Shiromani Gurudwara Parbandhak Committee's

Guru Nanak Khalsa College of Arts, Science and Commerce (Autonomous)

Matunga, Mumbai – 400 019, Maharashtra

Program: Bachelor of Arts

Syllabus

Course: TYBA

Semester V and VI

(Name of Subject: ECONOMICS)

(As per NEP guidelines-DSC model)

With effect from Academic Year 2025 - 2026)

Guru Nanak Khalsa College of Arts, Science and Commerce (Autonomous)

Program Structure

Semester-V

Course Name	Teaching Hours	Credits Assigned	Total Marks
	Theory		
Major-Paper-I: Advanced Microeconomics	60	4	100
Major-Paper-II: International Economics	60	4	100
Major-Paper-III: History of Economic Thought	60	4	100
Elective-I: Mathematics and Statistics for Economic Analysis Elective-II: Contemporary Economic Issues - India and the World	60/60	4	100
VSC: Econometrics with R & Python	30	2	50
On-Job-Training		4	100
		22	550

Semester-VI

Course Name	Teaching Hours	Credits Assigned	Total Marks
	Theory		
Major-Paper-I: Advanced Macroeconomics	60	4	100
Major-Paper-II: Development Economics	60	4	100
Major-Paper-III: Environmental & Resource Economics	60	4	100
Elective I: Behavioural Finance Elective II: Regional & Local Economics	60/60	4	100
Minor: Fundamentals of Macroeconomics	30	2	50
CC: Money and Finance		2	50
Field Project		2	50
		22	550

Guru Nanak Khalsa College of Arts, Science and Commerce (Autonomous)
Department of Arts

PROGRAMME OUTCOMES (PO)

BACHELOR OF ARTS (BA)

PO1: Learners will have strengthened intellectual, personal, and professional abilities through effective communication skills enhancing employability through linguistic competence.

PO2: Learners will be able to learn the historical evolution of mass/multimedia, its theories and practices. They will be equipped to assess media content and its societal impact.

PO3: Learners will be able to appreciate the glory of the ancient knowledge system and recognize its relevance in contemporary societies.

PO4: Learners will be able to develop, evaluate and apply analytical and cognitive skills such as abstract conceptualization, data analysis, problem solving, creative thinking, etc.

PO5: Learners will enhance their knowledge of their subjects by continual use of ICT and other advanced research tools.

PO6: Learners will be able to understand, integrate and practice values, morals and ethics in their everyday life; creating an awareness of rights and duties fostering holistic development and thus enabling them to be socially responsible citizens.

PO7: Learners will develop holistic understanding towards the historical, cultural, literary, economic and philosophical dynamics of society.

PO8: Learners will be equipped with the ability to understand and engage with issues pertaining to environment, sustainability and global ecological concerns.

PO9: Learners will gain insights associated with relevant topical issues and trends at regional, national and global levels. They will be able to evaluate its literary, philosophical, historical, economic contexts and its ramifications for the future.

Guru Nanak Khalsa College of Arts, Science and Commerce (Autonomous)
Department of Economics

Programme Specific Outcomes (PSOs) for BA in Economics

Sr. No.	A student completing BA in Economics will be able to:
PSO 1	Understand the basic and advanced concepts and theoretical frameworks in Economics. Adopt and evaluate models to solve economic problems.
PSO 2	Predict the impact of fiscal and monetary policy on the overall economic performance of the country.
PSO 3	Acquire knowledge on national and international trade.
PSO 4	Analyse the economic problems and suggest policy measures for the development of the economy.
PSO 5	Extract and analyse relevant data to assess economic variables with statistical tools and techniques.
PSO 6	Acquire entrepreneurial skills and become successful entrepreneur.

Guru Nanak Khalsa College of Arts, Science and Commerce
(Autonomous)
Department of Economics

Course: T.Y.B.A.
Semester-V: Major-I
Course Title: Advanced Microeconomics
Course Code: GNKUAECOMJ1105
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	Introducing students to the concepts of game theory and strategic interactions between decision makers.
2	Familiarizing students with basic concepts of Information Economics, problems associated with information asymmetry and optimal decision making under uncertainty.
3	Making students informed about various theoretical constructs related to General Equilibrium and Welfare Economics.
4	Equipping students to critically evaluate Monopoly market structure compared to the competitive market.

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Understand the strategic interactions between various types of decision makers and construct game theory representation of real-life situations.	**PO 4, PO 7**	**PSO 1**	**U, E, Ap**
CO 2	Analyze the problems arising out of asymmetric information and possible solutions for minimizing impact of uncertainties on decision making.	**PO 4, PO 7**	**PSO 1**	**An, Ap**

CO 3	Appreciate the concepts of general equilibrium and social welfare maximization.	**PO 4**	**PSO 1, PSO 4**	**U, An**
CO 4	Measure the concentration of monopoly power in the market; recognize the problems arising out of monopoly; appreciate the need for regulations in achieving competitive outcomes.	**PO 4, PO 7, PO 9**	**PSO 1, PSO 4**	**U, An**

Unit		**Title**	**No. of lectures**	**CO Mapping**
Unit 1		**Game Theory**	**15**	
	1.1	Prisoner's Dilemma	02	**CO 1**
	1.2	Dominant Strategy Equilibrium	02	**CO 1**
	1.3	Nash Equilibrium	03	**CO 1**
	1.4	Game Tree and Backward Induction	03	**CO 1**
	1.5	Mixed Strategy Equilibrium	03	**CO 1**
	1.6	Case Studies	02	**CO 1**
Unit 2		**Information Economics**	**15**	
	2.1	Asymmetric Information	01	**CO 2**
	2.2	Economics of Search	01	**CO 2**
	2.3	Market for Lemons and Adverse Selection	02	**CO 2**
	2.4	Insurance market and Adverse Selection	02	**CO 2**
	2.5	Problem of Moral Hazard and Allocative Inefficiency	02	**CO 2**
	2.6	The Market Signaling	01	**CO 2**
	2.7	The Principal-Agent Problem	02	**CO 2**
	2.8	Efficient Wage Theory	02	**CO 2**
	2.9	Case Studies	02	**CO 2**
Unit 3		**General Equilibrium and Welfare Economics**	**15**	
	3.1	Concept of General Equilibrium	03	**CO 3**
	3.2	Pareto Optimality and Marginal Conditions of Social Welfare	03	**CO 3**
	3.3	Pareto Optimality and Perfect Competition	02	**CO 3**
	3.4	Social Welfare function	03	**CO 3**
	3.5	Kaldor-Hicks Compensation Criteria	02	**CO 3**
	3.6	Arrow's Impossibility Theorem	02	**CO 3**
Unit 4		**Monopoly and Competition**	**15**	

	4.1	Measures of Monopoly Power (Lerner's and Elasticity of Demand)	02	**CO 4**
	4.2	The good and bad of Monopolies	02	**CO 4**
	4.3	Public Policy towards Monopoly and Competition	03	**CO 4**
	4.4	Problems of Nationalized Industries	03	**CO 4**
	4.5	Regulation of Natural Monopolies: Public Interest Theory and Marginal Cost Pricing, Average Cost Pricing	03	**CO 4**
	4.6	Encouraging Competition	02	**CO 4**

References

1. Mankiw N. Gregory (2015), Principles of Microeconomics, Cengage Learning.
2. Jhingan M. L. (2012), Advanced Economic Theory, Vrinda Publications, Delhi.
3. Blanchard, Olivier, and David R. Johnson (2012), Macroeconomics, 6th edition, Pearson.
4. Mansfield, Edwin (1985), Micro-economics: Theory & Applications, 5th edition, W. W. Norton & Company, New York.
5. Salvatore D. (2006), Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
6. Varian Hal R. (2010), Intermediate Microeconomics: A Modern Approach, 8th Edition, East-West Press, New Delhi
7. Banerjee S., Pindyck R. S., Rubinfeld D. L. (2022). Microeconomics, 9e, Pearson Education
8. Avinash Dixit and Barry Nalebuff (2010). The Art of Strategy: A Game Theorist Guide to Success in Business & Life.

Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**

Guru Nanak Khalsa College of Arts, Science and Commerce
(Autonomous)
Department of Economics

Course: T.Y.B.A.
Semester-V: Major-II
Course Title: International Economics
Course Code: GNKUAECOMJ2105
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	**Understanding the meaning of international economics, global interconnectedness, the rationale of trade and the underpinnings of trade theories**
2	**Evaluating trade policies and its effectiveness**
3	**Examining the challenges of global crises and its implications for developing economies and the reforms to be be made thereupon**
4	**Assessing and evaluating the changing global dynamics in trade**

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Understand the basis of International trade and related the concepts of trade	**PO1, PO4**	**PSO1**	**U**
CO2	to recall and explain the theories of international trade and identify the patterns of trade in the global scenario.	**PO1, PO4**	**PSO1, PSO3**	**U, R**
CO 3	Compare and contrast the different trade theories and bring out its limitations.	**PO4**	**PSO1, PSO3**	**An**
CO 4	understand and interpret trade policies and its impact on the nation's growth.	**PO6, PO7**	**PSO2**	**E**
CO5	Gain a broad understanding of the key issues in international Economics	**PO4**	**PSO1**	**U, A**
CO6	Apply the theoretical aspects of international trade to the changing global times and recognize the linkage between political,economic and financial developments.	**PO8, PO9**	**PSO5**	**Ap, C**

Unit		Title	No. of lectures	CO Mapping
Unit 1		**The Principle of Trading and Classical and Neo-classical Theory of Trade**	**15**	
	1.1	The basis of international trade: Why do nations trade? - Internal and International Trade	**2**	**CO1**
	1.2	Classical Theories: Absolute Advantage theory, Comparative Cost Advantage	**3**	**CO2**
	1.3	Neo Classical analysis of International Trade: Trade equilibrium under different Cost Conditions (Haberler's Approach of Opportunity Costs)	**4**	**CO2**
	1.4	Gains from Trade	**2**	**CO1**
	1.5	Terms of Trade	**2**	**CO1**
	1.6	Law of Reciprocal Demand: Offer Curves	**2**	**CO2**
Unit 2		**Modern Theories of Trade**	**15**	
	2.1	Heckscher Ohlin theorem: Physical and Price Criterion; Leontief Paradox	**4**	**CO2**
	2.2	Factor Price equalization Theorem	**3**	**CO2, CO3**
	2.3	Stolper Samuelson Theorem	**3**	**CO2,CO3**
	2.4	The Rybczynski Theorem	**2**	**CO2,CO3**
	2.5	Theory of Imperfect competition - Economies of Scale and emergence of IIT	**3**	**CO2,CO3**
Unit 3		**Commercial Policy**	**15**	
	3.1	Instruments of Trade Policy	2	**CO4**
	3.2	Tariff: Effects, Theory of Optimum tariffs	2	**CO4**
	3.3	Import Quotas: effects	1	**CO4**
	3.4	Export Subsidies: effects	2	**CO4**
	3.5	Voluntary Export Restraint: effect	1	**CO4**
	3.6	Technical Barriers to Trade: Sanitary and Phytosanitary conditions	1	**CO4**
	3.7	Trade Costs and Dumping (Krugman pg. 211,212, 213)	2	**CO4,CO5**
	3.8	Anti-Dumping Measures: Subsidies and CVDS	2	**CO4,CO5**
	3.9	Retaliatory Tariffs and Trade Wars (Case Studies)	2	**CO4,CO5**
Unit 4		**Global Crises and New International Economic Order**	**15**	
	4.1	A. Global Financial Crisis	2	**CO5**
	4.2	Developing Countries: Growth, Crisis, and Reforms	2	**CO5**
	4.3	Problem of Default of developing countries	2	**CO5**
	4.4	Reforming World Financial Architecture.	2	**CO5,CO6**
	4.5	B. GATT: Uruguay Round	2	**CO5**
	4.6	Role of WTO - Dispute Settlement Mechanism	2	**CO5**
	4.7	Regionalism Vs Multilateralism	1	**CO5,CO6**
	4.8	RTAs: Free Trade Areas, Customs Union, Economic Union	2	**CO6**

References

1. Paul Krugman, Maurice Obstfeld, and Marc Melitz (2022). International Economics Theory and Policy, Twelfth Edition. Pearson Education.
2. Salvatore, D. International Economics. Wiley.
3. Carbough, R. J. (1999), International Economics.
4. Bhagwati J. (1981), International Trade, Cambridge University Press, London.
5. Van Marrewijk, C., International Economics, Oxford University Press, 2007.
6. Bhagwati J. Regionalism and multilateralism: an overview. In: De Melo J, Panagariya A, eds. *New Dimensions in Regional Integration*. Cambridge University Press; 1993:22-51.
7. Understanding The WTO Agreement Anti-dumping, subsidies, safeguards: contingencies.
8. Gwaindepi, Abel and Karimu, Amin (2024) Reform of the global financial architecture in response to global challenges. How to restore debt sustainability and achieve SDGs? Directorate-general for external policies Policy department, EU https://www.europarl.europa.eu/RegData/etudes/IDAN/2024/754451/EXPO_IDA(2024)754451_EN.pdf
9. Bo Södersten and Geoffrey Reed (1994). International Economics, Macmillan.
10. Gita Gopinath, Pierre-Olivier Gourinchas, Andrea F Presbitero, and Petia Topalova. "Changing Global Linkages: A New Cold War?", *IMF Working Papers* 2024, 076 (2024), accessed April 29, 2025, https://doi.org/10.5089/9798400272745.001

Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**

Guru Nanak Khalsa College of Arts, Science and Commerce
(Autonomous)
Department of Economics

Course: T.Y.B.A.
Semester-V: Major-III
Course Title: History of Economic Thought
Course Code: GNKUAECOMJ3105
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	Introducing the Ancient Indian Knowledge system in the field of Economics
2	Meeting with Original Economic Thoughts of prominent Classical Economists through their own writings.
3	Presenting premium Neo-Classical Original ideas responsible for quantification & entirety of the subject.
4	Studying Original writings of Keynesian & post-Keynesian, focusing on highlighted Macroeconomic variables & trends with few Nobel Prize lectures who shaped the world.

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Learning, how critical, Analytical, Scientific thoughts stated.	**PO4**	**PSO1**	**REMEMBER**
CO 2	Development of reflective thinking among learners,	**PO2**	**PSO1**	**UNDERSTAND**
CO 3	Development of Global Competence ability among Learners	**PO9**	**PSO4**	**ANALYSE**
CO4	Analyse & Evaluate the Economic problem & its relevance of knowledge in contemporary society.	**PO3**	**PSO4**	**ANALYSE**
CO5	Development of most scientific expressions on Acquisition of Entrepreneurial skills	**PO4**	**PSO6**	**APPLY**

Unit		Title	No. of lectures	CO Mapping
Unit 1		**Indian Knowledge System Thought (IKS based)**	**15**	
	1.1	**Introduction**		
	1.1.1	Uses of History & Criteria for Selection	03	**CO1**
	1.2	**Buddhism & Economics**		
	1.2.1	Buddhism & The Economic Enterprise	02	**CO5**
	1.2.2	Prices & Taxation and Altruism & Economics	02	**CO1**
	1.2.3	Schumacher's Buddhist Economics	02	**CO4**
	1.3	**Kautilya's Arthashastra**		
	1.3.1	The Economic Functions of the State	02	**CO1**
	1.3.2	Taxation & Pricing Policy	02	**CO1**
	1.3.3	The Land System	02	**CO1**
Unit 2		**The Classical Tradition**	**15**	
	2.1	**Adam Smith**		
	2.1.1	Of the Division of Labour	02	**CO2**
	2.1.2	Of the Money & Prices	01	**CO2**
	2.1.3	Of the Wages, the Profit & the Rent	01	**CO2**
	2.1.4	Of the Accumulation of Capital	02	**CO2**
	2.2	**David Ricardo**		
	2.2.1	On Value: Ricardian Theory of Value	02	**CO2**
	2.2.2	On Rent: Ricardian Theory of Rent	01	**CO2**
	2.2.3	On Taxes: Ricardian Theory of Taxation	01	**CO2**
	2.3	**Karl Marx**		
	2.3.1	Commodities, Money & Capital	02	**CO2**
	2.3.2	Production of Surplus Value	01	**CO2**
	2.3.3	The Conversion of Rate of Surplus Value into Rate of Profit	01	**CO2**
	2.3.4	The Law of the Tendency of the Rate of Profit to Fall	01	**CO2**
Unit 3		**The Marginalist approach**	**15**	
	3.1	**Alfred Marshall**		
	3.1.1	On wants & Their Satisfaction	01	**CO4**
	3.1.2	Industrial Organisation	01	**CO4**
	3.1.3	On Markets	01	**CO4**
	3.1.4	The Distribution of The National Income	01	**CO2**
	3.2	**Arthur Pigou**		
	3.2.1	Welfare & Economic Welfare	01	**CO1**
	3.2.2	The National Dividend	01	**CO1**

	3.2.3	Economic Welfare & Changes in the Size of National Dividend	01	**CO1**
	3.2.4	Economic Welfare & Changes in the Distribution of National Dividend	01	**CO1**
	3.2.5	The National Dividend & The Quality of The People	02	**CO1**
	3.3	**Joseph Schumpeter**		
	3.3.1	Fundamental Phenomenon of Economic Development	02	**CO1**
	3.3.2	Entrepreneurial Profit	02	**CO5**
	3.3.3	The Business Cycle	01	**CO3**
Unit 4		**Keynesian & Post Keynesian Thoughts**	**15**	
	4.1	**J M Keynes**		
	4.1.1	Expectations As Determining Output & Employment	01	**CO3**
	4.1.2	Notes on the Trade Cycles	01	**CO3**
	4.2	**Friedrich Hayek**		
	4.2.1	The Abandoned Road	01	**CO4**
	4.2.2	The Economic Control & Totalitarianism	02	**CO4**
	4.3	**Milton Friedman**		
	4.3.1	The Power of The Market	01	**CO3**
	4.3.2	What's Wrong with Our Schools?	02	**CO3**
	4.4	**Nobel Prize Lectures**		
	4.4.1	Amartya Sen Prize Lecture 1998	01	**CO2**
	4.4.2	Elinor Ostrom Prize Lecture 2009	01	**CO2**
	4.4.3	Christopher Sims Prize Lecture 2011	02	**CO2**
	4.4.4	Abhijit Banerjee Prize Lecture 2019	01	**CO2**
	4.4.5	Daron Acemoglu Prize Lecture 2024	02	**CO2**

References

Module 1

1. Dasgupta Ajit, A History of Indian Economic Thought, Routledge Publisher, 2002, pp 1-40.
2. Schumacher E.F., Buddhist Economics, Center for New Economics, URL,"https://centerforneweconomics.org/publications/buddhist-economics/"

Module 2

1. Smith Adam, An Enquiry into the Nature and Causes of the Wealth of Nations, Oxford University Press, 1976, Volume 1, Book I & II.
2. Ricardo David, On Principles of Political Economy & Taxation, Batoche Books Kitchener, 2001, pp.8-50,104-108.
3. Marx Karl, Capital A Critique of Political Economy, Volume I, Progress Publisher Moscow, 1887, , pp.25-117, 355-375..
4. Marx Karl, Capital A Critique of Political Economy, VolumeI III, Progress Publisher Moscow, 1956, pp.18-92, 138-171.

Module 3

1. Marshall Alfred, Principles of Economics, Plagrave Macmillan, 8e, 1890, pp.70-115, 200-207,269-275, 418-453.
2. Pigou Arthur, Economics of Welfare, Macmillan & co., London, 4e, 1932, pp.3-22, 31-42, 82-86, 87-97, 106-122.
3. Schumpeter Joseph, Theory of Economic Development, Transaction Publisher, 1983, pp.41-69, 94-115, 157-189.

Module 4

1. Keynes John Maynard, The General Theory of Employment, Interest & Money, Palgrave Macmillan,1936, pp.29-32, 155-165.
2. Hayek F. A., The Road to Serfdom, Routledge Publisher, 1944, pp.10-23, 91-104
3. Friedman Milton & Rose, Free to Choose A Personal Statement, Harcourt Brace Jovanovich, 1980, pp.9-37, 150-188.
4. Sen Amartya, Nobel Lecture, NobelPrize.org, 8th Dec. 1998.
5. Ostrom Elinor, Nobel Lecture, NobelPrize.org, 8th Dec. 2009.
6. Christopher Sims, Nobel Lecture, NobelPrize.org, 8th Dec. 2011.
7. Abhijit Banerjee, Nobel Lecture, NobelPrize.org, 8th Dec. 2019.
8. Daron Acemoglu, Nobel Lecture, NobelPrize.org, 8th Dec. 2024.
9. Breit, W., & Hirsch, B. (2005). *Lives of the laureates: Eighteen Nobel economists* (Vol. 1). The MIT Press.

Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**

Guru Nanak Khalsa College of Arts, Science and Commerce
(Autonomous)
Department of Economics

Course: T.Y.B.A.
Semester-V: Elective-I
Course Title: Mathematics and Statistics for Economic Analysis
Course Code: GNKUAECOEL1105
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	Familiarizing students with the basic concepts of Mathematical Economics: Uses of economic functions and Use of derivatives for optimization.
2	Equipping students to work with matrices and being able to apply partial derivatives to identify marginal functions.
3	Introducing students to the concept of Probability distributions and to the idea of Integral Calculus and its applications in Economics.
4	Assisting students in understanding the concepts and interlink between correlation and regression analysis; Providing students with the opportunity to understand the concept, significance and limitations of Index numbers.

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Analyze economic functions in the context of changes in tax, subsidy or independent variable; Identify the optimum value of the function using derivatives.	**PO 4**	**PSO 1**	**U, E, An, Ap**
CO 2	Perform basic matrix operation and identify impact of independent variable on the dependent variable in the multivariate functions.	**PO 4**	**PSO 1**	**U, E, An, Ap**

CO 3	Find total functions from marginal functions using integration; Calculate probability associated with events following specific probability distribution.	**PO 4**	**PSO 1**	**U, E, An, Ap**
CO 4	Identify correlation and/or causation between variables; Understand the steps involved in construction of index number, its applications and limitations.	**PO 4**	**PSO 1**	**U, E, An, Ap**

Unit		**Title**	**No. of lectures**	**CO Mapping**
Unit 1		**Equations and Derivatives**	**15**	
	1.1	Market Demand and Supply models: Impact of tax and subsidy	02	**CO 1**
	1.2	Concept of derivatives and its applications in various economic analysis	04	**CO 1**
	1.3	Higher order derivatives	02	**CO 1**
	1.4	Increasing and decreasing functions	03	**CO 1**
	1.5	Optimization of Economic function	04	**CO 1**
Unit 2		**Matrix Algebra and Partial Derivatives**	**15**	
	2.1	Basic operations on matrices: Multiplication, Finding Rank of the matrix, Inversion, Cramer's Rule	04	**CO 2**
	2.2	Calculation of Marginal Productivity, Income and Price elasticities of demand using partial derivatives	05	**CO 2**
	2.3	Derivatives of multivariate functions: Unconstrained Optimization and Constrained Optimization using Lagrange Multiplier Method	06	**CO 2**
Unit 3		**Integral Calculus and Probability distribution**	**15**	
	3.1	Indefinite and Definite Integration	03	**CO 3**
	3.2	Economic Applications: Finding total functions, Learning Curve, Consumer Surplus and Producer Surplus	03	**CO 3**
	3.3	Probability theory: Sample Space and Events	01	**CO 3**
	3.4	Conditional Probability	02	**CO 3**
	3.5	Binomial Probability Distribution	03	**CO 3**
	3.6	Normal Distribution	03	**CO 3**

Unit 4		Correlation, Regression and Index Numbers	15	
	4.1	Karl Pearson's Correlation Coefficient	02	**CO 4**
	4.2	Spearman's Rank Correlation	02	**CO 4**
	4.3	Regression Analysis	03	**CO 4**
	4.4	Relation between correlation and regression	02	**CO 4**
	4.5	Concept, uses and problems of index numbers	02	**CO 4**
	4.6	Splicing and Shift of base	02	**CO 4**
	4.7	Laspeyre's, Paasche's and Fisher's Index Number	02	**CO 4**

References

1. Dowling Edward T: Introduction to Mathematical Economics, Schaum Outline Series in Economics, Tata McGraw -Hill, New Delhi, 2004.
2. Dowling Edward T: Theory and Problems of Mathematical Methods for Business and Economics, McGraw –Hill, 1993.
3. Gupta S.P.: Statistical Methods, S. Chand, New Delhi, 2014.
4. Lerner Joel J and P.Zima: Theory and Problems of Business Mathematics, McGraw Hill,New York, 1986.
5. Sancheti D.C. and V.K. Kapoor: Statistics-Theory, Methods and Applications, S. Chand, New Delhi, 2014.
6. Chiang A. C.: Fundamental Methods of Mathematical Economics, 3rd edition, McGraw-Hill, 1984.
7. https://www.3blue1brown.com/

Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**

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Course: T.Y.B.A.
Semester-V: Elective-II
Course Title: Contemporary Economic Issues - India and the World
Course Code: GNKUAECOEL2105
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	Understanding and analysing the contemporary economic issues and challenges of the World economy
2	Evaluating the implications of Changing World order and disruptions due to war, Cyber threats and AI
3	Discerning the catalysts and hurdles to growth and evaluating its impact
4	Understanding India's growth story in a global perspective and assessing major drivers to it's high growth

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Comprehend and analyse the trending issues of globalisation and deglobalisation and its impact. Demonstrate critical thinking and formulate conclusions about the global economy	PO1, PO4, PO8	PSO3	U, An
CO 2	Assess the growing challenges of silver economy ; the costs thereupon and explore policy options	PO4, PO6, PO8	PSO1,	An, E
CO 3	identify the risks of high debt and evaluate safe debt levels. Identify the key drivers of high debt; Analyse and compare the debt sustainability issues of emerging Vs advanced economies	PO7	PSO1	An, C

CO4	have better insights into the major global shocks and disruptions by way of War, Cyber threat and AI	**PO8, PO9**	**PSO1**	**Ap,E**
CO5	to have a pragmatic perspective on catalysts and hurdles to economic growth and transform the challenges to catalysts, fostering better and resilient growth	**PO8, P09**	**PSO2, PSO3**	**An, Ap, C**
CO6	to have a deeper insight into India's growth story in the global context; identify the potential high growth sectors	**PO7, PO9**	**PSO2, PSO3, PSO4**	**An, E, C**

Unit		Title	No. of lectures	CO Mapping
Unit 1		**Contemporary challenges plaguing the World Economy-I**	**15**	
	1.1	Globalization and Deglobalization	**3**	**CO1**
	1.2	Globalization and Growth	**3**	**CO1**
	1.3	Globalization and Inequality	**2**	**CO1**
	1.4	The Rise of the Silver Economy: Global Implications of Population Aging (World Economic Outlook)	**3**	**CO2**
	1.5	Debt Sustainability: Back to Basics; Debt Sustainability: Emerging Economies (EEs) versus Advanced Economies (AEs)	**4**	**CO3**
Unit 2		**Contemporary challenges plaguing the World Economy-II**	**15**	
	2.1	Changing World Order	**3**	**CO1**
	2.2	War and Economic Growth	**2**	**CO4**
	2.3	Guns and Growth	**2**	**CO4**
	2.4	Economic implications of Russia-Ukraine War	**2**	**CO4**
	2.5	Cyber threats to the financial system	**2**	**CO4**
	2.6	AI and World Economy	**2**	**CO4**
	2.7	AI and Labour markets	**2**	**CO4**
Unit 3		**Economic Growth: Catalysts and Hurdles**	**15**	
	3.1	Global Growth: Divergent and Uncertain (World Economic Outlook)	3	**CO5**
	3.2	Economics of Creative Destruction, Striking the right balance, The road ahead	3	**CO5**
	3.3	Creation	3	**CO5**
	3.4	Preservation	3	**CO5**
	3.5	Destruction (World Development Report)	3	**CO5**
Unit 4		**India and the World**	**15**	
	4.1	India's Macro Story	3	**CO6**
	4.2	Charting the path to a developed India: Viksit Bharat 2047	3	**CO6**
	4.3	India's Foreign Reserves and Global Risk	3	**CO6**

	4.4	India at 125: Reclaiming the Lost Glory and Returning the Global Economy to the Old Normal	3	**CO6**
	4.5	Sectors with high growth potential: FinTech, IT, Healthcare & Pharmaceuticals, Renewable Energy	3	**CO6**

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20. https://www.weforum.org/stories/2025/03/ai-authentic-intelligence/
21. https://www.dfat.gov.au/publications/trade-and-investment/india-economic-strategy/ies/chapter-1.html
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Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**

Guru Nanak Khalsa College of Arts, Science and Commerce
(Autonomous)
Department of Economics

Course: T.Y.B.A.
Semester-V: VSC
Course Title: Econometrics with R & Python
Course Code: GNKUAECOVSC105
Credits: 2
No of lectures (Hours): 30
Marks: 50 (30:20)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	Introducing students to the basic concepts of Econometrics.
2	Equipping students to use R software for executing models and performing diagnostic tests.
3	Presenting the ‘ simplified analysis due to cloud computing’ & ‘online repositories’ to learners
4	Comparing the efficiency between spreadsheets and online python freeware Google co-lab

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Understand the theoretical underpinning to econometrics modelling.	**PO 4**	**PSO 1, PSO 5**	**U**
CO 2	Apply the knowledge of econometric modelling and perform data analysis using R.	**PO 4, PO 5**	**PSO 5**	**An, Ap**
CO 3	Learners able to make own repositories Github accounts and access public repositories	**PO5**	**PSO5**	**APPLY**

CO 4	Enabling learners to use simple smartphone for statistical analysis with Google co-lab in Google Chrome application	**PO5**	**PSO5**	**ANALYSE**

Unit		**Title**	**No. of lectures**	**CO Mapping**
Unit 1		**Introduction to Econometrics**	**15**	
	1.1	Random variables and Probability Distributions	01	**CO 1**
	1.2	Simple Linear Regression	02	**CO 1, CO 2**
	1.3	Hypothesis Testing and Confidence Intervals	02	**CO 1, CO 2**
	1.4	Multiple Linear Regression	01	**CO 1, CO 2**
	1.5	Multicollinearity	01	**CO 1**
	1.6	Heteroscedasticity	01	**CO 1**
	1.7	Autocorrelation	01	**CO 1**
	1.8	Econometric Modelling: Model Specification and Diagnostic Testing	02	**CO 1, CO 2**
	1.9	Nonlinear Regression Models	02	**CO 1**
	1.10	Time Series Econometrics: Some Basic Concepts	02	**CO 1**
Unit 2		**Econometrics using Python**	**15**	
	2.1	Introduction to Google Co-lab with Google Drive & GitHub Repository	04	**CO3**
	2.2	Econometrics Python Analysis verifying with Spreadsheet Analysis as Uploading & stationarity check of data	03	**CO4**
	2.3	Akaike Information Criterion [AIC] for lag determination	02	**CO4**
	2.4	Granger Causality	02	**CO4**
	2.5	Vector AutoRegression [VAR] analysis	02	**CO4**
	2.6	Introduction to GitHub Co-pilot	02	**CO3**

References

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2. Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. MIT press.
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4. Hanck C., Arnold, M., Gerber A., and Schmelzer M. (2024). *Introduction to Econometrics with R*. (https://www.econometrics-with-r.org/index.html)
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Examination:

- **Internal Examination (20 Marks):** Continuous Internal assessment (CIA) of 20 Marks. Any two among Quiz, Assignment, Presentation, Viva of 7 and 8 Marks and Class Participation of 5 marks.
- **Semester End Theory Examination (30 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 1hour.
- **Combined passing of 40% with minimum 20% in Internal Component.**

Guru Nanak Khalsa College of Arts, Science and Commerce
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Department of Economics

Course: T.Y.B.A.
Semester-VI: Major-I
Course Title: Advanced Macroeconomics
Course Code: GNKUAECOMJ1106
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	Introducing students to the Post-Keynesian consumption theories.
2	Familiarizing students with the basic concepts related to Macroeconomics such as Aggregate Demand, Aggregate Supply, Taylor Rule, etc.
3	Discussing key concepts pertaining to Open Economy Macroeconomics such as concept of open economy, exchange rates, IS-LM-UIP model, Mundell-Fleming model, etc.

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Understand the evolution of consumption theories in Post-Keynesian literature.	**PO 4**	**PSO 1**	**U**
CO 2	Distinguish between various economic concepts especially related to monetary policy.	**PO 4, PO 7**	**PSO 1, PSO 2**	**U, An**
CO 3	Understand the theoretical frameworks that explain the relationship between macroeconomic variables in open economy setup.	**PO 4, PO 7**	**PSO 1, PSO 2, PSO 4**	**U, An, Ap**

Unit		Title	No. of lectures	CO Mapping
Unit 1		**Post-Keynesian Consumption Theories**	**15**	
	1.1	A critique of Keynes Consumption Function	02	**CO 1**
	1.2	Relative Income Hypothesis	02	**CO 1**
	1.3	Intertemporal Choice and Consumption Function	02	**CO 1**
	1.4	Franco Modigliani's Life Cycle Hypothesis	03	**CO 1**
	1.5	Milton Friedman's Permanent Income Hypothesis	03	**CO 1**
	1.6	Random-Walk Theory of Consumption and Rational Expectations	03	**CO 1**
Unit 2		**Aggregate Demand, Aggregate Supply & Prices**	**15**	
	2.1	Aggregate Demand	02	**CO 2**
	2.2	Aggregate Supply	02	**CO 2**
	2.3	Equilibrium in the short-run	02	**CO 2**
	2.4	Inflation, Expected Inflation and Natural Rate of Unemployment	03	**CO 2**
	2.5	Real Interest Rate and Nominal Interest Rate	02	**CO 2**
	2.6	The Taylor Rule and Monetary Policy	02	**CO 2**
	2.7	Case studies	02	**CO 2**
Unit 3		**Open Economy Macroeconomics – I**	**15**	
	3.1	Openness in Goods and Financial Markets	02	**CO 3**
	3.2	Goods market in an Open Economy	02	**CO 3**
	3.3	Output, Interest and Exchange Rates	03	**CO 3**
	3.4	Exchange rate regimes	03	**CO 3**
	3.5	Nominal versus real exchange rates	03	**CO 3**
	3.6	Significance of real exchange rate	02	**CO 3**
Unit 4		**Open Economy Macroeconomics – II**	**15**	
	4.1	IS-LM model for an open economy	02	**CO 3**
	4.2	Monetary and Fiscal Policy under Fixed Exchange Rate System	02	**CO 3**
	4.3	Monetary and Fiscal Policy under Flexible Exchange Rate System	02	**CO 3**
	4.4	Uncovered interest rate parity	02	**CO 3**
	4.5	IS-LM-UIP model	02	**CO 3**
	4.6	Mundell-Fleming model	03	**CO 3**
	4.7	Impossible trinity	02	**CO 3**

References

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2. Paul Krugman, Robin Wells & Kathryn Graddy (2007), Economics, Worth Publishers.
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5. Stiglitz, J. Economics of Public Sector, 3e. New York: W.W. Norton & Co, 2000
6. Froyen, R. Macroeconomics, 10e. Pearson Education, India.
7. https://mpra.ub.uni-muenchen.de/108215/1/MPRA_paper_108215.pdf

Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**

Guru Nanak Khalsa College of Arts, Science and Commerce
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Department of Economics

Course: T.Y.B.A.
Semester-VI: Major-II
Course Title: Development Economics
Course Code: GNKUAECOMJ2106
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	**Understanding the concepts and dynamics of growth and development; various measures of development**
2	**Understand the theories of growth and development so as to identify policies and strategies to accelerate growth and address the challenges like poverty, inequality, gender and sustainability**
3	**Evaluating policies so as to bring greater inclusivity**
4	**Gauging the impact of Technology and emerging artificial intelligence from the development perspective.**

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Students will have in-depth understanding of the historical development of monetary systems, emphasizing Kautilya's Arthashastra and the Indian Knowledge System, while exploring their continued relevance in the modern world.	PO 1, PO 3	PSO 1	U, R
CO 2	Explain and analyse the theories of growth and development and therefore evaluate developmental policies	PO1, PO4,	PSO2, PSO 3	U, An, E

CO 3	Apply their knowledge to analyse the issues of poverty, inequality, gender issues(have a better perspective of feminist macroeconomics) and sustainable development .	**PO6, PO7**	**PSO4, PSO5**	**Ap, An, E**
CO4	Evaluate the role of technology and types of technical progress . Understand the potential impact of AI on labor markets and the need to adapt and evolve in the face of disruptive technologies.	**PO8, PO9**	**PSO4, PSO 5**	**E, An, C**

Unit		Title	No. of lectures	CO Mapping
Unit 1		**Ancient Indian Finance and Development (IKS Based)**	**15**	
	1.2	Evolution of Indian Economy: Ancient to Modern	**2**	**CO1**
	1.3	Ancient Indian Idea of State and Economic Policies	**2**	**CO1**
	1.4	Evolution of Payment Systems in India	**2**	**CO1**
	1.5	Relevance of Kautilya's Arthshastra in modern times	**2**	**CO1**
	1.6	History of Money Lending and Debt Instruments in India	**2**	**CO1**
	1.7	Business Practices and Monetary History	**2**	**CO1**
	1.8	Indian Knowledge System and Sustainable Development (Integrating ancient wisdom with modern sustainable goals)	**3**	**CO1**
Unit 2		**Development Theory and Growth models**	**15**	
	2.1	Sen's Capability Approach	**1**	**CO2**
	2.2	Schumpeter's Theory	**1**	**CO2**
	2.3	Big push Theory	**2**	**CO2**
	2.4	Hirschman Theory of unbalanced growth	**2**	**CO2**
	2.5	Structural Transformation Models: Lewis and Nurkse Models, Rostow Theory of Growth	**3**	**CO2**
	2.6	Solow Model	**3**	**CO2**
	2.7	Harrod Domar Model	**3**	**CO2**

Unit 3		**Poverty, Inequality and Gender Disparity**	**15**	
	3.1	A. Measures of Inequality-Lorenz curve and Gini Coefficient	2	**CO3**
	3.2	Kuznets inverted U hypothesis	1	**CO3**
	3.3	Measures of Poverty, Thorbecke - Greer Index	2	**CO3**
	3.4	Chronic Poverty and Economic Characteristics of High Poverty groups. (Children, Women and Ethnic Minorities)	2	**CO3**
	3.5	Policy Options for Inequality and Poverty (case study of India)	2	**CO3**
	3.6	B. Role of Gender Economics in understanding Gender Inequality	2	**CO3**
	3.7	Gender Macro Economics: Feminist Macroeconomics (UN Women Training Manual)	2	**CO3**
	3.8	Gender Budgeting	2	**CO3**
Unit 4		**Technology and Economic Development**	**15**	
	4.1	Role of Technology in Economic Development	2	**CO4**
	4.2	Types of Technical Progress: Labour Augmenting, Capital Augmenting and Neutral Technical Progress	3	**CO4**
	4.3	Hicks and Harrod Technical Progress	5	**CO4**
	4.4	Schumacher's Appropriate Technology	2	**CO4**
	4.5	Economic Impact of Artificial Intelligence (AI)	3	**CO4**

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21. Economic impacts of artificial intelligence https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/637967/EPRS_BRI(2019)637967_EN.pdf
22. The Economic Impacts and the Regulation of AI: A Review of the Academic Literature and Policy Actions: file:///C:/Users/ECONOMICS/Downloads/wpiea2024065-print-pdf.pdf
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Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**

Guru Nanak Khalsa College of Arts, Science and Commerce
(Autonomous)
Department of Economics

Course: T.Y.B.A.
Semester-VI: Major-III
Course Title: Environmental & Resource Economics
Course Code: GNKUAECOMJ3106
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	Presenting learners importance of Natural Resource Economic analysis.
2	Introducing Economic theories in Natural Resources.
3	Helping learners to understand resource management literature.
4	Helping learners to understand global studies in Net Zero & apply its tools in Net Zero targeting

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Understanding real use of Natural Resource Economics	**PO1**	**PSO1**	**UNDERSTAND**
CO 2	Apply Environmental theories in given areas of the domain.	**PO3**	**PSO4**	**APPLY**
CO 3	Analyse & make international comparison of the Natural Resources	**PO9**	**PSO4**	**ANALYSE**
CO4	Learners are able to evaluate a clear path towards clean & green energy produce.	**PO8**	**PSO1**	**EVALUATE**

Unit		Title	No. of lectures	CO Mapping
Unit 1		**Environmental Economics Theory**	**15**	
	1.1	Natural Resource Economics	02	**CO1**
	1.2	Environment as an Economic & Social Asset	02	**CO1**
	1.3	Benefits & Demand of an Environment	01	**CO1**
	1.4	Cost & Supply of an Environment	02	**CO1**
	1.5	Emissions Tax & Tradable Permits	02	**CO2**
	1.6	Economic Value of an Environment	02	**CO2**
	1.7	Travel Cost Method	02	**CO2**
	1.8	Contingent Valuation Method	02	**CO2**
Unit 2		**Environmental Economics Policies**	**15**	
	2.1	Decentralising Environmental Policies	02	**CO1**
	2.2	Command & Control Strategies	02	**CO1**
	2.3	Incentive based strategies	01	**CO1**
	2.4	Rio Declaration	02	**CO3**
	2.5	Kyoto Protocol	03	**CO3**
	2.6	Paris Climate Change Agreement	03	**CO3**
	2.7	National Action Plan on Climate Change	02	**CO4**
Unit 3		**Resource Management**	**15**	
	3.1	**Water**		
	3.1.1	National Water Policy 2024	03	**CO1**
	3.1.2	Satellite Data & Water Policy	02	**CO1**
	3.1.3	International Commission for the protection of Danube River	02	**CO3**
	3.1.4	Ganga the river, Its Pollution & Remedies.	02	**CO2**
	3.2	**Land Use**		
	3.2.1	Precision Agriculture for Smallholder Farmers	02	**CO1**
	3.3	**Minerals**		
	3.3.1	Mineral Resource Governance Index	02	**CO3**
	3.3.2	Community engagement & participatory inclusion in Mining	02	**CO2**
Unit 4		**Carbon Sequestration & Electric Power**	**15**	
	4.1	**Carbon Sequestration**		
	4.1.1	Social Cost of Carbon & GIVE model	02	**CO2**
	4.1.2	Carbon Pricing	01	**CO1**
	4.1.3	Net Zero by 2050	02	**CO2**
	4.1.4	Carbon Sinks	01	**CO1**
	4.1.5	Carbon Capture & Storage	01	**CO1**

	4.1.6	The Future of Hydrogen	02	**CO3**
	4.1.7	Green Economy	02	**CO4**
	4.2	**Electric Power** -		
	4.2.1	Technology Neutral Clean Electricity tax credit	02	**CO4**
	4.2.2	Solar GeoEngineering & India	02	**CO4**

References

Module I

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2. Quah E. & Tan T. S., Valuing the Environment, Asian Development Bank Institute, ADBI Working paper series no.1012, Oct. 2019, pp.2, 6-8, 9-13.

Module II

1. Field Barry C. & Field Martha K., Environmental Economics, 7e, McGraw Hill Education, 2017, pp. 174-261.
2. Rio Declaration, Report of the United Nations Conference on Environment and Development, United Nations General Assembly, Rio de Janeiro, 3-14 June 1992.
3. United Nations Treaty Collection, Ch. XXVII 7a. Environment, Kyoto Protocol to The United Nations Framework Convention on Climate Change, Kyoto, 11 December 1997.
4. Paris Agreement, United Nations Framework Convention on Climate Change, United Nations, 2015.
5. National Action Plan on Climate Change, Ministry of Environment, Forest & Climate Change, Government of India, Dec. 2021.

Module III

Water

1. National Water Policy, Ministry of Water Resources, Government of India, 2012.
2. Kuwayama Yusuke, Satellite Data Can Inform Water Policy, Resources Issues No.203, March 2020.
3. Lessons from Danube: A World Leader in Transboundary River Basin Management, International Commission for the Protection of the Danube River, URL:"https://www.icpdr.org/sites/default/files/nodes/documents/lessons-from-the-danube-a-world-leader-in-transboundary-river-basin-management.pdf".
4. Ganga The River, Its Pollution & What We Can Do To Clean It, A Center for Science & Environment Briefing Paper, 2014.

Land use

1. Precision Agriculture for Smallholder Farmers; UNDP Global Center for Technology, Innovation & Sustainable Development, Singapore; United Nations Development Programme, September 2021.

Minerals

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2. Spiller Beia, et.al., Community Engagement & Participatory Inclusion In Mining: Challenges, Barriers & Opportunities, Working paper 25-08, Resource for the Future, March 2025.

Module IV

Carbon Sequestration

1. Rennert K., et.al., Social Cost of Carbon, Resources for the Future, March 2025.
2. Hafstead Marc, Carbon Pricing Calculator, Resource For the Future, Aug. 2020.
3. Net Zero by 2050, A Roadmap For the Global Energy Sector, International Energy Agency, Oct. 2021.
4. Wear David N. & Wibbenmeyer M., Land-Use Change, No-Net-Loss Policies and Effects on Carbon Dioxide Removals, Resource for the Future, working paper 23-29, Oct. 2023.
5. What is Carbon Capture, Usage & Storage? And What Role Can It Play In Tackling Climate Change?, Gratham Research Institute on the Climate Change & the Environment, The London School of Economics & Political Science, URL,"https://www.lse.ac.uk/granthaminstitute/explainers/what-is-carbon-capture-and-storage-and-what-role-can-it-play-in-tackling-climate-change/".
6. The Future of Hydrogen Seizing Today's Opportunities, Report prepared by the IEA for G20 Japan, International Energy Agency, June 2019.
7. Green Economy, United Nations Environmental Programme, URL,"https://www.unep.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/green-economy".

Electric Power

1. King Ben, et.al.,Technology-Neutral Tax Credit: The Foundation of US Electric Power Decarbonization, Rhodium Group, May 2024. URL,"https://rhg.com/research/tech-neutral-tax-credits-electric-power/".
2. Sirur Simran, Indian Scientist are Showing Interest in Advancing Solar GeoEngineering Research, India. Mongabay, Nov. 2024, URL,"https://india.mongabay.com/2024/11/indian-scientists-are-showing-an-interest-in-advancing-solar-geoengineering-research/".

Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**

Guru Nanak Khalsa College of Arts, Science and Commerce
(Autonomous)
Department of Economics

Course: T.Y.B.A.
Semester-VI: Elective-I
Course Title: Behavioural Finance
Course Code: GNKUAECOEL1106
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	Familiarizing students with the basic concepts in Behavioural Finance.
2	Introducing students to the commonly observed biases and errors in Investors' decision making and information processing.
3	Making students aware of steps to avoid behavioural bias in efficiently managing personal finance.

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Understand fundamentals of Behavioural Finance.	**PO 4**	**PSO 1**	**U**
CO 2	Analyze most common biases and errors observed in investment behaviour.	**PO 4, PO 7**	**PSO 1**	**U, An**
CO 3	Apply the knowledge of risk-profiling, goal-based investing, lessons from the 2008 crisis, etc. in achieving unbiased investment decisions.	**PO 4, PO 9**	**PSO 1**	**U, An, Ap**

Unit		Title	No. of lectures	CO Mapping
Unit 1		**Basic concepts I**	**15**	
	1.1	Introduction to Behavioural Finance		**CO 1**
	1.2	Behavioural Finance versus Conventional Finance		**CO 1**
	1.3	Conventional Finance Theoretical Underpinnings: Expected Utility Theory, Rationality of Agents, Risk Aversion		**CO 1**
	1.4	Efficient Market Hypothesis: Implications and Limitations		**CO 1**
	1.5	Market Anomalies		**CO 1**
Unit 2		**Basic concepts II**	**15**	
	2.1	Prospect Theory: Foundational idea behind Behavioural Finance		**CO 1**
	2.2	Cumulative Prospect Theory		**CO 1**
	2.3	Hyperbolic Discounting and Procrastination		**CO 1**
	2.4	Overconfidence and Optimism		**CO 1**
	2.5	Underreaction and Overreaction		**CO 1**
Unit 3		**Biases and Errors**	**15**	
	3.1	Psychological foundations of Behavioural Finance		**CO 2**
	3.2	Decision Making Biases and Information Processing Errors: Heuristics, Anchoring, Availability, Bounded Rationality, Confirmation Bias, Hindsight Bias and others		**CO 2**
	3.3	Mental Accounting		**CO 2**
	3.4	Framing Effects in Financial Market Forecasts		**CO 2**
Unit 4		**Behavioural Finance and Investment Decisions**	**15**	
	4.1	Best practices to avoid Behavioural Bias		**CO 3**
	4.2	Behavioural Personal Finance		**CO 3**
	4.3	Risk Profiling and Investing for Clients		**CO 3**
	4.4	Goal based investing		**CO 3**
	4.5	Behavioural Finance and 2008 crisis		**CO 3**
	4.6	Case Studies		**CO 3**

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2. Camerer, Colin F., George Loewenstein, and Matthew Rabin (2004), Advances in Behavioral Economics. Princeton University Press.
3. Daniel Kahneman, Thinking Fast and Slow, Farrar, Straus and Giroux.
4. George Akerlof and Robert Shiller, Animal Spirits, Princeton University Press.
5. Richard Thaler, Advances in Behavioral Finance Vol. 2, Princeton University Press.
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7. Cass Sunstein and Richard Thaler, Nudge, Yale University Press.
8. What Investors Really Want - Learn the lessons of behavioral Finance, Meir Statman, McGraw-Hill
9. Handbook of Behavioral Finance – Brian R. Bruce
10. Behavioral finance - Wiley Finance - Joachim Goldberg, Rüdiger von Nitzsch
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16. Plous, S. (1993). The psychology of judgment and decision-making NY: McGrawHill.
17. Barberis, N. (2013) "Psychology and the Financial Crisis 2007-2008," in Financial Innovation: Too Much or Too Little?, ed. by M. Haliassos, 15–28.
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Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**

Guru Nanak Khalsa College of Arts, Science and Commerce
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Department of Economics

Course: T.Y.B.A.
Semester-VI: Elective-II
Course Title: Regional & Local Economics
Course Code: GNKUAECOEL2106
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	Introducing learners theories of Economic Growth & Location.
2	Providing data sources in Regional & Local Economics with insights.
3	Presenting the state & challenges in South Asia Regional cooperation.
4	Meeting with ultimate reasons behind unbalanced regional growth between urban & rural regions.

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Understand the theories of Economic Growth & Location	**PO4**	**PSO1**	**UNDERSTAND**
CO 2	Able to apply the Regional Location Choice & Migration Chains to given Urban settlements.	**PO3**	**PSO1**	**APPLY**
CO 3	Evaluating the problem of regional unbalanced & its Market/Investment oriented solutions	**PO3**	**PSO1**	**EVALUATE**
CO 4	Analyse the Integration Challenges in the South Asia Region.	**PO6**	**PSO4**	**ANALYSE**

Unit		Title	No. of lectures	CO Mapping
Unit 1		**Growth & Location Theories**	**15**	
	1.1	**Growth**		
	1.1.1	Neoclassical Growth Theory	02	**CO1**

	1.1.2	Endogenous Growth Theory	02	**CO1**
	1.1.3	Unbalanced Growth Theory	01	**CO1**
	1.2	**Location**		
	1.2.1	Agricultural Location Theory	02	**CO1**
	1.2.2	Alfred Marshall Industrial Location Theory	02	**CO1**
	1.2.3	Alfred Weber Industrial Location Theory	02	**CO1**
	1.2.4	Central Place Theory	02	**CO2**
	1.2.5	Hotelling's Linear City Model	02	**CO2**
Unit 2		**Data & Insights in Regional & Local Economics**	**15**	
	2.1	**Data Sources**		
	2.1.1	Historical Data Sources	02	**CO1**
	2.1.2	Modern Data Sources	01	**CO1**
	2.2	**Advances & Insights**		
	2.2.1	Regional Location Choice & Migration Chains	02	**CO1**
	2.2.2	Neighbourhood Formation & Segregation within Cities	01	**CO2**
	2.2.3	Transportation between Cities/Regions	02	**CO2**
	2.2.4	Within Cities Transport	02	**CO2**
	2.2.5	Mumbai Urban Transport Project & Guidance note on Urban Resettlement	02	**CO2**
	2.2.6	Communication Networks	01	**CO2**
	2.2.7	Location of Economic Activities	02	**CO2**
Unit 3		**Regional Issues and Opportunities in Agriculture**	**15**	
	3.1	Changes Affecting Farming	02	**CO3**
	3.2	Traditional Farming	01	**CO3**
	3.3	Market Oriented Farming	02	**CO3**
	3.4	Farm Management	02	**CO3**
	3.5	Challenges Facing Farmers	01	**CO3**
	3.6	Economics & Management Decisions	02	**CO3**
	3.7	Managing Risk	01	**CO3**
	3.8	The Entrepreneurial Farmer	02	**CO3**
	3.9	Ten Principles of Responsible Investment in Agriculture	02	**CO3**
Unit 4		**Regional Economic Cooperation & Integration in South Asia**	**15**	
	4.1	Pattern of Trade in South Asia	02	**CO4**
	4.2	Potential for Regional Economic Integration	02	**CO4**
	4.3	Challenges to Intraregional Trade	02	**CO4**
	4.4	Harnessing the Potential of Regional Value Chains	02	**CO4**
	4.5	Transport Connectivity	02	**CO4**

	4.6	Energy Connectivity	01	**CO4**
	4.7	ICT & People to people Connectivity	02	**CO4**
	4.8	Financial Cooperation	02	**CO4**

References

Module I

1. Todaro Michael P. & Smith Stephen C., Economic Development, 13e, Pearson, 2015, pp.153-161.
2. Hirschman A., The Strategy of Economic Development, Yale University Press, 1958.
3. Johann Heinrich von Thunen, Agricultural Location Theory, Economics & Geography, Britannica Money,1826. URL,"https://www.britannica.com/money/location-theory#ref137336"
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5. Weber Alfred, Theory of Location of Industries, The University of Chicago Press, Chicago, Illinois, 1909
6. King Leslie, Central place Theory, The Web Book of Regional Sciences, West Virginia University, 1933
7. Hotelling Harold, Stability in Competition, The Economic Journal, Vol. 39, No.153 (Mar.,1929), pp. 41-57.

Module II

1. Abramitzky R., et.al. New Data & Insights in Regional & Urban Economics, National Bureau of Economic Research Working Paper 33561, URL,"http://www.nber.org/papers/w33561", March 2025.
2. Guidance Note On Urban Resettlement, Mumbai Urban Transport Project, The World Bank & The Government of Maharashtra, Report No. 49000-IN, January 2009.

Module III

1. Kahan David, Market Oriented Farming: An Overview, Food and Agriculture Organization of The United Nations, Rome 2013.

Module IV

1. Unlocking the Potential of Regional Economic Cooperation and Integration in South Asia Potential, Challenges and the Way Forward; United Nations Economic & Social Commission for Asia & the Pacific, September 2018.

Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**

Guru Nanak Khalsa College of Arts, Science and Commerce
(Autonomous)
Department of Economics

Course: T.Y.B.A.
Semester-VI: Minor
Course Title: Fundamentals of Macroeconomics
Course Code: GNKUAECOMI1106
Credits: 2
No of lectures (Hours): 30
Marks: 50 (30:20)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	To equip students with basic concepts of Macroeconomics and Keynesian Economics.
2	To enhance student's cognitive ability to critically assess the relevance and application of Keynesian economics in the context of developing economies
3	To develop an independent understanding of the components of money, the causes and dynamics of inflation, and the role of policy interventions in controlling inflation over time

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Gain a deeper understanding of fundamental macroeconomic concepts and learn to relate them to real-world economic scenarios.	PO1, PO 9	PSO 1, PSO 3	U, R
CO 2	Evaluate the consumption and investment patterns of an economy through the lens of Keynesian economic theory.	PO 1, PO 4	PSO 1	U, R, E
CO 3	Understand and elaborate the concept of money and its components and explore the relationship between prices and inflation and analyze the nature of inflation in developing economies.	PO 1	PSO 1	U, An

Unit		Title: Fundamentals of Macroeconomics	No. of lectures	CO Mapping
Unit 1		**Basic Concepts of Macro Economics and Keynesian Economics**	**15**	
	1.1	Meaning and Scope of Macro economics	**2**	**CO 1**
	1.2	Concepts of National Income	**2**	**CO 1**
	1.3	Real and Nominal GDP, GDP deflator	**1**	**CO 1**
	1.4	Measurement of National Income	**2**	**CO 1**
	1.5	Circular flow of National Income for Closed and Open Economy	**2**	**CO 1**
	1.6	Trade Cycles: Features and Phases	**2**	**CO 1**
	1.7	Keynesian Economics: Effective Demand; Consumption Function; Investment Function; Investment Multiplier and Accelerator	**2**	**CO 2**
	1.8	Relevance of Keynesian Economics to Developing Economies	**2**	**CO 2**
Unit 2		**Money, Prices and Inflation**	**15**	
	2.1	Constituents of Money Supply	**1**	**CO 3**
	2.2	Determinants of Money Supply	**1**	**CO 3**
	2.3	Velocity of Circulation of Money	**1**	**CO 3**
	2.4	Demand for Money: Classical and Keynesian approaches	**2**	**CO 3**
	2.5	Friedman's restatement of Demand for money	**2**	**CO 3**
	2.6	Money and prices: Demand Pull Inflation and Cost Push Inflation	**2**	**CO 3**
	2.7	Stagflation	**1**	**CO 3**
	2.8	Phillips Curve	**1**	**CO 3**
	2.9	Effects of Inflation	**1**	**CO 3**
	2.10	Nature of inflation in a developing economy	**1**	**CO 3**
	2.11	Policy measures to curb inflation	**1**	**CO 3**
	2.12	Fiscal and Monetary policies	**1**	**CO 3**

References

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2. Ahuja. H.L., Modern Economics — S.Chand Company Ltd. New Delhi.
3. Blanchard Olivier (2000), Macro Economics, Englewood Elitt, Prentice Hall
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8. Jhingan, M.L., Principles of Economics — Vrinda Publications (P) Ltd.
9. Shapiro, E (1996), Macro-Economic Analysis , Galgotia Publication, New Delhi.
10. Vaish .M.C. (2010) Macro Economic Theory 14th edition, Vikas Publishing House(P)Ltd

Examination:

- **Internal Examination (20 Marks):** Continuous Internal assessment (CIA) of 20 Marks. Any two among Quiz, Assignment, Presentation, Viva of 7 and 8 Marks and Class Participation of 5 marks.
- **Semester End Theory Examination (30 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 1hour.
- **Combined passing of 40% with minimum 20% in Internal Component.**

Shiromani Gurudwara Parbandhak Committee's

Guru Nanak Khalsa College of Arts, Science and Commerce (Autonomous)

Matunga, Mumbai – 400 019, Maharashtra

Program: Bachelor of Arts

Syllabus

Course: TYBCom

Semester V and VI

(Name of Subject: BUSINESS ECONOMICS)

(As per NEP guidelines-DSC model)

With effect from Academic Year 2025 - 2026)

Guru Nanak Khalsa College of Arts, Science and Commerce
(Autonomous)
Department of Economics

Course: T.Y.B.Com.
Semester-V: Elective
Course Title: International Economics
Course Code: GNKUCBCOMEL2105
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	To equip students with intermediate level of international trade theories.
2	Introduce trade policies such as tariff, quotas and economic integration as a concept.
3	Detail study on balance of payment, recent WTO negotiations and Role of Central Bank in foreign exchange market.

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Students will be able to apply theoretical concepts to real-world international trade patterns and evaluate their relevance through the analysis of real-life case studies.	PO 1, PO 9	PSO 1, PSO 3	Ap, E, An
CO 2	Analyzing the current tariff structure and trade policies will enable students to understand their impact and propose improvements to international trade policies that support holistic economic growth.	PO 1	PSO 1, PSO 4	U, An
CO 3 CO 4	A thorough understanding of the balance of payments, foreign exchange markets, and purchasing power parity will equip students to analyze and engage with key issues in international trade and assess its impact on the economic growth of both developing and developed economies.	PO 9	PSO 1	U, An

Unit		Title: International Economics	No. of lectures	CO Mapping
Unit 1		**Introduction to International Trade**	**15**	
	1.1	Theories of International Trade: Theory of Comparative Costs	**3**	**CO 1**
	1.2	Heckscher- Ohlin Theory	**3**	**CO 1**
	1.3	Terms of Trade - Types and Limitations	**3**	**CO 1**
	1.4	Gains from International trade	**3**	**CO 1**
	1.5	Offer Curves and Reciprocal Demand	**3**	**CO 1**
Unit 2		**Commercial Policy**	**15**	
	2.1	Commercial Trade Policy: Free Trade and Protection	**4**	**CO 2**
	2.2	Tariff And Non-Tariff Barriers: Meaning, Types and Effects	**4**	**CO 2**
	2.3	Retaliatory tariffs	**3**	**CO 2**
	2.4	International Economic Integration Types and Objectives - EU and Brexit, ASEAN	**4**	**CO 2**
Unit 3		**Balance of payments and International Economic Organization**	**15**	
	3.1	Balance of Payment: Meaning, Structure, Types of Disequilibrium	**3**	**CO 3**
	3.2	Causes and measures to correct the disequilibrium in Balance of Payments	**2**	**CO 3**
	3.3	International Capital flows	**3**	**CO 3**
	3.4	Factors affecting Capital Flows - FDI, FPI and Debt Flows	**3**	**CO 3**
	3.5	WTO: Major negotiations, Recent Developments	**3**	**CO 3**
	3.6	Role of World Bank	**1**	**CO 3**
Unit 4		**Foreign Exchange market**	**15**	
	4.1	Foreign Exchange Market: Meaning, Functions - Determination of Equilibrium Rate of Exchange	**3**	**CO 4**
	4.2	Fixed versus Flexible Exchange Rate System	**3**	**CO 4**
	4.3	Purchasing Power Parity Theory	**3**	**CO 4**
	4.4	Spot and Forward Exchange Rates	**2**	**CO 4**
	4.5	Arbitrage, Hedging and Speculation	**2**	**CO 4**
	4.6	Role of Central Bank in foreign exchange rate management	**2**	**CO 4**

References

1. Paul Krugman, Maurice Obstfeld, and Marc Melitz,2022;International Economics Theory and Policy Twelfth Edition PEARSON EDUCATION
2. D. Salvatore,2021;International Economics 13th Edition (An Indian Adaption) WILEY
3. Bo Södersten and Geoffrey Reed, International Economics , Macmillan (1994)
4. Carbough ,R. J. (1999), International Economics.
5. Van Marrewijk, C., International Economics, Oxford University Press, 2007.
6. RBI Bulletin: Foreign Exchange Intervention: Efficacy and trade-offs in the Indian Experience

Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**

Guru Nanak Khalsa College of Arts, Science and Commerce
(Autonomous)
Department of Economics

Course: T.Y.B.Com.
Semester-VI: Elective
Course Title: Indian Economy and Public Finance
Course Code: GNKUCBCOMEL2106
Credits: 4
No of lectures (Hours): 60
Marks: 100 (75:25)

Course Objectives:

Sr. No.	Course objectives
The course aims at:	
1	To give comprehensive knowledge on Indian economy and Public Finance.
2	To discuss sectoral issues and policies and bring out solutions for current issues in Indian Economy.
3	To apprehend Banking, Fiscal and monetary policy functioning and its impact on Indian economy.

Course Outcomes (COs):

Sr. No.	On completing the course, the student will be able to:	POs addressed	PSOs addressed	Cognitive Levels addressed
CO 1	Students will gain a comprehensive understanding of the Indian economy, focusing on the New Economic Policy, sustainable development, poverty and unemployment and the labour reforms implemented to address unemployment challenges.	PO 1, PO 8	PSO 1	U
CO 2	In-depth discussion and enhanced understanding of sector-specific issues and the policies implemented to address challenges in the agricultural, manufacturing, and service sectors.	PO 4	PSO 1, PSO 3	U, R
CO 3	The study of banking and financial sector reforms will help students understand the	PO 1, PO 4	PSO 1, PSO 3	U, R

	importance of timely financial interventions in supporting and strengthening the Indian economy.			
CO 4	**Students will be able to analyze the rationale and mechanisms behind fiscal and monetary policy interventions and understand their role in ensuring economic stability along with debt sustainability, and the need for expenditure reforms.**	**PO 4**	**PSO 2**	**An, Ap**
CO 5	**Special focus on evaluating flexible inflation targeting and liquidity management which will help students to develop cognitive skills such as abstract conceptualization and creative thinking.**	**PO 1, PO 4**	**PSO 2**	**E, An, U**

Unit		**Title: Indian Economy and Public Finance**	**No. of lectures**	**CO Mapping**
Unit 1		**Overview**	**15**	
	1.1	Overview of the Indian Economy	**2**	**CO 1**
	1.2	New Economic Policy 1991 onwards – Rationale	**2**	**CO 1**
	1.3	Sectoral Changes in the Indian Economy	**3**	**CO 1**
	1.4	Sustainable development Goals and Policy measures	**3**	**CO 1**
	1.5	Poverty and Unemployment	**3**	**CO 1**
	1.6	Labour reforms	**2**	**CO 1**
Unit 2		**Sectoral Issues and Policies**	**15**	
	2.1	Sectoral policy measures – Agriculture – National Agricultural Policy, MSP, Storage & Marketing, Food Security, Credit and Financial Inclusion	**4**	**CO 2**
	2.2	Industrial Reforms (Post 1991)	**3**	**CO 2**
	2.3	Competition Act	**2**	**CO 2**
	2.4	MSME Policy	**3**	**CO 2**
	2.5	Service Sector – Recent developments: IT, Healthcare and Education	**3**	**CO 2**
Unit 3		**Banking and Financial Markets**	**15**	
	3.1	Banking and Financial Market Reforms	**3**	**CO 3**

	3.2	Narasimham Committee Report	**3**	**CO 3**
	3.3	Capital Market reforms (Debt and Equity markets)	**3**	**CO 3**
	3.4	Foreign Exchange market reforms (post 1992) – LERMS, FEMA	**3**	**CO 3**
	3.5	RBI & Management of Forex Reserves	**3**	**CO 3**
Unit 4		**Economic Policies**	**15**	
	4.1	Fiscal and Monetary Policy – Objectives and Instruments	**3**	**CO 4**
	4.2	Fiscal Deficit and Reforms, FRBM and Debt Sustainability (Impact of Freebies on fiscal sustainability)	**3**	**CO 4**
	4.3	Expenditure Reforms Commission (Rationalisation of Subsidies)	**2**	**CO 4**
	4.4	Monetary Policy Framework- Instruments	**3**	**CO 4**
	4.5	Flexible Inflation Targeting	**2**	**CO 5**
	4.6	Inflation and Liquidity Management	**2**	**CO 5**

References

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Examination:

- **Internal Examination (25 Marks): 10 Marks** exam (MCQ and short answer question) with 20% completed syllabus. Duration of exam: 20 minutes. **10 Marks** for either Quiz/Assignments /Presentation/Viva**. 05 Marks** for Class Participation etc.
- **Semester End Theory Examination (75 Marks):** Weightage of each unit will be proportional to the number of lecture hours as mentioned in the syllabus. Duration of exam: 2hours 30mins
- **Combined passing of 40% with minimum 20% in Internal Component.**