

# Programme Project Report (PPR) for Master of Arts in Economics

## **Programme's Mission & Objectives :**

1. To provide educational opportunities for higher education through distance mode for a large segment of the population, including those in employment, women (including housewives) and adults who wish to upgrade their education or acquire knowledge in various fields of study.
2. To spread the light of education till the smallest & darkest corner.
3. To provide access to higher education to all segments of the society;
4. To offer high-quality, innovative and need-based programmes at different levels, to all those who require them;
5. To reach out to the disadvantaged by offering programmes in all parts of the country at affordable costs with our motto “देश हित में शिक्षा का प्रसार, देश के कौने कौने में”
6. To promote, coordinate and regulate the standards of education offered through open and distance learning in the country.
7. To spread more literacy in the society.

## **Relevance of the program with HEI's Mission and Goals :**

The University understands the need of literacy in India & firmly believes that education has to be spread to the general masses. The University has acquired a commendable record of service in the field of education, health care, and social welfare. To reach with the above motive of service to the remotest corner of India, the Distance Education Programme of Swami Vivekanand Subharti University was conceived in 2009.

## **Nature of prospective target group of learners :**

A large segment of the population living in villages, weaker sections of the society including those who are already in employment, girls belonging to the remote areas, women with social commitments (including home-makers) and anyone who wishes to upgrade their education or acquire knowledge in various fields of study.

## **Appropriateness of programme to be conducted in Open and Distance Learning mode to acquire specific skills and competence :**

Through various programmes, distance education can be able to spread more literacy in the society and encourage the large segment of population to upgrade their education skill/s.

## **Course Structure :**

### **1. Instructional Design :**

The Instructional System of the University comprises six components, viz, Self Learning Material, Continuous Internal Assessment (IA) & Assignment work (AW), Theory Training Classes, Practical Exposure Classes, Professional Project Work, Internship & Industry Integrated Learning.

### **1. Self Learning Material (SLM) –**

The success and effectiveness of distance education systems largely depends on the study materials. Self-learning materials depend on exploiting the various means and ways of communication to suit it to the needs of learners. These have been so designed as to substitute effectively the absence of

interaction with teachers in class room teaching mode. Their style is ideal for easy and better understanding in self-study mode.

## 2. **Continuous Internal Assessment (CIA)**

The progress of a learner is continuously monitored through Personal Contact Programmes, Viva & Group Discussions, Personality Development Programmes and Assignment Work. All these are compulsory and marks shall be awarded for attendance and performance of a learner in all these activities, as may be prescribed in the syllabus.

- a. **Personality Contact Programme (PCP)** – PCP sessions guide the learners as the programme proceeds. The date and venue for the PCP will be communicated to the learners through our website. During PCP, the learner gets guidance for better understanding of the subject. The learners can get their doubts cleared with the help of subject experts so as to improve their self-learning capability. The total duration of PCP sessions for a subject of four credits shall be 12-16 hours. Learners are required to attend PCP sessions for all their respective subjects.
  - b. **Viva & Group Discussion (VGD)** – VGDs are designed to help the learners improve their professional communication and presentation abilities. Special emphasis is laid on learners speaking extempore, an ability necessary for building leadership skill as well as for enhancing the capability of understanding and exchanging views. The total duration of VGD sessions for a subject of four credits shall be 3-4 hrs.
  - c. **Personal Development Programme (PDP)** – The PDPs are designed to improve the overall personality of the learner, and aim, especially, at the improvement of body language and strengthening of the power of expression. The purpose is to inculcate leadership, communication and presentation skills and brush up the knowledge of the learner by organizing a mix of management games, debates, quizzes and role play. The duration of PDP sessions for a subject of four credits shall be 3-4 hrs.
  - d. **Assignment Work (AW)** – Distance Education learners have to depend much on self study. In order to ascertain the writing skill and level of comprehension of the learner, assignment work is compulsory for all learners. Each assignment shall consist of a number of questions, case studies and practical related tasks. The Assignment Question Papers will be uploaded to the website within a scheduled time and the learners shall be required to respond them within a specified period of time. The response of the learner is examined by a faculty member.
3. **Practical Exposure Class (PEC)** – Not Applicable.
  4. **Professional Project/Dissertation Work (PPW)** – The PPW enables a learner to experience the rigours of an environment with the real life situations. The learners shall also be required to prepare a project report, which shall be evaluated by the University. Learners shall be subjected to a comprehensive viva for proper evaluation of the Project Report. For project work, wherever mentioned in the syllabus, DDE shall provide complete guidance to the learners. Normally, one credit of PPW shall require 30 hrs or input by the learner.
  5. **Internship & Industry Integrated Learning (IIIL)** – Not Applicable
  6. **Examinations** –
    - (a) The examination shall be held semester wise in June & December for the Calendar Batch and in December & June for Academic batch respectively.
    - (b) Admit Cards/Roll No. Slips and date sheet for appearing in the examination shall be provisional subject to fulfilling the eligibility, etc. Admit Cards/Roll Nos. and date-sheet will be issued to the candidates concerned, by e-mail or by hand, 10-12 days before the commencement of examination concerned, if the students have fulfilled all the requirements and paid their all kinds of fees/dues and submitted the requisite documents. If any candidate does not receive his/her Admit Card/Roll No. slip in time, he/she should contact the Directorate of Distance Education.

## 2. Curriculum design

### SEMESTER -I

<b>Code</b>	<b>Course</b> <b>Course Title</b>	<b>Credit</b>	<b>L-T-P</b>	<b>Type</b>
ECO.506	Microeconomics - I	3	4-0-0	Core
ECO.507	Macroeconomics - I	3	4-0-0	Core
ECO.508	Quantitative Methods in Economics - I	2	4-0-0	Core
ECO.509	International Economics	2	4-0-0	Core
ECO. ###	Students to choose a course from the list of elective courses given below	2	4-0-0	Elective
ECO.541	Seminar - I Interdisciplinary Elective – I (Students to choose a	1	0-0-0	Seminar
XXX. ###		3	2-0-0	IDC
	<b>Total</b>	<b>16</b>	<b>22-0-1</b>	

### **List of Electives** (Students to choose a course from these elective courses)

- ECO.510 Agricultural Economics
- ECO.511 Money and Banking
- ECO.512 Globalization and Development

### **Interdisciplinary courses offered by Dept. of Economic Studies (for students of other Departments)**

ECO.513	Introduction to Globalization (IDC)			
ECO.514	Foundations of Economics (IDC)			

## COURSE STRUCTURE AND SYLLABUS

**Admission Batch 2018-19**

**M. A. Economics (1<sup>st</sup> Year)**

### SEMESTER – II

Course Code	Course Title	Credit	L-T-P	Course Type
ECO.521	Microeconomics - II	3	4-0-0	Core
ECO.522	Macroeconomics - II	3	4-0-0	Core
ECO.523	Quantitative Methods in Economics - II	2	4-0-0	Core
ECO.524	Economics of Development and Planning	2	4-0-0	Core
ECO. ###	Students to choose a course from the list of elective	2	4-0-0	Elective
	courses given below			
ECO.542	Seminar - II	1	0-0-0	Seminar
XXX. ###	Interdisciplinary Elective – II (Students to choose a	3	2-0-0	IDC
	course from other Departments)			
<b>Total</b>		<b>16</b>	<b>22-0-1</b>	
<b>List of Electives</b> (Students to choose a course from these elective courses)				
ECO.525	Industrial Economics			
ECO.526	Financial Institutions and Markets			
ECO.527	Demography			

### **Interdisciplinary courses offered by Dept. of Economic Studies (for students of other Departments)**

ECO.528	Introduction to Indian Economy (IDC)			
ECO.529	Agricultural Development and Management (IDC)			

## COURSE STRUCTURE AND SYLLABUS

Admission Batch 2018-19

M. A. Economics (2<sup>nd</sup> Year)

### SEMESTER – III

Course Code	Course Title	Credit	L-T-P	Course Type
ECO.551	Basic Econometrics	3	4-0-0	Core
ECO.552	Public Economics	3	4-0-0	Core
ECO.553	Research Methodology for Economics	2	4-0-0	RM
ECO. ###	Students to choose a course from the list of elective	2	4-0-0	Elective
	courses given below			
ECO.543	Seminar - III	1	0-0-0	Seminar
ECO.599	Project	4	0-0-12	Project
XXX.###	Academic Writing	1	1-0-0	VAC
	<b>Total</b>	<b>16</b>	<b>17-0-7</b>	
<b>List of Electives</b> (Students to choose a course from these elective courses)				
ECO.554	Punjab Economy			
ECO.555	Political Economy of Development			
ECO.556	Environmental Economics			

## COURSE STRUCTURE AND SYLLABUS

Admission Batch 2018-19

M. A. Economics (2<sup>nd</sup> Year)

### SEMESTER – IV

Course Code	Course Title	Credit	L-T-P	Course Type
ECO.571	Indian Economy		4-0-0	Core
ECO. ###	Students to choose a course from the list of elective	4	4-0-0	Elective
	courses given below			
ECO.544	Seminar - IV	1	0-0-0	Seminar
ECO.599	Project	4	0-0-	Project

			12	
ECO.575	Practices of Economics -I	3	2-0-0	DEC
ECO.576	Practices of Economics -II	3	2-0-0	DEC
XXX.###	Data Analysis Using SPSS	1	0-0-1	VAC
	<b>Total</b>	<b>16</b>	<b>12-0-8</b>	
<b>List of Electives</b> (Students to choose a course from these elective courses)				
ECO.572	Advanced Econometric Theory and Applications			
ECO.573	International Trade and Investment			
ECO.574	Rural Economics			

**Course Name: Microeconomics - I**


**Course Code: ECO.506**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the foundations of modern economic analysis.

**Unit-I**

**15 Hours**

**Theory of Consumer Behaviour:** Basic concepts; Marshall's Approach; Ordinal Utility Theory: Optimizations, derivation of demand function, income-leisure, substitution and income effects; Linear expenditure system, Separable and Additive utility functions, Homogeneous and Homothetic utility functions; Indirect utility functions and Duality theorem; Theory of revealed preference, Consumer Surplus and Elasticity of Demand. The problem of choice in situations involving Risk and Uncertainty (attitude towards risk and insurance)

**Unit-II**

**15 Hours**

**Theory of Production and Costs:** Basic Concepts; Short-run and long-run production functions; Properties of homogeneous production functions (CD and CES production functions); Optimizing Behaviour and derivation of input demand functions, Duality in Production; Production under Uncertainty; Concepts of Costs: Traditional Cost Theories: Short-run and Long-run Costs, Envelope curve; Modern theory of Costs: Short-run and Long-run, L-shaped scale curve; Engineering cost curves.

### **Unit-III**

**15 Hours**

**Price-Output under Perfect Competition and Monopoly:** Perfect Competition: Short-run and Long-run Equilibrium; Supply curves of the Firm and Industry; Dynamic Changes and Industry Equilibrium. Monopoly: Short-run and Long-run Equilibrium; Predictions in Dynamic Changes, Regulated Monopoly (Taxation, and Price Regulation); Govt. regulated Monopoly; Discriminating Monopoly. Comparison Competitive and Monopoly firms and Excess capacity.

### **Unit-IV 15 Hours Price- Output under Monopolistic Competition and Oligopoly:** Monopolistic Competitive Market:

Product differentiation and Demand curve; Industry and Group; Chamberlin's model: with entry and price competitions and equilibrium of firms; Comparison Competitive and Monopolistic Competitive Markets; Concept of Excess capacity; Non-collusive Oligopoly: Cournot's model, Bertrand's model, Chamberlin's model, Stackelberg's model and Kinked demand Model of oligopoly.

### **Suggested Readings**

1. Snyder, C. and W. Nicholson (2010), *Fundamentals of Microeconomics, 10<sup>th</sup> Edition*, Cengage Learning-New Delhi.
2. Jehle, G. A. And P. J. Reny (2011), *Advanced Microeconomic Theory*, 3<sup>rd</sup> Edition, Pearson-New Delhi.
3. Henderson, J.M., and Quandt, R.E.(2003). *Microeconomic Theory: A Mathematical Approach. 3<sup>rd</sup> Edition*, Tata McGraw Hill, New Delhi
4. Pindyck, R.S. D.L. Rubinfeld, P.L Mehta (2009). *Microeconomics*, 7<sup>th</sup> Edition, Pearson, New Delhi.
5. Koutsoyiannis, A. (1979). *Modern Microeconomics* (2nd edition).Macmillan Press, London.
6. Varian, H.(2010). *Intermediate Microeconomic*. 8<sup>th</sup> Edition New York: W.W Norton.
7. Varian, H.(1992). *Microeconomic Analysis*. 3<sup>rd</sup> Edition New York: W.W Norton.
8. Mankiw, N. G. (2009). *Principles of Microeconomics*. 5<sup>th</sup> Edition. South-Western, Cengage Learning. USA
9. Samuelson, P.A. and Nordhaus, W.O. (1998). *Economics* (16th Edition). New Delhi: Tata McGraw Hill.
10. Stigler, G. (1996). *Theory of Price* (4th Edition).New Delhi: Prentice Hall of India.



**Course Name: Macroeconomics – I**

**Course Code: ECO.507**

**Course Objective:** The objective of this course is to familiarise the students of Master degree with the basic concepts, theories and approaches to understand the behaviour of macroeconomic aggregates and policies.

**Unit-I**

**15 Hours**

**National Income:** Basic Concepts, Measurement of National Income and Difficulties; Domestic and National Product and their Components, National income at factor cost and at Market Prices, Real and nominal GNP; National Income and Welfare, Social Accounting and its significance, System of National Accounts; Measurement of national Income in India.

**Unit-II**

**15 Hours**

**Classical Theory of Output and Employment** – The Classical Postulates; Say's Law of Market, Full Employment – Demand for and Supply of Labour; Labour Supply and Money Wages; Unemployment and Wage Rigidity; Overall Equilibrium in the Basic Static Model (Goods, Labour & Money Markets).

**Unit-III**

**15 Hours**

**Keynesian Theory of Income Determination:** Concepts and Functions; Two sector, Three sector and four sector Models of Income Determination; Investment Multiplier; Balanced Budget Multiplier; Keynesian Theory of Money and Interest; Basic two sector IS-LM Model.

**Unit-IV**

**15 Hours**

**Theories of Consumption:** Keynesian Theory; Consumption Puzzle; Absolute Income Hypothesis, Relative Income Hypothesis, Permanent Income Hypothesis, Life Cycle Hypothesis.

**Suggested Readings**

1. Mankiw, N. G. (2011): Macroeconomics, 6<sup>th</sup> edition, New York, Worth publishers
2. Fuller, Neil (2008): Principles of macroeconomics, Delhi, Overseas Press
3. Froyen, R. T. (2012): Macroeconomics: theories and policies. (8<sup>th</sup> edition), New Delhi, Pearson Education.
4. Blanchard, O. (2012): Macroeconomics. (4<sup>th</sup> edition), New Delhi, Pearson Education
5. Acemoglu, D. (2016): *Macroeconomics*, New Delhi, Pearson education

India.

6. Branson, W. H. (2014): *Macroeconomics: Theory and policy*, (3<sup>rd</sup> edition), New Delhi, East-West press Pvt. Ltd.
7. Dornbusch, R.; Fisher, S. and Startz, R. (2015): *Macroeconomics*, (11<sup>th</sup> edition), New Delhi, Tata McGraw hill education India Pvt. Ltd.
8. Gordon, R. J. (2015): *Macroeconomics*, (12<sup>th</sup> edition), New Delhi Pearson education India Pvt. Ltd.
9. McConnell, C. R., and Gupta, H. C. (2012). *Introduction to Macroeconomics*. Tata McGraw-Hill Publishing Company
10. Shapiro, Edward. (2015): *Macroeconomic analysis*, (5<sup>th</sup> edition), New Delhi, Galgotia publication Pvt. Ltd.

**Course Name: Quantitative Methods in Economics  
- I**

**Course Code: ECO.508**

**Course Objective:** The objective of this course is to familiarise the students of Master degree with the basic mathematics required to understand the various dimensions of economics.

**Unit-I**

**15 Hours**

**Differentiation and Integration:** Limit, Continuity, Differentiation of algebraic, exponential, logarithmic, trigonometric, and implicit functions; Partial Differentiations, Euler's theorem and total differentials; Maxima and minima with and without constraints; Indefinite and definite integrals, Economic applications of differentiation and integration.

**Unit-II**

**15 Hours**

**Differential and Difference Equations:** Differential and difference equations of first and second order; Applications for determining Market Equilibrium.

**Unit-III**

**15 Hours**

**Linear Algebra:** Concept of Vector; Matrix: Types, properties of determinants, rank and inverse of matrix; System of linear equations, Solution by Cramer's rule and matrix inverse method, Linear independence and dependence of vectors, characteristic roots and vectors, quadratic forms.

**Unit-IV**

**15 Hours**

**Linear Programming:** Formulation of linear programming problem; simplex and graphical methods, Concept of Duality; Input-Output Analysis – Open and Closed Models; Game Theory & its applications

**Suggested Readings**

1. Allen R.G.D (2016): *Mathematical analysis for econometrics*, New Delhi, Trinity press
2. Asano, Akhito (2013): *An introduction to mathematics for economics*. New Delhi, Cambridge university press

3. Chiang, Alpha C. and Wainwright, Kevin (2013): *Fundamentals methods of mathematical economics* (4<sup>th</sup> edition), New Delhi, Tata McGraw hill education.
4. Harrison, Michael, and Waldron, Patrick. (2011): *Mathematics for economics and finance*, London, Routledge
5. Hoy, Michael and Others (2014): *Mathematics for economics*, (3<sup>rd</sup> edition), New Delhi, PHI learning, Pvt. Ltd.
6. Pemberton, Malcolm (2017): *Mathematics for economics. An introductory textbook*, New Delhi, Viva books Pvt. Ltd.
7. Sydsaeter, K., and Hammond, P. (2008). *Essential mathematics for economic analysis*. New Delhi: Pearson Education.
8. Vali, Shapoor (2014): *Principles of mathematical economics*, U.S.A., Atlantic press
9. Wang, Susheng (2015): *Mathematical Economics*, 2<sup>nd</sup> edition, New Jersey, World scientific.
10. Yamane, T. (2012). *Mathematics for Economists*. Literary Licensing, LLC

**Course Name: International Economics**

**Course Code: ECO.509**

**Course Objective:** The objective of this course is to familiarise the students of Master degree with the basic theories, approaches, and polices of international economics.

**Unit-I**

**15 Hours**

**Theories of International Trade:** Absolute Advantage, Comparative Advantage and Opportunity Costs, Heckscher-Ohlin Theory of Trade; Factor Price equalization; Empirical testing of Heckscher Ohlin Theory, New approaches to trade theory: The Product Cycle Theory, Technology Gap Theory; Causes of Emergence and Measurement of Intra-industry Trade.

**Unit-II**

**15 Hours**

**Terms of Trade:** Concepts and Measurement; Prebisch and Singer views on terms of trade; Theory of Tariff; Regionalism and Multilaterism; Political Economy of Non-tariff barriers; Various forms of Economic Integration; Questioning the benefits of economic integration: Brexit crisis.

### **Unit-III**

**15 Hours**

**Balance of Payments and Adjustments:** Concepts and components; Causes of disequilibrium and different approaches: Traditional, Absorption and monetary approach, Process of adjustment in the balance of payment under Gold Standard, Fixed Exchange Rate and Flexible Exchange Rates; Theory of foreign exchange market, exchange trading, arbitrage and market hedging; Foreign trade multiplier; Crisis and exchange rate.

### **Unit-IV**

**15 Hours**

Collapse of Bretton woods system and emergence of international monetary system (IMF and World Bank) World Trading System, WTO and its impact on different sectors, Globalization: Discontents, Issues for Developing Countries, Emergence of Global value chain, Changing pattern of Trade; UNCTAD, Global Inequality

### **Suggested Readings**

1. Bhagwati, J. N. (1998). *International Trade: Selected Readings*. London: McMillan University Press.
2. Francis, C.(2008), *International Economics*, McGraw-Hill Education
3. James C. and Robert, M. (2004). *International Economics*, John Wiley & Sons. Inc.
4. Jones, R. W. and Kenen, P. B. (2003). *Handbook of International Economics*. (Volume I, II and III). Amsterdam: Elsevier.
5. Kofman, E., and Youngs, G. (2001). *Globalisation: Theory and Practice (2<sup>nd</sup> Ed.)*. London: Pinter.
6. Krugman, P. R. and Obstfeld, M. (2000). *International Economics: Theory and Policy*, Dorling Kindersley (India) Pvt. Ltd.
7. Mikic, M. (1998). *International Trade*. London: Macmillan Press.
8. Munck, R. (2003). *Globalization and Labour: The New Great Transformation*. Zed Books Ltd.
9. Nayyar, D. (2002). *Governing Globalisation: Issues and Institutions*. Delhi: Oxford University Press.
10. Sakamoto, Y. (1994). *Global Transformation: Challenges to the State System*. Tokyo: United Nations University Press
11. Salvatore, D. (2004). *International Economics*. John Wiley and Sons Inc.
12. Scholtze, J.A. (2000). *Globalisation: A Critical Introduction*. Basingstoke: Palgrave.

13. Sodersten, B. O. and Reed, G. (2008). *International Economics*. London: McMillan.
14. Stiglitz, J. E. (2002). *Globalization and its Discontents*. London: Penguin.
15. Stiglitz, J. E. (2013): *The Price of Inequality*, W. W. Norton & Company
16. Thomas Piketty (2015): *Capital in the 21<sup>st</sup> Century*, Brilliance Crop, MP3 Una edition.

**Course Name: Seminar-I**

**Course Code: ECO.541**

**Course Objective:** The objective of this course is to develop the human and soft skills of the students of Masters Degree.

**General Outline of Activities:**

1. The course coordinator should make the students learn how to prepare seminar report as well as seminar presentations on a given topic.
2. The preparation of seminar report on a given topic should be made referring to the literature available in the form of text/reference books, journals, periodicals, magazines, newspaper articles, and web resources.
3. The students should be encouraged to visit the library as well as computer centre of the University for preparing seminar reports and its power point presentation.
4. As far as possible the topic of the seminar should relate to current developments in the field.
5. The seminar report and its presentation should be evaluated by a duly constituted Department level committee.



## **Course Name: Agricultural Economics**

**Course Code: ECO.510**

**Course Objective:** The objective of this course is to familiarise the students of Master degree with the basic concepts, theories and approaches of agricultural economics.

### **Unit-I**

**15 Hours**

Agricultural Economics: Meaning, Scope and Role in economic development; Interface between Agriculture and Industry; Schultz's prescription of transforming traditional agriculture; Mellor's model; Land Reforms, Agriculture Development during Planning Periods; Green Revolution; Growth, Productivity and Regional Disparities in Indian Agriculture; Agrarian Crisis and Farmer Suicide

### **Unit-II**

**15 Hours**

Farm Size and Productivity Relationships, Risk and Uncertainty in Agriculture, Environmental Issues in Agriculture; Farm Management: Basics; Agricultural Marketing: Existing Structure, Problems, Costs and Efficiency in the markets, Marketing Reforms, Innovations in Agricultural Marketing System.

### **Unit-III**

**15 Hours**

Agricultural Price Policy in India-instruments and assessment; Food Security and Public Distribution System (PDS), Agricultural Finance: Role, Agencies, problems, Policies, Inter-linked Markets, Value Chain, Market Reforms, Indebtedness.

### **Unit-IV**

**15 Hours**

Cooperative: Organisation, Structure, Functions, Inter-sectoral terms of trade; Agricultural subsidies - Nature, Trends and Distributional Implications; Agricultural Exports: Nature, Trend, Composition; WTO and Indian agriculture.

### **Suggested Readings**

1. Acharya, S.S. and Agarwal, N.L. (2012). *Agricultural Marketing in India*. Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.
2. Bansil, P.C. (2017). *Economic Problems of Indian Agriculture*. Daya Publishing House, New Delhi.
3. Bhalla, G. S. and Gurmail S. (2001). *Indian Agriculture: Four Decades of*

*Development*. New Delhi: Sage Publications.

4. Chand, R. (2012). Development Policies and Agricultural Markets. *Economic and Political Weekly*, 47 (52): 53-63.
5. Chand, R., S S Raju, S. Garg and L.M. Pandey (2011). Instability and Regional variation in Indian Agriculture, NCAP, New Delhi.
6. 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.
7. Gill, A. (2004). Interlinked Agrarian Credit Markets: Case Study of Punjab. *Economic and Political Weekly*, 39 (33): 3741-3751.
8. Govt. of India (Latest). *Agricultural Statistics at a Glance*, Ministry of Agriculture, New Delhi.
9. Govt. of India (various years): *Five Year Plans*, Planning Commission, New Delhi.
10. Gulati, A. and Kelly, T. (2001). *Trade Liberalisation and Indian Agriculture*. New Delhi: Oxford University Press.
11. Gulati, A. and Narayanan (2005). *The Subsidy Syndrome in Indian Agriculture*, Oxford University Press, New Delhi.
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. Reddy, S.S. and Ram, P.R. (2000). *Agricultural Finance and Management*. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi.
16. D. Narshima Reddy & Srijit Mishra (2010): *Agrarian Crisis in India*, (eds.), Oxford University Press
17. R. S. Deshpande & Arora, S. (2010): *Agrarian Crisis and Farmer Suicide*, (eds.), Sage India Publications

**Course Name: Money and Banking**

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4	-	-	4

**Course Code: ECO.511**

**Course Objective:** The objective of this course is to familiarise the students of Master degree with the basic concepts, theories and approaches to understand the role and the functioning of the monetary and banking systems.

**Unit-I****15 Hours**

**Introduction to Money:** Meaning, Nature and functions; Quantity Theory of Money – Classical, Keynesian, Monetarists; Theories of Money Supply, Components of Money Supply; Measures of Money Supply; Determinants of Money Supply; Money Multiplier.

**Unit-II****15 Hours**

**Demand for Money** – Classical Theory, Keynes' Theory, Portfolio Balance Theory, Friedman's Theory; Monetary Policy – Meaning, Objectives, and Instruments; The structure of interest rate – term structure and yield curve; Theories of term structure of interest rates.

**Unit-III****15 Hours**

**Financial System** – Different theories & Approaches; Financial Markets – Functions and Types; Money Market and Capital Market – nature, functions and instrument; Structure of Indian money and capital markets; Theoretical perspectives on financial and real sectors.

**Unit-IV****15 Hours**

**Banking** – Theories of Banking; Commercial and Central Banking Systems – Functions, Credit Creation and Credit Control; Banking and Non-Banking Financial Intermediaries in India; RBI – Functions, Monetary Policy – Methods and Recent Changes in India; International Monetary policy transmission mechanism.

**Suggested Readings**

1. Bhole, L. M. (2004). *Financial Institutions and Markets: Structure, Growth and Innovations*. India: Tata McGraw-Hill Education
2. Gautam, S.K. (2012): *Money, banking and finance*. Mumbai, Vakratund publishers.
3. Hajela, T.N (2009): *Money and banking: Theory with Indian banking*. New Delhi, Ane books Pvt. Ltd.
4. Hajela, T.N. (2015): *Money banking and public finance*, New Delhi,

Ane Books Pvt. Ltd.

5. Iyenagar (2011): *Money matters: Macroeconomics and financial markets*, New Delhi, Sage publications
6. Mithani, D.M. (2013): *Money, Banking, international trade and public finance*, New Delhi, Himalaya publishing house
7. Poonia, V. (2012): *Money banking in India*. New Delhi, Srishti books distributors.
8. Popli, G. S., Jain, A. (2015): *Principles and Systems of Banking*, PHI Publishing.
9. Uppal, R.K (2011): *Money banking and finance: evolution and present structure*, New Delhi, new century publications
10. Zola, Emile (2014): *Money*, New Delhi, Oxford University press

## **Course Name: Globalization and Development**

**Course Code: ECO.512**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the significance of economic development in the perspective of globalization.

### **Unit-I**

**15 Hours**

Issues in Globalization: Alternative Perspectives on its Nature and Character;

Critical Dimensions: Economic, Political, Strategic, Cultural and Informatics, Globalization and the new global economy: Globalization as representing the triumph of free market capitalism; Continuity and change in the world economy since the 1970s; Economic Policy Changes in the Advanced and Developing Nations and Developments in Communication Technology.

### **Unit-II**

**15 Hours**

Transnational Corporations and the Globalization Process: TNCs and FDI and technology flow; Changing patterns of international trade: intra-firm and inter-firm trade; international production networks; Structure and Working of the International Capital market: the main actors and instruments of international asset transaction; offshore banking; Eurocurrencies and their trading; global finance and hot money flows.

### **Unit-III**

**15 Hours**

Regional and multilateral agreements: Brief History of Multilateral Institutions, their Structure and Working; International Monetary Fund and the World Bank; The World S Trade Organization: Organizational structure and decision making process and its evolving role; Questioning the benefits of economic integration: Inequality and instability in global economy.

### **Unit-IV**

**15 Hours**

Agricultural Globalization and Developing Countries; Industry and Services in the globalization process: Labour, Migration and Outsourcing; Globalization, State, Sovereignty and the Civil Society; The World Social Forum.

### **Suggested Readings**

1. Bhatia, S.K. (2017). *Brexit and India: Analyzing the Implication* (Eds.). New Delhi Publishers.
2. Daniels, P.W., and Lever, W.F. (1997). *The Global Economy in Transition*. Harlow:
3. Edwards, M., and Gaventa, J. (2001). *Global Citizen Action:*

*Perspectives and Challenges.* Boulder Colo: Westview Press.

4. Held, D., McGrew, A., Goldblatt, D., and Perraton, J. (1999). *Global Transformation: Politics, Economics and Culture.* Cambridge: Polity Press.
5. Herman, Edward and Robert W McChesney, *Globalization of culture* (New Delhi: Madhyam Books 2003)
6. Hoogvelt, A. M. M. (1997). *Globalisation and the Postcolonial World: The New Political Economy of Development.* Palgrave Macmillan.
7. Jackson, H. J. (1998). *The World Trade Organisation. London: The Royal Institute of International Affairs.*
8. James, P., and Veltmeyer, H. (2001). *Globalisation Unmasked.* London: Zed Books.
9. Khor, K. P., and Khor, M. (2001). *Rethinking Globalisation: Critical Issues and Policy Choices.* London: Zed Books.
10. Kofman, E., and Youngs, G. (2001). *Globalisation: Theory and Practice (2Ed.).* London: Pinter.
11. Munck, R. (2003). *Globalization and Labour: The New Great Transformation.* Zed Books Ltd.
12. Nayyar, D. (2002). *Governing Globalisation: Issues and Institutions.* Delhi: Oxford University Press.
13. Robert. C. Feenstra, (2004) *Advanced International Trade, Theory and Evidence, Published by Princeton University Press.*
14. Robert. C. Feenstra, and Alan, M. Taylor, (2011) *International Economics, Worth Publishers; Second Edition.*
15. Sailors, J. W., Qureshi, U. A., and Cross, E. M. (1973). Empirical Verification of Linder's Trade Thesis. *Southern Economic Journal*, 262-268.
16. Sakamoto, Y. (1994). *Global Transformation: Challenges to the State System.* Tokyo: United Nations University Press.
17. Salvatore, D. (2013). *International Economics (11th Edition).* USA: Wiley.
18. Sandeep, K. (2015). Migration and Bilateral Trade Flows: Evidence from India and OECD Countries. *Applied Econometrics and International Development*, 15(2), 179-196.
19. Scholtze, J.A. (2000). *Globalisation: A Critical Introduction.* Basingstoke: Palgrave.
20. Stiglitz, J. (2002). *Globalization and its Discontents.* London: Penguin.
21. UNCTAD, Trade and Development, Various Issues.
22. White, B., Little, R., and Smith, M. (2001). *Issues in World Politics (2Ed.).* Basingstoke: Palgrave.

23. Williams, M., Goetz, A. M., O'Brein, R., and Scholte, J. A. (2000). *Contesting Global Governance: Multilateral Economic Institutions and Global Social Movements*. Cambridge: Cambridge University Press.

**Course Name: Introduction to Globalization**

**Course Code: ECO.513**

**Course Objective:** The objective of this course is to give the students an



understanding of the globalization process, the principal mechanism of international economic connection through which it works.

**Unit-I** **8 Hour**  
Meaning, Nature, Scope, Types, and Process of Globalization.

**Unit-II** **7 Hours**  
Pattern of International Trade, Foreign Direct Investment.

**Unit-III** **8 Hours**  
Regional and Multinational agreements: Brief History.

**Unit-IV** **7 Hours**  
Structure and Working of International Monetary Fund and World Bank

### **Suggested Readings**

1. Kofman, E., and Youngs, G., (2001): *Globalization: Theory and Practice*. London: Pinter.
2. Salvatore, D. (2004). *International Economics*. John Wiley and Sons Inc.
3. Scholtze, J.A. (2000). *Globalization: A Critical Introduction*. Basingstoke: Palgrave.
4. Stiglitz, J. (2002). *Globalization and its Discontents*. London: Penguin.
5. Bhaduri, Amit and Deepak Nayyar (1996): *The Intelligent Person's Guide to Liberalization*, New Delhi: Penguin Books
6. Deepak Nayyar (1995): *Presidential Address on Globalization*, 78<sup>th</sup> Annual Conference of Indian Economic Association, India

**Course Name: Foundations of Economics**

**Course Code: ECO.514**

**Course Objective:** The objective of this course is to familiarise the students of different streams with the basic concepts, theories and approaches to understand the economics.

**Unit-I**

**8 Hours**

Economics, The production possibility frontier, Demand, Elasticity of demand, Supply, Market equilibrium, The free market system, Intervening in the market system, Costs: Short run and long run, Revenues, costs, and profits.

**Unit-II**

**7 Hours**

Perfect competition, Monopoly, Oligopoly, Monopolistic competition and non-price competition, The labour market, Introduction to macroeconomics, Equilibrium in the economy.

**Unit-III**

**8 Hours**

National income and the standard of living, Aggregate demand, aggregate supply, and the price level, Consumption, Investment, Fiscal policy, Money and monetary policy.

**Unit-IV**

**7 Hours**

Economic growth and the economic cycle, Unemployment, Inflation, Exchange rates, International trade, balance of payments, and protectionism, Protectionism and globalization.

**Suggested Readings**

1. Dewett, K. K. (2010). *Modern Economic Theory*. New Delhi: S. Chand & Company Ltd.
2. Gillespie, Andrew (2014). *Foundations of Economics* (3<sup>rd</sup> Edition). Oxford University Press, Oxford
3. Hoag, A.J and Hoag, J. H. (2010). *Introductory Economics* (4<sup>th</sup> Edition). Chennai: World Scientific Publishing Co. Pte. Ltd.
4. Mankiw, N. (2014). *Principles of Economics* (3<sup>rd</sup> Edition). South Western: Mason.
5. Samuelson, P.A., and William Nordhaus (2009): *Economics*, Tata-McGraw-Hill
6. Lipsey, R.G., and Chrystal, K.A., (1995): *An Introduction to Positive Economics*, Oxford University Press

## SEMESTER – II

**Course Name: Microeconomics – II**

**Course Code: ECO.521**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the foundations of modern economic analysis.

### **Unit-I**

**15 Hours**

**Collusive Oligopoly and Theory of Games:** Collusive Oligopoly: Cartels: Market sharing and joint profit maximization; Price leadership: Low-cost, Dominant firm, and Barometric price Leaderships. Theory of Games and collusive oligopoly: Two-person Zero-Sum Game; Certainty and Uncertainty Model; Non Zero-Sum Game; The prisoner's Dilemma, Nash- Equilibrium.

**Unit-II 15 Hours Marginalist Controversy and Average Cost Pricing:** Marginalist Controversy and Average Cost Pricing: Hall and Hitch Report and Full-Cost Pricing; Gordon's Attack; The Mark-Up Rule; Bain's Limit-Pricing theory; Recent developments in Limit Pricing Theory: Sylos-Labini, Franco-Modigliani, Bhagwati, Pahigian models; Managerial Theories of Firm: Baumol, Marris and Williamson Models of the Firm.

### **Unit-III**

**15 Hours**

**Factor Pricing and Income Distribution:** Factor Pricing under Perfectly Competitive Markets; Factor Pricing Under Imperfectly Competitive Markets: Monopolistic and Monopsonistic powers; Bilateral Monopoly; Elasticity of factor Substitution; Technological Progress and Income Distribution; Pricing of fixed factors: Rents and Quasi Rents; Adding up Problem and Product Exhaustion Theorem.

### **Unit-IV**

**15 Hours**

**General Equilibrium and Welfare Economics:** Interdependence in the Economy; The Walrasian System; Existence, Uniqueness and Stability of an Equilibrium; Path to General Equilibrium; Two-factor, two-commodity, Two-consumer General Equilibrium System. Welfare Economics: Pareto Optimality; Kaldor-Hicks Compensation Criteria, Bergson Criteria; Maximization of Social Welfare. Arrow's Impossibility Theorem and Theory of Second Best.

### **Suggested Readings**

1. Snyder, C. and W. Nicholson (2010), *Fundamentals of Microeconomics, 10<sup>th</sup> Edition*, Cengage Learning-New Delhi.
2. Jehle, G. A. And P. J. Reny (2011), *Advanced Microeconomic Theory, 3<sup>rd</sup> Edition*, Pearson-New Delhi.

3. Henderson, J.M., and Quandt, R.E. (2003). *Microeconomic Theory: A Mathematical Approach. 3<sup>rd</sup> Edition*, Tata McGraw Hill, New Delhi
4. Pindyck, R.S., D.L. Rubinfeld, & P.L Mehta (2009). *Microeconomics*, 7<sup>th</sup> Edition, Pearson, New Delhi.
5. Koutsoyiannis, A.(1979). *Modern Microeconomics* (2<sup>nd</sup> edition).Macmillan Press, London.
6. Varian, H. (2010). *Intermediate Microeconomic*. 8<sup>th</sup> Edition New York: W.W Norton.
7. Varian, H. (1992). *Microeconomic Analysis*. 3<sup>rd</sup> Edition New York: W.W Norton.
8. Mankiw, N. G. (2009). *Principles of Microeconomics*. 5<sup>th</sup> Edition. South-Western, Cengage Learning. USA
9. Samuelson, P.A. and Nordhaus, W.O. (1998). *Economics* (16<sup>th</sup> Edition). New Delhi: Tata McGraw Hill.
10. Stigler, G. (1996). *Theory of Price* (4<sup>th</sup> Edition).New Delhi: Prentice Hall of India.

**Course Name: Macroeconomics – II**

**Course Code: ECO.522**

**Course Objective:** The objective of this course is to familiarise the students of Master degree with the advance concepts, theories and approaches to understand the behaviour of macroeconomic aggregates and policies.

**Unit-I**

**15 Hours**

**Theories of Investment:** IS-LM model with Govt. Sector; IS-LM Model with Foreign Sector; Keynesian Theory of Investment Decisions, The Accelerator Theory of Investment; Lags in Investment, Jorgenson's Neo-Classical Theory of Investment; Theory of Rational Expectations; The Supply-Side Economics.

**Unit-II**

**15 Hours**

**Business Cycle Theories:** Pure Monetary Theory; Monetary over investment theory; Schumpeter's innovation theory; Keynes' theory, Samuelson's Multiplier-accelerator interaction theory; Hicks' trade cycle theory; Global Recession and Euro-Area Crisis.

**Unit-III**

**15 Hours**

**Inflation and Unemployment:** Meaning, causes, effects and control of Inflation; Theories of Inflation; Inflation and the rate of unemployment – Phillips curve hypothesis; Policy dilemma – inflation or unemployment; automation and unemployment.

## Unit-IV

15 Hours

**Macroeconomic Policies:** Meaning, Objectives and Formulation, Monetary & Fiscal Policy – instruments and their relative effectiveness; trade policies and exchange rate policies.

### Suggested Readings

1. Acemoglu, Doron (2016): *Macroeconomics*, New Delhi, Pearson education India.
2. Branson, William H. (2014): *Macroeconomics: Theory and policy*, (3<sup>rd</sup> edition), New Delhi, East-West press Pvt. Ltd.
3. Carlin, Wendy; & Soskice, David (2013): *Macroeconomics: Imperfections, institutions & policies*, New Delhi, Oxford University press.
4. Dornbusch, Rudinger; Fisher, Stanley; and Startz, Richard (2015): *Macroeconomics*, (11<sup>th</sup> edition), New Delhi, Tata McGraw hill education India Pvt. Ltd.
5. Gordon, Robert. J. (2015): *Macroeconomics*, (12<sup>th</sup> edition), New Delhi Pearson education India Pvt. Ltd.
6. McConnell, C. R., and Gupta, H. C. (2012). *Introduction to Macroeconomics*. Tata McGraw-Hill Publishing Company
7. Prasad, N. K. (2012): *Advanced macroeconomics*, Delhi ABD publisher.
8. Romer, David (2012): *Advanced Macroeconomics* (4<sup>th</sup> edition), New York, Tata McGraw Hill companies.
9. Shapiro, Edward. (2015): *Macroeconomic analysis*, (5<sup>th</sup> edition), New Delhi, Galgotia publication Pvt. Ltd.
10. Wickens, Michael (2011): *Macroeconomic theory*, 2<sup>nd</sup> edition, New Jersey, Princeton university press.

**Course Name: Quantitative Methods in Economics-II**

**Course Code: ECO.523**

**Course Objective:** The objective of this course is to familiarise the students of Master degree with the basic concepts, and methods of statistics to understand the fundamentals of economics and its applications.

**Unit-I**

**15 Hours**

Correlation and Regression: Meaning, assumptions and limitations of simple correlation and regression-analysis; Pearson's product moment and Spearman's rank Correlation coefficients and their properties; partial and multiple correlation, lines of regression and properties of regression coefficients; Multiple linear regression equation and coefficient of multiple determination (application only).

**Unit-II**

**15 Hours**

Index Number: meaning, problems in construction of an index number, Tests of consistency:, Base shifting and splicing of Index Numbers. Time Series: Components of Time series, Measurement of trend by moving average method and the method of least squares. Curve fitting .Method of estimation of second degree parabolic, exponential and modified exponential curves; Method of computing average annual rate of growth.

**Unit-III**

**15 Hours**

Elementary concept of a random variable: probability mass and density functions; Expectations, moments and moments generating function of a random variable; Elements of Probability: Deterministic and non-deterministic experiments, various types of events; Classical and empirical definitions, laws of addition and multiplication of probability, conditional probability, Properties and applications of Binomial, Poisson and normal distributions.

**Unit-IV**

**15 Hours**

Sampling: Concepts and uses of sampling, difference between random and non-random sampling, simple random sampling, stratified random sampling and probability proportional to size sampling; Meaning and construction of confidence interval for sample mean. Elementary applications based upon the distribution of Z, t,  $\chi^2$  and F (including

ANOVA) statistics.

### **Suggested Readings**

1. Gupta, S. C. (2012). *Fundamentals of Statistics*. New Delhi: Himalaya Publishing House Pvt. Ltd.
2. Gupta, S. C., and Kapoor, V. K. (2009). *Fundamentals of applied statistics*. New Delhi: Sultan Chand and Sons.
3. Gupta, S.P. (2012). *Statistical Methods* (28<sup>th</sup> Edition). New Delhi: Sultan Chand and sons.
4. Knut S, and Peter J. H. (2007). *Mathematics for Economic Analysis*. India: Pearson Education.
5. Murray, S. S. (2014). *Probability, Schaum Series (5<sup>th</sup> Edition)*. India: McGraw-Hill.
6. Murray, S. S. (2014). *Statistics, Schaum Series (5<sup>th</sup> Edition)*. India: McGraw-Hill
7. Nagar, A. L. and R. K. Das (1993). *Basic Statistics*. New Delhi: Oxford University Press.



**Course Name: Economics of Development and Planning**

**Course Code: ECO.524**

**Course Objective:** The objective of this course is to familiarise the students of Master degree with the basic theories, approaches and problems of economics of development and planning.

**Unit-I 15 Hours**

**Economic Development:** Meaning and Measurement; Human Development Index and Physical Quality of Life Index; Obstacles to Economic Development; Growth, Poverty and Income Distribution; Sustainable Development; Theories of Development: Classical, Harrod-Domar, Solow, Endogenous Growth Models.

**Unit-II 15 Hours**

**Development Theories:** Karl Marx, Schumpeter and Rostow's Stage theory, Joan Robinson Model; Dualism: Meaning, Characteristics and forms; Models of Dualistic growth: Lewis, Ranis and Fei and Jorgenson, Todaro.

**Unit-III 15 Hours**

**Importance of Institutions**-Government and markets; Approaches to Development-balanced growth, critical minimum effort, big push, Unbalanced growth theories, Vicious Circle of Poverty and Low Level Equilibrium Trap; Theories of Institutions and Development.

**Unit-IV 15 Hours**

**Investment Criteria, Choice of Technique:** labour, capital and intermediate. Importance of Economics Development: agriculture, industry, Natural resources, human resources, trade and aid, Infrastructure; Techniques of Planning, Plan Models in Developed vs. Developing countries including India.

**Suggested Readings**

1. Eckaus, P.S. and Parikh, K.S (2003). *Planning for Growth*. 2nd Revised Ed., MIT.

2. Ghatak, S. (2003). *Introduction to Development Economics*, Routledge.
3. Griffin, K. and J.L. Enos (1970). *Planning Development*. Addison-Wesley.
4. Meier, G. M. and Raunch, J. E. (2006). *Leading Issues in Economic Development* (8<sup>th</sup> Edition). New York: Oxford University Press.
5. Ray, D. (2004). *Development Economics*, Seventh Impression. New Delhi: Oxford University Press.
6. Thirlwall, A. P. (2006). *Growth and Development* (8<sup>th</sup> Edition). New York: Palgrave Macmillan.
7. Todaro, M. P. and Stephen C. S. (2007). *Economic Development* (8<sup>th</sup> Edition). New Delhi: Second Impression, Pearson Education (Singapore) Pvt. Ltd., Indian Branch.
8. Ronald, G. (2010): *Development Economics*, Pearson, India
9. Chang, Ha-Joon (2006): *Institutional Change and Economic Development*, United Nations University Press.
10. Acemoglu, D., and Robinson, J. (2006): *The Role of Institutions in Economic Growth and Development*, Chapter-5, Growth Commission Resources, Vol.3, World Bank

IQAC

**Course Name: Seminar-II**

**Course Code: ECO.542**

**Course Objective:** The objective of this course is to develop the human and soft skills of the students of Master's Degree.

**General Outline of Activities:**

1. The course coordinator should make the students learn how to prepare seminar report as well as seminar presentations on a given topic.
2. The preparation of seminar report on a given topic should be made referring to the literature available in the form of text/reference books, journals, periodicals, magazines, newspaper articles, and web resources.
3. The students should be encouraged to visit the library as well as computer centre of the University for preparing seminar reports and its power point presentation.
4. As far as possible the topic of the seminar should relate to current developments in the field.
5. The seminar report and its presentation should be evaluated by a duly constituted Department level committee.

**Course Name: Industrial Economics**

L	T	P	Cr
4	-	-	

**Course Code: ECO.525**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the basics of industrial economic analyses.

**Unit-I**

**15 Hours**

Industrial Economics – Meaning, Nature and Scope, Concept and organization of the firm, ownership, control and objectives of the firm, passive and active behaviour of the firm.

**Unit-II**

**15 Hours**

Market Structure: Seller's concentration, product differentiation, entry conditions, economies of scale, market structure and profitability, and market structure and innovation; Theories of industrial location: Weber and Sargent Florence, factors affecting location; Industrial Finance in India.

**Unit-III**

**15 Hours**

Market Conduct: Product pricing – theories and evidence; Investment expenditure-Theories and empirical evidence; and Merger and diversification. Market Performance: Growth, size, and profitability of the firm; and Constraints on firm's growth.

**Unit-IV**

**15 Hours**

Industrial Productivity: Concept and measurement, Capacity utilization – concept and measurement; Changes in Industrial structure and economic development; MNC's and transfer of technology; Small Scale Industries; Public policy and industrialization; Privatization – concept, scope and relevance; Trade Union, Social Security and Reforms in India.

**Suggested Readings**

1. Bains, J. S. (1996). *Industrial Organization, Cheltenham, U.K. An Elgar Critical Writings Reader.*
2. Barthwal, R. R. (2010). *Industrial Economics: An Introductory Textbook.* New Delhi: New Age International Publishers.
3. Hay, D. A and Morris, D. J. (1991). *Industrial Economic: Theory and Evidence.* Oxford University Press.
4. Lee, N., Jones, R. M., and Tyson, W. J. (1985). *An Introduction to Industrial Economics.* London: Allen and Unwin.

5. Marshall, A. (2003): *Elements of Economics of Industry*, Simon Publications, UK
6. Marshall, A. and Marshall, M. P. (2012): *The Economics of Industry*, Ulan Press, UK

**Course Name: Financial Institutions and Markets**

L	T	P	Cr
4	-	-	

**Course Code: ECO.526**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the functioning of the financial institutions and markets in India.

**Unit-I****15 Hours**

**Financial System** – Formal and Informal Financial Sectors, Components of the formal financial system, functions of a financial system, key elements of a well-functioning financial system, nature and role of financial intermediaries and financial markets in an economy, Structure of the Indian Financial System and reforms, Relationship between the financial system and economic growth – some theoretical and empirical evidence.

**Unit-II****15 Hours**

**Financial Markets** – The Money Market – Functions of the Money Market, Benefits of an Efficient Money Market, Money Market Instruments, The Indian Money Market; The Capital market – Functions of a Capital market, The Primary Market and Secondary Market, The Derivative Market, The Debt Market; Financial Regulation – RBI and SEBI.

**Unit-III****15 Hours**

**Financial Institutions** – Development Financial Institutions in India, Banking and Non-Banking Institutions, Management of NPAs by Banks in India, Mutual Funds – Investors, Organization, Types of Funds; Insurance – Role of Insurance in economic growth, Insurance intermediaries, Insurance Types, Insurance Regulatory - IRDA.

**Unit-IV****15 Hours**

**Financial Services** – Investment Banking Services, Merchant Banking Services, The Depository System, Introduction to Credit Rating - CRISIL and ICRA, Housing Finance, Leasing and Hire Purchase, Financial Inclusion and Microfinance.

### **Suggested Readings**

1. Avadhani, V.A. (2012): *Financial Services and Markets*, Himalaya Publishing House, India
2. Bhole, L. M. (2015): *Indian Financial System*, Chugh Publications, Allahabad, India
3. Bhole, L. M. (2016): *Financial Institutions and Markets*, Tata McGraw Hill Company Ltd., New Delhi, India
4. Gordon and Natarajan (2012): *Financial markets and services*, Himalaya Publishing House, India
5. Gupta, Shashi K. & Agrawal, Nisha (2013): *Financial services*, Kalyani Publishers, India
6. Houthakker, H. S. & Williamson, P. J. (1996): *Economics of Financial Markets*, Oxford University Press.
7. Khan, M. Y. (2016): *Indian Financial System*, Tata McGraw Hill, New York.
8. Pathak, B. (2014): *Indian Financial System*, Pearson Publication, India

IQAC

**Course Name: Demography**

L	T	P	Cr
4	-	-	

**Course Code: ECO.527**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the foundations of population economics.

**Unit-I**

**15 Hours**

**Basic Concepts, Indicators and Theories:** Meaning and Scope of demography, Population and Economic Development; Vital Rates – Fertility, Mortality, Age Pyramids, and Life Tables; From Development to Population; Theory of Demographic Transition; Historical Trends; Adjustment of Birth and Death Rates; Household Choice Models; From Population to Development; Malthusian View; Growth Impact; Population and Environment; Population and Innovation; Markets and Inputs.

**Unit-II**

**15 Hours**

**Population Projection:** National Projection of Total Population and Age-Sex composition – Mathematical Methods and Cohort-Component Methods; Methods of National & Sub-National Projection of Population; Projection of the Economically Active Population; Concepts of Stable, Stationary, and Quasi-Stationary Population.

**Unit-III**

**15 Hours**

**Population and Population Policy in India:** Major demographic features of India's population – Spatial, Age, Sex, Structure of Indian Population; Birth rate, Death rate, Life Expectancy & Infant Mortality; Trends & Patterns; Evaluation of family welfare programmes in India - National Population Policies since independence.

**Unit-IV**

**15 Hours**

**Ageing and Demographic Change:** Aging Process, Ageing around the world, The impact of demographic changes, The changing balance of age groups, Social, Economic, and Demographic Changes among the Elderly, Dependency ratio, Generational accounting and Pensions crisis; Social Groups and Family Size.

**Suggested Readings**

1. Bogue, D.J. (1971), Principles of Demography, John Wiley, New York.
2. Bose, A. (1996), India's Basic Demographic Statistics, B.R. Publishing Corporation, New Delhi
3. Choubey, P. K. (2000). *Population Policy in India*. New Delhi: Kanishka Publications.
4. Cochrane, S. H. (1975). Children as by-products, investment



goods and consumer goods: a review of some micro-economic models of fertility. *Population Studies* 29(3): 373-390.

5. Dandekar, V.M. (1998). Population Front of India's Economic Development. *Economic and Political Weekly*. 22(17): 837-842.
6. Dave, P., & Mehta, P. (2008). *Mental Health and Aging Women: Important Correlates*. New Delhi: Gyan Publishing House.
7. Ehsanul, H. (2007). *Sociology of Population*. New Delhi: Macmillan.
8. Hustedde, Ronald J., Ron Shaffer and Glen Pulver. (2005). *Community Economic Analysis: A How to Manual*. Rev. ed
9. Ishwar M. (2001). *Ageing and Human Development: Global Perspectives*. New Delhi: Rawat.
10. Novell, C. (1988), *Methods and Models in Demography*, Bellhaven Press, London.
11. Simon, J. L. (1992). *Population and Development in Poor Countries*. Princeton: Princeton University Press.
12. Srinivasan, K. and A. Shariff (1998), *India: Towards Population and Demographic Goals*, Oxford University Press, New Delhi
13. Srinivasan, K., (1992) *Basic Demographic Techniques and Applications*, Sage Publications, New Delhi.
14. Weil, David N., (1997) "The Economics of Population Aging" in Mark R. Rosenzweig and Oded Stark, eds., *Handbook of Population and Family Economics*, New York: Elsevier, 967-1014.

**Course Name: Introduction to Indian Economy****Course Code: ECO.528**

L	T	P	Cr
2	-	-	

**Course Objective:** The objective of this course is to familiarise the students of different streams with the basic concepts, structure, problems and issues concerning Indian economy.

**Unit-I****8 Hours**

Basic features and problems of Indian Economy: Economic History of India; Nature of Indian Economy, demographic features and Human Development Index, Problems of Poverty, Unemployment, Inflation, income inequality, Black money in India.

**Unit-II****7 Hours**

Sectoral composition of Indian Economy: Issues in Agriculture sector in India, land reforms Green Revolution and agriculture policies of India , Industrial development, small scale and cottage industries, industrial Policy, Public sector in India, service sector in India.

**Unit-III****8 Hours**

Economic Policies: Economic Planning in India , Planning commission v/s NITI Aayog, Five Year Plans, monetary policy in India, Fiscal Policy in India, Centre state Finance Relations, Finance commission in India. LPG policy in India.

**Unit-IV****7 Hours**

External sector in India: - India's foreign trade value composition and direction, India Balance of payment since 1991, FDI in India, Impact of Globalization on Indian Economy, WTO and India.

**Suggested Readings**

1. Dutt Rudder and K.P.M Sunderam (2017). *Indian Economy*. S Chand & Co. Ltd. New Delhi.
2. Mishra S.K & V.K Puri (2017). *Indian Economy and –Its Development Experience*. Himalaya Publishing House.
3. Singh, Ramesh, (2016): *Indian Economy*, Tata-McGraw Hill Publications, New Delhi.
4. Dhingra, I.C., (2017): *March of the Indian Economy*, Heed Publications Pvt. Ltd.,

5. Karam Singh Gill, (1978): Evolution of the Indian Economy, NCERT, New Delhi
6. Kaushik Basu (2007): The Oxford Companion to Economics of India, Oxford University Press.

**Course Name: Agricultural Development and Management**

L	T	P	Cr
2	-	-	

**Course Code: ECO.529**

**Course Objective:** The objective of this course is to familiarise the students of different streams with the basic concepts, theories, problems and issues related agricultural development and management.

**Unit-I**

**8 Hours**

Agricultural Development in India: Indian Agriculture in the eve of independence; Role and Importance; Development in Pre- and Post-Green Revolution Period, land reforms, Emphasis under different Five Year Plans.

**Unit-II**

**7 Hours**

Intervention of government in agricultural development: Subsidies (input/output), PDS, MSP, finance, cooperative marketing, MGNREGA.

**Unit-III**

**8 Hours**

Problems in agricultural development: Macro analysis (structural), Micro (land, inputs, environment); role of middlemen, risk and uncertainty in production.

**Unit-IV**

**7 Hours**

Managing Agriculture: role of agri-business, linking farmers with new markets, diversifying agriculture.

**Suggested Readings**

1. Acharya, S.S. and Agarwal, N.L. (2012). *Agricultural Marketing in India*. New Delhi: Oxford & IBH Publishing Co. Pvt. Ltd.
2. Lekhi, R. K. And Singh, J. (2015). *Agricultural Economics: An Indian Perspective* Ludhiana: Kalyani Publishers.

3. Reddy, S.S., Ram, P.R, Sastry, T.V.N, Devi, I.B. (2015). *Agricultural Economics*. New Delhi, India: Oxford and IBH Publishing Co. Pvt. Ltd.
4. Soni, R. (2004). *Leading Issues in Agricultural Economics*, New Delhi: Vishal Publishing.

## SEMESTER – III

**Course Name: Basic Econometrics**

L	T	P	Cr
4	-	-	

**Course Code: ECO.551**

**Course Objective:** The objective of the course is to provide basic understanding of the principles and foundations of econometrics to the students.

### Unit-I

**15 Hours**

**Linear Regression Model: Problem of estimation-** Meaning, Nature and Scope of Econometrics; Concepts of Population Regression Function and Sample Regression Function; Simple (two variable) Linear Regression Model: 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.

### Unit-II

**15 Hours**

**Extension of regression models-** Multiple (K-variable) Linear Regression Model: Assumptions, Estimation, Properties (Gauss-Markov Theorem (BLUE) and Consistency); 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.

### Unit-III

**15 Hours**

**Relaxation of Assumptions of CLRM-**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.

**Unit-IV****15 Hours**

**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 (Dickey-Fuller (DF) test, Augmented Dickey-Fuller (ADF) test, Phillips-Perron (PP) tests, Difference stationary and trend stationary process; Seasonality analysis; 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.

**Suggested Readings**

1. Brooks, C. (2014). *Introductory econometrics for finance*. Cambridge university press.
2. Baltagi, B. (2008). *Econometric analysis of panel data*. John Wiley & Sons.
3. Enders, W. (2008). *Applied econometric time series*. John Wiley & Sons.
4. Gujarati, D. (2014). *Econometrics by example*. Palgrave Macmillan.
5. Gujarati, D. N. (2005). Sangeetha (2007). *Basic econometrics*, TMH
6. Gujarati, D. N., & Porter, D. (2009). *Basic Econometrics* Mc Graw-Hill International Edition.
7. Nachane, D. M. (2006). *Econometrics: theoretical foundations and empirical perspectives*. OUP Catalogue.
8. Wooldridge, J. M. (2015). *Introductory econometrics: A modern approach*. Nelson Education.

**Course Name: Public Finance**

L	T	P	Cr
4	-	-	

**Course Code: ECO.552**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the economic functions of government in an economy.

### **Unit-I**

**16 Hours**

**Public Finance:** Meaning, Nature & Scope, Importance, Role of Government in Changing Perspective; Government as an agent of economic growth and development; Fiscal Functions of the Government; Classification of Goods: Private, Public, Social, Merit and Mixed Goods.

**Public Expenditure:** Meaning and Classification, Theories of Public Expenditure – Maximum Social Advantage, Normative and Positive Theories, Growth in Public Expenditure, Canons of Public Expenditure, Effects of Public Expenditure on Production, Distribution and economic growth, Criteria for public investment – social cost-benefit analysis – project evaluation.

### **Unit-II**

**14 Hours**

**Public Revenue:** Sources of Revenue, Taxation – characteristics of a good taxation system, Canons of taxation, direct vs. indirect taxes, principles of taxation, effects of taxation, taxable capacity, impact and incidence of taxation; Tax structure in India and Recent Reforms - GST.

### **Unit-III**

**14 Hours**

**Public Debt:** Sources of Public Debt, Burden of public debt – theories, effects of public debt, methods of debt redemption, Public Debt Management in India. **Public Budget** - Concept of public budget, types of public budget, theories of public budgeting.

### **Unit-IV**

**16 Hours**

**Federal Finance:** principles and problems of Federal finance centre-state financial relations, 14<sup>th</sup> Finance Commission; **Fiscal Policy:** meaning and objective, fiscal multipliers, compensatory fiscal policy, functional finance approach, fiscal policy for inflation, full employment and economic growth.

### **Suggested Readings**

1. Backhaus, J. G. & Wagner, R. E. (2004): Handbook of Public Finance, Springer, US.
2. Bhatia, A. K. (2013): Public Economics, Wisdom Press, India.



3. Choudhary, R. K. (2014): Public Finance and Fiscal Policy, Kalyani Publishers, New Delhi
4. Dalton, H. (1922): Principles of Public Finance, Allied Publishers, Reprinted by Routledge (2009).
5. Garg, R. & Garg, S. (2017): Handbook of GST in India, Bloomsbury India Professional.
6. Gupta, J. R. (2011): Public Economics in India: Theory and Practice, Atlantic Publishers.
7. Jha, Raghendra (2010): Modern Theory of Public Finance, New Age International Pvt. Ltd. India
8. Musgrave, R. A. (1959): The Theory of Public Finance, MG-Hill Publication, New York (Available in National Digital Library for Free Download)

<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
4	-	-	4

**Course Name: Research Methods in Economics**

**Course Code: ECO.553**

**Course Objective:** The objective of the course is to acquaint the students with the basics of research methods used in economics research. And, the objective is also to make them learn about the use of computer in research.

**Unit-I**

**15 Hours**

Research Methodology: Meaning and Types of Research, Scope of Research in Economics, Significance/Utility of Research in Economics, Qualities of a researcher, Research Process-Literature review: traditional, thematic and meta-analysis methods, identification and selection of research problem, Hypothesis Formulation, Research Design.

**Unit-II**

**15 Hours**

Sources Data: Primary and Secondary, Methods of Primary Data Collection, Secondary Data Sources – India and abroad, Tools of primary data collection. Classification, Tabulation, Presentation, Analysis-Descriptive and Inferential

**Unit-III**

**15 Hours**

Qualitative, Quantitative and Mixed Methods of Data Analysis and Interpretation of Results; Report Writing: Types of reports, Steps in report writing, Citation Styles, Bibliography and Appendix

**Unit-IV**

**15 Hours**

Use of Computer in Research: Use of MS word, Excel, power point, Research Ethics and dealing with plagiarism/similarity in research report writing.

**Suggested Readings**

1. Bruce, B. and Howard, L. (2014). Qualitative Research Methods for the social sciences, London: Pearson.
2. Flick, U. (2014). An introduction to qualitative research. Sage Publications.
3. Flick, U. (2015). Introducing research methodology: A beginner's guide to doing a research project. Sage.
4. Gregory, I. (2005). Ethics in research. London: Continuum.
5. Gupta, S.L. and Gupta, H. (2011). Research Methodology: Texts and Cases with SPSS. Delhi: International Book House.

6. Guthrie, G. (2010). Basic research methods: An entry to social science research. SAGE Publications India.
7. Kothari, C.R. and Garg, G. (2014). Research Methodology: Methods and Techniques, New Age.
8. Schwartz, S. (2012). Microsoft Office 2010, New Delhi: Pearson.
9. Sjoberg, G., and Nett, R. (2014). A methodology for social research. Jaipur: Rawat Publications.

**Course Name: Seminar-III**

**Course Code: ECO.543**

L	T	P	Cr
-	-	2	

**Course Objective:** The objective of this course is to develop the human and soft skills of the students of Master's Degree.

**General Outline of Activities:**

1. The course coordinator should make the students learn how to prepare seminar report as well as seminar presentations on a given topic.
2. The preparation of seminar report on a given topic should be made referring to the literature available in the form of text/reference books, journals, periodicals, magazines, newspaper articles, and web resources.
3. The students should be encouraged to visit the library as well as computer centre of the University for preparing seminar reports and its power point presentation.
4. As far as possible the topic of the seminar should relate to current developments in the field.
5. The seminar report and its presentation should be evaluated by a duly constituted Department level committee.

**Course Name: Project-I**

L	T	P	Cr
-	-	12	

**Course Code: ECO.599**

**Course Objective:** *The objective of the course is to learn the skills of formulation of research problem, objectives, hypotheses and also the skills of data collection, analysis and interpretation. make the students*

**General Outlines:**

1. Each student should be assigned a project supervisor from the faculty members of the concerned centre, preferably on the basis of the students' preferences.
2. The topic of project report should be decided by the supervisor taking into account the area of interest of the student. As far as possible the topic should address the current issues / developments in the field.

3. Standard norms for the preparation of a research project report may be followed – introduction, brief background, relevance of the topic, literature review, problem statement, objectives, hypotheses, sample design, data nature and sources, tools and techniques of data collection, data presentation, analysis, and interpretation, findings and conclusion.
4. The project outcomes may be reported in the following form: Chapter-1: Introduction & Review of Literature; Chapter-2: Research Methodology; Chapter-3: Conceptual & Theoretical Description; Chapter-4: Analysis and Interpretations; Chapter-5: Conclusion, Suggestions & Scope for further research; References, Annexure, etc. The students are required to complete the project report upto Chapter-3 in the third semester.
5. APA 6<sup>th</sup> edition style sheet may be followed for preparing in-text citations, foot notes, end notes, references and bibliography.
6. The project outcomes should be evaluated both in the form of project reports and seminar presentation/viva-voce examination by a duly constituted committee by the appropriate authority.
7. This is to be evaluated as ‘Satisfactory (S)’ or ‘Unsatisfactory (US)’.

IQAC

**Course Name: Academic Writing**

L	T	P	Cr
1	-	-	1

**Course Code: XXX.###**

**Course Objective:** The objective of this course is to develop the writing skills of the students of Master's Degree.

**Module-I: 4 Hours**

Meaning of academic writing, Purpose of academic writing, features of academic writing, Common types of academic writing, elements of academic writing, The writing process, choosing and narrowing a topic, the format of long and short writing tasks.

**Module-II: 4 Hours**

Use of simple and complex sentences in academic writing, writing in paragraphs, organizing paragraphs, accuracy in academic writing.

**Module-III: 4 Hours**

Reading – finding suitable sources, developing critical approaches, avoiding plagiarism, understanding titles to planning.

**Module-IV: 3 Hours**

Finishing key points and note-making, paraphrasing, summarizing, references and quotations, proof reading and editing.

### **Suggested Readings**

1. Alice Oshima and Ann Hogue (2007): Introduction to Academic Writing, The Longman Academic Writing Series, Pearson Education.
2. Stephen Bailey (2011): Academic Writing: A Handbook for International Students, Routledge



**Course Name: Punjab Economy**

L	T	P	Cr
4	-	-	

**Course Code: ECO.554**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the problems and perspectives of regional economics with special reference to Punjab economy.

**Unit-I 15 Hours** Regional Economics: Structural Changes in Punjab Economy, Concept, Scope and Framework; Regional Economic Problems; Location Factors; Different Approaches to Study Regional Economics; Location of Places and their Problems; Nature of Regions and Relation of Activities within a Region; Regional Policy and objectives; farm and non-farm employment.

**Unit-II**

**15 Hours**

Agriculture in Punjab: structure of agriculture in Punjab, Growth and Productivity; Green Revolution; Progress, Performance and Implications; Agricultural Diversification: Rationale, Constraints and Prospects; Dairy Farming and Other Allied Activities; Agriculture Credit and Marketing; W.T.O. and Punjab Agriculture; Agrarian crisis-nature, effects and measures, Land Reforms in Punjab.

**Unit-III**

**15 Hours**

Industry in Punjab: Structure of Industry in Punjab, MSME- Role, Problem and Future Prospects; State and Industrial Development; Agro-based Industries – Nature, growth, problem, and prospects; Service Sector in Punjab: Nature, growth, problem, and prospects.

**Unit-IV**

**15 Hours**

Social Sector in Punjab: Education, Health, Sanitation and Water Supply, Social Security, Employment, Migration, and Welfare Schemes; Banking and Finance – Nature, growth, problems and prospects.

**Suggested Readings**

1. Bawa R. S., P. S. Raikhy & Dhindsa, P. (2001). *Globalization and Punjab Economy. India: Punjab School of Economics, (DRS-UGC), Guru Nanak Dev University.*
2. Bawa, R. S. & Raikhy, P. S. (2000). *Punjab Economy: Emerging Issues. India: South Asia Books G.N.D.U.*
3. Deshpande, R. S. & Arora, S. (2010). *Agrarian Crisis and Farmer Suicides.* New Delhi: SAGE Publications India Private Limited.
4. Hoover, F.M. (2010). *An Introduction to Regional Economics.* Ryerson: McGraw-Hill.
5. Johar, R.S. & Khanna, J. S. (1983). *Studies in Punjab Economy.* Guru Nanak Dev University.
6. Kaur, Paramjit (2013): *Punjab Economy: Performance and Prospects,* Regal Publisher
7. Singh, I., Singh, S. and Singh, L. (2014): *Punjab's Economic Development in the Era of Globalization,* L G Publishers
8. Dhesi, A. S. and Singh, G. (2007): *Rural Development in Punjab: A Success Story Going Astray,* Routledge
9. Dutt, P. S. and Gill, S.S. (1995): *Land Reform in India: Intervention for Agrarian Capitalist Transformation in Punjab and Haryana,* Sage Publication
10. Chadha, G. K. (1986): *The State and Rural Transformation: The Case of Punjab, 1950-85,* Sage Publication.

IQAC

**Course Name: Political Economy of Development**

L	T	P	Cr
4	-	-	

**Course Code: ECO.555**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the foundations of the political economy of development.

**Unit-I**

**15 Hours**

Introduction to Political Economy; Idealism and materialism; Metaphysics and dialectics; Laws of dialectics; Categories of philosophy; Theory of cognition; Dialectical and Historical Materialism; Mode of production; Social super-structure and its elements; Dialectical interaction of base and superstructure; Historical social-economic formations; and Asiatic mode of production.

**Unit-II**

**15 Hours**

Marxian Political Economy; Analysis of capitalism; Development of capitalism in agriculture; Nature and process of planning; Market mechanism; Methods of accumulation; and Primitive socialist and capitalist methods.

**Unit-III**

**15 Hours**

Conceptualization of Imperialism: Emergence of monopoly capitalism and imperialism; Role of banks in monopoly capitalism; Imperialism;

Imperialism and the state; Concept of neo-colonialism; Colonialism and Neo-Colonialism; Forces against neo-colonialism and imperialism.

#### **Unit-IV**

**15 Hours**

Transition to Socialism; Transition period; Problems and policies; Nature of state; Role of Planning; Market mechanism; Distribution of income and wages; and Strategies for third world development.

#### **Suggested Readings**

1. Dobb, M. (2012). *Russian Economic Development since the Revolution*. London: Routledge Publications.
2. Mandel, E. (1999). *Late Capitalism*. London: Verso Publication.
3. Maurice, C. (2015). *Diametrical Materialism: An Introduction*. Aakar Books Publishers.
4. Petras, J. F. and Veltmeyer, H. (2001). *Globalization Unmasked: Imperialism in the 21<sup>st</sup> Century*. Canada: Fernwood Publication.
5. Preobrazhensky, E. A. (1965). *The New Economics*. London: Oxford University Press. (Open Online Access)
6. Ravenhill, J. (2016). *Global Political Economy*. Oxford: Oxford University Press.
7. Schumpeter, J. A. (2013). *Theory of Economic Development of Capitalism, Socialism and Democracy (2<sup>nd</sup> Ed.)*. Wilder Publication, Inc.
8. Sweezy, P. M. (1991). *The Theory of Capitalist Development (1<sup>st</sup> Ed.)*. New Delhi: K. P. Bagchi and Co.
9. Varoufakis, Y., Theocarakis, N., and Halevi, J. (2012). *Modern Political Economics: Making Sense of the Post-2008 World (2<sup>nd</sup> Ed.)*. Oxford: Taylor & Francis Publications.
10. Wilczynski, J. (1982). *The Economics of Socialism (1<sup>st</sup> Ed.)*. New Delhi: S. Chand & Co. Ltd.

**Course Name: Environmental Economics**

**Course Code: ECO.556**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the foundations of environment economics.

L	T	P	Cr
4	-	-	

**Unit-I**

**15 Hours**

**Environment and Development:** Economics and the Environment, Evolution and Growth of Environmental Economics, Relation between Environment and Growth, Environmental Kuznets hypothesis.

**Unit-II**

**15 Hours**

**Basic Concepts and Theories:** Public Goods and Externalities, Common Property Resources, resource degradation and market efficiency. Coase theorem, social cost benefit analysis, cost effective analysis for environment protection, Environmental Good's Demand and its Revealed Preference Methods.

**Unit-III**

**15 Hours**

**Environmental Valuation, Accounting and Management:** Types of environmental values, Evolution of Environmental Accounting, Features of Integrated Environmental and Economic Accounting, Degradation of land, water resources and forests; Alternative Energy Sources and Environment.

**Unit-IV**

**15 Hours**

**Global and Regional Issues:** Poverty, population and environment, global agreements on environment, political economy of sustainable development, Environment under WTO regime. Mechanism for environment regulation in India, environmental laws and their implementation, Policy instruments for controlling pollution environmental standards, forestry policy. Water Depletion vs. Water Logging, Use of Chemicals in Agriculture and Pollution; Agroforestry as an option for Diversification in Punjab.

**Suggested Readings**

1. Kolstad, C.D. (2011). Intermediate Environmental Economics. New Delhi: Oxford University Press.
2. Singh, Katar and Shishodia, Anil (2007). Environmental Economics: Theory and Applications. New Delhi: Sage Publications.
3. Berck, P. (2015). The Economics of the Environment. New Delhi: Pearson India.
4. Kumar, Pushpam (2009). Economics of the Environment and Development. New Delhi: Ane Book
5. Muthukrishna, S (2010). Economics of Environment. New Delhi: Phi learning Pvt. Ltd.

## SEMESTER – IV

**Course Name: Indian Economy**

L	T	P	Cr
4	-	-	

**Course Code: ECO.571**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the nature, problems and functioning of Indian economy.

### **Unit-I**

**15 Hours**

Indian Economy before Independence: A Review; Economic consequences of the British rule; Need for planned economic development; Basic strategy for development of the Indian economy under the planning period; Changes in the strategy of Indian planning; Role of the public and private sectors in India; and Main aspects of new economic policy and its relevance.

### **Unit-II**

**15 Hours**

Agrarian Reforms: Land Reforms, New agricultural policy; Production Structure of Indian Agriculture; Terms of trade between agriculture and industry; Industrial policy; Nature and extent of industrialization; and the existing production structure of industry in India.

### **Unit-III**

**15 Hours**

Savings and Capital Formation in Indian Economy; Trends in national income; Performance of different sectors; Trends in prices and money supply; Fiscal and Financial Sector reforms and recent changes in the policy; Natural Resources; Foreign capital in India; and Foreign Direct investment and Portfolio Investment.

### **Unit-IV**

**15 Hours**

Foreign Trade in Goods and Services; Balance of Payment; WTO and Indian Economy; Restrictions on Monopolies and Concentration of economic power; Poverty and economic inequalities; Population problem; Unemployment; Regional imbalances; Trends in migration; Economic Development and Environment Degradation; SHGs and Women empowerment.

### **Suggested Readings**

1. Banik,N. (2015). *The Indian Economy: A Macroeconomic Perspective*. Sage Publication.
2. Datt,G., and Majajan, A. (2017). *Indian Economy*. New Delhi: S. Chand and Co.

3. Kapila, U. (2011). *Indian Economy: Performance and Policies*. Academic Foundation, India.
4. Singh, R. (2017). *Indian Economy*. New Delhi: Tata McGraw-Hill Education.
5. Verma, S. (2017). *The Indian Economy*. Unique Publishers, India.

**Course Name: Advanced Econometric Theory and Applications**

L	T	P	Cr
4	-	-	

**Course Code: ECO.572**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of advanced econometric theories and their empirical applications.

**Unit-I**

**15 Hours**

**Time Series Econometric Modelling** - Approaches to time Series Forecasting; Univariate Time series modelling: AR, MA, ARMA and ARIMA models; Box-Jenkin Methodology; Multi-variate Time series modelling: OLS, Spurious Regression, Co-integration, Causality analysis (Granger and Sim); Granger representation theorem; Vector Auto-regression (VAR) and Vector Error Correction Models (VECM); Volatility modelling: ARCH and GARCH models.

**Unit-II**

**15 Hours**

**Limited Dependent variable Models** - 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.

**Unit-III**

**15 Hours**

**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.

**Unit-IV**

**15 Hours**

**Applications** – Introduction to E-views, STATA and R; Time series econometric modelling using E-views; Estimation of Limited Dependent Variable Models using STATA; Panel Data Modelling using E-views, STATA and R;

**Suggested Readings**

1. Gujarati, D. N. (2005). Sangeetha (2007). *Basic econometrics, 4e*, 304-331.



2. Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. MIT press.
3. Wooldridge, J. (2009). Instrumental variables estimation and two stage least squares. *Introductory Econometrics: A Modern Approach*. Nashville, TN: South-Western.
4. Wooldridge, J. (2009). Advanced panel data methods. *Introductory econometrics: a modern approach*. Mason: South-Western Cengage Learning, 489.
5. Madala, G. S. (2009). *Introduction to Econometric*.
6. Madala, G. S. (1968). *Limited Dependent and Qualitative Variables in Econometrics*. Cambridge: Cambridge University Press
7. Baltagi, B. (2008). *Econometric analysis of panel data*. John Wiley & Sons.
8. Hsiao, C. (2014). *Analysis of panel data* (No. 54). Cambridge university press.
9. Brooks, C. (2014). *Introductory econometrics for finance*. Cambridge university press.
10. Enders, W. (2008). *Applied econometric time series*. John Wiley & Sons.
11. Gujarati, D. (2014). *Econometrics by example*. Palgrave Macmillan.
12. Cameron, A. C., & Trivedi, P. K. (2010). *Microeconometrics using stata* (Vol. 2). College Station, TX: Stata press.
13. Stata, A. (2015). *Stata Base Reference Manual Release 14*.
14. Long, J. S., & Freese, J. (2006). *Regression models for categorical dependent variables using Stata*. Stata press.
15. Hall, R., Lilien, D., Sueyoshi, G., Engle, R., Johnston, J., & Ellsworth, S. (1999). EViews manual. *Quantitative Micro Software Inc*, 312.
16. Kawakatsu, H. (1998). *A computer handbook using EViews: to accompany Econometric models and economic forecasts, Pindyck and Rubinfeld*. McGraw-Hill College.
17. Zucchini, W., MacDonald, I. L., & Langrock, R. (2016). *Hidden Markov models for time series: an introduction using R* (Vol.150). CRC press.
18. Venables, W. N., Smith, D. M., & R Development Core Team. (2004). *An introduction to R*.

**Course Name: International Trade and Investment**

L	T	P	Cr
4	-	-	

**Course Code: ECO.573**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the theories and perspectives of international trade and investment.

**Unit-I**

**15 Hours**

Conceptualization of Trade: Classical, Neo Classical and New Theories of trade, Terms of trade, Prebisch and Singer views on terms of trade, Environmental and Social issues of trade.

**Unit-II**

**15 Hours**

Emerging Pattern of Trade: Classification of Trade in Services, High Technology Products, Trade in Climate Smart Goods, Changing nature of trade in emerging economies, Trade between developed vs. developing economies. Role of Global Value Chain in Trade

**Unit-III**

**15 Hours**

Regional Integration: North- North, South- South and North-South. EU, ASEAN, NAFTA, SAARC, BIMSTEC, RCEP, India in various Trade blocs, Brexit and India

**Unit-IV**

**15 Hours**

Investment and Development: Portfolio and Direct Foreign Investment; determination of direct foreign investment; multinational corporations, Relation between FDI and R&D, Export, Contribution of Various Nobel Laureates in International economics, India's EXIM and FDI policy .

**Suggested Readings**

1. Alex, E. F. Jilberto, and Andre M. (1998). *Regionalization and Globalization in the Modern World Economy: Perspectives on the Third World and Transitional Economies*, Routledge.
2. B. Copeland, and S. Taylor., (1994). *North-South trade and the Environment*, *Quartely Journal of Economics*, 755-787.
3. B. Copeland, and S. Taylor., (1995). *Trade and Tran boundary Pollution*, *American Economic Review*, 716-737.
4. B. Copeland, S. Taylor, and W. Antweiler.,(2001). *Is Free Trade Good for the Environment?* *American Economic Review*, 877-908.
5. Baldwin, R. and Philippe M., (1999). *Two Waves of Globalisation: Superficial Similarities, Fundamental Differences*, NBER working paper No. 6904.
6. Bank, W. (2008). *World Integrated Trade Solution (WITS) Database*.
7. Bhagwati, J.N., (Jan. 2007). *In Defence of Globalization*, Oxford University Press.

8. Bhagwati, J.N.,(1998).*International Trade: Selected Readings*, McMillan University Press.
9. Bhatia, S.K. 2017). *Brexit and India: Analyzing the Implication* (Eds.), *New Delhi Publishers*.
10. Chacholiades,M. (2006). *Pure theory of International Trade*, Published by Aldine Transaction; Revised edition.
11. *Clement, R. L. and Rothwell, K.J.,(1967). Theoretical Issues in International Economics*, Constellate and Company Ltd.
12. Cole, Matthew and Robert J. R. E., (2003). *Do Environmental Regulations Influence Trade Patterns: Testing Old and New Trade Theories*, *The World Economy*: 1163-86.
13. Corden, W. M. (1971). *The Theory of Protection*. Oxford: Clarendon Press.
14. Daniels ,Joseph, P. and David, V. H., (2011).*Global Economic Issues and Policies*, Routledge publications.
15. Das, R. U. (2011). Regional Trade-FDI-Poverty Alleviation Linkages :Some Analytical and Empirical Explorations. *Regional Integration, Economic Development and Global Governance*, 149.
16. Debroy, B. (2005) *WTO at Ten: Looking Back To Look Beyond - Development Through Trade(Volume 1) (2 Volume Set)*, *Konark Publishers*.
17. Debroy, B. (2006) *The Trade Game: Negotiation Trends at WTO and Concerns of Developing Countries*, *Published by Academic Foundation*.
18. Edward, E. Learner (1985) *Sources of International Comparative Advantages: Theory and Evidence*, *Published by the MIT Press*.
19. Feenstra, R., (2004). *Advanced International Trade, Theory and Evidence*, Princeton University Press.
20. Findlay, R. (1970). *Trade and specialization* (chapters 5 & 6). Penguin.
21. Grant, L. R. (1973). *Private Foreign Investment in Development*. Oxford: Oxford University Press.
22. H. Kierzkowski., (1984). *Monopolistic Competition and International Trade*, Clarendon Press, Oxford Press, UK.
23. Haberler, G. (1988). *International trade and economic development* (No. 1). Ics Pr.
24. *Handbook of International Economics* (1st Edition), Volume 1, 2, 3 & 4. New Delhi, ND: Elsevier publications.
25. Harry, P. Bowen and A. Hollander, and Jean MaveViane (2012), *Applied International Trade Analysis*, *Published by Palgrave Macmillan*.
26. Helpman, H. and P. Krugman., (1985). *Market Structure and Foreign Trade*, Cambridge, MIT Press

27. Herrick, B. and Kindleberger, C.P. (1985), *Economic Development* , Fourth edition , McGraw-Hill International Book Company, Singapore
28. James,C. and Robert M., (2004). *International Economics*, John Wiley & Sons. Inc., Dunn, Jr
29. Jones, R.W. and Kenen, P.B., (2003). *Handbook of International Economics*, Volumes-I, II and III, Elsevier Amsterdam.
30. Krugman, P. R. and Maurice Obstfeld (2003), *International Economics: Theory and Policy*, Sixth Edition , Addison Westley.
32. Nayyer, D. (2013) *Catch Up: Developing Countries in the World Economy*, *Publisher: Oxford University Press India*. Nocke, V. and S. Yeaple. (2008). *Globalization and the Size Distribution of Multiproduct Firms*, Mimeo.
33. P. Krugman, and Helpman,E. (1989). *Trade Policy and Market Structure.*, Cambridge, MIT Press.
34. Prakash, J. V., Nauriyal, D. K., & Kaur, S. (2017). Assessing Financial Integration of BRICS Equity Markets: An Empirical Analysis. *Emerging Economy Studies*, 3(2), 127-138.
35. RIS, South Asia Trade and Development Report, Various Issues.
36. Robert. C. Feenstra, (2004) *Advanced International Trade, Theory and Evidence*, *Published by Princeton University Press*.
37. Robert. C. Feenstra, and Alan, M.Taylor, (2011) *International Economics*, *Worth Publishers; Second Edition edition* .
38. Sailors, J. W., Qureshi, U. A., and Cross, E. M. (1973). Empirical Verification of Linder's Trade Thesis. *Southern Economic Journal*, 262-268.
39. Salvatore, D. (2013). *International Economics* (11th Edition). USA: Wiley.
40. Sandeep, K. (2015). Migration and Bilateral Trade Flows: Evidence From India And Oecd Countries. *Applied Econometrics and International Development*, 15(2), 179-196.
41. Saon, Roy and Smita Miglani and Neha Malik (2014). *Impact of American Investment in India: A Socioeconomic Assessment* *Published by Academic Foundation*.
42. Singh, K., & Kaur, B. S. (2017). Whether FDI or Exports Enhance Innovation: Evidence From Indian Manufacturing Firms, 2001-2012. *Revista Galega de Economía*, 26(3), 19-32.
43. Stevens, Candice., (1993). *The Environmental Effects of Trade*, *The World Economy*, 16(4): 439-451.
44. UNCTAD, Trade and Development, Various Issues.

L	T	P	Cr
4	-	-	

**Course Name: Rural Economics**

**Course Code: ECO.574**

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the foundations of rural economics.

**Unit-I**

**15 Hours**

Rural Economy: rural dynamics, characteristics, problems, challenges and opportunities; Responding to Changing Agrarian Economy; Rural Farm and Non-Farm Sector: Employment and Barriers; Rural Employment Generation Programmes: NRLM, MGNREGA.

**Unit-II**

**15 Hours**

Approaches to understand rural development: Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA); Sustainable Rural development, Technology for rural growth: ICT, mobile, successful programmes; Business Markets for village economy.

**Unit-III**

**15 Hours**

Planning for Rural Development: levels, functions, decentralization, methodology of micro-level planning, for block and district level planning; Organizations for rural development: criteria, government organisations, PRIs, Cooperatives, Voluntary Agencies/NGOs, Corporations; Community Capacity Building, Common Property Resources.

**Unit-IV**

**15 Hours**

Rural Entrepreneurship: role, programmes, role of institutions, Agri-preneurship; Micro-Finance Institutions (MFIs): role of MFIs, Self Help Groups; Micro, Small and Medium Enterprises in Rural India; Rural and micro Insurance; Rural Industrialization

**Suggested Readings**

1. Churchill, Craig (2006). *Protecting the poor: A micro insurance compendium*, International Labour Office, Geneva.
2. Government of India (n.d.) *MSME at a Glance*, Ministry of Micro, Small and Medium Enterprises.
3. IDFC Rural Development Network (2013). *India Rural Development Report 2012/13*. Delhi: Orient Black Swan.
4. Mukherjee, A., (2004). *Participatory rural appraisal: methods and applications in rural planning: essays in honour of Robert Chambers* (Vol. 5). Concept Publishing Company.

5. Narula, U. (2010). *Dynamics of Indian Rural Economy: Growth Perspective*, Atlantic Publishers, New Delhi.
6. Parthasarathy, G. (2003). *Economic Reforms and Rural Development in India*. Academic Foundation.
7. Reddy, K. V. (2012). *Agriculture and Rural Development*, Himalaya Publishing House.
8. Schaeffer, P.V. and Loveridge, S. (2000). *Small Town and Rural Economic Development: A case studies Approach*, Praeger Publisher.
9. Singh, B.M. and Namboodiri, KVN (2007). *Unleashing Rural Entrepreneurship*, Icfai University Press, Hyderabad.
10. Singh, K. (2009). *Rural Development: Principles, Policies and Management*, Sage Publications.

**Course Name: Seminar-IV**

L	T	P	Cr
-	-	2	1

**Course Code: ECO.544**

**Course Objective:** The objective of this course is to develop the human and soft skills of the students of Masters Degree.

**General Outline of Activities:**

1. The course coordinator should make the students learn how to prepare seminar report as well as seminar presentations on a given topic.
2. The preparation of seminar report on a given topic should be made referring to the literature available in the form of text/reference books, journals, periodicals, magazines, news paper articles, and web resources.
3. The students should be encouraged to visit the library as well as computer centre of the University for preparing seminar reports and its power point presentation.
4. As far as possible the topic of the seminar should relate to current developments in the field.
5. The seminar report and its presentation should be evaluated by a duly constituted Department level committee.

**Course Name: Project-II**

**Course Code: ECO.599**

L	T	P	Cr
-	-	12	

**Course Objective:** The objective of the course is to make the students learn the skills of formulation of research problem, objectives, hypotheses and also the skills of data collection, analysis and interpretation.

**General Outlines:**

1. Each student should be assigned a project supervisor from the faculty members of the concerned centre, preferably on the basis of the students' preferences.
2. The topic of project report should be decided by the supervisor taking into account the area of interest of the student. As far as possible the topic should address the current issues / developments in the field.
3. Standard norms for the preparation of a research project report may be followed – introduction, brief background, relevance of the topic, literature review, problem statement, objectives, hypotheses, sample design, data nature and sources, tools and techniques of data collection, data presentation, analysis, and interpretation, findings and conclusion.
4. The project outcomes may be reported in the following form: Chapter-1: Introduction & Review of Literature; Chapter-2: Research Methodology; Chapter-3: Conceptual & Theoretical Description; Chapter-4: Analysis and Interpretations; Chapter-5: Conclusion, Suggestions & Scope for further research; References, Annexure, etc.
5. APA 6<sup>th</sup> edition style sheet may be followed for preparing in-text citations, foot notes, end notes, references and bibliography.
6. The project outcomes should be evaluated both in the form of project reports and seminar presentation/viva-voce examination by a duly constituted committee by the appropriate authority.
7. This is to be evaluated as 'Satisfactory (S)' or 'Unsatisfactory (US)'.

**Course Name: Practices of Economics-I**

L	T	P	Cr
1	1	0	

**Course Code: ECO.575**

**Course Objective:** The objective of the course is to enable the students through practices the economic theories and applications through exercises to compete for National level competitive examinations.

**Module-I: Quantitative Methods:**

**8 Hours**

Measures of Central tendency, dispersion, skewness, kurtosis, correlation, regression, index number, time series analysis, theory of probability and probability distribution; sampling techniques/methods and sampling errors, statistical inferences – hypothesis testing, Application of differential and integral calculus, Input-output analysis, linear programming and Game theory.

**Module-II: Microeconomic Analysis:**

**7 Hours**

Theories of demand; theory of production and cost; pricing and output under different forms of market structure; factor pricing analysis; elements of general equilibrium and new welfare economics.

**Module-III: Macroeconomic Analysis:**

**8 Hours**

Theories, Models and Approaches of determination of output and employment, demand and supply of money, Phillips curve analysis, business cycle theories, Macroeconomic equilibrium and macroeconomic policies.

**Module-IV: Economic Growth, Development and Planning: 7 Hours**

Theories and Models of economic growth and development, agriculture, industry, technology and international trade as engines of economic growth; plan models for market oriented economy.

**Suggested Readings**

1. Schaum's outline of introduction to probability and statistics, McGraw-Hill Education, 2011
2. Schaum's outline of introduction to mathematical economics, McGraw-Hill Education, 2011
3. Schaum's outline of mathematical methods for business and economics, McGraw-Hill Education, 2009
4. Schaum's outline of statistics and econometrics, McGraw-Hill Education, 2011



5. Schaum's outline of principles of economics, McGraw-Hill Education, 2011
6. Schaum's outline of microeconomics, McGraw-Hill Education, 2011
7. Schaum's outline of macroeconomics, McGraw-Hill Education, 1997
8. Schaum's outline of international economics, McGraw-Hill Education, 1995
9. Schaum's Outline of Theory and Problems of Development Economics, McGraw-Hill Education, 2001

**Course Name: Practices of Economics-II**

L	T	P	Cr
1	1	0	

**Course Code: ECO.576**

**Course Objective:** The objective of the course is to enable the students through practices the economic theories and applications through exercises to compete for National level competitive examinations.

**Module-I: International Economics:**

**8 Hours**

Theories, model and approaches of international trade; terms of trade, balance of payments, theories of regionalism at global level, trade policy and reforms.

**Module-II: Public Finance:**

**7 Hours**

Role of Govt, Fiscal functions of Govt, The public budgets, public expenditure, revenue, debt, fiscal federalism, and fiscal policy.

**Module-III: Indian Economy:**

**7 Hours**

Basic economic indicators, agriculture, industry, public finance, foreign trade, Five year plans, economic reforms, economic policies, commercial and central banking, money and capital markets; environment and sustainable development.

**Module-IV: Role of Agriculture, Industry, Demography and Environment:**

**8 Hours**

Land Reforms, Green revolution, technological aspects, capital formation, regional disparities in agriculture, strategies for rural development; interrelationship between agriculture and industry, Pattern of industrialization, theories of industrial location, industrial productivity, industrial finance, industrial labour; interrelationship between population, development and environment.

**Suggested Readings**

1. Schaum's outline of principles of economics, McGraw-Hill Education, 2011
2. Schaum's outline of international economics, McGraw-Hill Education, 1995

3. Schaum's Outline of Theory and Problems of Development Economics, McGraw-Hill Education, 2001
4. Patrick J. Welch, (2012), Economics: Theory and Practice, Wiley
5. Peter W. Abelson (2012), Public Economics: Principles and Practice, McGraw-Hill Education
6. Ramesh Singh (2017), Indian Economy, McGraw-Hill Education
7. K. Srinivas, Vikas Kumar, S. R. Kantwa and S. V. Sai Prasad (2014), Agricultural Economics, New Vishal Publications
8. Nick Hanley (2007), Environmental Economics: In Theory and Practice, Palgrave Macmillan

**Course Name: Data Analysis Using SPSS**

L	T	P	Cr
0	0	2	1

**Course Code: XXX.###**

**Course Objective:** The objective of the course is to equip the student with the knowledge of basic data analysis using SPSS.

**Module-I: Introduction and Data Management: 7 Hours**

Introduction to SPSS; Getting familiar with the interface; Importing data from Excel; Creating a new data file (entering survey data); Data preparation and exploratory data analysis; Defining variables; dealing with missing values; data manipulation- data transformation; syntax files and scripts; output management. Generating and transforming variables.

**Module-II: Descriptive Analysis of Data: 8 Hours**

Descriptive statistics for two or more variables; Creating and editing charts for two or more variables; Inferential statistics for the mean and the median; One-sample t-test; T-test and Mann-Whitney U Test; Paired-difference t-test & Wilcoxon Signed-Rank Test; Power Analysis for t-test; One-sample binomial test; One-sample Chi-square; Chi-Squared Test of Independence; Power Analysis for the proportion. One-way and two-way ANOVA.

**Module-III: Correlation and Regression Analysis: 8 Hours**

Computation of Pearson's and Spearman's rank correlation coefficient; Partial and multiple correlation coefficient; Simple Linear regression model and multiple regression models; Regression diagnostic tests: Multicollinearity; Heteroscedasticity and Autocorrelation detections and remedial measures; and detecting the presence of outliers.

**Module-IV: More topics on Regression Analysis:****7 Hours**

Dummy variable (independent) regression models; Limited dependent variable regression models: Logit; and Probit models; Basic time series regression models: stationarity checking and fitting univariate and multivariate time series regression models; and Basic Panel data regression models: fixed effect and random effect models.

**Suggested Readings**

1. Landau, S. and B. S. Everitt (2004). A handbook of statistical analyses using SPSS. CRC. London New York Washington, D.C.
2. Field A., (2013); *Discovering Statistics Using SPSS, Fourth Edition*, SAGE
3. Pallant, J. (2010). SPSS Survival Manual. McGraw Hill, Berkshire, England

#### **4. Course Duration :**

**Minimum Duration: 2 Years**

**Maximum Duration: 5 Years**

**5. Faculty and support staff requirement : 02\_ full time Faculty of Professor/Assoc./Asst. Professor level**

#### **Procedure for admission, curriculum transaction and evaluation :**

##### **A. Admission Procedure:**

##### **1. Procedure for Obtaining Admission Form and Prospectus**

- a. The prospectus containing Admission Form can be obtained in person from :  
The Directorate of Distance education, Swami Vivekanand Subharti University, Subhartipuram, NH-58, Delhi-Haridwar Bypass Road, Meerut or its city office located at Lokpriya Hospital Complex, Samrat Palace, Garh Road, Meerut on payment of Rs. 125/- in cash or by demand draft.
- b. The Prospectus can also be obtained by post by sending a demand draft of Rs. 175/- drawn in favour of "SVSU, Distance Education", payable at Meerut along with a filled requisite proforma (available at DDE website i.e. [www.subhartidde.com](http://www.subhartidde.com)) for "Obtaining the Prospectus and Admission Form" to the Directorate of Distance Education.

##### **2. Submission of Admission Form:**

- a. An applicant should submit the admission form duly filled with all enclosures completed, personally or by post, to the Directorate of Distance education, Swami Vivekanand Subharti University, Subhartipuram, NH-58, Delhi-Haridwar Bypass Road, Meerut-250005.
- b. The application for admission should be submitted along with the following :
  - i. A demand draft for the course fee (as per fee structure table) drawn in favour of "SVSU, Distance Education" payable at Meerut.
  - ii. Duly attested photocopy of Aadhar Card, statement of marks and other relevant documents/certificated pertaining to the qualifying examination, by a gazetted officer or Principal of the college from where these were obtained, should be submitted at the time of admission.
  - iii. Self attestation of document/s is permissible, if the originals are produced before the Registrar of Swami Vivekanand Subharti University or Asst. Director/Deputy Director/Director of Directorate of Distance Education.
  - iv. 4 recent passport size color photographs should be provided in which 2 photographs should be pasted on the admission form & Enrollment form accordingly and another two photographs should be attached/stapled with the form.
- c. The learners are advised to check up the eligibility criteria of a course they wish to apply for, from our website [www.subhartidde.com](http://www.subhartidde.com) or DDE Prospectus.

##### **3. Admission Procedure -**

- a. Applications can be sent to the Directorate of Distance Education directly or through its city office. The applicant's eligibility will be checked and accordingly he/she shall be granted admission and an acknowledgement of the receipt of the fee and the application form shall be issued.

- b.** An Identity Card, mentioning the enrollment number of the learner, shall be issued by University as soon as the admission is confirmed. Learners are advised to keep their Identity Card safely, as it will be required for attending counseling sessions/PCPs and also for the receipt of study material, mark sheets, Degree etc in person. In case of loss of Identity Card, a duplicate can be issued on receiving a written request along with a fee of Rs. 100/-. The Identity Card shall be valid for the entire duration of the Programme.
- c.** The University conduct entrance examination twice in a year for admission in MBA and MCA or any other programme, as may be decided by the University. Learners can obtain information relating to the entrance examination from the Directorate of Distance Education or its website [www.subhartidde.com](http://www.subhartidde.com). The University may, as an alternative, consider granting admission on the basis of the score obtained by an applicant in any central or state level entrance examination for a similar course.

**4. Minimum Eligibility and Fee Structure –**

**1. Minimum Eligibility and Fee Structure for ODL –**

Sr. No.	Title of Programme	Eligibility	Course Duration		Annual Fees Per
			Minimum	Maximum *	Year (In Rs.)
1	Master of Arts in Economics	Graduation or eq.	2 Years	5 Years	20000/-

**2. Minimum Minimum Eligibility and Fee Structure for OL –**

Sr. No.	Title of Programme	Eligibility	Course Duration		Annual Fees Per
			Minimum	Maximum *	Year (In Rs.)
1	Master of Arts in Economics	Graduation or eq.	2 Years	5 Years	30000/-



## **B. Curriculum transaction and evaluation :**

The University follows the following evaluation system:

- a. Continuous evaluation through personal contact programmes, assignment work, viva, group discussion and personality development programmes.
- b. Semester wise Examination
- c. Evaluation of practicals, wherever prescribed
- d. Evaluation of professional project report, wherever prescribed
- e. A learner shall be declared 'pass' at the end of the academic/calendar year, if he/she secures minimum 40% marks in each subject (including project report, internship, industry integrated learning and practicals, wherever prescribed) separately in the Semester wise Examination and the internal assessment. If a learner fails to secure 40% marks in any subject or in internal assessment, he/she will still be promoted to the next academic/calendar year, but he/she will have to appear in back paper for the subject in which he/she has not been able to obtain the requisite passing marks. The examination for learners giving back paper in any subject shall be held along with the subsequent examination for the relevant subject. In case, the learner fails to secure minimum 40% marks in internal assessment, he/she will have to resubmit the assignments for evaluation.

## **Requirement of the laboratory support and Library Resources :**

Resources are available of Library for the learners during PCPs. The University has a rich Central Library with more than 3.80 lac books, 181 journals (Foreign & Indian), Internet Section of 200 nodes, Computer Centres, Museum, Instrumentation (USIC) workshop, Student's Guest House, etc.

The resources for laboratory also available as per the need of the programme.

## **Cost estimate of the programme and the provisions :**

a. Cost estimate:     Approx. Rs. 14,10,786.05/-

(The cost estimate may vary depending upon the no. of students enrolled)

b. Provisions:             Swami Vivekanand Subharti University

## **Quality assurance mechanism and expected programme outcomes :**

In accordance to the UGC Guidelines, the University has established an Internal Quality Assurance Cell, as per ordinance no. VI (1), dated 11.02.2009, to instill a momentum of quality consciousness amongst its all Institutions including Directorate of Distance Education, aiming for continuous improvement.

1. The cell holds various events regularly and maintain the documentation of the various programmes/activities leading to quality improvement.

2. The cell is responsible for incorporating various new changes/developments regarding up-gradation of learning material and spreading awareness of Quality Culture in the various institutions of the University.
3. The cell also prepares 'Annual Quality Assurance Report (AQAR)' as per the laid guidelines and parameters.