Lectures, Discussion, Term paper, Presentation, Brain storming and problem solving.	
II 15 Hours	Education and Labour Market: The association between education and individual earnings and reasons why that relationship has changed over time, the role of education in individual mobility. Distinction of education from other goods and services and the potential for market failures in	CLO2

		1
	education; connection between education market and labor	
	market, Delivery of Education: Public and Non-profit	
	Organization, Education Planning.	
	Learning Activities: Lectures, Discussion, Term paper,	
	Presentation, Brain storming and problem solving.	
	Higher and Vocational Education: Migration of skilled	
	and unskilled labour, Higher and professional education	
	Equity, Higher Education with the mix of public and non	
	profit provision: Access, Vocational and professional	
III	Education and Incentives, Education loans, Unemployment	CLO3
15 Hours	and skill, role of government in social sector. Higher and	
10 110415	Vocational Education-Punnayya Committee and	
	Swaminathan Committee Report.	
	Learning Activities: Lectures, Discussion, Term paper,	
	Presentation, Brain storming and problem solving.	
	Education in India after liberalization: Impact of	
	Globalization, Liberalization and Privatization on Education	
	sector in India. International trade in higher education.	
	Financing school education in India, fund flow and related	
17.7	issues, early childhood care education, Education	CLO4
IV	discrimination; gender issue in Indian education. Education	
15 Hours	Sector in India: An overview literacy rates, school	
	participation, school quality measures. Policy- New	
	Education Policy 2020 and emerging knowledge economy,	
	Learning Activities: Lectures, Discussion, Term paper,	
	Presentation, Brain storming and problem solving.	
		1

Transaction Mode: Class Lectures, Discussion, Term paper, presentation, blended learning, Brain-storming.

Suggested Readings:

- Anand, Mukesh and Jha, Raghavendra, (2004) "Budgetary Subsidies and Fiscal Deficit: A Case of Maharashtra", Economic and Political Weekly, August 21.
- Barr, Nicholas (2003) "Financing Higher Education: Comparing the Options", London School of Economics and Political Sciences, London, UK.
- Blaug, Mark (ed.) (1968) Economics of Education, Selected Readings, Volume I and II, Penguin Books.
- Blaug, Mark, (1989) "Review of Economics of Education: Research and Studies", Psacharopoulos, G (ed.) (1987) OxfordUniversity Press.
- Brown, Phillip and Lauder, Hugh, (1996) "Education, Globalization and Economic Development", Journal of Education Policy, 11(1), pp 1-25.
- Carnoy, Martin, (1995) "Structural Adjustment and the Changing Face of Education", International Labour Review, 134(6), pp. 653-73.
- Chatopadhyay, Saumen (2009) "Market in Education: Concern for Equity and Quality". Economic and Political Weekly, 18-24 July, 2009.
- Chattopadhyay, Saumen (2012) Education and Economics: Disciplinary Evolution and Policy Discourse, New Delhi: Oxford University Press.
- Greenaway, David and Haynes, Michelle (2004) Funding Higher Education, in Johnes, G and Johnes, J (ed.) International Handbook on the Economics of Higher Education, Edward Elgar.
- Hannum, Emily and Buchmann, Claudia, (2005) "Global Education Expansion and Socio-economic Development: An Assessment of Findings from the Social Sciences", World Development, Vol.33, pp. 333-354.
- 11. Hanushek, E.A. & L. Woessmann (2015) The Knowledge Capital of Nations: Education and the Economics of Growth, Cambridge, MA: MIT Press.
- 12. Human Development Report: Human Development for Everyone, UNDP
- Jimenez, Emmanuel, (1989) "Social Sector Pricing Policy Revisited: A Survey of Some Recent Controversies", Proceedings of the World Bank Annual Conference on Development Economics.
- 14. Johnes, Geraint and Johnes, Jill (ed.) (2004) International Handbook on the Economics of Education, Edward Elgar Publishing Ltd.
- 15. Kapur, Devesh and Mehta, PratapBhanu (2004) "Indian Higher Education Reform: From Half-baked Socialism to Half-baked Capitalism", CID Working Paper no. 108 September, Centre for International Development at HarvardUniversity.

- 16. Khadria, Binod, (1989) "The Subsidies Question in Higher Education Tight-Rope Walking for Public Policy Makers in Developing Countries", Journal of Educational Planning and Administration, vol. 3, Jan. & April, pp. 43-59, New Delhi.
- 17. Khadria, Binod, (1999), The Migration of Knowledge Workers: Second Generation Effects of Brain Drain, Sage.
- Majumdar, Tapas, (1983) Investment in Education and Social Choice, Cambridge: CambridgeUniversity Press.
- 19. Majumdar, Tapas, (1997) "Economics of Indian Education for the Next Century", The Indian Economic Journal, 45(4), April-June.
- Majumdar, Tapas, (2005) "Rationality with Inconsistency between Parallel Preference Orderings", Contemporary Issues and Ideas in Social Sciences, web: <u>www.ciiss.net</u>, January.
- McMohan, Walter W. 2004. "The Social and External Benefits of Education", Johnes, G. and Johnes, J. (ed) Internal Handbook on the Economics of Education, Edward Elgar.
- 22. Mehrotra, Santosh, (2005) "Human Capital or Human Development?: Search for a Knowledge Paradigm for Education and Development", Economic and Political Weekly, January 22.
- 23. National Education Policy, 2020
- 24. Olssen, Mark 1996. "In Defence of the Welfare State and Publicly Provided Education: A New Zealand Perspective", Journal of Education Policy, 11(3), 337-362.
- 25. Psacharopoulos, G. and Patrinos, H.A. 2005. "Human Capital and Rates of Return" in Johnes, G. and Johnes, J. (ed) International Handbook on the Economics of Education. Edward-Elgar.
- Psacharopoulos, George (ed.) (1987) Economics of Education, Research and Studies, Pergamon Press.
- 27. Riddell, R. Does Foreign Aid Really Work? Oxford University Press: Oxford, 2007.
- Romer, Paul M. (1994) "The Origins of Endogenous Growth", Journal of Economic Perspectives-Volume 8, No. 1, pp. 3-22, Winter.
- 29. Schultz, T. W. (1961) Investment in Human Capital, The American Economic Review, 51:1, pp. 1-17.
- Sen, Amartya, and Dreze, J., (1996) India: Economic Development and Social Opportunity, OxfordUniversity Press.

- Spence, M.A. (1973) Job Market Signaling, Quarterly Journal of Economics, 87, pp. 355-74.
- 32. Srivastava, D.K., and Rao, Bhujanga C (2004) "Government Subsidies in India: Issues and Approach", in Favaro, Edgardo M. and Lahiri, Ashok (ed.) Fiscal Policies and Sustainable Growth in India, Oxford University Press.
- 33. Tilak, J.B.G. (1987), The Economics of Inequality in Education, Sage Publications, India.
- 34. Tilak, Jandhyala B.G. (2004) "Public Subsidies in Education in India", Economic and Political Weekly, January 24.
- 35. Varghese N.V. (2013) "Private sector in Education. In IDFC India Infrastructure Report 2012, London and New Delhi: Routledge (Taylor and Francis), pp. 145-56.
- 36. Varghese, N.V.Higher Education Aid: Setting Priorities and Improving Effectiveness. Journal of International Cooperation in Education 2010; Vol.13 No.2 ,pp.173-187.
- 37. World Development Report 2018: Education, The World Bank.

Course Name: Agrarian Change and Policy

L	Т	Р	Cr	
4	0	0	4	

Course Code: ECO.711 Course type: Elective Total Hours: 60 *Course Learning Outcomes:* On completion of this course, students will be able to:

CLO1: Understand the Land and Agrarian relations,

CLO2: Impart the basic theories of inequality in the land, asset and recent issues and problems,

CLO3: Analyze various theories on institutional support and agrarian change,

CLO4: Aware of climate change impact on agriculture and its vulnerability.

Units/Hours	Contents	Mapping with Course Learning Outcome
I 15 Hours	Land and Agrarian Relations: Land tenure systems during the colonial period India; Zamindari System, Mahalwari system, Ryotwari System, and colonial exploitation. Land reforms in India after the independence; abolition of zamindari system, land ceiling and land distribution, consolidation of land holdings, cooperative farming, Tenancy Reforms; Protection of tenants' rights.	CLO1
	Learning Activities: Lectures, Brain storming and problem solving.	
II 15 Hours	Agricultural issues and Problems: What is economic inequality?, inequality, income, and growth, inverted U	CLO2

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	hypothesis, land ownership and a brief history of land	
	inequality, various measures of inequality, land rental	
	contracts, ownership and tenancy, forms of tenancy: fixed rent	
	and sharecropping, land size and productivity, Irrigation and	
	agricultural development, Agricultural Insurance with	
	emphasis on crop insurance, Green revolution in India; High	
	yield varieties, Agriculture and food security, Agrarian crisis	
	and farmer's suicides in India.	
	Learning Activities: Lectures, Brain storming and problem solving.	
	Institutional Support and Agrarian change: The sources of	
	demand for credit, some of the characteristics of rural credit	
	markets, theories of informal credit markets; lenders	
	monopoly, the lender risk hypothesis, default and fixed capital	
	loans, default and collateral, information asymmetries and	CLO3
	credit rationing. Agricultural Finance; Sources of Agricultural	
	Finance and their Relative Importance, Cooperative Credit	
III	Societies, Commercial Banks and Rural Credit, Regional	
15 Hours	Rural Banks, National Bank for Agriculture and Rural	
	Development (NABARD), Financial Inclusion, Agricultural	
	Marketing; Government Measures to Improve the System of	
	Agricultural Marketing, cooperative marketing, the role of the	
	self-help groups in the rural marketing. PM-Kisan Samman	
	Nidhi and agriculture development.	
	Learning Activities: Lectures, Brain storming, Presentations,	
	Case studies	
	Climate Change and Agriculture: Climate Change and	
	Agriculture in India: Impact and Adaptation, Crop Responses	
	to Elevated Carbon Dioxide and Temperature, Vulnerability	
IV	and Adaptation Strategies, Climate Mitigation strategies,	CLO4
15 Hours	Climate change and food security. National Mission for	
	Sustainable Agriculture. National Mission on Strategic	
	Knowledge for Climate Change.	

Learning Activities: Lectures, Brain storming, Presentations,	
Case studies	

Transaction Mode: Class Room Teaching, Guest Lecture, Case study, Debate, Discourse, and Presentation.

Suggested Readings:

- 1. Amartya Kumar Sen. (1962). An Aspect of Indian Agriculture, the Economic Weekly.
- Ahmad, M. F., & Haseen, S. (2012). The Performance of India's Food Grains Production. A Pre and Post Reform Assessment. *International Journal of Scientific and Research Publications*, 2(3), 1-
- Balagopal, K. (2007). Land Unrest in Andhra Pradesh-I: Ceiling Surpluses and Public Lands. Economic and Political Weekly, Vol. 42, No. 38, pp. 3829-3833.
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- Banerjee, A., & Iyer, L. (2005). History, institutions, and economic performance: The legacy of colonial land tenure systems in India. American economic review, 95(4), 1190-1213.
- Bansil, P. C. (2017). Economic problems of Indian agriculture. Daya Publishing House, New Delhi.
- Chatterjee, S., & Rudra, A. (1989). Relations of Production in Pre-Colonial India. Economic and Political Weekly, 1171-1175.
- Dantwala, M. L. (1952). Agricultural Credit in India-The Missing Link. Pacific Affairs, Vol. 25, No. 4 (Dec., 1952), pp. 349-359.
- Dantwala, M. L. (1976). Agricultural policy in India since independence. Indian Journal of Agricultural Economics, 31(4), 31-53.
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- IPCC Report (1996) Inter-governmental panel on climate for science of climate change.
 In: Houghton JT, Meira Fillio, Callander BA, Harris N, Kttenberg Maskell (eds) Climate Change 1995, Cambridge University Press, p 572.

- 12. IPCC 2007 Climate change 2007: the physical science basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK: Cambridge University Press.
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- Kaushik Basu. (2007). Land Reform, entry in The Oxford Companion to Economics in India, Oxford University Press.
- 15. Kumar Kangayappan. (1973). Some Policy Issues on Mitigating Poverty in India. Land Economics, Vol. 49, No. 1 (Feb., 1973), pp. 76-81.
- K.A. Manikumar. (2014). Impact of British Colonialism on Different Social Classes of Nineteenth-Century Madras Presidency. Social Scientist, Vol. 42, No. 5/6, pp. 19-42.
- 17. Mahdi, S. S. (Ed.). (2019). Climate change and agriculture in India: Impact and adaptation. Srinagar.
- 18. Mazumdar, D. (1965). Size of farm and productivity: a problem of Indian peasant agriculture. Economica, 32(126), 161-173.
- 19. Mohanakumar, S. (2010). Agrarian Crisis and National Commission for Enterprises in the Unorganized Sector. Social Scientist, Vol. 38, No. 5/6, pp. 62-75.
- 20. NCEUS. (2008). A special programme for marginal and small farmers. National Commission for Enterprises in the Unorganized Sector. New Delhi, pp. 1-77.
- 21. Nancharaiah, G. (1987). Land legislation and changing agrarian structure, Indira Gandhi Memorial Library, University of Hyderabad
- 22. Ray, D. (2014). Development economics. Oxford University Press.
- Reddy, D. N. (Ed.). (2009). Agrarian Reforms, Land Markets, and Rural Poor. Concept Publishing Company.
- Reddy, D. N., & Mishra, S. (Eds.). (2010). Agrarian crisis in India. Oxford University Press.
- 25. Sharma, P. S. (2014). Inequality in land holdings and agricultural development in India: a regional analysis. Shruti Publication, New Delhi.
- 26. Singh, S. N. (Ed.). (2009). Climate change and crops. Springer Science & Business Media.