MAHATMA GANDHI RURAL DEVELOPMENT

AND

PANCHAYAT RAJ UNIVERSITY, GADAG

School: Social Science and Rural Reconstruction

Programme: M.A.Economics (DE)

SYLLABUS COPY

PROGRAMME STRUCTURE

SEMESTER -I

(14-16 Weeks' Duration)

Sl. No.	Course Category	Course Code	Course Title	Teaching				Examination			
				Theory Lecture L	Practical P	Durations/ Week (in Hours)	Durations (in Hours)	Internal Marks	Theory/ Practical Marks	Total Marks	Credits
1.	DSC	DE 1.1	Advanced Microeconomics	4	-	4	52	40	60	100	4
2.	DSC	DE 1.2	Advanced Mathematics for Economics	3	2	4	52	40	60	100	4
3.	DSC	DE 1.3	Research Methodology for Economics	4		4	52	40	60	100	4
4.	DSC	DE 1.4	Public Economics	4	-	4	52	40	60	100	4
5.	SEC	SE 1.1	Life and Professional Skills-I	1	2	3	30	20	30	50	2
6.	SEC	SE 1.2	Fundamentals of Agriculture and Allied Activities	1	2	3	26	20	30	50	2
7	SEC	SE 1.3	Computer Skills and Application	1	2	2	30	20	30	50	2
	Sub-Total			**18**	**8**	**24**	**294**	**220**	**330**	**550**	**22**

DSC-Discipline Specific Core, SEC-Skill Enhancement Course, DE – Development Economics,

SEMESTER-II

(14-16 Weeks' Duration)

II SEMESTER (16-18 Weeks Duration). Rural Immersion / Rural Camps (Field Work in Rural Settings) for 3-4 weeks between I and II Semesters.

Sl. No.	Course Category	Course Code	Course Title	Teaching				Examination				
				Theory Lecture L	Tutorial T	Practical P	Durations/ Week (in Hours)	Durations (in Hours)	Internal Marks	Theory/ Practical Marks	Total Marks	Credits
1.	DSC	DE 2.1	Advanced Macroeconomics	4	-	-	4	52	40	60	100	4
2.	DSC	DE 2.2	Advanced Statistics for Economics	3	-	2	4	52	40	60	100	4
3	DSC	DE 2.3	Economics of Growth and Development	4	-	-	4	52	40	60	100	4
4	DSC	DE 2.4	Regional Economics	4	-	-	4	52	40	60	100	4
5	SEC	SE 2.1	Life and Professional Skill –II	1	-	2	3	26	20	30	50	2
6	SEC	SE 2.2	Data Analytics for Economics	1	-	2	3	26	20	30	50	2
7	SEC	DE 2.5	Rural Immersion	4 weeks					25	25	50	2
Sub-Total				**17**		**6**	**22**	**260**	**225**	**325**	**550**	**22**

SEMESTER- III

(14-16 Weeks' Duration).

Track-Specific Internship in Organizations / Institutions with Rural Focus for 3-4 weeks between II and III Semesters

Sl. No.	Course Category	Course Code	Course Title	Teaching				Examination				
				Theory Lecture	Tutorial	Practical	Durations/ Week (in Hours)	Durations (in Hours)	Internal Marks	Theory/ Practical Marks	Total Marks	Credits
				L	T	P						
1.	DSC	DE 3.1	Basic Econometrics	2	-	2	3	40	25	50	75	3
2.	DSC	DE 3.2	Gandhian Economics	3	-		3	40	25	50	75	3
3.	DSC	DE 3.3	International Trade and Finance	3	-		3	40	25	50	75	3
4	DSC	DE 3.4	Indian Economic Thought	3	-		3	40	25	50	75	3
5.	DSC	DE 3.5	Environmental Economics	3	-		3	40	25	50	75	3
6	DSC	OE 3.1	Indian Economy	3	-		3	40	25	50	75	3
7	DSC	VS 3.1	Data Mining and Processing for Economics	1	-	2	3	26	20	30	50	2
8.	SEC	SE 3.1	Internship In organizations/Institutional with rural focus	**4 weeks**					25	25	50	2
Sub-Total				**18**	**-**	**4**	**21**	**266**	**195**	**355**	**550**	**22**

SEMESTER – IV

(14-16 Weeks' Duration).

Project Work in a professional organization for 12 weeks soon after III Semester under the supervision of an Organizational Guide and/or a Faculty of the School. It will be followed by 8 weeks of course work of IV Semester &finalization of Project Report.

Sl. No.	Course Category	Course Code	Course Title	Teaching				Examination				
				Theory Lecture L	Tutorial T	Practical P	Durations/ Week (in Hours)	Durations (in Hours)	Internal Marks	Theory/ Practical Marks	Total Marks	Credits
1.	DSC	DE 4.1	Advanced Econometrics	5	-	2	6	40	25	50	75	3
2.	DSC	DE 4.2	Indian Economic Policy and Development	6	-	-	6	40	25	50	75	3
3.	DSC	DE 4.3	Behavioural Economics	6	-	-	6	40	25	50	75	3
4	DSC	DE 4.4	Rural Economics	6	-	-	6	40	25	50	75	3
4.	DSC	DE 4.5	Project work; Project report and viva-voce*	12 weeks					50	100/50	200	8
			Sub-Total	**23**	**-**	**2**	**24**	**160**	**150**	**350**	**500**	**20**

***Project report=200 marks**

Total Credits for the Programme = 22+22+22+20=86

Course Title:	ADVANCED MICRO-ECONOMICS		
Course Code:	**DE 1.1**	No. of Credits	**4**
Contact hours	**52Hours**	Duration of SEA/Exam	**$2^{1/2}$ hours**
Formative Assessment Marks	**40**	**Summative Assessment Marks**	**60**

Course Outcomes (COs): After completing the course, the student will be able to:

- ➢ To acquaint theories that help students to understand the economics of consumer and producer behaviour.
- ➢ To grasp theoretical nuances of market structure & firm behaviour and its impact on general equilibrium and welfare.
- ➢ To understand the relevance and relaxation of assumptions in Micro Economic Theory.

Course Learning Objectives (CLOs)

- ➢ Understand how utility, preferences, and income influence demand
- ➢ Apply economic reasoning with ease to individual and firm behaviour.
- ➢ Learn basic economic concepts and terms.
- ➢ Explain the operation of a market system;
- ➢ Analyse the production and cost relationships of a business firm;
- ➢ Evaluate the pricing decisions under different market structures; and
- ➢ Use basic cost-benefit calculations as a means of decision-making (i.e., thinking like an economist)

Contents		
Syllabus- Course 1: Title- Advanced Micro-economics		**52 Hrs.**
Chapter 1	**Utility, Consumer, and Production**	**16 Hours**
	Utility: Cardinal and Ordinal Utility, Marginal Utility, Utility Function –Expected Utility Theorem, Lancaster's Demand Theory–Bandwagon Effect-VeblenEffect– CobwebTheorem.	8 hrs.
	Theory of Consumer Behaviour: Indirect Utility Demand Functions – Income and Substitution Effects –Slutsky Equation–Normal Versus Inferior Goods–Types of Demand Functions–Inverse Demand Functions – Elasticity – Consumer Surplus–Revealed Preference (Weak and Strong Axioms)–Recent Developments in Demand Theory –Pragmatic Approach (CES	8 hrs.

<table>
<tr><td></td><td>Demand Function – Dynamic Demand Function).</td><td></td></tr>
<tr><td colspan="3">Practicum:
➢ Group Discussion on the substitution effect
➢ Pragmatic analysis of recent developments in demand theory
➢ Conducting a consumer survey to understand consumer tastes and preferences</td></tr>
<tr><td rowspan="2">Chapter 2:</td><td>Theory of Production and Cost</td><td>10 Hours</td></tr>
<tr><td>Production Functions – Types of Production Functions (Cobb-Douglas.) – Marginal Products –Rate of Technical Substitution– Technical Progress – Cost Functions – Average and Marginal Costs – Short Run Versus Long Run Costs –Economies of Scale and Scope – Profit Maximization – Cost Minimization.</td><td>10 hrs.</td></tr>
<tr><td colspan="3">Practicum:
➢ Group Discussion on Economies and Diseconomies of scale
➢ Project work on cost functions and cost Maximization</td></tr>
<tr><td rowspan="2">Chapter 3</td><td>Markets, General Equilibrium, and Welfare</td><td>10 Hours</td></tr>
<tr><td>Market Structures: Assumptions of Perfect Market – Competitive Markets – Demand and Supply– Demand and Supply Curves of Individual Firms – Short-Run Versus Long-Run– Competitive Market Equilibrium –– Price-Controls and Shortages–Market Failure - Imperfect Markets– Sources of Monopoly Power– Monopoly Market Equilibrium– Price Discrimination – First, Second and Third Degree– Tax Incidence– Oligopoly– Cournot Model–Stackelberg Model–Bertrand Model–Monopolistic Competition.</td><td>10 hrs.</td></tr>
<tr><td colspan="3">Practicum:
➢ Conduct a local Market Survey to identify the nature, features and structures of markets for different goods/services
➢ Understanding the price discrimination in the local market and writing an assignment</td></tr>
<tr><td rowspan="2">Chapter 4</td><td>General Equilibrium Theory</td><td>10 Hours</td></tr>
<tr><td>Perfectly Competitive Price and General Equilibrium Models–With and without Production – Edgeworth Box –Pareto Improvement and Efficiency – Walrasian Equilibrium– Money in General Equilibrium-Asymmetric Information: Moral Hazard Problem –</td><td>10 hrs.</td></tr>
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<tr><td></td><td>Adverse Selection – Principal – Agent Problem–Market for Lemons – Credit Market – Implications of Asymmetric Information – Market Signalling & screening.</td><td></td></tr>
<tr><td colspan="3">Practicum:
➢ Conducting Market Survey to identify the nature and features of markets for different goods/services and the implications of asymmetric information
➢ Identify the Asymmetric Information about the identified products through a survey
➢ Solving an equilibrium problem</td></tr>
<tr><td rowspan="2">Chapter 5</td><td>Game Theory and Bounded Rationality</td><td>06 hours</td></tr>
<tr><td>Types of Games , Prisoner's Dilemma , Sequential and Simultaneous Games – Extensive Forms and Normal Forms – Dominant Strategies and Elimination of Dominated Strategies– Nash Equilibrium.</td><td>06 hrs.</td></tr>
<tr><td colspan="3">Practicum:
➢ Conducting game theory exercises, giving an economic problem
➢ Survey to identify the dominant strategies & elimination of dominated strategies</td></tr>
</table>

Reference Books:

1. Gravelle, H and R. Rees (2004), Microeconomics, Pearson Education, 3rd Edition.
2. Henderson, M. and R.E. Quandt (1980), Microeconomic Theory: Mathematical Approach,McGraw Hill.
3. Jehle,G.A. and P.J. Reny (2000), Advanced Microeconomic Theory, Addison-WesleyLongman.
4. Koutsoyiannis, A. (2005), Modern Microeconomics, Macmillan press, London.
5. Kreps, D. M. (1998), A Course in Microeconomic Theory, Prentice Hall, India, New Delhi.
6. Pindyck, R. S. and D.L. Rubinfield (2013), Microeconomics, Prentice Hall.
7. Sen, A. (2005), Microeconomics: Theory and Application, Oxford University Press, NewDelhi.
8. Varian, H. R. (2009), Microeconomic Analysis, 3rd Edition, Viva Books.

Course Title:	ADVANCED MATHEMATICS FOR ECONOMICS		
Course Code:	**DE 1.2**	No. of Credits	**4**
Contact hours	**52Hours**	Duration of SEA/Exam	**$2^{1/2}$ hours**
Formative Assessment Marks	**40**	**Summative Assessment Marks**	**60**

Course Outcomes (COs): After successfully completing the course, the student will be able to:

- Expertise in applying mathematical techniques for the economic problems used in Masters Programme.

Course Learning Objectives (CLOs)

- To master the basic mathematics necessary for an Economic analysis

Contents		**52 Hrs.**
Syllabus- Course 2: Title- Advanced Mathematics for Economics		**52 Hrs.**
Chapter 1	**Introduction to Mathematical Economics**	**6 hours**
	Nature of Mathematical Economics and its applications in Economic Analysis - Fractions – Percentage – Powers – Roots – Fractional Powers – Logarithms– Mathematical Induction– Permutations– Combinations -Sets: Set notation, operations, finite and infinite sets, laws of set operations.	6 hrs.
Chapter 2	**Relations and Functions**	**12 hours**
	Ordered pairs, relations and functions - Meaning and types of functions- Simultaneous Equations- Vectors-vector spaces, linear dependence- Solving Simple Equations (Equality and Inequality) – Summation– Functions (Linear and Non-Linear)- Euclidean Geometry and Axiomatic Systems.	12 hrs.

Chapter 3	**Matrices**	**10 hours**
	Matrix Operations- Addition and Subtraction, Matrix Multiplication, Commutative, Associative and Distributive Laws-Transpose - Inverse Matrix - Determinants: Properties, Rank of Matrix, Minor, Co-factor - Cramer's Rule.	10 hrs
Chapter 4	**Calculus**	**16 hours**
	Limit, Continuity and Derivatives; Rules of Differentiation, Uses in Economics; Marginal Concept; Marginal Cost; Revenue; Utility; Elasticity's and Types; Partial Differentiation. Concept of Integration -Rules of Integration -Consumers Surplus- Producers surplus.	16 hrs.
Chapter 5	**Optimization Techniques**	**08 hours**
	Concept of optimization – Meaning-Unconstrained Optimization concept - Lagrange Multiplier Problems, Constrained Optimization Problems; Optimization in Simple Economic Problems.	08 hrs.
Practicum	*Application of mathematics using economic Variables*	

Pedagogy: Classroom Lecture, tutorials, Problem-solving exercise

Text Books

Chiang, A. C. and Wainwright, K., "Fundamental Methods of Mathematical Economics", McGraw-Hill/Irwin, 4th Edition, 2005.

Sydsaeter, K and Hammond, P., Mathematics for Economic Analysis, Pearson Educational Asia, 4th Edition, 2002.

References

- *Allen R.G.D., (2015) Mathematical Analysis for Economists, Macmillan.*
- *Bose D., (2003) An Introduction of Mathematical Economics, Himalaya Publishing House, Mumbai.*
- ChiangA.C.(2000), *Introduction to Mathematical Economics*, McGraw Hill, New York.
- *Dowling, E. T., "Introduction to Mathematical Economics", McGraw-Hill, 2001.*

- *Hoy, M., Livernois, J. McKenna, C, Rees, R. and Stengos, T., "Mathematics for Economics", MIT Press, 3rd Edition,2011*
- MongaG.S (1972), *Mathematical and Statistics for Economists*, Vikas Publishing House, New Delhi.
- *Sydsaeter, K and Hammond, P., Mathematics for Economic Analysis, Pearson Educational Asia, 4th Edition, 2002.*
- Veerachamy R. (2002): Quantitative Methods for Economists. New Age International Publishers, Bangalore.
- *Yamane Taro, (2002**)** Mathematics for Economists - An Implementer Analysis, Phi Learning Publishers.*

Course Title:	RESEARCH METHODOLOGY FOR ECONOMICS		
Course Code:	**DE 1.3**	No. of Credits	**4**
Contact hours	**52Hours**	Duration of SEA/Exam	**$2^{1/2}$hours**
Formative Assessment Marks	**40**	**Summative Assessment Marks**	**60**

Course Outcomes (COs): After successfully completing the course, the student will be able to:

- This course on research methodology in economics is specially designed to prepare the students for the use of research techniques and systematically approach any researchable issues.
- The course will equip the students to write a good research report on any current economic issue of their choice under the supervision of the assigned supervisor.
- The course will train them to use appropriately all the relevant concepts, research processes and the basic mechanics of research.
- The student will be ready to use the economic data and interpret taking actual examples.

Course Learning Objectives (CLOs)

- To acquaint the students with the methodology of research.
- To make their understanding clear about the resources, methods and methodology of research with appropriate examples.
- To practically train them in preparing a research proposal, use of data, analysis of the data and appropriate statistical tools.

Contents		
Syllabus- Course 3: Title- Research Methodology for Economics		**52 Hrs.**
Chapter 1	**Introduction to Research Process**	**10 hours**
	Meaning and Characteristics of Research - Planning a Research - Stages of Research - Research Problem - Theoretical Foundation - Review of Literature - Objectives – Hypotheses-Types of Research: Pure and Applied Research - Qualitative, Quantitative and Mixed (Hybrid Research) - Exploratory, Descriptive, Diagnostic, Evaluation, Action and Experimental Research - Historical Research - Surveys - Case Study - Field Study; Need and Importance of Research in	10 hrs.

	Economics - Applicability - Ethical Issues in Research.	
Practicum: ➢ Identify research problems after reading prescribed articles ➢ Survey of the identified research problem ➢ Group Discussion on Ethical Issues in Research		
Chapter 2	**Data Sources and Methods of Data Collection**	**12 hours**
	Primary and Secondary Sources of Data; Quantitative Data - Sources - Time Series Data - Cross Section Data and Pooled Data - Observation - Interview Method, Schedules and Questionnaires - Questionnaire Designing Procedure –Participatory Techniques- Case Study, Projective Methods - Simulation - Merits and Demerits.	12 hrs.
Practicum: ➢ Collecting the primary and secondary data on the prescribed topic ➢ Preparing the interview schedules and questionnaires and understand designing procedures, participatory techniques and projective methods of research		
Chapter 3	**Sampling Methods and Data Processing**	**16hours**
	Sampling Considerations: Concepts - Sample vs Census - Principles of Sampling Design & Process - Types of Sample Design: Probability Sampling Techniques: Simple Random, Stratified Random, Cluster and Multi-Stage and other Methods of Sampling. Non-Probability Sampling Techniques: Quota Sampling, Convenient Sampling, Purposive Sampling, Judgment Sampling and other Methods- Determination of Sample Size - Advantages and Disadvantages - Errors in Sampling. Data Processing: Processing and Distribution - Field Work Validation - Tabulation - Editing - Coding - Classification and Tabulation of Data - Presentation - Graphical Representation.	16 hrs.
Practicum:		

- Group Discussion on sampling- types, designs and process
- Exercise to identify the specific prescribed number through random sampling methods and write an assignment.

Chapter 4	**Data Analysis and Interpretation** (Theoretical Exposure)	**10 hours**
	Univariate and Multivariate Data Analysis - Descriptive v/s Inferential Analysis - Descriptive Analysis of Univariate Data and Bivariate Data - Testing of Hypotheses: Concepts, Steps in Testing of Hypothesis. Estimation of Mean: Test of Single Sample Mean - Two Independent Means Tests – T-Test, F Test and Z Test - Estimate of Population Variance.	10 hrs

Practicum:

- Forming and testing of hypothesis after reading the prescribed problem/issue
- Exercise to Solve and analyse the Univariate and Multivariate Data

Chapter 5	**Report Writing and Presentation of Results**	**04 hours**
	Importance of Report Writing - Types of Reports: Brief Reports, Detailed Reports, - Report Preparation - Report Structure: Preliminary Section, Main Report - Interpretations of Results - Research Findings and Suggested Recommendations - Limitations of the Study, and End Notes - Report Writing: Report Formulation.	04 hrs

Practicum:

- To write a brief report on the prescribed research problem
- Group Discussion on Interpretation of research

References

1. Black, Thomas, R. (1998), Doing Quantitative Research in Social Sciences, Sage, London.
2. Blaug M.,(1980), The Methodology of Economics: Or How Economists Explain, Cambridge University Press, Cambridge.
3. Bryman, A. (1988), Quantity and Quality in Social Research, London: Unwin Hyman.
4. Converse, J.M. and Presser, S., (1986), Survey Questions, Handcrafting the Standardised Questionnaire, Beverly Hills, CA: Sage.
5. Creswell, John W. (1998), Qualitative Inquiry and Research Design, Sage Publications, Thousand Oaks.
6. Denicolo, Pam and Lucinda Becker (2012), Developing Research Proposal, Sage South sia Edition, New Delhi.
7. Denzin, K. Norman and Yvonne S. Lincoln, (1998), Collecting and Interpreting Qualitative Materials, Sage, London.
8. Einspruch, Eric, (1998), An Introductory Guide to SPSS for Windows, Sage, London.
9. Fontana, A., and J.H. Frey. (1994), Interviewing: The Art of Science, in *Handbook of Qualitative Research,* eds. N.K. Denzin, and Y.S. Lincoln. Thousand Oaks: Sage.
10. Foster, Jeremy J., (1998), Data Analysis Using SPSS for Windows, Sage, London.

Course Title:	**PUBLIC ECONOMICS**		
Course Code:	**DE 1.4**	No. of Credits	**4**
Contact hours	**52Hours**	Duration of SEA/Exam	**$2^{1/2}$ hours**
Formative Assessment Marks	**40**	**Summative Assessment Marks**	**60**

Course Outcomes (COs): After successfully completing the course, the student will be able to:

Good acquaintance with the concepts, tools, issues and models in Public Economics.

Learn the policy challenges that the governments faces, the potential solutions and the difficulties involved.

Understand the tenets of generation of State Revenue, Taxes a, Expenditure and Budget analysis.

Course Learning Objectives (CLOs)

- To learn about the role of State & Public sector in the economic development. Understand the government interventions and its influence on growth and development.
- To enable students to acquire knowledge about the role of state in the applications of economic theory and non-market decision-making process.
- The focus on understanding the key issues relating to the government spending, taxing and financing activities and the outcomes.

Contents		
Syllabus- Course : Public Economics		**52 Hrs.**
Chapter 1	**Introduction**	**12 hours**
	Public Economics-Nature, Scope and Evolution. Role of Government in organized society; changing perspective – Government in a mixed economy. Theory of Public goods; private goods, merit goods, social goods, Club-goods; Market failure – imperfections, decreasing costs, externalities, public goods. Principle of Maximum Social Advantage, Economies of Externalities-Positive and Negative externality, Remedies for externalities.	12 hrs.
Practicum:		

➢ Group Discussion of Public Goods and Private Goods		
Chapter 2	**Public Choice and Policy**	**12hours**
	Public Choice and voting – Arrows Impossibility theorem; Public Policy for Allocation of Resource; Voluntary Exchange Model; (contributions of Samuelson and Musgrave) The Bowen-Black Majority Voting model, Pareto-Optimality; Demand Revealing schemes for Public goods; Tibeout Model, Theory of club goods; Theory of Second best.	12 hrs.
Practicum: ➢ Group Discussion of Club Goods and Tibeout model		
Chapter 3	**Public Revenue and Taxation**	**10 hours**
	Public Revenue: Sources and Classification, Taxation, Tax Elasticity, Theory of Incidence, Different concepts of Incidence, Benefits and Ability to Pay Approaches, Laffer Curve analysis, Taxation in a Federal System; Vertical and Horizontal imbalances; tax evasion and avoidance. Taxation and Dead Weight Loss, Theory of Optimal Taxation, Tradeoff between equity and efficiency; Effects of Taxation on Production and Distribution.	10 hrs
Chapter 4	**Public Expenditure**	**10 hours**
	Pure theory of Public Expenditure; Wagner's law of increasing state activities; Wiseman-Peacock hypothesis; Growth and Structure of Public Expenditure; Criteria for Public investment, Social-cost-benefit analysis-Project evaluation, Estimation of costs, discount rate; Reforms in expenditure budgeting; Programme budgeting and zero base budgeting. Impact of Government expenditure on output and employment. Interdependence of Fiscal and Monetary Policy.	10 hrs

Chapter 5	**Public Debt and its Management**	**08 hours**
	Public Debt: Concept, objective, sources-Internal and External, Reasons for growing Public Debt and its consequences, Burden of Public – Debt, Public Borrowings and Price level, Crowding out of Private Investment and Activity, Principles of Debt management and Repayment.	08 hrs

References

1.Auerbach, A. J. and Feldstein, M. (1985 & 1987). Handbook of Public Economics Vol. 1 & 2, Elsevier, Amsterdam, North Holland

2. Peacock, A. T. (1979).The Economic Analysis of Governments, and Related Themes, St Martin Press, New York

3. Aurebach, A. and Feldstein M. (2002). Handbook of Public Economics, Vol. 3, North Holland,

4. Bailey, S.J. (2004). Public Sector Economics, Macmillan

5. Boadway, R. (1984). Public Sector Economics, 2nd Sub edition, Scott Foresman& Co., London

6. Dalton, H. (1922). Principles of Public Finance. Routledge and Kegan Paul Ltd.

7. Chelliah, R.J. (1996).Towards Sustainable Growth: Essays in Fiscal and Financial Sector Reforms in India, Oxford University Press

8. Cullis J. and Jones P. (2010). Public Finance & Public Choice, 3rdEdition, Oxford Publications.

9. Hindriks, J. and Myles G.D. (2006). Intermediate Public Economics, MIT Press

10. Mundle, S (1997). Public Finance Policy Issues for India, Oxford University Press, New Delhi

11. Musgrave, R.A. and Musgrave, P.B. (1970). Public Finance in Theory and Practice, McGraw Hill,Tokyo.

12. Musgrave, R. A, Musgrave, P. B. (2004). Public Finance in Theory and Practice,McGraw Hill Education, New Delhi

Common Paper for PG Programmes Semester I

Paper Title : Life and Professional Skills I

Paper Code: SE 1.1	Credits: 2
Hours Per Week (T+P) = 1+1(2) = 3	**Total Contact Hours: 30**
Total Marks: 50	**Internal Assessment : 20 Marks**
	Semester End Examination : 30 Marks

Course Objectives :

1. To develop life skills for empowerment of self and others.
2. To enhance one's ability to be fully self aware by helping oneself to overcome all fears and insecurities and to grow fully from inside out and outside in.
3. Help students to develop leadership skills to influence and motivate others

Learning Outcomes :

1. Gain self competency and confidence
2. Gain intellectual and emotional competency
3. Be an integral human being

Module I	Life Skills	08 hours
Meaning, nature and importance of life skills; personal SWOT analysis; self management skills; World Economic Forum (WEF) recommended essential skills for the future.		
Module II	**Communication Skills**	**14 Hours**
Meaning, importance and communication process; importance of feedback; 7 C's of communication; barriers to communication; verbal communication; non-verbal communication. <u>Listening skills</u> - meaning, importance; barriers to listening and developing effective listening skills. <u>Speaking skills</u> - meaning, features and types; traits of a good speaker and developing essential speaking		

skills. <u>Reading skills</u> - meaning, techniques and essentials of effective reading. <u>Writing skills</u> - writing process, different modes of writing; effective writing strategies.		
Module III	**Leadership Skills**	**08 Hours**
Leadership – meaning, significance and basic leadership skills; leadership behaviour and styles; success and failures and learning from failures; innovation leadership.		

<u>Practicum - Assignment / Activities:</u>

1. Give the learners a set of questions. Let them find the answers to the questions by listening to the comprehension (a passage or a talk or a speech from YouTube).
2. Conduct extempore, debate and group discussions for students.
3. Encourage students to bring in videos of their talks and speeches that show how fluent they are and were all they fumble.
4. Take-up reading exercises for students on the topics of their choice.
5. Students to be given exercises on writing essays, letters, articles, reports, etc.
6. Let students do their SWOT analysis and take feedback from friends, parents and well wishers and strive towards improvement.
7. Students have to meet successful leaders and managers and interact with them and learn the essential leadership and managerial skills from them.

<u>E - Resources: UGC Jeevan Kaushal</u>

1. Fries, K. (2019). 8 Essential Qualities That Define Great Leadership. Forbes. Retrieved 2019- 02-15 from https://www.forbes.com/sites/kimberlyfries/2018/02/08/8-essentialqualities-that-define-great-leadership/#452ecc963b63.
2. How to Build Your Creative Confidence, Ted Talk by David Kelly - https://www.ted.com/talks/david_kelley_how_to_build_your_creative_confidence
3. India's Hidden Hot Beds of Invention Ted Talk by Anil Gupta - https://www.ted.com/talks/anil_gupta_india_s_hidden_hotbeds_of_invention
4. Knowledge@Wharton Interviews Former Indian President APJ Abdul Kalam. "A Leader Should Know How to Manage Failure" https://www.youtube.com/watch?v=laGZaS4sdeU
5. Martin, R. How Successful Leaders Think. Harvard Business Review, 85(6): 60.
6. NPTEL Course on Leadership - https://nptel.ac.in/courses/122105021/9
7. https://www.pdfdrive.net/life-skills-e19396496.html

8. https://www.pdfdrive.net/50-activities-for-developing-management-skills-e19495298.html

Reference Books:

1. Sen Madhucchanda (2010), An Introduction to Critical Thinking, Pearson, Delhi
2. Silvia P. J. (2007), How to Read a Lot, APA, Washington DC
3. Lesikar, Flatley, Rentz and Neerja Pandey, Basic Business Communication, Tata McGraw Hill Education Private Limited
4. Kaul, Asha, Effective Business Communication, PHI, New Delhi.
5. Urmila Rai, Business Communication, Himalaya Publications
6. Leadership and Communication Skills - Sharma, Sharmila.
7. Chanakya's Seven Secrets of Leadership – Pillai, Radha Krishnan.
8. Leadership, Theory & Practice – Northhouse Peter G.
9. Essence of Leadership – Kakabadse, Andrew.

Suggested Readings:

1. Alphonse A. (2010), "Developing the Adolescent Personality", Better Yourself Book, Mumbai.
2. Balram S., Malke, M.K. and Rangari S.K. (2008), "Development of Generic Skills",
3. Denett & Co., Nagpur. By Robert W. (2010), "Time Management, Make Every Second Count", Jaico Publication House.
4. Buch M.B. (1997), "Fourth Survey of Research in Education", NCERT, New Delhi. Fitness,
5. J. and Outfield, J. (2004), "Emotion and Communication in Families", Mahwah, N.J.:

Common Paper for PG Programmes Semester I

Paper Title: Computer Skills and Application

Paper Code:	Credits: 2
Hours Per Week (T+P) = 1+1(2) = 3	**Total Contact Hours: 30**
Total Marks: 50	**Internal Assessment: 20 Marks**
	Semester End Examination: 30 Marks

Course Objectives:

1. Select and use office productivity software appropriate to a given situation.
2. Operate a variety of advanced spreadsheet, operating system and word processing functions.
3. To Utilize web technologies

Learning Outcomes:

1. Demonstrate a basic understanding of computer hardware and software.
2. Demonstrate problem-solving skills.
3. Demonstrate basic understanding of network principles.

Module I	Introduction to Computers and its Hardware	10 hours
Understanding the computers: Introduction, Classification of Computers, Computing Concepts, The computer System, Application of computer, The Block diagram of a Computer system. **Memory and Input/Output Devices:** Introduction to Memory and Types of Storage systems, Various Input Devices and output Devices.		
Module II	**Computer Software**	**10 Hours**
Types of Computer Software, application Programs: Word Processor, Spread Sheet, Database Management System and Power Point Presentation. **Operating System:** Introduction, History of OS, Types of OS, GUI, Case Study: Basic commands of		

DOS, Windows and Unix Operating System.		
Module III	**Introduction to Networks**	**10 Hours**
Data Communication and Networks: Basic elements of Data communication, Data Communication using Modem, Types of Computer Network: LAN, WAN, MAN, Internet and Intranet, Client-Server N/W, P2P, N/W, value Added Network, Applications of network. **Internet and World Wide Web (WWW):** Internet Applications: Business, Education, Communication, Entertainment and Government. Understanding the WWW:Popular Web Browsers, Search Engine, E-mail Service, Understanding, URL, HTTP, HTML and XML.		

Practicum - Assignment / Activities:

1. Write a letter to deputy commissioner of your district giving details of category wise population, health details, educational qualification, land holding by farmers, rail and road connectivity use word and spreadsheet tools.
2. Create a marks card template using MS Excel spreadsheet.
3. Using MS Excel demonstrate he basic arithmetic operations like addition, subtraction, multiplication and division on user input.
4. Create a power point presentation in your local language regarding the initiatives taken by government of Karnataka for rural development.
5. Write a mail to secretary, RDPR, regarding the usage of local languages in RDPR website and applications.
6. Create a video on rural development
7. Create a webpage of your curriculum vitae using HTML

ReferenceBooks:

10. Fundamentals of Computers,E Balagurusamy, TMH, 7th Reprint, 2012
11. Working in Microsoft Office – Ron Mansfield - TMH.
12. MS Office 2007 in a Nutshell –Sanjay Saxena – Vikas Publishing House.
13. Excel 2020 in easy steps-Michael Price – TMH publications

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SE 1.2 Subject Title: Fundamentals of Agriculture and Allied Activities

Sub. Code:FAA 1.1	**Total Marks (I+E)=20+30 =50**
Credits:2	**Total Hours = 30**
Hours Per Week (T + P) = 0 + 2(4) = 4	

Course Objectives:

1. To provide an overall understanding of various dimensions of Indian Agriculture – past present and the future.
2. To make students to understand agriculture and allied activities as entrepreneurship/employment opportunities.

Course Outcome:

At the end of the course students are able to:

1. Practical knowledge of agriculture and allied activities and hands – on experience on practices.
2. Knowledge of working of different farm equipments/implements.
3. Understanding institutional arrangements for agriculture development

Practical	Titles of Practical	Mode of practical
Practical 1	Demonstration of Land Preparation	Lab and field
Practical 2	Nursery Activities	Lab and field
Practical 3	Introductory Animal Husbandry	Lab and field
Practical 4	Biofuel Production	Lab and field
Practical 5	Seed Treatment	Lab and field
Practical 6	Processing and Value addition of Fruits and Vegetables	Lab and field
Practical 7	Production of Organic Fertilizers and Pesticides	Lab and field
Practical 8	Processing and Value addition of Cereals and Pulses	Lab and field
Practical 9	Breeding / Feeding of Livestock	Lab and field
Practical 10	Soil Sampling and Testing	Lab and field

Reference:

1. Agrawal, A. N., Indian Agricultur e – problems, progress and prospects
2. Chinna,S.S, Agricultural Economics and Indian Agriculture.
3. Puttarudriah, M., 1983, A guide for cultivation and protection of important crops
4. JalihalK.A., and Veerabhadraiah V., 2007, Fundamentals of Extension Education and Management in Extension. Concept Publ. Co.
5. Ministry of Agriculture, Government of India. 2004. State of Indian Farmer. Vol V. Technology Generation and IPR Issues. Academic Foundation.
6. Jagadish Prasad, Principles and Practices of Dairy farm management. Kalyani

II Semester

Course Title:	ADVANCED MACRO-ECONOMICS		
Course Code:	**DE 2.1**	No. of Credits	**4**
Contact hours	**52Hours**	Duration of SEA/Exam	**2$^{1/2}$ hours**
Formative Assessment Marks	**40**	**Summative Assessment Marks**	**60**

Course Outcomes (COs): After successfully completing the course, the student will be able to:

- Use national income accounts to describe and analyse the macroeconomic issues in quantitative terms.
- Use economic models to analyse the impact of price, income, and interest rate on consumption, saving, and investment.
- Analyse fiscal and monetary policy impact on the economy.
- Understand equilibrium in real and money markets.

Course Learning Objectives (CLOs)

- To understand the macroeconomic behaviour through national income accounts
- To learn the analytical framework of macroeconomic concepts used by different schools of economic thought

Contents		
Syllabus- Course 1: Title- Advanced macro-economics		**52 Hrs.**
Chapter 1	**National Income Accounts**	**7 hours**
	Key Concepts–A Brief History of Macro-Economic Thought–National Accounts Methodology and Critique – Data sources for Macroeconomics –Gross Domestic Product –Circular Flow of Income and its Measurement: Expenditure – Income and value-Added Methods–Balance of Payments –Savings and Investment under Closed and Open Economy	7 hrs.

Practicum:

- Group Discussion on Macro Economic thought
- Calculate the National Income in all the three methods

Chapter 2	**Behavioural Foundations**	**8 hours**
	Consumption: Keynes Psychological Law– Kuznet's Consumption Puzzle —Permanent Income Hypothesis–Life Cycle Hypothesis and Relative Income Hypothesis–Neo-Classical Theory of Investment–Stock Market and Tobin's Q-Ratio–Accelerator Theory of Investment (Simple and Flexible Acceleration Models).	8 hrs.
Practicum: ➢ Conduct a survey of your batchmates on determinants of consumption and prepare a schedule in a tabular form and interpret the results in Graphical form		
Chapter 3	**Macroeconomic Theories**	**17 hours**
	Keynesian and Classical: Simple Keynesian Model and Aggregate Demand Framework – Aggregate Supply and Trade-off Between Unemployment and Inflation–Role of Government in Terms of Monetary and Fiscal Policy – Stabilization Policy –Say's Law– Price Flexibility and Full Employment – Classical Dichotomy and Neutrality of Money– Natural Rate of Unemployment– Synthesis Between Classical Models and Keynesian Models–Interpretation and Policy Analysis–Equilibrium Concept in Classical Model-Harrod Domar Model.	17 hrs.
Practicum: ➢ Group Discussion on Neutrality of Money ➢ Reviewing the monetary policy of RBI ➢ Identify the impact of inflation on your neighborhood households		
Chapter 4	**Equilibrium Analysis for Real and Money Markets**	**12 hours**
	IS-LM Model: Interaction of Real and Monetary Sectors of the Economy – Keynesian Version of the IS-LM Model – Neo – Classical version of the IS-LM Model; Fiscal and Monetary Policy Analysis IS-LM Model; I S- LM Model with Government Sector – Fiscal Policy and Crowding out – The Role and Relative Effectiveness of Fiscal and Monetary Policy.	12 hrs
Practicum: ➢ Use the IS-LM model and identify changes in market preferences altering the equilibrium levels of gross domestic product (GDP) and market interest rates.		

➢ Group Discussion on the effectiveness of Fiscal and Monetary Policy		
Chapter 5	**Inflation: Theories and Policies**	**8 hours**
	Theories of Inflation – Demand – Pull and Cost–Push Theories of Inflation – Phillips Curve - Monetarist, Keynesian and New Classical Views on Inflation and Unemployment—Monetary and Fiscal Policy Options.	8 hrs
Practicum: ➢ Assignment on Monetarist, Keynesian and New Classical Views on Inflation and Unemployment ➢ Group Discussion on theories of Inflation		

Reference Books:

1. Ahuja H.L. (2019); Macroeconomics, S. Chand Publishing Publications, 20th Edition.
2. Jhingan (2016); Macro Economic Theory, Vrinda Publications PLT, Delhi, 13th Edition.

Suggestived Readings:

1. Bhaduri, A. (1986), Macroeconomics: The Dynamics of Commodity Production, PalgraveMacmillan.
2. Blanchard,O.andFisher,S.(2013),Lectureson Macroeconomics,PHILearning.
3. Carlin,W.andSoskice, D.(2005), Macroeconomics:Imperfections, InstitutionsandPolicies,OxfordUniversity Press.
4. D'Souza,E.(2012),Macroeconomics,DorlingKindersley.
5. Dornbusch,R.,Fischer,S.,andStartz,R.(2010),Macroeconomics,TataMcGrawHill.
6. Heijdra,B.J.(2009),FoundationsofModernMacroeconomics,OxfordUniversityPress.
7. Jha,R.(1991),ContemporaryMacroeconomicTheoryandPolicy,WileyEastern.
8. Mankiw,G.N.(2012),Macroeconomics,WorthPublishers.
9. Patnaik,P.(ed.)(1995),Macroeconomics,OxfordUniversityPress.
10. Phelps,E.(1990),SevenSchoolsofMacroeconomicThought,OxfordUniversityPress, Oxford
11. Romer,D.(2012),AdvancedMacroeconomics,McGraw-Hill,FourthEdition
12. Snowdon,B.,HowardA.V.,andWynarczyk,P.(1994),AModernGuidetoMacroeconomics: AnIntroductiontoCompetingSchoolsofThought,EdwadElgarPublishers.

Course Title:	**ADVANCED STATISTICS FOR ECONOMICS**		
Course Code:	**DE 2.2**	No. of Credits	**4**
Contact hours	**52 Hours**	Duration of SEA/Exam	**$2^{1/2}$ hours**
Formative Assessment Marks	**40**	**Summative Assessment Marks**	**60**

Course Outcomes (COs): After successfully completing the course, the student will be able to:

- To expertise in adopting statistical tools for the economic analysis

Course Learning Objectives (CLOs)

- To master Statistics is necessary for a Postgraduate programme.

Contents		
Syllabus- Course 2: Title- Advanced Statistics for Economics		**52 Hrs.**
Chapter 1	**Introduction to Statistics**	**08 hours**
	Types of Data -Sources of Data; Descriptive Statistics and Inferential Statistics. Sources of Data- Primary and Secondary Data; Tabulation and Frequency Distribution.	08 hrs.
Chapter 2	**Measures of Average and Dispersion**	**12 hours**
	Measurement of Average - Arithmetic Mean, Geometric Mean, Harmonic Mean, Median, and Mode. Measures of Dispersion- Range, Quartile and Standard Deviation. Skewness and kurtosis.	12 hrs.
Chapter 3	**Correlation and Regression**	**08 hours**
	Correlation – Meaning and Types of Correlation – Measurement of Correlation. Regression-Simple Regression Model; Karl Pearson Co-relation.	08 hrs.
Chapter 4	**Probability and Distribution**	**12hours**
	Probability Theory - Concepts and Approaches to Estimate Probability - Probability Distribution Functions - Theoretical Distribution: Binomial, Poisson, Normal, t, Chi -Square & F Distribution-Theory of Estimation and Hypothesis Testing; Formulation of Hypothesis-Null and Alternative	12 hrs

	Hypothesis.	
Chapter 5	**Index Numbers and Time Series Analysis**	**12 hours**
	Nature and purpose of Index Numbers; Types of Index Numbers-Simple and Aggregate Index Numbers: Laspeyre's Index, Paasche's Index, Marshall and Edgeworth's Index-Fisher's Index-Time Reversal and Factor Reversal Tests Problems of Construction of Index Numbers and Limitation of Index Numbers; Analysis of Trend- Moving Average Method and Least-Square Method.	12 hrs
Practicum: ➢ **Graphical Presentation of Data:** Tabular and Graphical Methods - Relative Frequency and Percentage - Frequency Distribution - Bar Graphs, Line Graph, Pie Charts, Histogram, Cumulative Distribution and Ogives}		

Reading List:

- Anderson, Sweeney & Williams (2007): *Statistics for Business & Economics,* 9^{th} Edition, Thomson South-Western,Bangalore.
- Bose,D.(2018):*AnIntroductiontoMathematicalEconomics*,HimalayaPublishingHouse,Pvt.Ltd. Mumbai.
- Goon, A. M., M. K. Gupta and B. Dasgupta (1968): *Fundamentals of Statistics*, Vol.1, The World Press, Ltd,Calcutta.
- Gupta, B.N. (1992): *Statistics Theory and Practice*, SahityaBhavan,Agra.
- Gupta,S.C.(2016):*FundamentalsofStatistics*,HimalayaPublishingHouse,Bombay.
- Gupta,S.P.(2014):*StatisticalMethods*,S.Chand&Company,NewDelhi,(43^{rd}Edition)
- Gupta,S.C.andKapoor,V.K.(2016):*FundamentalsofAppliedStatistics,*SultanChand&Sons,New Delhi.
- MehtaandMadnani(2017):*MathematicsforEconomists,*SultanChandandSons,NewDelhi.
- Monga,G.S.(2015):*MathematicsandStatisticsforEconomics*,SecondRevisedEdition,Vikas PublishingHouse,Pvt.Ltd.NewDelhi.
- Nagar, A. L. and R. K. Das (1997): *Basic Statistics*, Oxford University Press, NewDelhi
- Salvatore,D.(2015):*MathematicsandStatistics*,Schaum'sSeries,TataMcGrawHill.
- Veerachamy, R. (2005): *Quantitative Methods for Economics*, New Age International

Course Title:	ECONOMIC OF GROWTH AND DEVELOPMENT		
Course Code:	**DE 2.3**	No. of Credits	**4**
Contact hours	**52 Hours**	Duration of SEA/Exam	**2 1/2 hours**
Formative Assessment Marks	**40**	**Summative Assessment Marks**	**60**

Course Outcomes (COs): After successfully completing the course, the student will be able to:

- ➢ Critical understanding of the concepts and topics in economics of development and their applications.
- ➢ Enhance the analytical power in analyzing issues in the economics of development.
- ➢ Map the influence and impact of economic development across sectors and countries.

Course Learning Objectives (CLOs)

- ➢ To familiarize the students with the Political Economy of Development and Underdevelopment
- ➢ To acquaint them with Contemporary Issues in India's development.
- ➢ To familiarize the students with the concepts, structure and current issues in the economics of development.
- ➢ To acquaint them with the theories of development, their applications, critics and the 'state of art' understanding in the field of economics of development.

Contents		
Syllabus- Course 3: Title- Economic of Growth and Development		**52Hrs.**
Chapter 1	**Economic Development: An Overview**	**8 Hours**
	Concept, Need of Development Economics - Sustainable Development - Ethics and Economic Development, Measurement of Economic Development Goals of Economic Development - Emerging Challenges in Development, Development Ethics – Inclusive Development– Concept of Human Development - Human Development Index - Human Capability Approach to Development - Development as Freedom - Development versus Displacement.	8 hrs.

Practicum:

- ➢ Identify the concepts relating to various dimensions of economic growth and development and write an assignment.

➢ Calculate the HDI of your 20 neighborhood households		
Chapter 2	**Grand Theories of Economic Growth and Development**	**12 hours**
	Classical Theory of Economic Development and its Salient Features-Adam Smith's and David Ricardo's Theories of Growth-Karl Marx: Growth and Decay of Capitalism; Theory of Social Change, Surplus Value Theory, Reserve Army and Materialistic Interpretation of History; Schumpeter's Growth Theory: Capitalistic Development, Crisis in Capitalism in innovation, Degeneration of Capitalism-Structural Analysis of Development.	12 hrs.
Practicum: ➢ Group Discussion on Classical Theory of Economic Development ➢ Visit an industry and observe the role of an entrepreneur and write a report		
Chapter 3	**Neo-Classical Growth Theories**	**12 hours**
	Stylized Factors of Neo-Classical Growth Theory; J.E. Meade's Growth Model; Harrod-Domar Model; Kaldor &Mirrlees Model; Mrs. Joan Robinson's Model; Cambridge Criticism of Neo-Classical Growth Model.	12 hrs
Practicum: ➢ Group Discussion on Neo classical growth theories. ➢ Assignment on Criticism of Neo-Classical Growth Model.		
Chapter 4	**Partial Theories of Economic Growth and Development**	**12 hours**
	Salient Features of Partial Theories; Vicious Circle of Poverty-Theory of Circular Causation; Lewis Model; Big-push and Critical Minimum Effort Thesis; Ranis and Fei Models: Balanced and Unbalanced Growth Theories; Dualistic Theories-Dixit-Marglin Models-Dependency Theory of Development; Two Sector Model of Uzawa; Endogenous Growth Models-Romar- Lucas Model.	12 hrs
Practicum: ➢ Group Discussion on the dualistic theory of economic development with reference to India ➢ Identify the big push factors in 75 years of Indian economic development		

Chapter 5	**Development: Sectoral Aspects**	**8 hours**
	Agriculture and Economic Development –Efficiency and Productivity- Sustainable Agriculture- Globalization and Agriculture –Agricultural Development Policy –Rationale of Industrialization- Critical Issues in Industry Development- Terms of Trade between Agriculture and Industry- Industry Development Policy - Infrastructure and Economic Development - Critical Issues in Infrastructure Development-Infrastructure Development Policy- Information and Communication Technology. Choice of Technology and Employment.	8 hrs
Practicum: ➢ Group discussion on the rationale of Industrialization /MSME development in India ➢ Identify the sustainable agriculture practices in your village		

Reading List:

Adelman, Irma (1961): *Theories of Economic Growth and Development*, Stanford University Press, Stanford, USA.

Branko, Milanovic (2016): *Global Inequality: A New Approach for the Age of Globalization*, Harvard University Press,Cambridge.

Higgins, Benjamin (1968): *Economic Development: Theory, Principles and History*, W. W. Norton, New York, USA.

Meier Gerald M. (2005): *Leading Issues in Economic Development*, Oxford University Press, New York,USA.

Ray, Debraj (1998): *Development Economics*, Princeton University Press, NewJersey.

Rogers, Peter P. and K. F. Jalal and J. A. Boyd (2005): Sustainable Development, The Continuing Education Division, Harvard University and Glen Educational Foundation, Harvard.

Srivastava, O. S. (1996): *Economics of Growth, Development and Planning*, Vikas Publishing House Pvt. Ltd., NewDelhi.

Thrilwal, A. P. (2006): *Growth and Development,* 6th Edition, West Press Ltd., New Delhi.

Todaro, Michael. P. (1989): *Economic Development in the Third World*, 4th Edition, Orient and Longman,London.

Course Title:	REGIONAL ECONOMICS		
Course Code:	**DE 2.4**	No. of Credits	**4**
Contact hours	**52 Hours**	Duration of SEA/Exam	**2 $^{1/2}$hours**
Formative Assessment Marks	**40**	**Summative Assessment Marks**	**60**

Course Outcomes (COs): After successfully completing the course, the student will be able to:

- Gain in-depth knowledge of regional economics

Course Learning Objectives (CLOs)

- To acquaint the students with a comprehensive understanding of the Regional imbalances in India and Karnataka
- To enable the students to understand the techniques of Regional Economics.

Contents		
Syllabus- Course 5: Title- Regional Economics		**52 Hrs.**
Chapter 1	**Introduction**	**08 hours**
	Definition and Scope of Regional Economics - Regional Economics as an Independent Field of Academic Enquiry; Region-Concept, Types of Regions, Importance of Regionalization, Approaches to Regionalization, Globalization and Regionalization and Indicators of Regional Development.	08 hrs.

Practicum:

- Group Discussion on the Importance and approaches of Regionalization

Chapter 2	**Regional Growth**	**10 hours**
	Neo-Classical Growth Models; Cumulative Causation Model; Center-Periphery Model; Growth Pole Analysis; Convergence and Divergence of Disparities in Per Capita Regional Income;	10 hrs.

	Techniques of Regional Analysis.	
Practicum: ➢ Survey economic disparities of 20 households in your village/area and write a report		
Chapter 3	**Inter-regional Differentials in India's Development**	**10 hours**
	Regional Characteristics in India and Imbalances; Agriculture; Industry; Physical Infrastructure; Social Sector; Role of Planning Commission and Finance Commission in Reducing Regional Imbalances; Liberalization and Regional Imbalances.	10 hrs
Practicum: ➢ Group Discussion on the role of the planning commission and finance commission in reducing regional imbalances		
Chapter 4	**Regional Economic Policy and Regional Planning**	**12 hours**
	Importance and Objectives of Regional Economic Policy - Formulation of Regional Economic Policy-Tools and Techniques - Implementation Mechanism and Limitations; Regional Planning - Backward Area Development Programmes - Institutional and Policy Framework for Removal of Regional Disparities - New Economic Policy and Regional Disparities.	12 hrs
Practicum: ➢ List the backwardness characteristics of your region and suggest the policy changes to over cone it ➢ Assignment on Increasing regional disparities in post new economic policy era in India		
Chapter 5	**Regional Disparities in Karnataka**	**12 hours**
	Trends in the Level of Development and State Income; Inter-District Variations in the Rate of Development and Per Capita Income;	12 hrs

	Regional Disparities in Agriculture and Irrigation Development; Regional Disparities in Industrial Development and Industrial Dispersal Policies; Incentives for Development of Industries in Backward Areas; Banking and Regional Development; Economic Infrastructure and Regional Development.	

Practicum:

- Group discussion on Regional Disparities in Karnataka
- Assignment on Disparities in Agriculture, Irrigation Development, Industrial Development in Karnataka and polices to mitigate them and way forward

Reading List

1. Beckman, M. (1969): *Location Theory*, Random House,London.Bhalla, G.S.andY. K.
2. Alagh (1989): *Performance of Indian Agriculture: A District-wise Study*, Sterling, NewDelhi.
3. Brahmananda, P.R. and V.R. Panchamukhi (Eds.)(2001): *Development Experience in the Indian Economy: Inter-State Perspectives*, Bookwell,Delhi.
4. Dadibhavi, R. V. (1986): *Income, Productivity and Industrial Structure*, Chugh Publications, Allahabad.
5. Dholakia, R.H. (1985): *Regional Disparity in Economic Growth in India*, Himalaya Publishing House, Bombay.
6. Hansen, N.M. (1974): *Public Policy and Regional Economic Development: The Experience in Nine Western Countries*, Ballinger,Massachusetts.
7. Hooverm, E.N. (1974): *An Introduction to Regional Economics*, Alfred.A.Knopf, NewYork.
8. Isard, W. (1960): *Methods of Regional Analysis*, MIT Press, Cambridge,Mass.
9. Nair, K.R.G. (1982): *Regional Experience in a Developing Economy*, Wiley; Eastern, NewDelhi.
10. Pande (1969): *Report of the Working Group on Identification of Backward Areas*, GOI, PlanningCommission.
11. Rao, H. (1984): *Regional Disparities and Development in India*, Ashish Publishing House, NewDelhi.
12. Richardson (1973): *Elements of Regional Economics*, MacMillanLondon.
13. Richardson, H.N. (1969): *Regional Economics*, Weidenfield& Nicolson,London.

Course Title:	**DATA ANALYTICS FOR ECONOMICS**		
Course Code:	**SE 2.2**	No. of Credits	**2**
Contact hours	**26 Hours**	Duration of SEA/Exam	**2hours**
Formative Assessment Marks	**20**	**Summative Assessment Marks**	**30**

Course Outcomes (COs): After successfully completing the course, the student will be able to:

- ➢ Well versed in data analytics for Economics

Course Learning Objectives (CLOs): -

- ➢ To acquaint with preparing the questionnaires
- ➢ To acquaint with data Analysis and Interpretation
- ➢ To acquaint with the basics of Advanced Data Analysis Techniques
- ➢ To acquaint with report writing and presentation of results

Contents		
Syllabus- Course 8: Title- Data Analytics for Economics		**26 Hrs.**
Chapter 1	**Introduction**	**3 hours**
	Introduction to the different software/Apps for Data Analytics for Economics, Significance, Importance, Usages and Limitations (Theory)	
Chapter 2	**Questionnaires** Preparing questionnaires Introduction to KOBO, conducting survey, uploading data in Android Phone or TAB, Collection of Data, Exporting data from KOBO to Excel or SPSS (Practical)	3 hrs.
Chapter 3	**Data Analysis and Interpretation**	**3 hours**
	Introduction: Excel and SPSS/ E-VIEWS/ STATA Data analysis through packages (Practical)	
Chapter 4	**Introduction to Advanced Data Analysis Techniques**	**3 hours**
	Regression Meaning and Importance of Regression- Regression Equation-	

	Estimation of regression equation – Application of Regression equation in Economics	
Chapter 5	**Practical** Applying regression to live data	5 hrs
Chapter 6	**Data Visualization**	**3 hours**
	QGIS Introduction (Theory) Introduction and Installation of QGis Software, uploading of shape file and toposheets to QGis, Merging and joining of different files to QGis, Thematic Map Preparation, (Practical)	
Chapter 7	**Report Writing and Presentation of Results**	**5 hours**
	Types of Reports Importance and Types of Reports Need and Guidelines- Presenting Tabular Data, Tables, Graphs, Charts – Presenting Footnotes and Bibliography; Method of Citation and Referencing. (Theory with Practical)	

References

Scott Madry Ph.D.(2021). Introduction to QGIS Open Source Geographic Information System

Sujoy Kumar Tarafder (2021). Learning GIS with QGIS Software. A Complete Practical Based Book with Theoretical Explanation Volume 1, A.S.Publication.

Bhattacharyya, G. K., and R. A. Johnson, (1997). Statistical Concepts and Methods, John Wiley and Sons, New York.

Dixon, W. J. and Massey, F.J. (1969). Introduction to Statistical Analysis, McGraw-Hill, New York.

Draper, N. and Smith, H., (1981). Applied Regression Analysis, John Wiley & Sons, New York.

Montgomery, D. C. (1991). Design and Analysis of Experiments, John Wiley & Sons, New York.

Mosteller, Frederick and Tukey, John (1977), Data Analysis and Regression, Addison-Wesley

Common Paper for PG Programmes Semester II :

SE 2.1: Life and Professional Skills - II

Paper Code: SE 2.1	**Credits: 2**
Internal Assessment = 20 Marks	**Semester End Examination = 30 Marks**
Hours Per Week (T+P) = 1 + 1 (2) = 3	**Total Marks (I+E) = 20 + 30 = 50**

Course Objectives:

3. Enable learners to understand the concepts of personality development.
4. Enable learners to build an efficient career.
5. Enable learners to understand work-place organization.

Course Outcome:

At the end of the course students are able to:

4. Developing an efficient personality that leads to success.
5. Enhancing career prospects by developing efficient career skills.
6. Plan and organize "work" in the future workplaces.

Module I	Personality Development	**10 hours**
Concept and significance of personality; techniques in personality development; empathy; interpersonal relationships; networking and building relationships; sharing experiences; soft skills.		
Module II	Career Skills	**10 Hours**
Goal setting and effective planning for achieving goals; presentation skills; group discussions; personal branding; public speaking; resume, bio-data, C.V. and letter writing; facing interviews.		
Module III	Organizing Skills	**10 Hours**
Organizing the workplace; 5s for workplace organization; developing expertise at work; meeting, agenda and minutes writing; E-communication; managing stress and conflicts; work ethics; entrepreneurial skills.		

Practicum (Assignment / Activities):

1. Refer e-resources, ted talks, you-tube videos of famous personalities and discuss in class.
2. Sharing good and not-so-good experiences by students in class.
3. Oral and power-point presentations by students on famous personalities.
4. Group discussions on interesting common topics by students.
5. Resume, Bio-data, C.V. and letter writing exercises for students.
6. Conducting mock interviews in class for the students by faculty.

7. Visiting organizations, shops, garages, etc., and observing their work-place set-ups and discussing / presenting them in class.
8. Draft an agenda for a student's meeting, let students conduct the meeting and inform them to draft the meeting minutes and circulate them to all.
9. Practical exercises on E-communication.
10. Meet entrepreneurs and business people and analyse their personalities; learn their entrepreneurial skills and discuss their success stories in class.

SEMESTER- III

Course Title: BASIC ECONOMETRICS			
Course Code:	**DE 3.1**	No. of Credits	**3**
Contact hours	**40 Hours**	Duration of SEA/Exam	**2 hours**
Formative Assessment Marks	**25**	**Summative Assessment Marks**	**50**

Course Outcomes (COs): After completing the course, the student will be able to:

- Learn basic econometric techniques and their applications to economics.
- Understand how to postulate and test hypotheses related to economic issues or problems.

Course Learning Objectives (CLOs)

To prepare foundations for understanding advanced econometric analysis.

To combine theory with hands-on experience in econometric modeling.

Contents		
Syllabus- Course 1: Title- Basic Econometrics		**40Hrs.**
Chapter-1	Introduction to Econometrics	**6**
	Statistical and Deterministic Relationships–Understanding Regression– Correlation and Causation – Modelling strategies and methods of constructing a model.	
Practicum: Group Discussion on the econometric approaches or methods of Statistical and Deterministic Relationship Understanding Regression		
Chapter 2:	**Simple and Multiple Regression Models**	**22**
	Simple Regression Model: Specification–OLS Method–Assumptions of CLRM(Classical Linear Regression Model) – BLUE –Gauss Markov Theorem–Hypothesis Testing and Goodness of Fit –Regression and Correlation	10
	Multiple Regression Analysis: Estimation– Partial Regression Coefficients– Multiple Coefficients of Determination– Normality Assumption – Testing Individual Regression Coefficients– Testing Overall Significance	12
Practicum: Assignment on least-square estimates and their properties and group discussion on OLS model and its applications		

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<tr><td colspan="3"></td></tr>
<tr><td rowspan="2">Chapter 3</td><td>Relaxation of the Assumptions of Classical Linear Regression Model</td><td>12 hours</td></tr>
<tr><td>Nature, Consequences, Detection and Remedial Measures – Multicollinearity, heteroscdesticity, Autocorrelation, General Criteria for Model Selection–Types of Specification Errors and Testing Model Specification–Errors of Measurement</td><td></td></tr>
<tr><td colspan="3">Practicum:
➢ Develop a model using general criteria for model selection</td></tr>
</table>

Reference Books

1. Greene, W. (2008),Econometrics Analysis– Pearson.
2. Gujarati, D. (2009),Basic Econometrics–McgrawHill.
3. Hatekar, Niraj(2011), Principles of Econometrics through R, Sage.
4. Johnston, J. and John Dinardo (1997), Econometric Methods–Mcgraw-Hill.
5. Koutsoyannis,A.(2006), Theory of Econometrics–Ane Books.
6. Maddala, G.S.(1992), Introduction to Econometrics– Macmillan.
7. Nachane,D. M. (2006), Econometrics: Theoretical Foundations and Empirical Perspectives,Oxford University Press.
8. Pindyck,R.S. and Daniel L. Rubinfeld(1998), Econometric Methods and Economic Forecast–McgrawHill.
9. Wooldridge, J. M.(2003), Introductory Econometrics: A Modern Approach– Thomson South Western.

Course Title: GANDHIAN ECONOMICS			
Course Code:	**DE 3.2**	No. of Credits	**3**
Contact hours	**40 Hours**	Duration of SEA/Exam	**2 hours**
Formative Assessment Marks	**25**	**Summative Assessment Marks**	**50**

Course Outcomes (COs): After completing the course, the student will be able to:

The outcomes should equip students with a deep appreciation of Gandhian economics, enabling them to critically evaluate economic systems and policies in light of its principles and encouraging them to consider how these principles can be applied to address contemporary economic and societal challenges.

Course Learning Objectives (CLOs)

- Understanding Gandhian Philosophy
- Relevance in Modern Context
- Promoting Swadeshi
- Sustainability and Environmental

Contents		
Syllabus- Course 1: Title- Gandhian Economics		**40Hrs.**
Chapter-1	Introduction to Gandhian Economics	**12 Hrs**
	Understanding Mahatma Gandhi's life and philosophy, Relevance of Gandhian economics in the modern world.	5 Hrs
	Swadeshi and Self-Sufficiency- Gandhian concept of Swadeshi and its implications, Self-sufficiency as an economic goal.	7 Hrs

Practicum:

- Assignmnet on Key Principles of Gandhi’s life and how they influenced his economic philosophy.
- Debating the pros and cons of Swadeshi in the modern era.

Chapter 2:	Village Industries and Rural Development	**15 Hrs**
	Promotion of cottage and village industries- Role of rural development in Gandhian economics- Trusteeship and Wealth Distribution- Gandhian principle of trusteeship- Wealth distribution and social justice in Gandhian thought.	15hrs

<table>
<tr><td colspan="3">Practicum:
Organize field visits to rural areas or villages where cottage and village industries are prevalent. Students can interact with local artisans and entrepreneurs, observe their work, and understand the challenges and opportunities they face.
Organize a wealth distribution simulation exercise where students take on different roles representing various income levels. They can experience firsthand the challenges and ethical considerations related to wealth distribution</td></tr>
<tr><td rowspan="2">Chapter 3</td><td>Decentralization planning and Environmental Sustainability</td><td>13 Hours</td></tr>
<tr><td>Importance of decentralized planning and governance-Panchayat Raj system and local self-governance-Gandhian emphasis on sustainable living- Environmental ethics in Gandhian economics</td><td></td></tr>
<tr><td colspan="3">Practicum:
Assign students to analyze government policies related to decentralization and local self-governance. They can assess the extent to which these policies align with Gandhian principles and make recommendations for improvement.
Assign students research projects to explore eco-friendly technologies and practices. They can investigate the feasibility of implementing these solutions in specific communities or businesses.</td></tr>
</table>

Course Title: INTERNATIONAL TRADE AND FINANCE			
Course Code:	**DE 3.3**	No. of Credits	**3**
Contact hours	**40 Hours**	Duration of SEA/Exam	**2 hours**
Formative Assessment Marks	**25**	**Summative Assessment Marks**	**50**

Course Outcomes (COs): After completing the course, the student will be able to:

- Critical understanding of the concepts and topics in International Economics as well as their applications.
- Enhance the analytical power in analysing issues related to International Economics.
- Get a full understanding of the gains of trade, terms of trade and free trade.

Course Learning Objectives (CLOs)

- To familiarize the students with the concepts, structure in International Economics
- To equip the students the importance and role of international trade in economic development.
- To lean different models and theories pertaining to international trade.

Contents		
Syllabus- Course 1: Title- International Trade and Finance		**40Hrs.**
Chapter-1	International Trade and Trade Theories	**12 Hrs**
	Introduction to International Economics & Trade: Inter-regional and International Theories of International Trade: Absolute cost Advantage, comparative cost	5 Hrs
	Advantage- Heckscher - Ohlin, Theory of Trade – Factor Price Equalization Theorem – New Trade Theories	7 Hrs
Practicum: Assignment on Heckscher - Ohlin, Theory of Trade – Factor Price Equalization Theorem		
Chapter 2:	International Trade and Exchange Rate	**15 Hrs**
	Meaning and measurement of Gains from Trade, Terms of Trade; Trade as a Engine of economic Growth; Free Trade: Meaning, Argument far and Against; Protective Trade: Meaning, Argument far and Against; -Trade Restrictions; Tariffs – Partial Equilibrium Analysis of a Tariff- Fixed and flexible Exchange Rate.; Theories of Exchange Rate: Purchasing power parity Theory, Balance of payment Theory. Exchange Rate policy of India.	15hrs

Practicum:

Debate on Trade as an engine of economic growth and Protective trade

Chapter 3	**Economic Integration and International Institution**	**13 Hours**
	Customs Unions and Free Trade: Introduction – Trade Creating Customs Union – Trade Diverting Customs Union – Static & Dynamic Benefits from Customs Union – History of Economic Integration – The European Economic Community – The European Free Trade Association – NAFTA – Attempts of Developing Countries towards Economic Integration – SAARC- WTO-GATT-GATS.	
Practicum: Group Discussion: Effectiveness of IMF and IBRD in developing countries Seminar: Agreements of WTO or current issues of WTO		

Readings:

- Kindiberger, C. P. (1973), International Economics, Homewood.
- Rana &Verma (2010), International Economics, Vishal Publication, Delhi.
- Jhingan M. L. (2010), International Economics, Vrinda Publishers, new Delhi.
- Mithani D. M. International economics, Himalaya Publishing House, Mumbai.
- Charles Van Marrewijk (2007), *International Economics: Theory, Application and Policy,* OUP.
- Elsevier Science B.V., (1997), *Handbook of International Economics*, Vol. 3, Amsterdam.
- Ethier W., (1997), *Modern International Economics*, 3rd edition. W.W. Norton & Co.
- Kenan, P.B. (1994), *The International Economy*, Cambridge University Press, London.
- Kindlberger, C.P. (1973), *International Economics*, R.D. Irwin, Homewood.
- Krugman P., Obstfeld M. (2003), *International Economics: Theory and Policy*, Addison Wesley.
- Mannur H.G (2003), *International Economics*, Vikas Publishing House Pvt. Ltd, New Delhi
- Mithani D.M (2003), *International Economics*, Himalaya Publishing House, Mumbai
- Salvatore, Dominick (2005), *International Economics*, John Wiley & Sons, Inc
- Sodersten, Bo (1991), *International Economics*, Macmillan Press Ltd., London.

Course Title: INDIAN ECONOMIC THOUGHT			
Course Code:	**DE 3.4**	No. of Credits	**3**
Contact hours	**40 Hours**	Duration of SEA/Exam	**2 hours**
Formative Assessment Marks	**25**	**Summative Assessment Marks**	**50**

Course Outcomes (COs): After completing the course, the student will be able to:

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Course Learning Objectives (CLOs)

The evolution of economic ideas in each instance was as much a response to immediate economic problems and policy issues as much as it was a self-conscious attempt to refine earlier analysis by correcting mistakes and filling in the gaps in analysis. This paper, tracing the history of economic thought, would enable the student to understand how contemporary economics came to be what it is.

Contents		
Syllabus- Course 1: Indian Economic Thought		**40Hrs.**
Chapter-1	**Classical School of Thought**	**12 Hrs**
	Adam Smith: division of labour, theory of value, capital accumulation, canon of taxation, economic progress. David Ricardo: value, theory of rent, distribution, ideas on economic development and international trade.	7 Hrs
	Karl Marx: dynamics of social change. Economic ideas of J.B. Say, J.S. Mill.	5 Hrs
Practicum: Assignment on David Ricardo: value, theory of rent, distribution and Karl Marx: dynamics of social change		
Chapter 2:	Nobel Laureates in Economics	**15 Hrs**
	Nobel laureates: Gunnar Myrdal -Theory of under development and development, Simon Kuznets; James Meade, Arthur Lewis - a brief analysis of their contributions.	15hrs
Practicum: Seminar on a brief analysis of contributions of Gunnar Myrdal, Simon Kuznets; James Meade, Arthur Lewis for Economic Development		

<table>
<tr><td rowspan="2">Chapter 3</td><td>Indian Economic Thought</td><td>13 Hours</td></tr>
<tr><td>Early economic ideas: Kautilya, Basava Philosophy. Modern economic ideas: Naoroji and Ranade. Economic ideas of Gandhi: Village, Swadeshi, place of machine and labour, cottage industries, trusteeship; Early approaches to planning (the national planning committee). Nehru; Dr. B.R. Ambedkar’s Economic idea’s, M S Swaminathan, Amartya Sen.</td><td></td></tr>
<tr><td colspan="3">Practicum:Comparative Group Discussionon Early economic ideas, Modern economic ideas, Economic ideas of Gandhi and Dr. B.R. Ambedkar’s Economic idea</td></tr>
</table>

References

- Bell John Fred (1963), *History of Economic Thought*, the Ronald Press Company, New York
- Bhatia, H.L (1980), *History of Economic Thought*, Vikas publishing house Pvt. Ltd. India.
- Blackhouse, R. (1985), *A History of Modern Economic Analysis*, Basil Blackwell, Oxford.
- Blaug, M. (1997), *Economic Theory in Retrospect: A History of Economic Thought from Adam Smith to J.M. Keynes*, (5th edition), Cambridge University Press, Cambridge.
- Brue Stanley L (2000), *The Evolution of Economic Thought*, the Dryden press, Fort Worth, USA
- Dasgupta, A.K. (1985), *Epochs of Economic Theory*, Oxford University Press, New Delhi.
- Ganguli, B.N. (1977), *Indian Economic Though: A 19th Century Perspective*, Tata McGraw Hill, New Delhi.
- Grey, A. and A.E. Thomson (1980), *The Development of Economic Doctrine*, Longman Group, London.
- Roll, E. (1973), *A History of Economic Thought*, Faber, London.
- Schumpeter, J.A. (1954), *History of Economic Analysis*, Oxford University Press, New York.
- Seshadri, G.B. (1997), *Economic Doctrines*, B.R. Publishing Corporation, Delhi.

Course Title: ENVIRONMENTAL ECONOMICS			
Course Code:	**DE 3.5**	No. of Credits	**3**
Contact hours	**40 Hours**	Duration of SEA/Exam	**2 hours**
Formative Assessment Marks	**25**	**Summative Assessment Marks**	**50**

Course Outcomes (COs): After completing the course, the student will be able to:

- Students will be trained to analyse the key contemporary issues in environmental economics and get equipped with the tools and methodologies applied in the analyses of environmental problems and policies.

Course Learning Objectives (CLOs)

- To revisit the tenets in welfare economics, national income accounting, macroeconomic policies and trade & development from environmental perspective.
- To develop expertise and skills in applying economic methods to environmental issues.
- To understand and appreciate the relationship between environment and economic development

Contents		
Syllabus- Course 1: Environmental Economics		**40Hrs.**
Chapter-1	Concepts and Issues in Environmental Economics	**12 Hrs**
	Introduction to Environmental and Ecological Economics – Historical Perspectives (classical, neo-classical and modern) –Nature and Scope of Environmental Economics –The Environment and Economics Interactions – Genesis of Environmental Problems – Market Failures,– Environment Versus Development – Resource Scarcity and Material Balance Principle– Thermodynamics – Entropy – and Moral Hazard – Concept of Transaction Costs& Economic Repercussions.	7 Hrs
	Moral Hazard – Concept of Transaction Costs& Economic Repercussions – Property Rights – Open Access Resources – Collective Action – Environment and Development Trade-off.	5 Hrs

Practicum:

Making charts relating to SDGs or Assignments on environment- economy linkages at the local level

Chapter 2:	Economic Values and Valuation & Common Property Resources:	**15 Hrs**
	Valuation –Theories and Tools –Ecosystem Services and Values –Use Value & Non–use Value – NPV–Direct – Indirect – Option – Existence Value – Services – Provisioning – Regulating – Habitat – Cultural & Amenity Services – Economic Valuation– Need for Valuation – Theory of Market & Non-market Valuation –Methods of Valuation – Total Economic Valuation Framework.	15hrs
Practicum: Identifying Economic Values; Project on Ecosystem Services and Values (esp. water) at the College level; Discussion on Economic Valuation Framework.		
Chapter 3	Biophysical Limit to Economic Growth &Theory of Sustainable Development	**13 Hours**
	Limit to growth: (Neo) Malthusian perspective – Ehrlich – Neo classical perspective – resource scarcity – Empirical evidence – before 1970s and after 1970s-Growth&environment – Environmental Kuznet's curve – Ecological economics perspectives-Defining Sustainable Development – Different Approaches to Sustainability – Measurement of Sustainability – Rules of Sustainable Development and Indicators – The Hartwick–Solow Approach – \ Weak & Strong Sustainability.	
Practicum: Assignment on Limits to Growth and Different Approaches to Sustainability		

Reference Books:

1. Baumol, W. J. and W. E. Oates (1988), *The Theory of Environmental Policy*, Second edition,Cambridge University Press, Cambridge, 299 pp
2. Bromely, D.W. (1995), Handbook of Environmental Economics, (Ed.), Blackwell, London
3. Common, M. (1988), *Environmental and Resource Economics: An Introduction*, Longman Group UK Limited, London, 319 pp
4. Dasgupta, P.S. and K.G. Maler (1997), Environment and Emerging Development Issues, (Ed.), Cambridge University Press, Cambridge
5. Hanley, N., J. Shogren, and B. White (1997), *Environmental Economics in Theory andPractice*, Macmillan Press, 464 PP
6. Kolstad, C.D. (2003), Environmental Economics, Oxford University Press, New Delhi
7. Markandya, A. and J. Richardson (1992), The Earth Scan Reader in Environmental Economics, (Eds.), Earth Scan, London
8. Mitchell, R. C., and R. T. Carson (1989), Using Survey to Value Public Goods: The Contingent Valuation Method, Resource for the Future

9. Ostrom, E. (1990), Governing the Commons: The Evaluation of Institutions for Collective Actions, Cambridge University Press, Cambridge.

Course Title: Indian Economy			
Course Code:	**OE 3.1**	No. of Credits	**3**
Contact hours	**40 Hours**	Duration of SEA/Exam	**2 hours**
Formative Assessment Marks	**25**	**Summative Assessment Marks**	**50**

Course Outcomes (COs): After completing the course, the student will be able to:

- Build the critical understanding of India's economic development.
- Attempt to enhance understanding about the sectoral development future of the Indian economy
- Enhance analytical power of the students in understanding the conceptual and measurement issues in poverty and unemployment

Course Learning Objectives (CLOs)

- To enable students to capture essential details of changes in the Indian Economy & Its characteristics
- To make the student aware about various poverty alleviation and employment generation programmes and their critical appraisal.
- To apprise students on the changing sectoral composition of the Indian economy
- To familiarize with the external sector issues of India

Contents		
Syllabus- Course 1: Indian Economy		**40Hrs.**
Chapter-1	**Introduction to Indian Economy**	**12 Hrs**
	Basic Indian economy on the eve of India's independence – Historical trends in Indian economy -Recent transformation and performance of the economy since 1991.	5 Hrs
	National Income-Concept, methods of calculation and its problems, trends of national income in India. Approaches to economic development- PQLI, HDI, HPI and MPI, GDI, sustainable development, Green GDP, World Happiness Index the Human Capital Index.	7 Hrs
Practicum: Assignment on Characteristics and importance of Indian Economy Solve a problem on National Income using different methods of calculation		
Chapter 2:	Poverty and Unemployment in India	**15 Hrs**
	Poverty –definitions, causes, measurement of poverty, status of poverty, poverty eradication programmes, livelihood mission. Unemployment – definition, Nature and estimates of	15hrs

	Unemployment in India, causes of unemployment, Major Government Policy/Programmes for removing Unemployment.	
Practicum: Debate on Problems of Rising Unemployment Assignment on Causes and consequences of Poverty in India		
Chapter 3	External Sector	**13Hrs**
	Trade, balance of payments and exchange: Foreign trade of India; composition and direction shifts in trade policy from import substitution to export promotion. Impact of liberalization on pattern of trade-India's external Borrowings-the Debt problem; Exchange rate of the rupee; Devaluations, depreciations and their effects on balance of Payments.	13 Hrs
Practicum: Prepare India‟s Balance of Payment statement using recent Economic Survey		

Reference Books- :

Amartya Sen (1995), India, Economic Development and Social Opportunity, University Press, Delhi.
Dhingra I.C. (2009), Indian Economy, Sultan Chand &sons Educational Publishers, New Delhi.
Dhingra I.C. (2005), The Indian Economy, Environment and Policy, Sultan Chand Publication 19th Edition.
Gupta K.L, Harvider, Kaur (2005), New Indian Economy and Reforms, Deep & Deep Publication Pvt. Ltd.
Iswar C, Dhingra (1981), Indian Economy Resource Planning, Development and problems, Sultan Chand Publication, 1st Edition.
Jegadish Gandhi P. and Ganesan P. (2007) Services sector in the Indian Economy, Deep and Deep publication, New Delhi
Kewal, Khanna, Parmala Khanna (2001), Indian Economy Towards Globalization, Raj Publishing House, 1st Edition.
Misra S.K., Puri (2020), Indian Economy, Himalaya Publishing House.
Uma Kapila., Indian Economy Since Independence: A Comprehensive and Critical Analysis of India's Economy, 1947-2018 Paperback – Import, 30 Jan 2019.
Ahluwalia, I.J. and I.M.D. Little (Eds.) (1999), Indian's Economic Reforms and Development (Essays in Honour of Manmohan Singh), Oxford University Press, New Delhi.
Bardhan, P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi.

Course Title: DATA MINING AND PROCESSING FOR ECONOMICS			
Course Code:	**VS 3.1**	No. of Credits	**2**
Contact hours	**26 Hours**	Duration of SEA/Exam	**1Hrs 30 Minutes**
Formative Assessment Marks	**20**	**Summative Assessment Marks**	**30**

Course Outcomes (COs): After completing the course, the student will be able to:

- Understand the availability of data on different socio-economic indicators at state, districts, taluk and village levels
- Extract unit level data of NSSO and NFHS
- Generate different tables at disaggregated levels.
- Construct different indices
- Write a meaningful research reports

Course Learning Objectives (CLOs)

- To get knowledge of availability of data on different socio-economic indicators at different disaggregated levels.
- To calculate different ratio and rates at disaggregated levels such and literacy rate, sex ratio, work participation rate and so on (state, district, taluk and village levels)
- To construct different socio-economic indices
- To write research reports

Contents		
Syllabus- Course 1: Data Mining and Processing for Economics		**26Hrs.**
Chapter-1	**Data mining and working with Large scale Secondary sources of Data**	**9Hrs.**
	Introduction to Data Mining in Economics RBI, CSO, MGNREGA Census Karnataka at Glance, District at Glance	

Practicum:

- Students have to collect the data on state-wise public revenue and public expenditure on different heads of budget for last ten years (RBI website)
- Students have to collect GDP, GSDP, Saving and investment data for different states (RBI and CSO websites)
- Students have to collect data on selected state-wise, district-wise different indicators of employment guarantee scheme (NREGA website)
- Students have to calculate selected taluk and village-wise literacy rate, work participate Rate, Sex Ratio, Dependency of Agriculture, % of SC and ST Population and so on (Census Website)
- Students have to Calculate different household assists for different states, districts and taluks (Census Website)
- Students have to collect data on different socio-economic indicators like health, education, sanitation, transportation, infrastructure, industry and so on for the districts and taluks of Karnataka (Karnataka at Glance, District at Glance)

Chapter 2	**Extraction and Processing of unit level data of NSSO and NFHS**	**8Hrs**
	➢ Introduction to National Sample Survey Organization (NSSO) ❖ Different Rounds of NSSO Data ❖ Extraction of NSSO unit level data ❖ Processing of NSSO unit level data ➢ Introduction to National Family Health Survey (NFHS) ❖ Different Rounds of NFHS Data ❖ Extraction of NFHS unit level data ❖ Processing of NFHS unit level data	
Practicum: ❖ Students have to Collect data on different rounds of NSSO Reports ❖ Students have to Extract unit level data of NSSO ❖ Students have to Calculate different tables on socio-economic indicators for state and districts from NSSO ❖ Students have to Collect data on different rounds of NFHS Reports ❖ Students have to Extract unit level data of NFHS ❖ To Calculate different tables on socio-economic indicators for state and districts from NFHS		
Chapter 3	**Construction Indices and Report Writing**	**9Hrs**
	Importance of Construction Different Indices Construction of Composite Indices: Relatively Index, Weighted Index Introduction to Artificial Intelligence (AI) AI for Social Science Research Report Writing techniques	
Practicum: Students have to Construct state-wise Human Development Index using UNDP methodology Students have to Construct Education and Health Infrastructure Indices for the districts of Karnataka using relativity index method Students have to Prepare a Review of Literature using AI for their selected research topics Students have to Write a Report based on the above chapter for their research topics		

Reference Books- :

1. Jiawei Han & Micheline Kamber, "Data Mining Concepts & Techniques", 2011, 3rd Edition.
2. Freedman, D., Pisani, R., &Purves, R. (2007). Statistics. W.W. Norton & Company, Inc., 4th Edition.
3. Stock, J. H., & Watson, M. W. (2019). Introduction to Econometrics. Pearson 4th Edition.
4. RBI: https://rbi.org.in/Scripts/Statistics.aspx
5. Census: https://censusindia.gov.in/census.website/
6. CSO: https://www.mospi.gov.in/central-statistical-office-cso
7. MGNERGA: https://nrega.nic.in/MGNREGA_new/Nrega_home.aspx
8. NSSO: https://mospi.gov.in/NSSOa
9. NFHS: https://rchiips.org/NFHS/factsheet_NFHS-4.shtml

10. Karnataka at Glance https://kgis.ksrsac.in/

SEMESTER- IV

Course Title: **ADVANCED ECONOMETRICS**			
Course Code:	**DE 4.1**	No. of Credits	**3**
Contact hours	**40 Hours**	Duration of SEA/Exam	**2 hours**
Formative Assessment Marks	**25**	**Summative Assessment Marks**	**50**

Course Outcomes (COs): After completing the course, the student will be able to:

Students will get an understanding of advanced treatment of econometric principles for conducting empirical research using data and be able to implement these techniques using the econometric software package.

Course Learning Objectives (CLOs)

This course is a continuation of Foundations in Econometrics. This course is both method and application oriented. It deals with methods relating to both single equation and simultaneous equations system. Examples from Economics are used and methods required for those specific applications are emphasized. The student is expected to be thorough with calculus, matrix algebra, statistics and basic econometrics. It would be advantageous if the student is familiar with the usage of computer in general and a regression package (SPSS or Eviews or Start) in particular as the course will emphasize the application of econometrics through econometric software package.

Contents		
Syllabus- Course 1: Advanced Econometrics		**40Hrs.**
Chapter-1	**Nonlinear and Qualitative Response Regression Models**	**12 Hrs**
	Nonlinear Regression Models, Estimation of Nonlinear Regression Models;	5 Hrs
	Qualitative Response Regression Models- Nature of the models, Linear Probability Models (LPM), Application of LPM, The Logit Model, Estimation of Logit Model, The Tobit model –illustration of the Tobit model . ***Test for Correlation*: Kolmograv Smirnov Test – Kruskal Wallis Test of One Way ANOVA - Mann Whitney U Test–Sign, Multivariate Analysis of Variance (MANOVA) – Analysis of Covariance (MANCOVA). Method of Maximum Likelihood and its Properties –Wald Test– Lagrange Multiplier– Likelihood Ratio.	7 Hrs

Practicum:Assignment on Application of LPM, The Logit Model, Estimation of Logit Model, The Tobit model –illustration of the Tobit model .

<table>
<tr><td rowspan="2">Chapter 2:</td><td>Dynamic Econometric Models (15 classes)</td><td>15 Hrs</td></tr>
<tr><td>The role of lag in Economics, Reasons for lags, Distributed Lag Models (DLM), Estimation o of DLM ,Koyck's approach to DLM , Adaptive Expectations Model, Partial Adjustment Models.</td><td>15hrs</td></tr>
<tr><td colspan="3">Practicum:

Debate on The role of lag in Economics, Reasons for lags, Distributed Lag Models (DLM), Estimation o of DLM</td></tr>
<tr><td rowspan="2">Chapter 3</td><td>Simultaneous Equation Models</td><td>13 Hrs</td></tr>
<tr><td>Meaning and nature of simultaneous Equation Models, Identification Problem- Meaning and Definition, Rules for Identification- Order condition and Rank Condition; Test for Simultaneity – Hausman Specification Test; Test for Exogeneity; Simultaneous Equation Methods – Indirect Least Squares Method, Two-Stage Least Squares Method, Three-Stage Least Squares Method, Full Information Maximum Likelihood Method.</td><td>13 Hrs</td></tr>
<tr><td colspan="3">Practicum: Solving problems on different types of Simultaneous Equation Models</td></tr>
</table>

Reading List

1. Johnston, J. : Econometric Methods.
2. Gujarati, D.N. : Basic Econometrics,
3. Gujarati, D.N. : Econometrics by Examples.
4. Maddala, G.S. : Introduction to Econometrics,
5. Cramer, J.S. : Empirical Econometrics
6. Krishna, K.L. (ed): Econometric applications in India
7. Wallis, K.F. : Topics in Applied Econometrics
8. Deaton, A.S. and J. Muellbauer : Economics and Consumer behaviour
9. Deaton, A.S. : The Analysis of Household Survey - A micro-econometric approach to development policy
10. Iyengar, N.S. and Bhattacharya: A Survey of Research in Economics, Vol. 7
11. Pollak, R.A. and T.J. Wales: Demand System Specification and Estimation.

Course Title: INDIAN ECONOMIC POLICY AND DEVELOPMENT			
Course Code:	**DE 4.2**	No. of Credits	**3**
Contact hours	**40 Hours**	Duration of SEA/Exam	**2 hours**
Formative Assessment Marks	**25**	**Summative Assessment Marks**	**50**

Course Outcomes (COs): After completing the course, the student will be able to:

- Critical understanding of Economic Policy, development process and policy interventions in the context of Economic development.
- Acquaint the students with current development issues and critical appraisal of the policies.

Course Learning Objectives (CLOs)

- To know the foundations of the discipline of Indian Economic Policy and Development.
- To understand the foundations of development process and policy interventions in the context of Economic development.
- Understand the concept of Economic Development and Growth Policy.
- Tounderstand aboutstrategic Indian Planning and Agriculture and Industrial Sectors of The Economy

Contents		
Syllabus- Course 1: Indian Economic Policy and Development		**40Hrs.**
Chapter-1	Economic Development and Growth Policies	**12 Hrs**
	Economic Development & Social Opportunity - Development, Freedom and Opportunity on education & health, the government, the state & the market; Human Development - Essential Components of Human development.	5 Hrs
	Indexing Human Development in India - indicators, scaling and composition; Recasting Planning in terms of Human Development	7 Hrs
Practicum: Group Discussion on Economic Development & Social Opportunity and Indexing Human Development in India		
Chapter 2:	Agriculture and Industrial Sectors of the Indian economy	**15 Hrs**
	Agriculture Growth and Industrial Performance in Indian - salient features of industrial and agriculture growth, links between agriculture and industry - production linkages, demand linkages, savings & investment linkages; Planning for Agriculture - 21st Century perspective, Indian agriculture - emerging perspectives and policy issues; Land System and its reforms in India - land reforms progress in post independent India. Impact of Structural Reorganization, emerging perspectives & Policy Issues; Critical appraisal of Food Security Policy.	15hrs

Practicum: Assignment on Agriculture Growth and Industrial Performance in India - salient features of industrial and agriculture growth, links between agriculture and industry		
Chapter 3	Indian Planning	**13 Hrs**
	Objectives & strategy of Planning in India; Regional Planning Policy in India - regional imbalances in India and policy measures to remove regional imbalances, critical review of Regional Planning in India; Economic Growth and Social Attainment - the role of Development Strategy; Gender Responsive Budgeting and Gender Equity; Federal Finances - responsibilities and resources, division of functions, resource raising powers.	13 Hrs
Practicum:Debate on Regional Planning Policy in India - regional imbalances in India and policy measures to remove regional imbalances, critical review of Regional Planning in India		

Reading List 1.
Bardhan, Pranab (1994) : The Political Economy of Development in India; Oxford University Press, New Delhi
2. C.T. Kurian (1978) : Poverty Planning and Social Transformation - An Alternative in Development Planning Allied Publishers, New Delhi
3. V. M. Dandekar : The Indian Economy 1947-97; transforming traditional Agriculture Vol. I'
4. Bimal Jalan : Indian Economic Crisis : The Way Ahead; Oxford University Press, New Delhi 1992
5. India's Economic Policy Preparing for the 21st Century : Penguin. New Delhi, 1996.
6. A. P. 'Thirwall' Growth and Development, 6th Edition Macmillan Press Ltd., 1999.
7. Vijay Joshi : IMD Little; India's Economy Reforms; Oxford University Press. New Delhi, 1991-2001.
8. Usha Kapila Indian Economy Since Independence; Vol. I, II & III, Academic Foundation. New Delhi.
9. Recent Developments in Indian Economy, Part 3 & 4 Academic Foundation. New Delhi. 1994 & 95.

Course Title: **Behavioural Economics**			
Course Code:	**DE 4.3**	No. of Credits	**3**
Contact hours	**40 Hours**	**Duration of SEA/Exam**	**2 hours**
Formative Assessment Marks	**25**	**Summative Assessment Marks**	**50**

Course Outcomes (COs): After completing the course, the student will be able to:

- Familiarise with the discipline of behavioural economics
- Familiarise with the foundations of behavioural Micro and MacroEconomics
- Toappreciate the role of strategic interaction and behavioural game theory

Course Learning Objectives (CLOs)

- To know the foundations of the discipline behavioural economics
- To understand the foundations of behavioural Micro and Macro Economics
- Understandthe concept of preference, risk etc.
- Tounderstand aboutstrategic interaction& behavioural game theory

Contents		
Syllabus- Course 1: Behavioral Economics		**40Hrs.**
Chapter-1	Introduction to Behavioral Economics	**08 Hrs**
	Behavioral economics: Meaning, definitions - History and evolution- relation with other disciplines- objectives, and scope- themes and methodology of behavioral economics (theory, evidence, consilience) – application.	

Practicum:

Assignment on economics various aspects of behavioral economics

Group Discussion on Behavioral Economics

Chapter 2:	Foundation of Behavioral Micro and Macro Economics	**16Hrs**
	Micro Economics: Values, preferences and choice- beliefs- heuristic and biases- state-dependent preferences (such as habit formation and addiction)- misprediction and projection bias-anticipation and information avoidance-decision making under risk and uncertainty.	

	Macro Economics: Neo-Keynesian Rational Expectation model- the role of rational expectation in the business cycle and labour market equilibrium- the role of monetary policy and the determination of asset prices- Animal Spirits and economic decisions	16 hrs
Practicum: Form the different student groups and give them tasks to form decision-makingin a given situation under given risk and uncertainty. Assignment on Animal Spirits and economic decisions with case studies		
Chapter 3	Strategic interaction	**16 Hrs**
	Behavioural game theory (nature, equilibrium, mixed strategies, bargaining, iterated games, signalling, learning)- application. Modelling of social preferences –nature and factors affecting social preferences-distributional social preferences based on altruism, inequality aversion models-reciprocity models, evidence and policy implications.	16 Hrs
Practicum:Group the students and give a problem play a behavioral game theory Seminar on Strategic interaction & behavioural games		

References

Wilkinson and Klaes(2016)An introduction to behavioral economics, Palgrave McMillan

Michelle Beddeley(2019) Behavioural Economics and Finance, Rutledge,

J.L. Buxter(2016) Behavioural foundations of economics , McMillan Press,

Ayala and A. Palacio-Vera (2014) "The Rational Expectations Hypothesis: An assessment from Popper's Philosophy", http://www.levyinstitute.org/pubs/wp_786.pdf

Course Title: RURAL ECONOMICS			
Course Code:	**DE 4.4**	No. of Credits	**3**
Contact hours	**40 Hours**	Duration of SEA/Exam	**2 hours**
Formative Assessment Marks	**25**	**Summative Assessment Marks**	**50**

Course Outcomes (COs): After completing the course, the student will be able to:

- Critical understanding of the rural society, development process and policy interventions in the context of Political Economy of development.
- Acquaint the students with current development issues and critical appraisal of the policies.

Course Learning Objectives (CLOs)

- To familiarize the students with Rural Society, its Structure and the process of development and underdevelopment
- To acquaint them with Historical and Contemporary Issues in development policy for rural India.

Contents		
Syllabus- Course 1: Rural Economics		**40Hrs.**
Chapter-1	**Basic Understanding of Rural Economy**	**12 Hrs**
	Understanding of rural Economy, Importance of Agriculture in economic Development of India, Rural Economic problems of India; History of rural development in India.CDP Programme.	5 Hrs
	Strategies of rural development- Growth oriented strategy-welfare strategy responsive strategy- holistic strategy -capacity building and empowerment strategies-participatory strategy- assets based development strategy - technology enabled rural development.	7 Hrs

Practicum:

Assignment on Characteristics and importance of Rural Economy
Survey to know the characteristics of rural economy in the neighbourhood

Chapter 2:	**Dynamics of Rural Change**	**15 Hrs**
	Rural Society-its Structure and Change; Village and Village Structure Village and its Social Organization-Indian Village and its types, Rural-Urban Continuum and Rural-Urban relationships, Rural social Institutions-family, Property, caste, Class, Agarian structure, indebtedness and Poverty, -Post Modernization and Globalization and Indian Villages. Gandhian way towards Village Development; Village Republic; Inclusive Village Development, Gandhian View of Decentralization.	15hrs
Practicum: Undertake evaluation study on rural development programmes and problems and prepare an assignment. Field visit to nearby village and study the employment opportunities and present situation		
Chapter 3	**Agrarian Change and Rural Society**	**13 Hrs**
	Structure of Backward Agricultural Society, Nature of land Problems-Evolution of Policy-Land Reforms, Agricultural Holdings, Fragmentation and Sub-division of Holdings, cooperative Farming-Rural Labour Problems-Nature of Rural Unemployment- Employment and Wage Policy-Sources of Technological change and Green Revolution, Analysis of Stagnation, mode of production and land tenure, Economic inequality and rural poverty – measurement, nature and dimensions, Status of Employment, Income and Consumption in Rural India.	13 Hrs
Practicum: Debate on Agrarian Change and Rural Society		

Reading list:

1. Sundaram, Satya,I.: Rural Development, Himalaya Publishing
2. Desai Vasant.: Rural Development- Programmes and Strategies, Himalaya Publishing House, Mumbai
3. Mukundan, N.: Rural Development and Poverty Eradication in India, New Century, New Delhi
4. Soni, R.N.: Leading Issues in Agriculture Economics,Vishal Publishing Company
5. Reddy,Venkata.K.: Agriculture and Rural Development (A Gandhian Perspective), Himalaya Publishing House
6. Mukundan,N.-Rural Development and Poverty eradication in India.
7. Katar Singh -Rural Development –Principles, Policies and Management.
8. Reddy, Venkata (1998), Rural Development in India, Poverty and Development, Ist Ed.
9. Ram K. Parma (1996) Policy Approach to Rural Development, Print well, Jaipur.
10. George H. Axinn and nancy W. Axinn (1997) Collaboration in International Rural Development, Sage Publication, New Delhi.