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COURSE STRUCTURE

B. A. ECONOMICS

Under

Choice-Based Credit System (CBCS)

Credits Distributions as per UGC Guidelines

Sr. No.	Category	Minimum Credit Requirement	
		3 Year UG	4 Year UG
1	Major (Core)	60	80
2	Minor Stream	24	32
3	Multidisciplinary	09	09
4	Ability Enhancement Courses (AEC)	08	08
5	Skill Enhancement Courses (SEC)	09	09
6	Value Added Courses (VAC)	06-08	06-08
7	Summer Internship	02-04	02-04
8	Research/Project Dissertation	-	12
Total		**120**	**160**

B.A. Economics (H) Credits Distribution

Semester	Major	Minor	Multidisciplinary	AEC	SEC	VAC	Total
I	8	4	3	2	3	2	**22**
II	8	4	3	2	3	2	**22**
III	12	4	3	2	-	2	**23**
IV	16	4	-	2	-	2	**24**
V	16	4	-	-	3	2	**25**
VI	16	4	-	-	-	2	**22**
Total	**76**	**24**	**9**	**8**	**9**	**12**	**138**

First Semester

S. NO.	CODE	SUBJECT	TEACHING SCHEME L	T	P	CREDITS	CONTACTS HRS/WK
1.	BAEC 2001	Principles of Microeconomics	4	0	0	4	4
2.	BAEC 3002	Indian Economy	4	0	0	4	4
3.		Minor-01	4	0	0	4	4
4.		Multidisciplinary-01	3	0	0	3	3
5.		Ability Enhancement Course-01	2	0	0	2	2
6.		Skill Enhancement Course-01	3	0	0	3	3
7.		Value Added Course-01	2	0	0	2	2
Total						**22**	**22**

Second Semester

S. NO.	CODE	SUBJECT	TEACHING SCHEME L	T	P	CREDITS	CONTACTS HRS/WK
1.	BAEC 2003	Principles of Macroeconomics	4	0	0	4	4
2.	BAEC 2004	Mathematics for Economics-I	2	0	0	2	2
3.	BAEC 2005	Statistics for Economics-I	2	0	0	2	2
		Minor-02	4	0	0	4	4
		Multidisciplinary-02	3	0	0	3	3
		Ability Enhancement Course-02	2	0	0	2	2
		Skill Enhancement Course-02	3	0	0	3	3
		Value Added Course-02	2	0	0	2	2
Total						**22**	**22**

Third Semester

S. NO.	CODE	SUBJECT	TEACHING SCHEME L	T	P	CREDITS	CONTACTS HRS/WK
1.	BAEC 2024	History of Economic Thoughts	4	0	0	4	4
2.	BAEC 2007	Intermediate Microeconomics-I	2	0	0	2	2
3.	BAEC 2008	Intermediate Macroeconomics-I	2	0	0	2	2

4.	BAEC 2009	Mathematics for Economics-II	2	0	0	2	2
5	BAEC 2010	Statistics for Economics-II	2	0	0	2	2
		Minor-03	4	0	0	4	4
		Multidisciplinary-03	3	0	0	3	3
		Ability Enhancement Course-03	2	0	0	2	2
		Value Added Course-03	2	0	0	2	2
Total						**23**	**23**

Fourth Semester

S. NO.	CODE	SUBJECT	TEACHING SCHEME			CREDITS	CONTACTS HRS/WK
			L	T	P		
1.	BAEC 2011	Money and Banking	4	0	0	4	4
2.	BAEC 2012	Public Economics	4	0	0	4	4
3.	BAEC 2013	Intermediate Microeconomics-II	2	0	0	2	2
4.	BAEC 2014	Intermediate Macroeconomics-II	2	0	0	2	2
5.	BAEC 2015	Agricultural Economics	4	0	0	4	4
		Minor-04	4	0	0	4	4
		Ability Enhancement Course-04	2	0	0	2	2
		Value Added Course-04	2	0	0	2	2
Total						**24**	**24**

Fifth Semester

S. NO.	CODE	SUBJECT	TEACHING SCHEME			CREDITS	CONTACTS HRS/WK
			L	T	P		
1.	BAEC 2016	Economic Growth and Development	4	0	0	4	4
2.	BAEC 2017	International Economics	4	0	0	4	4
3.	BAEC 2018	Econometrics	4	0	0	4	4
4.	BAEJ 0001	Summer Project	0	0	4	4	4
		Minor-05	4	0	0	4	4
		Skill Enhancement Course-03	3	0	0	3	3
		Value Added Course-05	2	0	0	2	2
Total						**25**	**25**

B.A. Economics/ Economics (Hons with Research)

Sixth Semester

S. NO.	CODE	SUBJECT	TEACHING SCHEME			CREDITS	CONTACTS HRS/WK
			L	T	P		
1.	BAEC 2020	Regional Economics with reference to Uttar Pradesh	4	0	0	4	4
2.	BAEC 2021	Environmental Economics	4	0	0	4	4
3.	BAEC 2022	Data Analysis	4	0	0	4	4
4.		Dissertation	0	0	4	4	4
		Minor-06	4	0	0	4	4
		Value Added Course-06	2	0	0	2	2
Total						**22**	**22**

CORE COURSES

S. NO.	CODE	SUBJECT	TEACHING SCHEME L	T	P	CREDITS	CONTACTS HRS/WK	PRE-REQUISITES
1.	BAEC 2001	Principles of Microeconomics	4	0	0	4	4	
2.	BAEC 3002	Indian Economy	4	0	0	4	4	
3.	BAEC 2003	Principles of Macroeconomics	4	0	0	4	4	
4.	BAEC 2004	Mathematics for Economics-I	2	0	0	2	2	
5.	BAEC 2005	Statistics for Economics-I	2	0	0	2	2	
6.	BAEC 2024	History of Economic Thoughts	4	0	0	4	4	
7.	BAEC 2007	Intermediate Microeconomics-I	2	0	0	2	2	
8.	BAEC 2008	Intermediate Macroeconomics-I	2	0	0	2	2	
9.	BAEC 2009	Mathematics for Economics-II	2	0	0	2	2	
10.	BAEC 2010	Statistics for Economics-II	2	0	0	2	2	
11.	BAEC 2011	Money and Banking	4	0	0	4	4	
12.	BAEC 2012	Public Economics	4	0	0	4	4	
13.	BAEC 2013	Intermediate Microeconomics-II	2	0	0	2	2	
14.	BAEC 2014	Intermediate Macroeconomics-II	2	0	0	2	2	
15.	BAEC 2015	Agricultural Economics	4	0	0	4	4	
16.	BAEC 2016	Economic Growth and Development	4	0	0	4	4	
17.	BAEC 2017	International Economics	4	0	0	4	4	
18.	BAEC 2018	Econometrics	4	0	0	4	4	
19.	BAEJ 0001	Summer Project	0	0	4	4	4	
20.	BAEC 2020	Regional Economics with reference to Uttar Pradesh	4	0	0	4	4	
21.	BAEC 2021	Environmental Economics	4	0	0	4	4	
22.	BAEC 2022	Data Analysis	4	0	0	4	4	
23.		Dissertation	0	0	4	4	8	
PRACTICAL						**08**	**16**	
THEORY						**68**	**68**	
TOTAL						**76**	**84**	

ELECTIVE COURSES (Offered to another Department)

S. NO.	SUBJECT	TEACHING SCHEME L	T	P	CREDITS	CONTACTS HRS/WK	PRE-REQUISITES
1.	Basics of Microeconomics	4	0	0	4	4	
2.	Basics of Macroeconomics	4	0	0	4	4	
3.	Indian Economy	4	0	0	4	4	
4.	Contemporary Economic Issues	4	0	0	4	4	
PRACTICAL						**0**	
THEORY						**16**	
TOTAL						**16**	

MULTIDISCIPLINARY COURSES

S. NO.	CODE	SUBJECT	TEACHING SCHEME L	T	P	CREDITS	CONTACTS HRS/WK	PRE-REQUISITES
1.	BAIO0007	Economics for Engineers	3	0	0	3	3	
2.	BAIO0001	Indian Economy with Contemporary Issues	3	0	0	3	3	
3.	BAIO0002	Elementary Econometrics	3	0	0	3	3	
4.	BAIO0003	Entrepreneurship Development	3	0	0	3	3	
5.	BAIO0006	Economic Thoughts of Indian Thinkers	3	0	0	3	3	
PRACTICAL						0		
THEORY						15		
TOTAL						15		

SKILL ENHANCEMENT COURSES

S. NO.	CODE	SUBJECT	TEACHING SCHEME L	T	P	CREDITS	CONTACTS HRS/WK	PRE-REQUISITES
1.	BAIO0004	Economic Survey Techniques and Report Writing	3	0	0	3	3	
2.	BAIO0005	International Business Economics	3	0	0	3	3	
PRACTICAL						**0**		
THEORY						**6**		
TOTAL						**6**		

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DETAILED SYLLABUS

SEMESTER - I

BAEC 2001: Principles of Microeconomics
Course Type: Core Course (CC)

Course Objectives:

- To impart the knowledge of basic concepts of microeconomics such as laws of demand and supply, theories of consumer's behavior and producer's behavior.

CREDITS: 04 **SEMESTER I** **L–T–P: 4-0-0**

Module	Unit	Content		Teaching Hours
I	I	Introduction to microeconomics: Basic concepts and core Economic Agents Natural Monopolies. Principles of individual decision making and principles of economic interactions, interdependence, production possibilities frontier, absolute and comparative advantage. The Concepts of Markets, goods and factor markets, free and controlled markets. Market and non-market sectors, public and private sectors, economies- free market, command and mixed.		5
	II	Concept of utility: Utility and choice, Cardinal to Ordinal Approach, Total Utility and Marginal Utility, diminishing marginal utility, assumptions on preference ordering, indifference curve, marginal rate of substitution and convexity of IC, budget constraint, consumers 'equilibrium-interior and corner, income and substitution effects. Price consumption curve, Income consumption curve and Engel curve. Price effect - Income and Substitution effect (Hicks and Slutsky), inferior goods and Giffen goods, Marshallian and compensated demand curves. Derivation of Demand Curves from ICs, composite good convention.; Application: Cash subsidy versus subsidy in kind. Theory of Revealed Preference.		10
	III	Production and Costs**:** Production: behaviour of profit maximizing firms, production process, production functions, law of variable proportions, returns to factor and returns to scale, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition. Costs: costs in the short run, costs in the long run, revenue and profit maximizations, minimizing losses, short run competitive equilibrium of the firm, short run supply curve of firm and industry, Output choice and competitive equilibrium in long run, Economic rent and profit,		10
II	IV	long-run industry supply- constant, increasing and decreasing cost. short run industry supply curve, economies and diseconomies of scale, long run adjustments. Types of production functions- Cobb-Douglas, fixed-coefficient and CES functions Cost structure- implicit cost, explicit cost, accounting cost, sunk cost, economic cost, fixed cost, variable cost, total, average and marginal cost. Determinants of short run cost, cost curves, cost minimization and expansion path, short versus long run cost curves, economies of scale.		5
	V			10

		Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium. Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus.		
	VI	Importance of Elasticity in Choice-Decisions. Method of Calculation-Arc Elasticity, Point Elasticity-definition. Demand and supply Elasticities-types of elasticity and factors affecting elasticity, Demand Elasticity and Revenue, Long run and Short run elasticities of Demand and Supply Income and Cross Price Elasticity.		15

Text/Readings:

1.Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson.
2. Ahuja ,H.L : Advanced Economic Theory", S.Chand & Company.

References

1. Hal. R Varian , Intermediate Microeconomics, A modern Approach, WW Norton and Company, 8 th edition, 2010 (T)
2. Ferguson, C. E. and Gould, J.P., Microeconomic Theory, Aitbs Publishers and Distributors, NewDelhi.
3. Lipsey, R. and Chrystal, A., 2007, Economics, OUP
4. Stonier and Hague: A text book of Economic theory
5. Koutsoyiannis, A: Modern Microeconomics", Macmillan.

Course Outcome:

CO1- The students are familiarized with the basic concepts of Economics and microeconomics
CO2- learns and understands the concepts of Scarcity and Production
CO3- Learn the application and theory of Production possibility curve and absolute advantage and comparative advantage.
CO4- learn about demand, supply and elasticity.
CO5-learn theory of cost, production and utility

BAEC 3002: Indian Economy
Course Type: Core Course (CC)

Course Objectives

The course aims to provide students with a comprehensive understanding of the structure, evolution, and functioning of the Indian economy. It equips learners with analytical insights into key sectors—agriculture, industry, and services—and examines the dynamics of growth, development, poverty, and inequality. The course further explores the fiscal framework of India, including public finance, tax policies, budgeting process, and intergovernmental fiscal relations. By integrating policy analysis with current economic trends, the course prepares students to critically assess India's economic strategies, reforms, and developmental challenges in a post-liberalization context.

CREDITS: 04 **SEMESTER I** **L–T–P: 4-0-0**

Module	Unit	Content	Lecture

I	I	**Structural Features and Development Strategy of the Indian Economy**
		• Overview and characteristics of the Indian economy
		• Structural composition: Primary, Secondary, and Tertiary sectors
		• Science & Technology policy
		• Pattern of Growth and Development
		• Population trends and demographic transition in India
		• Issues of inequality and poverty
		• Evolution of economic planning in India
		  ○ Five-Year Plans: Objectives and achievements
		  ○ Shift from Planning Commission to NITI Aayog
			10

	II	**Indian Agriculture – Policies and Performance** • Role of agriculture in the Indian economy • Agricultural Policies Pre 1991 & Post 1991 • Agricultural Development and employment	8
	III	**Indian Industry – Structure, Policy and Performance** • Industrial policy in India: Pre-1991 and post-1991 reforms • Industrial production trends and sectoral performance • Role and challenges of the Public Sector • Disinvestment and privatisation policy • MSME sector: growth, contribution, and challenges • Regional disparities in industrial development	7
	IV	**Services Sector and Trade in India** • Contribution of services to GDP and employment: Growth and structure of the services sector • Development of the Financial sector, IT, tourism, health, and education sectors. • Trends in services trade and FDI • Investment policies related to the services sector	5
	V	**Public Finance in India – Concepts and Fiscal Trends** • Objectives and role of fiscal policy in India • Government expenditure: capital vs revenue; plan vs non-plan	8

		• Government receipts: capital and revenue; tax and non-tax revenue • Tax structure in India: direct and indirect taxes • Public Debt & Borrowings, Public Expenditure • Types of deficits: fiscal, revenue, and primary • Impact of fiscal deficits on the economy	
	VI	**Union Budget and Contemporary Fiscal Practices** • Union Budget: objectives, structure, and preparation process • Actual, revised, and budget estimates • Zero-base budgeting and gender budgeting • Fiscal federalism and centre-state financial relations • Analysis of fiscal and revenue deficits • Sources of revenue: trends, growth, and reforms (GST, tax net expansion) • Expenditure trends: sectoral analysis, thrust areas, and spending efficiency • Role of the Economic Survey • Analysis of recent budgets and policy focus areas	8

Text Books

1. A.N. Agarwal/MK Agarwal- Indian Economy
2. Manoj Kumar Agarwal- Uttar Pradesh ka Arthik Vikas
3. Rudra Dutt and KPM Sundaram- Indian Economy
4. Misra and Puri- Indian Economy

References

Given the nature of the course, the readings will be updated every year.

1. Centre for Budget and Governance Accountability. Recent reports.
2. Chakraborty, P. (2015). Intergovernmental fiscal transfers in India: Emerging trends and realities. In P. Patnaik (ed.): Macroeconomics. Oxford University Press.
3. Dasgupta, D., De, S. (2012). Fiscal deficit. In The new Oxford companion to economics in India. Oxford University Press.
4. Kapila, U. (2016). Fiscal and budgetary developments in Indian economy since independence. Academic Foundation.
5. Ministry of Finance. Economic and social classification of the budget.

Course Outcomes:

- **CO1:** Students will be able to analyze the structural features of the Indian economy and interpret the implications of demographic trends, rural-urban disparities, and poverty on economic development.
- **CO2:** Students will be able to evaluate the performance of the agricultural sector, including the impact of policies, credit systems, and land reforms, in both pre- and post-liberalization periods.
- **CO3:** Students will develop the ability to assess industrial policy developments, production trends, and the role of MSMEs and the public sector in India's industrial growth.
- **CO4:** Students will be able to examine the expansion of the service sector and analyze the trends in service trade and investment policies contributing to India's economic transformation.
- **CO5:** Students will gain a conceptual understanding of fiscal policy, taxation structure, government receipts and expenditures, and analyze the impact of deficits on the economy.
- **CO6:** Students will be able to critically analyze the Union Budget, the budget-making process, and contemporary fiscal practices, including gender budgeting, fiscal devolution, and trends in revenue and expenditure.

SEMESTER - II

B.A. Economics/ Economics (Hons with Research)

BAEC 2003: Principles of Macroeconomics
Course Type: Core Course (CC)

Course Objectives:

This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variables like savings, investment, GDP, money and inflation.

Credits: 04 **SEMESTER II** **L–T–P : 4-0-0**

Module	Unit	Content	Lecture
I	I	Understanding Macroeconomics Macro vs. Microeconomics, Macroeconomic issues, Limitations of Macroeconomics; Introduction to National Income. National Income and Economic Welfare; Green Accounting.	4
	II	National Income Accounting: The circular flow of Income and expenditure in two, three, and four-sector economy. Concepts of GDP, GNP, NDP and NNP at market price and factor cost; Nominal and Real income; Concepts of Corporate Income, Corporate Savings, Personal Income, Personal Disposable Income and Personal Savings. Limitations of the GDP concept.	12
	III	Measurement of National Income- Income, expenditure, product or Value-added Methods and related aggregates; The problem of double counting.	10
II	IV	Evolution of Schools of Macro Economic Thoughts, Basic Ideas of Classical Macroeconomics; Say 's Law and Quantity Theory of Money, Loanable fund theory	12
	V	The Classical Theory of Income and Employment determination; full Employment and wage-price flexibility; Classical Dichotomy and Neutrality of Money.	10

Texts

1.Branson, W.A (1989): Macroeconomics Theory and Policy, Harper & Row.
2. Ahuja,H.L (2012) : Macroeconomics: Theory and Policy , S. Chand &Company, New Delhi.
3. Ahuja,H.L (2012) : Samasti Arthshastra , S. Chand &Company, New Delhi. Lal,S.N (2012) : SamastibhaviVisleshan , Shiva Publishing House,Allahabad.

References

1. Ackley.G (1976): Macroeconomics: Theory and Policy, Macmillan, New York.
2. D.L (1969): Advanced Macroeconomics, McGraw Hill, New York.
3. Dornbusch, Rudiger&startz, Richard (2012): Macroeconomics, Tata McGraw Hill Education.
4. Dwivedi,D.N (2010) : Macroeconomics: Theory and Policy , Tata McGraw Hill Education.
5. Gupta, R.D.&Rana,A.S (2009) : Keynes post-Keynesian Economics , Kalyani Publishers, New Delhi &Ludhiana.
6. Hansen,A.H (1953) : A Guide To Keynes, McGraw Hill.
7. Jhingan, M.L (2010): Macroeconomics, Vrinda Publications, New Delhi.
8. Jhingan, M.L (2012) :SamastiArthshastra , Vrinda Publications, New Delhi
9.. N. Gregory Mankiw. Principles of Macroeconomics, Indian Imprint of South Western by Cengage India, 6th edition, 2015.
10. Ghosh Chandana and Ghosh Ambar, Indian Economy: A Macro-theoretic Analysis, PHI

Learning Pvt Ltd, 2016.
11. Shapiro, Edward (2005): Macroeconomic Analysis, Galgotia Publications, New Delhi.
12. Sikdar, Saumyen (2011): Principles of Macroeconomics, Oxford University Press, New Delhi.

Course Outcomes:

CO1: Students will be having the conceptual understanding of Macroeconomics and they will be able to differentiate between Microeconomics and Macroeconomics.
CO2: Students will be able to understand the concept of National Income, National Income Accounting and various macroeconomic Indicators.
CO3: Students will understand the various methods of measuring National Income and the problem of double accounting.
CO4: Students will understand the evolution of the school of the macroeconomic thoughts and basic understanding of classical theory.
CO5: Students will understand the conceptual understanding of Classical theory of Income and Employment determination.

BAEC 2004: Mathematics for Economics-I
Course Type: Core Course (CC)

Course Objective:

Preliminary mathematical knowledge is essential for studying theoretical courses in economics at the UG and higher-level studies and also for logical analysis of real-world economic situations. The basic objective of this course is to equip the students with the fundamental knowledge about the preliminaries of sets, functions, geometry, algebra, matrix algebra etc.

Credits: 02 **Semester II** **L–T–P : 2-0-0**

Module	Unit	Content	Lecture
I	1	Preliminaries of Sets and set operations. functions and their properties; number systems. Convex sets; geometric properties of functions: convex functions, their characterizations, properties and applications; further geometric properties of functions: quasi-convex functions, quasi-concave functions, their characterizations, properties and applications.	10
	2	Functions of one real variable: Continuous functions of different types and their graphs- quadratic, polynomial, power, exponential, and logarithmic; Basic Trigonometry—ratios, height and distance, angle laws; Basic Coordinate geometry—coordinates, graphs, straight line, circle and simple non-linear curves.	6
II	**3**	Algebra: Recapitulation of preliminaries of Algebra; Arithmetic and Geometric Progression, Logarithm, Surds and Indices, Equation: Linear, Quadratic and Simultaneous equations.	6
	4	Matrix Algebra: Definition of Matrix, Types, Algebra of Matrices, Rank of a matrix; Properties of Determinants, Adjoint Matrix, Inverse Matrix. Cramer's Rule for solving equation.; Eigen values and Eigen vectors.	10

Text:

1. A. C. Chiang and K. Wainwright (2005): Fundamental Methods of Mathematical Economics, McGraw Hill International Edition.
2. Allen, R.G.D (2006): Mathematical Analysis for Economists, Macmillan and Company Limited

References:

1. Archibald and Lipsey: An Introduction to Mathematical Treatment of Economics, Littlehampton Book Services Ltd;
2. T. Yamane (2012): Mathematics for Economists, Prentice-Hall of India
3. Mehta and Madnani: Mathematics for Economists, New Delhi: Sultan Chand Company.

Course Outcome:

After completion of this course students will be able to follow the theoretical courses in economics in a comfortable way.

BAEC 2005: Statistics for Economics-I
Course Type: Core Course (CC)

Course Objective:

Course is designed to equip the students with the basic statistical tools generally used to understand and analyse the economic scenario.

CREDIT - 02 **SEMESTER II** **L–T–P : 2- 0 - 0**

Module	Unit	Content	Lecture
I	I	Introduction to Basic Concepts in Statistics: Population, Sample, variable and Parameter, Data-Meaning, types, sources. Data collection: Questionnaire, Schedule & Interview Schedule (meaning, concept & types). Presentation of data: Tabulation, Graphic and Diagrammatic. Frequency Distribution, Cumulative frequency.	7
	II	Measures of central tendency, Dispersion, Moments, Skewness and Kurtosis; Bivariate Frequency Distribution	8
II	III	Concept of sampling and random sampling.; methods of sampling (SRSWR, SRSWOR, Stratified sampling, etc.). Sampling vs non-sampling error. Principal steps in a sample survey.	5
	IV	Correlation: Meaning, Concept, Types & Properties. Methods of measurement of Correlation: Karl Pearson and Spearman. Coefficient of Correlation Regression: Meaning and Concept. Least squares method, Interpretation of Regression Coefficients.	10

Text Books:

1. S. C. Gupta: Fundamentals of Statistics, Himalaya Publishing House, New Delhi
2. Goon, Gupta and Dasgupta, Basic Statistics.

References:

1. N.G.Das Statistical Method, McGrow Hill(India) Private Limited

Course Outcome:

After going through this course student are expected to collect the statistical data, present those data and analyse those data by calculating different types of means, dispersions correlation. They will also do regression analysis.

SEMESTER - III

B.A. Economics/ Economics (Hons with Research)

BAEC 2024: History of Economic Thoughts
Course Type: Core Course (CC)

Course Objectives:

To introduce & highlight before the students about the world and Indian Economic Thinkers and their valuable contribution in the field of Economics.

Credits: 02 **Semester III** **L–T–P : 2–0–0**

Module	Unit	Content	Lecture
I	I	Economic thoughts in Ancient India. Economic Sutra: an engaging perspective on ancient Indian economic thought, Buddhist Economic Thoughts, 19th Century Indian thinkers.	15
	II	Early Period: Economic thought of Plato and Aristotle - Doctrines of Just Cost and Just price. Mercantilism: Main Characteristics; Physiocracy: Natural Order, Primacy of Agriculture, Social Classes, Tableau Economique, Economic ideas of Petty, Cantillon, Locke and Hume.	15
II	III	Classical Period: Adam Smith - Division of Labor, Theory of Value, Capital Accumulation, Distribution, Views on Trade, David Ricardo, Distribution, Ideas on International Trade; Thomas R. Malthus, J.B. Say, J.S. Mill	15
	IV	Karl Marx — Dynamics of Social Change, Labor Theory of Value, Surplus Value, Profit, And Theory of Capitalist Crisis; Economic Ideas of Neo-Classical Economists and Marginalist.	15

Texts

1. Roll, Eric : History of Economic Thought, Faber
2. Ganguli, B.N(1977) : Indian Economic Thought : A 19th Century Perspective, Tata Mcgraw Hill.
3. Hajela,T.N (2011) : Aarthik Vicharon Ka Itihas , Ane Books.

References:

1. Bhatia,H.L : History of Economic Thought ,Vikash Publishing House.
2. Ganguli, B.N(1977) : Indian Economic Thought : A 19th Century Perspective, Tata Mcgraw Hill.
3. Hajela,T.N (2011) : Aarthik Vicharon Ka Itihas , Ane Books.
4. Hajela,T.N (2011) : History Of Economic Thought , Ane Books.
5. Kautilya (1992), The Arthashastra, Translated And Introduced By L.N.Rangarajan, Penguin Books.
6. Staley, Charles. E, “A History of Economic Thought: From Aristotle To Arrow”, Blackwell Publishing
7. Vinay Bharat Ram, Evolution of Economic Ideas – Smith to Sen and Beyond, Oxford University Press..

Course Outcomes: It is expected that after going through this course the students will learn how the economic thoughts have evolved in India and in the world.

BAEC 2007: Intermediate Microeconomics-I
Course Type: Core Course (CC)

Course Objective:

To impart the knowledge of basic concepts of perfect competition and imperfect competition; theories of firms under perfect competition, and theories of monopoly firm.

Credits: 02 **Semester III** **L–T–P : 2–0–0**

Module	Unit	Content	Lecture
I	I	Perfect Competitive Market Theory of firm under perfect competition: equilibrium of the firm in the short run and long run; long run industry supply curve: increasing, decreasing and constant cost industries. Welfare: allocative efficiency under perfect competition.	8
	II	Imperfect Competition: Monopoly Market, Monopolistic Market and Oligopolistic Market. Theory of a Monopoly: Concept of monopoly firm; short run and long run price and output decisions of a monopoly firm; concept of a supply curve under monopoly; comparison of perfect competition and monopoly, social cost of monopoly, price discrimination; remedies for monopoly: Antitrust laws, natural monopoly.	8
II	III	Monopolistic Market: Assumptions, short run and long run price and output determination under monopolistic competition, economic efficiency and resource allocation.	6
	IV	Oligopolistic Market: Assumptions, oligopoly models, contestable markets, role of government. Oligopoly equilibrium as Nash equilibrium, Cournot, Bertrand and Stackelberg Model- use of isoprofit curves and simple game theoretic interpretation. Sweezy‘s kinked demand curve model and non-collusive equilibrium. Competition versus collusion- the Prisoners’ Dilemma. Collusive Oligopoly –Cartels and Price Leadership	8

Text

1. Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson.

2. Ahuja ,H.L : Advanced Economic Theory”, S.Chand & Company.

References

1. Hal. R Varian , Intermediate Microeconomics, A modern Approach, WW Norton and Company, 8 th edition, 2010 (T)
2. Ferguson, C. E. and Gould, J.P., Microeconomic Theory, Aitbs Publishers and Distributors, New Delhi.

3. Lipsey, R. and Chrystal, A., 2007, Economics, OUP
4. Stonier and Hague: A text book of Economic theory

5. Koutsoyiannis, A: Modern Microeconomics", Macmillan

Course Outcomes:

CO1- The students are familiarized with the basic concepts of market and market structures
CO2- learn and understands the concept of perfect market, short run & long run equilibrium, Industry
supply curve under perfect market and welfare efficiency under perfect market.
CO3-. Learn imperfect market, equilibrium conditions under monopoly & price discrimination and
compare imperfect competition with perfect competition
CO4- Learn Monopolistic market situations.
CO5- Learn Oligopolistic market situation

BAEC 2008: Intermediate Macroeconomics-I
Course Type: Core Course (CC)

Course Objectives:
To impart the basics of Keynesian theories of macroeconomics.

CREDITS: 02 **SEMESTER III** **L–T–P : 2–0–0**

Module	Unit	Content	Lecture
I	I	Simple Keynesian Model (SKM): Keynes' Objection to the Classical Theory; Aggregate Demand and Aggregate Supply Functions; The Principle of Effective Demand; The Simple Keynesian Model in a Closed Economy. The Simple Keynesian Model (SKM) in a Closed Economy without Government	10
	II	The Keynesian Consumption Function - Average and Marginal Propensity to Consume; Factors influencing Consumption Spending, the Keynesian Saving Function; income determination in SKM; stability of equilibrium; the concept of effective demand- the concept of demand-determined output; the Simple Keynesian Multiplier; the paradox of thrift;	5
II	III	SKM in a Closed Economy with Government: government expenditure and tax; the government expenditure multiplier and the tax rate multiplier; the balanced budget multiplier; the budget surplus; effects of tax changes and government purchases on budget surplus; the full employment budget surplus.	5
	IV	IS-LM Analysis: Derivations of the IS and LM functions; IS-LM and aggregate demand; shifts in the AD curve.	10

Texts

1.Branson, W.A (1989) : Macroeconomics Theory And Policy, Harper & Row.
2. Ahuja,H.L (2012) : Macroeconomics: Theory and Policy , S. Chand &Company, New Delhi.
3. Ahuja,H.L (2012) : Samasti Arthshastra , S. Chand &Company, New Delhi. Lal,S.N (2012) : SamastibhaviVisleshan , Shiva Publishing House,Allahabad.

References

1. Ackley.G (1976) : Macroeconomics: Theory And Policy, Macmillan, New York.
2. D.L (1969) : Advanced Macroeconomics, McGraw Hill, New York.
3. Dornbusch, Rudiger&startz, Richard (2012): Macroeconomics, Tata McGraw Hill Education.
4. Dwivedi,D.N (2010) : Macroeconomics: Theory and Policy , Tata McGraw Hill Education.
5. Gupta,R.D.&Rana,A.S (2009) : Keynes post-Keynesian Economics , Kalyani Publishers, New Delhi &Ludhiana.
6. Hansen,A.H (1953) : A Guide To Keynes, McGraw Hill.
7. Jhingan, M.L (2010): Macroeconomics, Vrinda Publications, New Delhi.
8. Jhingan, M.L (2012) :SamastiArthshastra , Vrinda Publications, New Delhi
9.. N. Gregory Mankiw. Principles of Macroeconomics, Indian Imprint of Southwestern by Cengage India, 6th edition, 2015.

10. Ghosh Chandana and Ghosh Ambar, Indian Economy: A Macro-theoretic Analysis, PHI Learning Pvt Ltd, 2016.
11. Shapiro, Edward (2005): Macroeconomic Analysis, Galgotia Publications, New Delhi.
12. Sikdar,Saumyen (2011) : Principles of Macroeconomics , Oxford University Press, New Delhi.

Course Outcomes:

CO1- The students will able to understand the difference between classical and Keynesian economics

CO2- The students will able to understand the simple Keynesian model in a closed economy

CO3- The students will be able to understand the concept of effective demand and the determinants of consumption function and investment function

CO4- The students will be able to understand and apply the concept of IS-LM curves

BAEC 2009: Mathematics for Economics-II
Course Type: Core Course (CC)

Course Objectives:

The basic objective of this course is to equip the students with the fundamental knowledge about the differential and integral calculus.

CREDITS: 02 **SEMESTER III** **L–T–P : 2–0–0**

Module	Unit	Content	Lecture
I	I	Function: Definition, Classification and Types of function, Elementary idea of Limit and Continuity.	6
	II	Differentiation: Definition of Derivative and its geometrical interpretation, Rules of Derivatives, Partial Differentiation of simple algebraic functions,	10
II	III	Maximum and minimum value of functions. Examples of applications.	4
	III	Integration of functions, Standard integral forms, Integration by parts, Integration by partial functions (elementary problems), Definite integral. Examples of application.	10

Text:

1. A. C. Chiang and K. Wainwright (2005): Fundamental Methods of Mathematical Economics, McGraw Hill International Edition.
2. Allen,R.G.D (2006):Mathematical Analysis For Economists, Macmillan And Company Limited
3. Mehta and Madnani: Mathematics for Economists, New Delhi: Sultan Chand Company.

References:

1. T. Yamane (2012): Mathematics for Economists, Prentice-Hall of India
2. K. Sydsaeter and P. J. Hammond (2002): Mathematics for Economic Analysis, Pearson Educational Asia
3.Shanti Narayan and Patil, Differential Calculas, S Chand.
4. B.C.Das & B.N.Mukherjee, Differential Calculas, U.N.Dhar & Sons.
5. B.C.Das & B.N.Mukherjee, Integral Calculas, U.N.Dhar & Sons.

Course Outcomes: After completion of this course, students will be able to do differentiation and integration and they will be capable of understanding the theoretical courses in economics.

BAEC 2010: Statistics for Economics-II
Course Type: Core Course (CC)

Course Objectives:

To impart the statistical techniques of time series analysis and to give the students elementary knowledge of probability theory, sampling and hypothesis testing.

CREDITS: 02 **SEMESTER III** **L–T–P : 2–0–0**

Module	Unit	Content	Lecture
I	I	Time Series: Concept, Meaning & Components - Determination of Regular, Trend and Seasonal Indices. Index Number: Concept, Classification of Index Numbers-price relative, quantity relative, value relative & special purpose (in brief). Consumer Price Index(CPI), Whole Sale Price Index (WPI), Methods of Construction of Index Numbers- i Unweighted & ii Weighted indices (in brief). Test of Adequacy of Index Number Formulae	10
	II	Elementary probability theory and probability distributions: Sample spaces and events; probability axioms and properties; counting techniques; conditional probability and Bayes' rule; independence;	5
II	III	Random variables and probability distributions; Defining random variables; discrete and continuous random variables, probability distributions; expected values and functions of random variables. Sample Distributions: Properties of commonly used discrete and continuous distributions (uniform, binomial, exponential, Poisson, hypergeometric and Normal random variables).	5
	III	Statistical inference and Hypothesis Testing : Sampling distribution of sample mean and sample proportion Mean and standard error both in SRSWR and SRSWOR .Standard normal, chi-square, Student‘s t and F distributions – definitions, important properties (mean and variance) . Point estimation-Properties of a good estimator. • Basic principles of Ordinary Least Square, Maximum Likelihood Method • Interval estimation. • Testing of hypothesis (basic concepts of null hypothesis, alternative hypothesis, type I and Type II errors, power of a test, p-value) [.	10

Text Books:

1. S. C. Gupta: Fundamentals of Statistics, Himalaya Publishing House, New Delhi
2. Goon, Gupta and Dasgupta, Basic Statistics.

References:

1. N.G.Das Statistical Method, McGrow Hill(India) Private Limited

Course Outcomes: Students will be able to analyse the time series data, they will be able to make statistical inferences and hypothesis testing.

SEMESTER - IV

B.A. Economics/ Economics (Hons with Research)

BAEC 2011: Money and Banking
Course Type: Core Course (CC)

Course Objective:

Understand simple concepts related with monetary economics and banking theory. This course introduces students to the conceptual and practical operations of the Money and banking, financial markets and institutions. The course is intended to provide an in-depth understanding of the operational issues of capital and money market network along with its regulatory framework. Appreciate the potential importance of monetary phenomenon in the economy.

Credits: 04 **Semester IV** **L–T–P : 4–0–0**

Module	Unit	Content	Lecture
I	I	Money and Value of Money: Money - Meaning, Functions and Classification; Monetary Standards -Metallic and Paper Systems of Note Issue.	10
	II	Demand for Money and Supply of Money. Determinants of Money Supply—High Powered Money and Money Multiplier—Indian Currency system.	10
	III	Functions of a Central Bank; Quantitative and Qualitative Methods of Credit Control - Bank Rate Policy, repo rate, Open Market Operations, Variable Reserve Ratio and Selective Methods; Role and Functions of the Reserve Bank of India; Objectives and Limitations of Monetary Policy with Special Reference to India.	10
II	IV	Commercial Banking: Meaning and types; Functions of Commercial Banks; The process of Credit Creation - Purpose and Limitations; Liabilities and Assets of banks. Evolution of Commercial Banking in India after Independence; A Critical Appraisal of the Progress of Commercial Banking after Nationalization; Recent Reforms in Banking Sector in India.	10
	V	Financial institutions, markets instruments, role of financial markets. Recent developments of financial institutions, digital finance, etc. Theories of Microfinance and Indian experiences.	20

Texts

Eyler,Robert (2009) : Money and Banking-An International Text ,Routledge.
Gupta,S.B (2009) : Monetary Economics-Institutions, Theory & Policy , S.Chand & Company, New Delhi.
Jhingan, M.L (2012) : Maudrik Arthshastra , Vrinda Publications, New Delhi.

References:

Jhingan ,M.L (2012) : Monetary Economics , Vrinda Publications,NewDelhi.
Khanna, Perminder (2005): Advanced Study in Money and Banking: Theory and Policy Relevance in The Indian Economy , Atlantic.
Lal, S.N (2012): Mudra,Banking, Avam Videshi Vinimay , Shiva Publishing House,Allahabad.
Nadar,E.Narayanan (2013) : Money and Banking , PHI Learning Press.
Paul, R.R (2011): Money, Banking & Exchange , Kalyani Publishers, Delhi.
Seth. M.L (2012) : Maudrik Arthshastra , Laxmi Narayan Publications,Agra.
Uppal, R.K (2011): Money, Banking and Finance in India- Evolution & Present Structure New Century Publications.

Course Outcomes:

After compilation of the course, students will be able to:

CO1- Understand simple concepts related with money and monetary standards. Appreciate the potential importance of monetary phenomenon in the economy.
CO2- This course introduces students to the concepts of money its demand and supply, its determinants, money multiplier and Indian currency system.
CO3- Intended to provide an in-depth understanding of central bank of India, its functions and role, monetary policy and its different instruments.
CO4- Understand the concept of commercial banks evolution, its functions, role in credit creation, critical appraisal and recent reforms.
CO5- Understand the concepts of monetary and financial institutions along with its regulatory framework, its operations and issues, theories of microfinance and Indian economy

BAEC 2012: Public Economics
Course Type: Core Course (CC)

Course Objectives:

Understand the sources of finance both public and private ● Demonstrate the role of government to correct market failures and possible advantage of public financing. ● Understand the possible burden, benefits, and distribution of various types of taxes among various classes of people, know the general trend and impact on general welfare and arouse them to suggest good and bad tax system

Credits: 04 **Semester IV** **L–T–P : 4–0–0**

Module	Unit	Content	Lecture
I			
	I	Nature and Scope of Public Finance: Meaning and scope of Public Finance; Distinction between Private and Public Finance; Public Goods Vs. Private Goods; The Principle of Maximum Social Advantage; Market Failure; Role of the Government.	15
	II	Public Expenditure: Meaning, Classification and Principle of Public Expenditure; Canons and Effects of Public Expenditure; Trends in Public Expenditure and Causes of Growth of Public Expenditure in India.	15
II	III	Taxation: Sources of Public Revenue; Taxation — Meaning, Canons and Classification of Taxes; Division of Tax Burden — The Benefit and Ability-To-Pay Approaches; Impact and Incidence of Taxes; Taxable Capacity; Effects of Taxation; Characteristics of A Good Tax System.	15
	IV	Fiscal policy: Components, Instruments, Objectives. Role of Fiscal Policy in Developed and Developing Countries, Budget Structure of the Government of India, State Budget- Sources of Revenues and Expenditures. Major Tax Reforms in India. Fiscal Federalism in India: Union-State Fiscal Relations, Federal Fiscal Imbalances and the Role of Finance Commission. Finances of Local Bodies.	15

Texts:

1. Margolis,J&Guitton,H : Public Economics (1974), Mcmiillan.
2. Musgrave,R.A& P.B. Musgrave : Public Theory: Theory & Practice, Mcgraw Hill.

References:

1. Bagchi,Amaresh (2005) : Readings in Public Finance, Oxford University Press.
2. Cullis,John& Jones Philip (2009) : Public Finance and Public Choice, Oxford University Press.
3. Gupta, Janak Raj (2011): Public Economics in India Theory and Practice, Atlantic. New Delhi.

Course Outcomes:

CO1-Understand the concept of public economics, difference between public and private goods and the role of government
CO2- Understand principles and canons of public expenditure. The trends and growth of public expenditure.
CO3- Understand concept of public revenue and taxation system.
CO4- Identify the objectives, importance and instruments of fiscal policy and budget structure

of the government.

CO5- Understand fiscal imbalances and role of finance commission and other local bodies.

B.A. Economics/ Economics (Hons with Research)

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BAEC 2013: Intermediate Microeconomics-II

Course Type: Core Course (CC)

Course Objectives: To impart the knowledge of basic theories of distribution and theories of welfare.

Credits: 02 **Semester IV** **L–T–P : 2–0–0**

Module	Unit	Content	Lecture
I	I	**Income Distribution and Factor pricing** Input Market in Perfect Competition. Basic concepts- productivity of an input, marginal product of an input, marginal revenue product: Marginal productivity theory of distribution; derived demand; input demand curves.	15
	II	**Consumer and Producer Theory and Labor market** Consumer and Producer Theory in Action Externalities, marginal cost pricing labor market-supply of labor, competitive labor markets; land markets and rent.	
II	III	**Markets and Market Failure** Market adjustment to changes in demand, efficiency of perfect competition; sources of market failure: imperfect markets imperfect information: adverse selection, moral hazard, social choice, government inefficiency. public goods, externalities, imperfect information; evaluating the market mechanism.	15
	IV	Concept & Definition of Welfare Economics. Normative &Positive Economics. Concepts of Social Welfare. Role of Value Judgment in Welfare Economics, Individual & Social Welfare. Pareto Optimality, Edgeworth box and contract curve, Pareto efficiency and perfect competition. New Welfare Economics: Kaldor-Hicks Welfare Criterion. Scitovsky Paradox & Scitovsky's Double Criterion. Grand Utility Possibility Frontier. Social Welfare Function. Theories of Social Choice.	

Text

1. Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson.

2. Ahuja ,H.L : Advanced Economic Theory", S.Chand & Company

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References

1. Hal. R Varian , Intermediate Microeconomics, A modern Approach, WW Norton and Company, 8 th edition, 2010 (T)
2. Ferguson, C. E. and Gould, J.P., Microeconomic Theory, Aitbs Publishers and Distributors, New Delhi.
3. Lipsey, R. and Chrystal, A., 2007, Economics, OUP
4. Stonier and Hague: A text book of Economic theory
5. Koutsoyiannis, A: Modern Microeconomics", Macmillan.

Course Outcome: The students are familiarized with basic theories of rent, wage, interest and profit and their practical applications. They will also be familiar with the basic concepts of welfare economics.

CO1-To understand concepts of input market, derived demand, labor market and marginal productivity theory.

CO2- Understand concepts of public goods, externalities, moral hazard, government inefficiencies.
CO3- Understand perfect, imperfect market, market failure and market mechanisms.
CO4- Understand the concepts of social welfare and welfare economics.

BAEC 2014: Intermediate Macroeconomics-II
Course Type: Core Course (CC)

CREDITS: 02 **SEMESTER IV** **L–T–P : 2–0–0**

Module	Unit	Content	Lecture
I	I	Theory of Interest: Classical, Neo-Classical and Keynesian Theories of Interest. The bond market is the mirror image of the money, the Walrus Law. Relationship between bond price and rate of interest- the concept of Keynesian liquidity preference schedule-speculative demand for money, and liquidity trap. Indeterminateness in Liquidity Preference Theory.	10
	II	Theory of Investment - Autonomous and Induced Investment; Savings and Investment - Ex Post and Ex Ante, Equality and Equilibrium. Investment function: Concepts of Marginal productivity of capital, marginal efficiency of capital (MEC), and marginal efficiency of investment (MEI)- Jorgenson's neo-classical theory of Investment.	8
II	III	Principle of Accelerator. Multiplier -Acceleration principle- fixed and variable. Multiplier-accelerator interaction. Theories of Consumption.	7
	IV	Inflation, determinants of inflation; relationship between inflation and unemployment: Phillips Curve in the short run and the long run. New Philips curve & Augmented Phillips curve.	5

Texts

1. Ahuja,H.L (2012) : Macroeconomics: Theory and Policy , S. Chand &Company, New Delhi.
2. Ahuja,H.L (2012) : Samasti Arthshastra , S. Chand &Company, New Delhi. Lal,S.N (2012) : SamastibhaviVisleshan , Shiva Publishing House,Allahabad.
3. Branson,W.A (1989) : Macroeconomics Theory And Policy, Harper & Row.

References

1. Ackley.G (1976) : Macroeconomics: Theory And Policy, Macmillan, New York.
2. D.L (1969) : Advanced Macroeconomics, McGraw Hill, New York.
3. Dornbusch, Rudiger&startz, Richard (2012): Macroeconomics, Tata McGraw Hill Education.
4. Dwivedi,D.N (2010) : Macroeconomics: Theory and Policy , Tata McGraw Hill Education.
5. Jhingan, M.L (2012): SamastiArthshastra , Vrinda Publications, New Delhi.

Course outcomes:

CO1: Students will have the knowledge on the macroeconomic debate between the neo-classical and the Keynesian school, the Theories of interest, Walras Law, and Liquidity Preference theory.
CO2: Students will understand the theory of Investment, Investment Function and related concepts.
CO3: Students will understand the Principle of Accelerator, the interaction of Multiplier and accelerator.
CO4: Students will learn the different theories of Consumption.
CO5: Students will understand the conceptual understanding of Inflation and the Phillips Curve.

BAEC 2015: Agricultural Economics
Course Type: Core Course (CC)

Course Objective:
The objective is to make the students realise and feel the importance of agricultural sector in the economy and its linkage to other sectors. It aims at equipping them with the knowledge of the various important issues and problems of agricultural sector and their analysis with special reference to Indian agriculture.

CREDITS: 04 **SEMESTER IV** **L–T–P : 4–0–0**

Module	Unit	Content	Lecture
I	I	Definition, scope and nature, need for a separate study of Agricultural Economics, Backward and Forward Linkage between agriculture and industry. Role of agriculture in economic development with special reference to Rural Development	4
	II	Models of Agricultural Development	4
	III	Agricultural Production Function, Supply Response, Farm Size, Returns to Scale and Productivity. Cobweb Theorems. Agricultural Marketing. Efficiency Measures in agricultural production and marketing.	4
	IV	Production and Productivity in Indian agriculture. Farm Size and Productivity Debate. Agricultural Diversification: Meaning, Concept & Issues. Crop Diversification: Meaning, Concept and Issues. Farm Incomes and Employment in Indian Agriculture.	4
II	V	Current Issues in Indian Agriculture-Employment, Poverty & Food Security in India, Agro- Subsidies in India, Subsidy Vs Public Investment. Export and Imports of Agricultural Commodities, Terms of Trade in Indian Agriculture, WTO and Indian Agriculture-Bali Negotiations.	4
	VI	Role of Credit in Agricultural Development, Institutional & Non-Institutional Sources of Credit in India, Cooperative Movement in India (In Brief). Role of Schedule Commercial Banks, Lead Banks, Regional Rural Banks and NARBAD to Promote Agricultural Development.	4
	VII	Agricultural Marketing: Meaning and Concept. Structure of Agricultural Markets in India, Issues and Challenges in the Marketing of Agricultural Products in India (with focus on the post reform period).	4
	VIII	Agriculture Price Policy- Need, objectives and Instruments of Agriculture price policy, agriculture price policy in India	4

References

1. Bardhan, P. (1984) Land, Labour and Poverty; Essays in Economic Development, OUP, New Delhi.
2. Bhaduri, A. (1984), The Economic Structure of Backward Agriculture; Macmillan, Delhi.
3. Bhalla, G.S., (2007) Indian Agriculture since Independence, National Book Trust, India
4. Dantawala, M.L. et al. (1991): Indian Agricultural Development since Independence, Oxford & IBH, New Delhi.
5. Soni, R.N (2011): Leading Issues In Agricultural Economics, Vishal Publishing Company,Jalandhar (New Delhi)
6. Sunder,I (2010): Principles of Agricultural economics, Neha Publishers.

7. Singh,Sadhu and Singh (2013), Fundamentals of Agricultural Economics, Himalaya Publishing House, Delhi

Course Outcome. Students will be able i) to understand and explain the basics of agriculture economics, ii) to realise the significance of agriculture in the economic growth and economic development of an economy like Indian Economy, iii) to critically analyse the rural and agricultural issues and problems of the country and think of solutions to those problems.

SEMESTER - V

BAEC 2016: Economic Growth and Development
Course Type: Core Course (CC)

Course Objectives:

The basic objective of this course is to introduce the students to the basics of development economics, with in-depth discussions of the concepts of development, growth, poverty and inequality.

CREDITS: 04 **SEMESTER V** **L–T–P : 4–0–0**

Module	Unit	Content	Lecture
I	I	Meaning and Measurement of Economic Growth and Development. Measuring Development and Development Gap, GDP, GNP, Per Capita Income, Factors affecting Economic growth and Development.	6
	II	Concept of Poverty and Inequality, Vicious cycle of poverty, Lorenz Curve, Gini Coefficient Concept of Human Development, Human Development Index, Physical Quality of Life Index, Quality of Life Indices. Hunger Index, Happiness Index, Development and Sustainability. Concept of Sustainable Development. Millennium Development	8
	III	Lewis model of labour surplus economy, Rosentein Rodan's theory of Big Push, Nelson's Level equilibrium trap, balanced vs Un-balanced growth, Rostow's stages of growth, Harrod and Domar Growth models.	8
	IV	Theory of Demographic Transition, Population as Limits to Growth. The Concept of Inclusive Growth- with Reference to India. Market Failure and Government Failure, Food Security, Education, Health and Nutrition, Gender, and Development.	8
II	V	Development & Underdevelopment: an overview; The Characteristics and Explanations Of Underdevelopment- Vicious Circle of Poverty, Circular Causation, Dualism-Social, Technological, Financial, Organizational, Model of Dual Economy, Lewis, Ranis-Fei, Jorgenson, Dependency Theories of Underdevelopment	8
	VI	Models of Technical Progress, Embodied and Disembodied Technical Progress, Neutral Technical Progress- Hicks, Harrod, Solow, Kaldor, Mirrlees Technical Progress Function, Arrow's Learning by Doing Approach to Economic	8
	VII	Accumulation Endogenous growth, Intellectual capital, Role of Learning, Education and Research, Explanations of Cross country Differentials in Economic Growth, Information Paradigm-Stiglitz	8
	VIII	Development and International Issues International aspects of economic development; International trade, FDI, FII, Regional cooperation (SAPTA, NAFTA, SAARC, BRICS etc.) , WTO and developing countries.	6

Texts:

1. Thirlwall, A.P., Growth and Development with Special Reference to Developing Economies, Macmillan, UK, 1999.
2. Todaro, Michael. P & Smith, Stephen. C (2011): Economic Development, Pearson
3. Meier, G.M., Leading Issues in Economics Development, Oxford University Press, New Delhi, Latest edition.

References:

1. Mishra, S.K & Puri, V.K (2012): Economics of Development and Planning, Himalaya Publishers, Mumbai
2. Basu, Kaushik (2010): Analytical Development Economics: The Less Developed Economy, Oxford University Press.
3. Hayami, Y., Development Economics, Oxford University Press, New York, 2010 (5th Impression).
4. Ghatak, S., An Introduction to Development Economics. Allen and Unwin London, latest edition.

Course outcome:

CO1: Understand economic growth and development, and assess development gaps using GDP, GNP, per capita income, and influencing factors.
CO2: Evaluate poverty, inequality, and human development using tools like Lorenz Curve, Gini Coefficient, HDI, and sustainability indices, along with sustainable development concepts and global goals.
CO3: Analyze key development theories and growth models to understand structural transformation and growth in developing economies.
CO4: Examine how population dynamics impact inclusive growth and human development in India, focusing on challenges like market failure, food security, education, health, and gender.
CO5: Assess underdevelopment through theories like the Vicious Circle of Poverty, Dualism, Dependency Theory, and dual economy models by Lewis, Ranis-Fei, and Jorgenson.
CO6: Understand models of technical progress and analyze growth contributions by Hicks, Harrod, Solow, Kaldor, Mirrlees, and Arrow's learning-by-doing.
CO7: Analyze how accumulation, endogenous growth, and knowledge-based factors like education and research explain cross-country growth differences.
CO8: Examine international aspects of development through trade, FDI, FII, regional cooperation, and the impact of WTO policies on developing countries.

BAEC 2017: International Economics
Course Type: Core Course (CC)

Course Objectives:

Objective is to impart the knowledge of basics of international trade theory and international economic co-operation and policies. This course aims at giving a brief exposition of models that try to explain the composition, direction, and consequences of international trade, and the determinants and effects of trade policy.

Credits: 04 **Semester V** **L–T–P : 4–0–0**

Module	Unit	Content	Lecture
I	I	Need, Significance and Scope of International Economics. Early Trade Theory-Mercantilism; The Classical Theories of Trade -Adam Smith, David Ricardo; HO Theory , Opportunity Cost Approach; Terms of Trade-Meaning and Concepts, Factors affecting Terms of Trade; Mill's Reciprocal Demand Analysis, Modern theories of trade	15
	II	Free Trade and Protection-Meaning of Free Trade, Arguments For and Against Free Trade, Meaning of Protection, Arguments for Protection Economic and Non-Economic Arguments; Protection and Less Developed Countries	10
	III	Balance of Trade Balance of Payments-Concepts; Adjustment Mechanisms of Balance of Payments- Adjustment Through Variations in Exchange Rates, Devaluation and Balance of Payments Adjustment, The Elasticity Approach, Marshall-Lerner Condition.	10
II	IV	International Financial Institutions-IMF, WORLD BANK, ADB; GATT, WTO-TRIPS &TRIMS, WTO and India;, UNCTAD**,** North-South Trade Dialogue, South-South Cooperation; Globalization; FDI.	10
	V	Foreign Exchange-Meaning and Instruments, Exchange Rate Determination, Mint Par Parity theory, Purchasing Power Parity Theory, Hedging, Foreign Exchange Rate Policy- Fixed, Flexible & Multiple Exchange Rate System; Convertibility of Rupee in Current Account and Capital Account, Move Towards Capital Account Convertibility; Global Financial Crisis.	15

Texts

1. Soderston, International Economics, Palgrave Macmillan.
2. Paul Krugman, Maurice Obstfeld and Marc Melitz, International Economics: Theory and Policy. Addison-Wesley (Pearson Education India Edition).

References:

1. Agarwal,Babita (2009) : Antarrastriya Arthshastra, Omega Publications.

Bhatia,H.L (2006) :International Economics, Vikash Publishing House.

2. Cherunilam,Francis (2008) :International Economics" Tata McGraw Hill Education.
3. Jhingan, M.L (2011): Antarrastriya Arthshastra, Vrinda Publications, New Delhi.

Dominick Salvatore, International Economics: Trade and Finance, John Wiley International.

Course Outcome:

CO1: To know the meaning of international trade and the theories of international trade.
CO2: To understand the concept of free trade and protectionism
CO3: To understand the mechanism of payments, Balance of payments, exchange rates and approaches in trade.
CO4: To get familiar with the various international financial institutions like IMF, World Bank, WTO and other concepts of regional cooperations in trade, FDI etc.
CO5: To understand the concepts of foreign exchange system, its instruments and concepts like purchasing power parity and global financial crisis.

BAEC 2018: Econometrics
Course Type: Core Course (CC)

Course Objectives:

This course is designed to make students competent enough to apply econometric methods in analyzing primary and secondary data. The course is designed on the assumption that students have acquired reasonable aptitude in statistical methods. The objective of the course is also to enhance research capacity building, since application of Econometric method is currently indispensable in research endeavors.

Credits: 04 **Semester V** **L–T–P : 4–0–0**

Module	Unit	Content	Lecture
I	I	What is econometrics? Why a separate discipline? Methodology of econometrics. The nature of regression analysis. Nature and sources of data. Concepts of population regression function and sample regression function.	6
		Practical: Familiarize students with data types and structures. Introduce software (STATA or R) and data loading.	
	II	Two variable regression analysis: Simple Classical Linear Regression (Two variable) Model (CLRM): Specification of the Model-Assumptions- Stochastic and other assumptions, Linearity in variables and parameters, OLS method and Estimation of parameters by OLS, Properties of a good estimator, Gauss Markov Theorem, Goodness of fit of the econometric model, standard error test, t and F tests. Inference in the Linear Regression Model- Confidence interval for the parameters and the Testing of Hypotheses - Prediction with the Simple Regression model.	14
		Practical: Estimate and interpret a simple linear regression model. Conduct hypothesis testing on coefficients.	
II	III	Multiple regression analysis: Three variable regression model. Partial regression coefficients, partial correlation coefficients, multiple correlation coefficient, adjusted and unadjusted R2., different functional forms of multiple regression model. Violations of Classical Assumptions: Multicollinearity , Heteroscedasticity and Autocorrelation - Consequences, Detection and Remedies.	14
		Practical: Estimate multiple regression models. Detect and interpret violations of classical assumptions (Multicollinearity, Autocorrelation, Heteroscedasticity)	
	IV	Econometric Modelling (basic concepts) Simultaneous equations Models Dummy variable regression models Fundamental idea of Time Series (AR, MA, Stochastics Process, Unit Root Test, Ganger Causality Test) Basic concept of Volatility Medeling (ARCH and GARCH)	14
		Practical: Introduce modelling techniques beyond basic regression. Explore time series and dummy variable usage.	

Texts

1.Gujarati, D. (2014). Econometrics by example, 2nd ed. Palgrave Macmillan..
2. Kmenta, J. (2008). Elements of econometrics. Khosla Publishing House.

References

1. Dougherty, C. (2011). Introduction to econometrics, 4th ed. Oxford University,Press.
2. Maddala, G., Lahiri, K. (2009). Introduction to econometrics, 4th ed. Wiley.
3. J. Johnston, Econometric Methods, 2nd edition,McGraw-Hill.
4. Koutsoyiannis, Theory of Econometrics, 2nd edition, Macmillan.

Course Outcomes:

1. Understand the purpose of econometrics and distinguish between population and sample regression analyses.
2. Estimate and interpret simple linear regression models and perform hypothesis testing.
3. Apply multiple regression analysis and detect violations of classical assumptions.
4. Interpret models with dummy variables, time series basics, and volatility concepts.

SEMESTER - VI

B.A. Economics/ Economics (Hons with Research)

BAEC 2020: Regional Economics with reference to Uttar Pradesh
Course Type: Core Course (CC)

Course Objectives:

This course is designed to impart concepts, strategies, and techniques of local economic analysis, planning, and development.

CREDITS: 04 **SEMESTER VI** **L–T–P : 4–0–0**

Module	Unit	Content	Lecture
I		Concept of regional economics. Importance of the study of regional economics. Brief introduction to the theories of regional development. Analysis of regions of India.	10
	I	Brief profile of the state of Uttar Pradesh. Agro-climatic zones and natural resource base of the state. Demographic features and transition. Changing pattern of development indices of the state (GDP, per capita GDP, poverty level, HDI etc).	10
	II	Development of economy of agricultural sector (crop, horticulture, floriculture, livestock, fisheries, forestry etc) of the state and their zone/district wise variations.	5
	III	Informal Economy, Development of the economy of industrial sector (Large scale industries, Medium Enterprises, Small, Micro including household and cottage industries) and zone/district wise variations. Development of the economy of service sector (financial, transport, communication, construction, trading and business-whole sale, intermediate and retail etc) and zone/district wise variations.	5
II	IV	Development of Social sectors (Education, Health and sanitation etc) and zone/district wise variations.	10
	V	Pattern of Urbanisation of Uttar Pradesh	10
	VI	Development of Tourism economy of the state.	5

Text/ Readings:

1.Krishan Narayanan Regional Economic Diversity, OUP, India.

2.Mahesh Chand and V.K.Purin Regional Planning in India,Allied Publishers Pvt Ltd.

3. Agarwal,,M K (2009): Uttar Pradesh ka Arthik Vikas. New Royal Book Company.
4. Mishra, Arvind Narayan & Atul Chandra (2018): The Economy of Uttar Pradesh. Gutenberg Publication.
5. Uttar Pradesh Human Development Report, UNDP, 2008.
6. Uttar Pradesh State Development Report, Volume I & II, State Plan Division, Planning Commission.

Course Outcomes:

Upon completion of this course students will understand contemporary economic development issues and problems and will be able to assess economic development prospects for the state.

BAEC 2021: Environmental Economics
Course Type: Core Course (CC)

Course Objectives:

To make the students understand the interactions between environment and economy. To equip them with the economic principles for environmental studies and policy suggestions for solving the environmental problems. To make the students familiar with the method of environmental impact assessment. To make them realize the importance, influence and problems of environment on the path of development of the economy.

CREDITS: 04 **SEMESTER VI** **L–T–P : 4–0–0**

Module	Unit	Content	Lecture
I	I	Introduction to Environmental Economics: Thinking about environment from the view point of economics. Economy-Environment Interaction, Material Balance Principle, Entropy Law.	8
	II	Economic principles in environmental studies; The theory of externalities, Public goods and environmental goods; Pareto optimality and market failure in the presence of externalities; property rights and the Coase theorem.	8
	III	Meaning and need for Valuation of Environmental goods and resources and assessing benefits and assessing environmental costs. Difficulties in Measuring Values of Environmental goods and resources and Environmental Damages and improvements. Methods of Valuation of Environmental goods and resources and Valuation of Environmental Damages.	10
	IV	The Design and Implementation of Environmental Policy :Methods of Environmental problem solutions: non-market and institutional approaches (Allocation of Property Rights, Prohibition and Regulation ,Fiscal Measures, Moral persuasion, collective and community actions).market approach Pollution Tax, subsidies, Permits etc.). Methods of Conservation, protection, improvement of environment.	10
II	V	Environmental Costs of Economic Growth. Environment vs Development: Relation between development and environmental stress, Environmental Kuznet's Curve. Limits to Growth and the concept of sustainable development. Economics of climate change.	6
	VI	Environmental Impact Assessment; Environmental Management and Monitoring-(Some case studies and real life examples).	6
	VII	Environmental problems in India : rural : agriculture(crop, non-crop, livestock, forestry and fisheries), rural industry , infrastructure and services. urban : industry , residence, , infrastructure and offices & other services. Mountain and tarai areas, coastal areas including mangroves, deserts ,wetlands population and livelihood.	8

	VIII	Trade and Environment in the WTO Regime; International Environmental Issues and Legislations, Carbon Trading.	6

Texts

Kolstad, Charles. D (2012): Intermediate Environmental Economics, Oxford University Press.
Smith, Stephen (2011): Environmental Economics: A Very Short Introduction, Oxford University Press.

References:

Bharucha, Erach : Paryavaran Adhyann, Orient Blackswan.
Bhattacharya, Rabindra Nath (2002): Environmental Economics – An Indian Perspective, Oxford University Press.
Eugine,T (2005) : Environmental Economics, Vrinda publications, Delhi.
Jhingan,M.L & Sharma,C.K (2009) : Environmental Economics Theory Mgt & Policy, Vrinda publications, Delhi.
Nagre,Vijay.H (2012) : Environmental Economics, Chandralok Prakashan.
Singh, Kartar & Shishodia (2007): Environmental Economics: Theory and Applications, Sage India.

Course Outcome:

On completion of this course students will understand the linkage between environment and economic production and understand the implications of environmental degradation on economic growth. They will be able to measure the environmental goods and resources, environmental damages and improvements. They will be able to suggest corrective measures.

BAEC 2022: Data Management and Analysis
Course Type: Core Course (CC)

Course Objectives:

Students will be given the knowledge about data availability and hands-on training on using those data through statistical and computing software to better visualize and better interpretation of the data. The course is to be delivered through classroom lectures and computer lab classes.

Credits: 04 **Semester VI** **L–T–P : 4–0–0**

Module	Unit	Content	Lecture
I	I	Introduction to the course: How can the representation and analysis of data help us study real-world problems.	10
	II	Publicly available data sets. Concepts of Data extraction from Statistics	20
II	III	The basics of data management, steps in data storage, organization, and cleaning. Available statistical software (Stata / R / E-views / SPSS / MS Excel).	20
	IV	Visualization and Representation: Alternative forms of data summarizing and presenting data. Concept of Big Data Analysis	10

References:

1. Goon, A. M, Gupta, M. K, and Dasgupta, B. Fundamentals of Statistics (Volume One), The World Press Private Ltd.
2. GOI, Note on Sample Design and Estimation Procedure of NSS 68th Round, National Sample Survey Office, Ministry of Statistics and Programme Implementation.
3. GOI, SRS Statistical Report 2016, Office of the Registrar General & Census Commissioner, India.
4. Levine, D., Stephan, D., Szabat, K. (2017). Statistics for managers using Microsoft Excel, 8th ed. Pearson.
5. Tattar, P., Ramaiah, S., Manjunath, B. (2018). A course in statistics with R. Wiley.

Course Outcomes: After completion of the course students will know the existing data sources and the nature and characteristics of those data. They will learn to use data simulations and publicly available data sources to help students learn about data types, their organization and visual representation. They will learn to use software packages for visual representation, computing summary statistics and basic statistical inference