BA+MA Integrated (Economics) Honours- 5 years (1st Semester)

S.No	Course Code	Course Title	Course Type	Credits			Credit Units
				L	T	P	
1	ECN 102	Introductory Microeconomics	Core Course	6	0	0	6
2	ECN 103	Mathematical Methods for Economics – I	Core Course	6	0	0	6
3	ECN 104	Money and Banking	Allied Course	6	0	0	6
4	STA 103	Data Analysis	Employability & Skill Enhancement Course	2	0	0	2
5	ENG 101	Communication Skills—I	Value Added Course	1	0	0	1
6	PSY 101	Behavioural Science: Understanding Self for Effectiveness	Value Added Course	1	0	0	1
7	FOL 101/FOL102	Introduction to French Culture & Language /Introduction to German Culture & Language	Value Added Course	1	0	0	1
8	INL 101/INL102	Punjabi Language & Literature/ History and Culture of Punjab	Ability Enhancement Course	1	0	0	1
9	ENV101	Environmental Studies	Ability Enhancement Course	2	0	0	2

		Total Credits		26

Introductory Microeconomics

L	T	P	Total Credits
6	0	0	6

Course Contents/syllabus:

	Lecture Hours
Unit I: Introduction to Microeconomics	**27**
• What is microeconomics? Scope and method of economics; the economic problem: scarcity and choice; the concept of opportunity cost; the question of what to produce, how to produce and how to distribute output; science of economics; institutions for allocating resources; the basic competitive model; prices, property rights and profits; incentives and information; rationing; positive versus normative analysis • The scientific method; the role of assumptions; models and mathematics; why economists sometimes disagree • Interdependence and gains from trade; specialization and trade; absolute advantage; comparative advantage and trade.	

Unit II: Supply and demand: How markets work, markets and welfare	27
- Concept of demand and Supply: types, determinants of individual demand/supply; demand/supply schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets - Application to international trade; comparison of equilibrium with and without trade, the winners and losers from trade; effects of tariffs and quotas; benefits of international trade; some arguments for restricting trade	
Unit III: The Households	27
- Utility Analysis -cardinal and ordinal approaches, Cardinal Approach- Law of Diminishing Marginal Utility, Law of Equi-Marginal Utility, Indifference curves- Concept, Properties, Different shapes - The consumption decision - budget constraint, consumption and income/price changes, demand for all other goods and price changes; description of preferences (representing preferences with indifference curves); properties of indifference curves; consumer's optimum choice; income and substitution effects: Hicks and Slutsky Approach- Compensating Variation and Equivalent Variation.	
Unit IV: The Firm and Perfect/ Imperfect market structure; Input Markets	27
- Behavior of profit maximizing firms and the production process; short-run costs and output decisions; costs and output in the long-run - Monopoly and anti-trust policy; government policies towards competition; imperfect competition - Labour and land markets: Basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; input demand curves; shifts in input demand curves; competitive labour markets; labour markets and public policy.	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Develop an understanding of microeconomics concepts and explanations.

- Assess diverse situations of demand and supply as they impact a business.
- Analyze the characteristics of perfect and imperfect markets with their relevance.
- Evaluate the impact of microeconomics on individual decision making as consumers & producers.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Gregory Mankiw	Economics: Principles & Applications	Thomson Press (India) Ltd	2008	978-8131505779	
N. Gregory Mankiw	Principles of Microeconomics	Cengage Learning India Pvt. Ltd	2015	978-9386668295	520
T R Jain, V K Ohri, O P Khanna	Introductory Microeconomics and Macroeconomics	VK Global Publications Private Limited	2014	978-9380735085	536
H.L. Ahuja	Principles Of Microeconomics	S Chand Publishing	2016	978-9352533305	872
Mass Colell	Microeconomics Theory	Oxford	2016	978-0198089537	998

Mathematical Methods for Economics – I

L	T	P	Total Credits
6	0	0	6

Course content and syllabus

	Teaching Hours
Unit I: Introduction to basic relational mathematics	**27**
• Logic and proof techniques; • Sets and set operations; • Relations; • Functions and their properties; • Number systems	
Unit II: Functions of one real variable	**27**
• Graphs; • Elementary types of functions: quadratic, polynomial, power, exponential, logarithmic; • Sequences and series: convergence, algebraic properties and applications; • Continuous functions: characterizations, properties with respect to various operations and applications; • Differentiable functions: characterizations, properties with respect to various operations and applications; • Second and higher order derivatives: properties and applications	
Unit III: Single-variable optimization	**27**
• Geometric properties of functions: convex functions, their characterizations and applications; • Local and global optima: geometric and calculus-based characterizations, and applications	
Unit IV: Linear algebra	**27**
• Vector spaces: algebraic and geometric properties, scalar products, norms, orthogonality; • Linear transformations: properties, matrix representations and elementary operations; • Systems of linear equations: properties of their solution sets; • Determinants: characterization, properties and applications	

Course Learning Outcomes:

The course hones and upgrades the mathematical skills acquired in school. The course:

• Provides the mathematical foundations necessary for further study of a variety of disciplines including economics, statistics, computer science, finance and data analytics.

- Explains applications wherever optimization techniques are used in business decision-making
- Increases understanding of the tools necessary for an analyst profile.
- Makes the student more logical in making or refuting arguments.

Text / Reference Books:

AUTHOR	TITLE	Publisher	Year of publication	ISBN	Pages
K. Sydsaeter, P. Hammond	Mathematics for economic analysis	Pearson Educational	2002	978-8177581041	800
Simon, C. and L. Blume	Mathematics for Economists	Norton London	2018	978-8130916002	956
Sheldon M. Ross	Introduction to Probability Models	Academic Press	2009	978-0123756862	800

Money and Banking

L	T	P	TotalCredits
6	0	0	6

Course content and syllabus

	Teaching Hours
Unit I: Introduction to Money	27
- Money :Concept, approaches to define money and functions of money - Velocity of money - Measurement: theories of money supply determination and the approaches to determine money multiplier, RBI Measures of Money Supply	
Unit II: Financial institutions, markets, instruments and financial innovations	27
- Role of financial markets and institutions; Financial System in India; Financial Inclusion; problem of asymmetric information - adverse selection and moral hazard; financial crises. - Money and capital markets: Organisation & structure - Market reforms in India; - Types of financial services and other innovations.	

Unit III: Interest rates	27
- Interest rates Determination: Classical theory of interest rate, Neo-classical loanable fund theory, Keynes Liquidity preference theory of interest and Modern theory of interest rate (IS-LM approach) - Sources of interest rate differentials - Theories of term structure of interest rates: Liquidity Premium theory, Segmented market theory and Portfolio behaviour theory; - Interest rates in India	
Unit IV: Banking System, Central Banking and Monetary Policy	27
- Indian banking system: Changing role and structure; banking sector reforms - Central banking and monetary policy Functions, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy; current monetary policy of India - Commercial Banks and Cooperative Banking System in India - NABARD & Regional Rural Bank in India	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Develop an understanding of functions and theories of Money
- Assess role of financial institutions, markets , instruments and financial innovations in Indian financial system.
- Analyze the interest rates determination, related theories and current prevailing interest rates in India.
- Evaluate the role of banking system and central banks and monetary policy.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Bhole, L, Mahukud, J.	Financial Institutions And Markets	Tata McGraw-Hill.	2017	978-9352605415	
Fabozzi, F., Modigliani, F., Jones, F., Ferri, M.	Foundations Of Financial Markets And Institutions	Pearson Education	2014	978-9332536784	704

Khan, M	Indian Financial System	Tata McGraw-Hill	2019	978-9353167301	1008
Mishkin, F., Eakins, S.	Financial Markets And Institutions	Pearson Education	2018	978-1292215006	696
TR Jain, V K Ohri	Money and Banking	VK Global Publications Pvt Ltd	2020	978-9350586938	
N K Sinha	Money, Banking & Finance	BSC Publishing	2018	9788190458948	538
Michael Brandl	Money, Banking, Financial Markets and Institutions	Cengage Learning India Pvt. Ltd.	2019	978-9353502232	
Dr. D.D.Chaturvedi / Dr. Anand Mital	Money and Banking	Kitab Mahal Publishers	2018	978-8122506358	292
R. Glenn Hubbard, Anthony P O'Brien	Money, Banking and Financial System	Pearson Education	2019	978-9353069858	656

Data Analysis

L	T	P	Total Credits
2	0	0	2

Course Contents/syllabus:

	Lecture Hours
Unit-1 Introduction to the course:	**9**
How can the representation and analysis of data help us study real-world problems. Publicly available data sets	
Unit-2- Using Data	**9**
Available statistical software, steps in data storage, organization and cleaning.	

Unit-3- Visualization and Representation	9
Alternative forms of presenting summarizing and presenting data	
Unit-4-Techniques and Tests	9
Simple estimation techniques and tests for statistical inference	

Course Learning Outcomes: At the end of this course, the students will be able

- To develop the understanding basic concepts of data representation and analysis.
- To use data simulations and publicly available data sources to help students learn about data types, their organization and visual representation.
- To analyze the techniques and tests used for statistical inferences of data.
- To enhance the analytical skills which are applicable in Business Organizations.

Text / Reference Books:

Author	Title	Publisher	Year of publication	ISBN	Pages
David Levine, David Stephan, Kathryn Szabat	Statistics for Managers Using Microsoft Excel	Pearson	2017	9780134173054	736
Prabhanjan N. Tattar, Suresh Ramaiah, B. G. Manjunath	A Course in Statistics with R	Wiley	2018	9788126578252	860

Communication Skills—I

Course Contents/syllabus:

L	T	P/S	SW/FW	TOTAL CREDIT UNITS
1	0	0	0	1

	Lecture Hours
Unit I: Basic Concepts in Communication	4
Definition of communication, Nature and process of communication, role and purpose of communication, types and channels of communication, communication networks/flow of communication: vertical, diagonal, horizontal, barriers to communication: physical, language, and semantic, socio-psychological, organizational, gateway to effective communication, towards communicative competence, choosing the appropriate channel and medium of communication, social communication: small talk and building rapport, barriers in communication.	
Unit II: Communication Types	5
Verbal communication: Oral Communication: Forms, Advantages & Disadvantages, Written Communication: Forms, Advantages & Disadvantages, Introduction of Communication Skills (Listening, Speaking, Reading, Writing), Nonverbal communication: functions and effective use, KOPPACT(Kinesics, Oculesics, Proxemics, Para-language, Artifacts, Chronemics, Tactilics). The implication of appropriate communication; effective ways of using social media, importance of digital literacy.	
Unit III: Reading and Writing Skills	4

Significance of reading; Reading Comprehension, gathering ideas from a given text, identify the main purpose and context of the text, evaluating the ideas, interpretation of the text, Paragraph development; essay writing.	
Unit IV: Speaking and Presentation Skills	5
Speaking skills: fluency, vocabulary, grammar, and pronunciation; effective speaking: selection of words, your voice, and non-verbal communication, functions of speaking: interaction, transaction, and performance; structuring the message; effective speaking strategies. Planning, preparation, practice, and performance; audience analysis, audio-visual aids, analyzing the non-verbal communication, methods of delivery: impromptu, extemporaneous, memorization, manuscript, and outlining.	

Course Learning Outcomes:

- Students will be able to understand the basic processes of communication, both verbal as well as non-verbal—nature, scope, and power of communication processes.
- Students will be able to demonstrate cultural sensitivity in communication and appreciation of cultural variations of diverse socio-cultural contexts.
- Students will be able to develop an awareness of the role of mass media in shaping public psyche, beliefs, and perceptions about social realities and build an informed and critical perspective.
- Students will be able to analyze situations and audiences to make right choices about the most effective and efficient ways to communicate and deliver messages.
- Students will be able to assess various barriers in communication and develop communicative competence thereby for effective communication.

AUTHOR	TITLE	Publisher	Year of publication	ISBN	Pages
P. D. Chaturvedi and Mukesh Chaturvedi	*Business Communication: Concepts, Cases and Applications*	Pearson Education	2006	9788131701720	516
Meenakshi Raman and Prakash Singh	*Business Communication*	Oxford University Press	2012	9780198077053	650
Jeff Butterfield	*Soft Skills for Everyone*	Cengage Learning	2017	9789353501051	628

Behavioural Science: Understanding Self for Effectiveness

L	T	P	Total Credits
1	0	0	1

Course Contents/syllabus:

	Teaching time

Unit I: Self: Core Competency	5
Understanding of Self, Components of Self – Self identity , Self concept, Self confidence , Self image , BIG5 Factors	
Unit II: Techniques of Self Awareness	4
Exploration through Johari Window, Mapping the key characteristics of self, Framing a charter for self Stages – self awareness, self acceptance and self-realization	
Unit III: Self Esteem & Effectiveness	5
Meaning, Importance, Components of self esteem, High and low self esteem, Measuring your self esteem	
Unit IV: Building Positive Attitude and Emotional Competence	4
Meaning and nature of attitude, Components and Types of attitude ,Importance and relevance of attitude Emotional Intelligence – Meaning, components, Importance and Relevance Positive and negative emotions, Healthy and Unhealthy expression of emotions	

Course Learning Outcomes: At the end of this course, the students will be able to:
- The student will apply self-introspection as a tool for self-awareness.
- The student will understand self-concept for self-recognition, self-improvement and perception of others.
- The student will be able to analyze their physical self, social self, the competent self and psychological self.

The student will be able to analyze what motivates his/her actions and the actions of others

Text / Reference Books:

AUTHOR	TITLE	Publisher	Year of publication	ISBN
Singh A.	Achieving Behavioural Excellence for Success	Wiley Publication	2012	9788126 5 8027
Towers, Marc	Self Esteem	American Media	1995	9781884 9 26297
Pedler Mike, Burgoyne John, Boydell Tom	A Manager's Guide to Self-Development	McGraw-Hill	2006	978-0077114 7 01
Covey, R. Stephen	Seven habits of Highly Effective People	Simon & Schuster Ltd	2013	978-1451639 6 12
Khera Shiv	You Can Win	Macmillan	2005	978-0333937 4 02
Gegax Tom	Winning in the Game of Life	Harmony Books	1999	978-0609603 9 25

Singh, Dalip	Emotional Intelligence atWork	Publications	2006	9780761 9 35322
Goleman, Daniel	Emotional Intelligence	Bantam Books	2007	9780553 0 95036
Goleman, Daniel	ing with E.I	Bantam Books	1998	9780553 1 04622

Introduction to German Culture & Language

L	T	P	Total Credits
1	0	0	1

Course Contents/syllabus:

	Teaching hours
Unit-I Introduction to German Language (Einführung)	**5**
Introduction to German as a global language, Self-introduction and Greetings, DieAlphabeten, Phonetics: the sound of consonants and vowels, Wie buchstabieren Sie Ihren Name?	
Unit-II- Numbers and everyday conversation (die Zahl und Gespräche)	**4**
Counting in German from 1-100, Simple Calculation and verb 'kosten' - Wie vielkostet das? Plural Forms, Vocabulary: Wochentage, Monate, Jahreszeiten, Ordinal numbers and the question - Wann haben Sie Geburtstag?	
Unit-III- Regular verbs and nominative case: articles and pronouns (Regelmässige Verben und Nominativ Kasus: Artikel und Pronomen)	**5**
Introduction to all personal pronouns and conjugation of Regular verbs Detailed exercise on regular verbs. Reading a text on regular verbs. Introduction to definite. Vocabulary: Schulsachen und Getränke, Nominative case/ Articles (der, die, das) Nominative Pronouns: - Applicability of pronouns for both persons and things. Usage of nominative Personal Pronouns Introduction of nominative possessive pronouns usage of nominative possessive pronouns	
Unit-IV- The Family, Work-life and Professions (Familienmitglieder und Berufe) & Interrogative sentences (W-Fragen)	**4**
The Family, Work-life and Professions (Familienmitglieder und Berufe) Vocabulary: Professions and conjugation of the verb 'sein' Introduction to simplepossessive pronouns with the help of the verb 'haben' Usage of possessive pronouns. Interrogative sentences (W-Fragen) W-Fragen: who, what, where, when, which, how, how many, how much, etc. Exercises on the question pronouns	

Course Learning Outcomes: At the end of this course, the students will be able to

express themselves in writing and orally in basic German. This course content focuses on the speech of the students in a lucid and a concurrent manner using appropriate vocabulary and pronunciation techniques. Extra stress will be given on their understanding of grammatical structures and the foreign accent of the language. At the end of the course, the student shall be able to:

- Understand information; Express in his own words; Paraphrase; Interpret and translate.
- Apply information in a new way in a practical context
- Analyse and break-down information to create new ideas
- Evaluate and express opinion in a given context

Text / Reference Books:

Author	Title	Publisher	Year	ISBN
Rolf Bruseke	Starten Wir A 1	Langers International Pvt Ltd (Max Hueber Verlag)	2017	978-3190160006
Giorgio Motta	Wir Plus Grundkurs Deutschfur Junge Lerner Book	Ernst Klelt Verlog	2011	978-8183072120
Heimy Taylor, Werner Haas	Station en Deutsch Self Study Course German Guide	Wiley	2007	978-0470165515

Introduction to French Culture & Language

L	T	P	Total Credits
1	0	0	1

Course Contents/syllabus:

	Teaching hours
Unit-I Introduction to French language	4
• Brief introduction of French and Francophone countries • Presenting oneself • Getting information about someone else • Greeting and taking leave • Asking/giving personal information	
Unit-II- A rendez-vous ; Visiting a place	5

• Pronouncing and writing numbers in French • Spell and count numbers • Telling the time • Temporal expressions • Communicating in class • Fixing an hour, place for a meeting. • Describing a person. • Identifying a person, object and place • Describing relation in a family • A specific person, object and place	
Unit-III- An interview	**5**
• Description of objects, people and places • Nationalities • Speaking about one's professions • Expressing Actions using regular –er ending verbs; avoir, être; reflexive verbs –usage, conjuagation • Interview of celebrity	
Unit-IV- At the discotheque	**4**
• Portrait by a journalist • Giving a positive or negative reply • Asking questions • Discussion with a person • Activities in a day	

Course Learning Outcomes: At the end of this course, the students will be able to express themselves in writing and orally in basic French. This course content focuses on the speech of the students in a lucid and a concurrent manner using appropriate vocabulary and pronunciation techniques. Extra stress will be given on their understanding of grammatical structures and the foreign accent of the language. At the end of the course, the student shall be able to :

- Understand information; Express in his own words; Paraphrase; Interpret and translate.
- Apply information in a new way in a practical context
- Analyse and break-down information to create new ideas
- Evaluate and express opinion in a given context

Text / Reference Books:

Author	Title	Publisher	Year	ISBN No
Christine Andant, Chaterine Metton, Annabelle Nachon, Fabienne Nugue	A Propos - A1 Livre De L'Eleve, Cahier D' Exercices	Langers International Private Limited	2010	978-9380809069
Manjiri Khandekar and Roopa Luktuke	Jumelage - 1 Methode De Fraincais - French	Langers International Private Limited	2020	978-9380809854

Michael Magne, Marie-Laure Lions-Olivieri	Version Originale1: Cahier d'exercices	Maison Des Langues	2010	978848 443561 7

Punjabi Language and Literature-1

L	T	P/S	SW/FW	Total Credit Units
1	0	0	0	1

Course content and syllabus

	Weightage (%)	Teaching Hours
Unit I:	**25%**	**4 hours**
ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਵਿਤਾ ਦਾ ਅਧਿਐਨ (ਕਾਵਿ-ਸੁਮੇਲ ਪਾਠ-ਪੁਸਤਕ) ਕਵਿਤਾ ਦਾ ਸਾਰ/ਕੇਂਦਰੀ ਭਾਵ ਅਤੇ ਪ੍ਰਸੰਗ ਸਾਹਿਤ ਵਿਆਖਿਆ ਕਵੀ ਦੇ ਜੀਵਨ ਅਤੇ ਸਾਹਿਤਕ ਯੋਗਦਾਨ ਬਾਰੇ ਮੁੱਢਲੀ ਜਾਣਕਾਰੀ		
Unit II:	**25%**	**4 hours**
1.ਲੇਖ-ਰਚਨਾ ਲੇਖ-ਰਚਨਾ: ਮਹੱਤਵ, ਕਿਸਮਾਂ ਅਤੇ ਵੱਖ-ਵੱਖ ਵਿਸ਼ਿਆਂ ਅਨੁਸਾਰ ਵਿਹਾਰਕ ਅਭਿਆਸ **2.ਸੰਖੇਪ-ਰਚਨਾ** ਸੰਖੇਪ-ਰਚਨਾ: ਮਹੱਤਵ ਅਤੇ ਤਕਨੀਕ		
Unit III:	**25%**	**5 hours**
ਵਿਆਕਰਨ ਸਿਧਾਂਤ ਅਤੇ ਵਿਹਾਰ: 1.ਵਿਆਕਰਨ: ਪਰਿਭਾਸ਼ਾ;ਮਹੱਤਤਾ;ਉਦੇਸ਼;ਵਿਆਕਰਨ ਦੇ ਅੰਗ 2. ਪੰਜਾਬੀ ਧੁਨੀਵਿਓਂਤ: ਸੁਰ ਅਤੇ ਵਿਅੰਜਨ ਧੁਨੀਆਂ ਦਾ ਵਰਗੀਕਰਨ, ਉਚਾਰਨ ਅੰਗ		
Unit IV:	**25%**	**5 hours**
ਵਿਆਕਰਨ ਸਿਧਾਂਤ ਅਤੇ ਵਿਹਾਰ: ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ: ਪਰਿਭਾਸ਼ਾ ਅਤੇ ਪ੍ਰਕਾਰ ਨਾਂਵ, ਪੜਨਾਂਵ, ਵਿਸ਼ੇਸ਼ਣ, ਕਿਰਿਆ, ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ, ਸਬੰਧਕ,ਯੋਜਕ ਅਤੇ ਪ੍ਰਸ਼ਨ-ਸੂਚਕ ਸ਼ਬਦ		

Course Learning Outcomes:

1. Understand modern Punjabi Poetry.
2. Interpret the importance of essay and precise writing
3. Analyze the Punjabi language structure and grammar.
4. Examine the impact and importance of grammar and language structure.
5. **Text / Reference Books:**
6.

AUTHOR	TITLE	Publisher	Year of publication	ISBN	Pages
ਡਾ. ਕਰਮਜੀਤ ਸਿੰਘ (ਸੰਪਾ.),	ਕਾਵਿ ਸੁਮੇਲ	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਪੰਜਾਬ ਯੂਨੀਵਰਸਿਟੀ ਚੰਡੀਗੜ੍ਹ	2020	-	-
ਸੁਰਿੰਦਰ ਸਿੰਘ ਖਹਿਰਾ (ਸੰਪਾ.),	**ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਵਿਆਕਰਨ ਅਤੇ ਬਣਤਰ**	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ,ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ ਪਟਿਆਲਾ	**2015**	-	-
ਡਾ.ਹਰਕੀਰਤ ਸਿੰਘ,	**ਕਾਲਜ ਪੰਜਾਬੀ ਵਿਆਕਰਨ ਅਤੇ ਲੇਖ ਰਚਨਾ**	ਪੰਜਾਬ ਸਟੇਟ ਯੂਨੀਵਰਸਿਟੀ ਟੈਕਸਟ ਬੁੱਕ ਬੋਰਡ,ਚੰਡੀਗੜ੍ਹ	**1999**	-	-
ਡਾ. ਪ੍ਰੇਮ ਪ੍ਰਕਾਸ਼ ਸਿੰਘ	**ਕਾਲਜ ਪੰਜਾਬੀ ਵਿਆਕਰਨ ਅਤੇ ਲੇਖ ਰਚਨਾ**	ਮਦਾਨ ਪਬਲੀਕੇਸ਼ਨਜ਼, ਪਟਿਆਲਾ	**2002**	-	-
ਡਾ. ਬੂਟਾ ਸਿੰਘ ਬਰਾੜ	**ਪੰਜਾਬੀ ਵਿਆਕਰਨ ਸਿਧਾਂਤ ਅਤੇ ਵਿਹਾਰ**	ਚੇਤਨਾ ਪ੍ਰਕਾਸ਼ਨ, ਪੰਜਾਬੀ ਭਵਨ,ਲੁਧਿਆਣਾ	**2012**	-	-
ਡਾ. ਬੂਟਾ ਸਿੰਘ ਬਰਾੜ	**ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਸ੍ਰੋਤ ਅਤੇ ਸਰੂਪ**	, ਵਾਰਿਸ ਸ਼ਾਹ ਫ਼ਾਉਂਡੇਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ	**2012**	-	-
ਦੁਨੀ ਚੰਦ੍ਰ	**ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦਾ ਵਿਆਕਰਣ**	, ਪੰਜਾਬ ਯੂਨੀਵਰਸਿਟੀ ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਚੰਡੀਗੜ੍ਹ	**1995**	-	-
ਜੋਗਿੰਦਰ ਸਿੰਘ ਪੁਆਰ ਅਤੇ ਹੋਰ	**ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦਾ ਵਿਆਕਰਨ (ਭਾਗ**	ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਕਾਦਮੀ ਜਲੰਧਰ	**2003**	-	-

	1,2,3),				
ਸੁਖਵਿੰਦਰ ਸਿੰਘ ਸੰਘਾ	**ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਵਿਗਿਆਨ**	ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਕਾਦਮੀ ਜਲੰਧਰ	**2010**	**--**	**-**
ਅਗਨੀਹੋਤਰੀ,ਵੇਦ	ਪਰਿਚਾਇਕ ਭਾਸ਼ਾ ਵਿਗਿਆਨ	ਦੀਪਕ ਪਬਲਿਸ਼ਰਜ਼ ਜਲੰਧਰ	**1981**		

History and Culture of Punjab
Course Contents/syllabus:

L	T	P/S	SW/FW	Total Credit Units
1	0	0	0	1

	Lecture Hours
Unit I:	**4**
Ancient Punjab: Physical features; impact on History Historical Sources: Literary; archaeological Harappan Culture: Extent and town planning.	
Unit II:	**5**
Harappan Culture: Social, Economic and Religious life; causes of disappearance Rig Vedic Age: The rise of Indo Aryans; main features of the life in early Vedic Age. Later Vedic Age: Political, Social, Economic and Religious life of later Vedic Aryans.	
Unit III:	**4**
Caste System: Origin and evolution. The Epics: Historical importance of Ramayan and Mahabharat. Political Condition on eve Alexander's invasion	
Unit IV:	**5**
Impact of Alexander's invasion on social and cultural life. Position of women: Harappan, early Vedic and later Vedic Age	

Course Learning Outcomes:

      Understand the history of various cultures in Punjab.
      Interpret the importance of Harappan ,Ayan and Vedic influences on Punjab
      Compare the structure of caste system .
      Examine the impact of various invasions on socio-cultural life of Punjab.

Text / Reference Books:

Author	Title	Publisher	Ed/year	ISBN No	Pages
Joshi, L.M	History and Culture of the Punjab, Part-I,	Publication Bureau, Punjabi University, Patiala,	1989,3rd	-	-
Prakash, Buddha	Glimpses of Ancient Punjab,	Punjabi University, Patiala,	1983	-	-

Environmental Studies 1

L	T	P/S	SW/FW	Total Credit Units
2	0	0	0	2

Course Contents/syllabus:

	Lecture Hours
Unit-1- Multidisciplinary nature of environmental studies	4
Multidisciplinary nature of environmental studies: Definition, scope and importance; components of environment –atmosphere, hydrosphere, lithosphere and biosphere. Concept of sustainability and sustainable development.	
Unit-2-Ecosystems	5
Ecosystem: What is an ecosystem; Structure and function of an ecosystem; Energy flow in the ecosystem; Food chains, food webs and ecological succession. Case studies of the following ecosystems: Forest ecosystem Grassland ecosystem Desert ecosystem Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).	
Unit-3- Natural Resources	4
Natural resources: Land resources and land use change, land degradation, soil erosion and desertification. Deforestation: causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal population. Water Resources-Use and over-exploitation of surface and groundwater, floods, drought, conflicts over water (international and inter-state). Heating of earth and circulation of air; air mass formation and precipitation. Energy resources- renewable and non-renewable energy sources, use of alternate energy sources, Growing energy needs, Case studies.	
Unit-4- Biodiversity and its conservation	5
Biodiversity: Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; biodiversity patterns and global biodiversity hot spots.	
India as a mega–biodiversity nation; endangered and endemic species of India.	
Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; conservation of biodiversity: *in-situ* and *ex-situ* conservation of biodiversity.	
Ecosystem and biodiversity services: ecological, economic, social, ethical, aesthetic and information value.	

Course Learning Outcomes: At the end of this course, the students will be able to develop:

- Appreciate the multi-disciplinary nature of environmental science
- Understand natural resources and evaluate limitations surrounding renewable and non-renewable resources
- Understand the nuances of ecosystem and learn about behaviour of various ecosystem
- Learn about the types, services and threats to our biodiversity and importance of conserving it.

Text / Reference Books:

(Mention only those Text / Reference Books which are available in the library)

AUTHOR	TITLE	Publisher	Year of publication	ISBN	Pages
William P. Cunningham, Mary Ann Cunningham	Principles of Environmental Science	McGraw-Hill	2019	9781260219715	--
Dash and Dash	Fundamentals of ecology	Tata McGraw-Hill Education	2009	978-0070083660	--
lliam P. Cunningham, Mary Ann Cunningham, Barbara Woodworth Saigo	vironmental Science: A global concern,	McGraw-Hill	2021	9781260363821	--
ston K.J. and Spicer, J. I.	odiversity – An Introduction 2nd edition	Blackwell Publishing	2004	978-1-405-11857-6	--

BA+MA Integrated (Economics) Honours- 5 years (2nd semester)

S.No	Course Code	Course Title	Course Type	Credits			Credit Units
				L	T	P	
1	ECN 105	Mathematical Methods for Economics – II	Core Course	6	0	0	6
2	ECN 106	Introductory Macroeconomics	Core Course	6	0	0	6
3	ECN 107	Economic History of India 1857-1947	Allied Course	6	0	0	6
4	ECN 108	Financial Economics	Employability & Skill Enhancement Course	2	0	0	2

5	ENG103	Communication Skills—II	Value Added Course	1	0	0	1
6	PSY106	Individual, Society and Nation	Value Added Course	1	0	0	1
7	FOL 103/ FOL 104	French Grammar/ German Grammar	Value Added Course	1	0	0	1
8	INL 104/ INL 105	Punjabi Language & Literature/ History and Culture of Punjab	Ability Enhancement Course	1	0	0	1
9	ENV 106	Environmental Studies	Ability Enhancement Course	2	0	0	2
		Total Credits			26		

Mathematical Methods for Economics – II

L	T	P	Total Credits
6	0	0	6

Course content and syllabus

	Lecture Hours
Unit 1 Functions of several real variables	**28**
- Geometric representations: graphs and level curves - Differentiable functions: characterisations, properties with respect to various operations and applications - Second order derivatives: properties and applications - The implicit function theorem, and application to comparative statics problems - Homogeneous and homothetic functions: characterisations and applications	
Unit 2 Multivariate Analysis	**28**
- Multivariate optimization Convex sets - Geometric properties of functions: convex functions, their characterisations, properties and applications	

• Further geometric properties of functions: quasiconvex functions, their characterisations, properties and applications • Unconstrained optimisation: geometric characterisations, characterisations using calculus and applications • Constrained optimisation with equality constraints: geometric characterisations, Lagrange characterisation using calculus and applications. • Properties of value function: envelope theorem and applications		
Unit 3 Linear programming	**26**	
• Introduction, graphical solution, matrix formulation, duality, economic interpretation.		
Unit 4 Integration, differential equations, and difference equations	**26**	
• Definite integrals, indefinite integrals and economic applications. • First order difference equations, equilibrium and its stability • First order differential equations, phase diagrams and stability		

Course Learning Outcomes:

1.The course provides the mathematical foundations necessary for further study of a variety of disciplines including postgraduate economics, statistics, computer science, finance and data analytics.

2. The analytical tools introduced in this course have applications wherever optimization techniques are used in business decision-making for managers and entrepreneurs alike. These tools are necessary for anyone seeking employment as an analyst in the corporate world.

Text / Reference Books:

AUTHOR	TITLE	Publisher	Year of publication	ISBN	Pages
K. Sydsaeter, P. Hammond	Mathematics for economic analysis	Pearson Educational	2002	978-8177581041	800
Simon, C. and L. Blume	Mathematics for Economists	Norton London	2018	978-8130916002	956
Sheldon M. Ross	Introduction to Probability Models	Academic Press	2009	978-0123756862	800

Introductory Macroeconomics

L	T	P	Total Credits
6	0	0	6

Course content and syllabus

	Lecture Hours
Unit I: Introduction to Macroeconomics and national income accounting	26
- Nature and scope of macroeconomics –Meaning and definition of key variables - Circular Flow and networking in macroeconomic system - Basic issues studied in macroeconomics: Measurement of gross domestic product; income, expenditure and the circular flow; real versus nominal GDP - Price indices: Concept and Methodology of CPI and WPI - National income accounting for an open economy - Balance of payments: current and capital accounts	
Unit II: Money	28
- Types of Money, Functions of money; Fisher's quantity theory of money; Cambridge equation for determination of money - Demand for Money: transactionary, speculative and precautionary motives, Keynes Demand for Money Theory, Liquidity Trap - Process of Credit Creation: Money Multiplier, Supply of Money - Central Bank and Tools of monetary policy - Money Market Equilibrium	
Unit III: Inflation and Unemployment	28
- Concept of inflation, determinants and types of inflation, inflation and its social cost, hyperinflation - Controls of Inflation: Monetary Policy, Fiscal Policy and Physical Controls - Concept, types and Phillips Curve in short run and long run - Static, Adaptive and Rational Expectations, Expectations Augmented Philips Curve - Relationship between inflation and unemployment.	
Unit IV: The closed economy in the short run	26
- Schools of macroeconomic thought: Classical, Keynesian, New – classical and New Keynesian - Classical and Keynesian systems - Keynesian model of income determination; IS-LM model; fiscal and monetary policy	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

   1. Develop an understanding of macroeconomics concepts and explanations.
   2. Enable students to understand and comment upon real economic issues like inflation, money supply, GDP and their inter- linkages.

1. Critically evaluate various macroeconomic policies in terms of a coherent logical structure and appraise economic issues and public policy by using economic models.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
A.Abel, B.Bernanke	Macroeconomics	Pearson Education	2016	9780134896441	651
O. Blanchard	Macroeconomics	Pearson Education	2018	978-9332587601	624
Dornbusch, R., Fischer, S., Startz, R.	Macroeconomics	McGraw-Hill.	2018	978-9339221188	680

Economic History of India

L	T	P	Total Credits
6	0	0	6

Content	Lecture hours
Unit 1: Colonial India: background and introduction	28
• Historical Background of India in the Pre-Colonial Phase • Advent of European Powers • Expansion of the British empire in India • Expansion of Company under Major Governor Generals • Commercial and trade policies of the East India company • The Economic Policies of the British and The Revolt of 1857	
Unit: 2 National Income, Agriculture and Occupational Structure	26
• National Income of India under Colonial Rule, Methods of estimating National Income during the British period and after Independence, Drain of Wealth • Population of India during the British Rule, Occupational Structure of Colonial India • Urbanization in The Colonial Period • Agrarian trend in India during the colonial period-An introduction • Agricultural Techniques and Methods used in British India • Agriculture production and productivity in the colonial rule • Land Revenue Settlement of India during the British Rule • Agrarian Credit in the Colonial Period • Commercialization of Agriculture. • Plantation in India, Famines in Colonial India	

Unit 3 Railways and Industries	26
- Advent of Railways - Railways on market integration and trade in Colonial India - Industrialization in India - Characteristics of Indian Industries at the time of British rule - Rise of Large-Scale Industries in Colonial India - Small Scale Industries in British India. - The Debate on De-industrialization	
Unit 4 Trade, Fiscal and Monetary Policies	28
- Entrepreneurship in Colonial regime - Rise economic nationalism - External and internal trade - Foreign Capital, Monetary policy - Fiscal policy - Role of State in the imperialistic structure - Indian economy at the eve on independence	

Course Learning Outcomes:

The course develops critical analytical skills and exposes students to understanding the intricacies of India's economic, political and social developments both in the past and present times. It increases their employability by enhancing their ability to deal with a variety of textual and statistical sources, and to draw upon them to construct a coherent argument. These skills would be useful in a variety of careers in academics, research, journalism and the government

Text / Reference Books:

AUTHOR	TITLE	Publisher	Year of publication	ISBN	Pages
Balachandran, G	Colonial India and the world economy, C. 1850- 1940- A new economic history of colonial India	Routledge.	**2016**	**97813877972**	**284**
Parthasarathy, P.	Why Europe grew rich and Asia did not: Global economic divergence, 1600-1850.	Cambridge University Press	2011	**0521168244**	**380**

Financial Economics

L	T	P	Total Credits
2	**0**	**0**	**2**

Course Contents/syllabus:

	Lecture Hours
Unit-1 Basic Accounting:	9
- Basic understanding of Accounting and Financial Terminology - Understanding of Accounting and Financial Statements - Understanding of Accounting and Financial Management	

		Lecture Hours

Unit		Hours
• Financial Decisions Under Financial Management • Objectives of Financial Management • Sources of Finance and How accounting is different from finance		
Unit-2- Introduction to Financial Economics		9
• Components of Formal Financial System, • Key elements of well-functioning financial system • Nature and Role of Financial Institutions and Financial Markets		
Unit-3- Non-Banking Financial Institutions		9
• Non-Banking Financial Institutions- Role Growth and Structure of (NBFIs) in India. • Types and Control of Non-Banking Financial Companies(NBFCs).		
Unit-4- Financial Markets		9
• Primary market - functions- types • Secondary Markets - functions- types • Equity and Debt Markets • Time Value of Money • Present and Future Values • Venture Capital and Start up Ecosystem		

Course Learning Outcomes: At the end of this course, the students will
- Have a thorough understanding of the fundamental Financial tools and valuation techniques required in the capital investment appraisal process.
- Understand the logic and reasoning behind taking strategic financial decisions
- To enhance the analytical skills which are applicable in Business Organizations.

Text / Reference Books:

Author	Title	Publisher	Year of publication	ISBN	Pages
R.E. Bailey	The Economics and Financial Markets	Cambridge University Press	2005	978-0521612807	528
S.F. Ley Roy and J. Werner	Principles of Financial Economics	Cambridge University Press	2005	9781316060872	289

Communication Skills—II

L	T	P	Total Credits
1	0	0	1

	Lecture Hours
Unit I: Basic Concepts in Communication	5
Towards communicative competence; choosing the appropriate channel and medium of communication; ways to develop communication skills in the areas of Listening, Speaking, Reading, and Writing.	

Unit II: Communication Types	4
Nonverbal communication: detailed analysis, KOPPACT (Kinesics, Oculesics, Proxemics, Paralanguage, Artefacts, Chronemics, Tactilics).	
Unit III: Communication and Technology	5
Importance of digital literacy and communication on digital platforms.	
Unit IV: Presentation Skills	4
Planning, preparation, practice, and performance; audience analysis, audio-visual aids, analyzing the non-verbal communication, methods of delivery: impromptu, extemporaneous, memorization, manuscript, and outlining.	

Course Learning Outcomes:

- Students will be able to understand the basic processes of communication, both verbal as well as non-verbal—nature, scope, and power of communication processes.
- Students will be able to demonstrate cultural sensitivity in communication and appreciation of cultural variations of diverse socio-cultural contexts.
- Students will be able to develop an awareness of the role of mass media in shaping public psyche, beliefs, and perceptions about social realities and build an informed and critical perspective.
- Students will be able to analyze situations and audiences to make right choices about the most effective and efficient ways to communicate and deliver messages.
- Students will be able to assess various barriers in communication and develop communicative competence thereby for effective communication.

Text / Reference Books:

Author	Title	Publisher	Year of publication	ISBN	Pages
P. D. Chaturvedi and Mukesh Chaturvedi	Business Communication: Concepts, Cases and Applications	Pearson Education	2006	9788131701720	516
Meenakshi Raman and Prakash Singh	Business Communication	Oxford University Press	2012	9780198077053	650
Jeff Butterfield	Soft Skills for Everyone	Cengage Learning	2017	9789353501051	628

Individual, Society and Nation

L	T	P	Total Credits
1	0	0	1

	Lecture Hours
Unit-1- Individual differences & Personality	**4**
• Personality: Definition& Relevance • Importance of nature & nurture in Personality Development • Importance and Recognition of Individual differences in Personality • Accepting and Managing Individual differences Intuition, Judgment, Perception & Sensation (MBTI) BIG5 Factors	
Unit-2- Managing Diversity	**4**
• Defining Diversity • Affirmation Action and Managing Diversity • Increasing Diversity in Work Force • Barriers and Challenges in Managing Diversity	
Unit-3- Socialization, Patriotism and National Pride	**5**
• Nature of Socialization • Social Interaction • Interaction of Socialization Process • Contributions to Society and Nation • Sense of pride and patriotism • Importance of discipline and hard work • Integrity and accountability	
Unit-4- Human Rights, Values and Ethics	**5**
• Meaning and Importance of human rights • Human rights awareness • Values and Ethics- Learning based on project work on Scriptures like- Ramayana, Mahabharata, Gita etc.	

List of Professional Skill Development Activities (PSDA):
- Project on Understanding Diversity
- Term Paper on Patriotism among Youth

Text / Reference Books:

Author	Title	Publisher	Year of publication	ISBN	Pages
Department of English, University of Delhi	The Individual & Society	Pearson Education	2010	978-8131704172	266

Umang Malhotra	**Individual, Society, and the World**	iUniverse	2004	978-0595662401	188
Tonja R. Conerly & Kathleen Holmes	Introduction to Sociology 3e	Openstax	2015	9781711493978	458
Daksh Tyagi	"A Nation of Idiots"	Every Protest	2019	978-8194275015	350

French Grammar

L	T	P	Total Credits
1	0	0	1

	Lecture Hours
Unit-I : My family and my house	**4**
Descriptors/Topics • Talk about your family members • Usage of possessive adjectives • Describe your house/apartment • Prepositions of location • Negation	
Unit-II- Lifestyle	**5**
Descriptors/Topics • Talk about your hobbies and pastimes • Usage of appropriate articles : definite and contracted • Talk about your daily routine • Usage of pronominal verbs	
Unit-III- In the city	**4**
Descriptors/Topics • Filling up a simple form • Ask for personal information • Usage of interrogative adjectives • Give directions about a place • Ordinal numbers • Usage of demonstrative adjectives	
Unit-IV- Week-end	**5**
Descriptors/Topics • Talk about your week-end plans • Usage of disjunctive pronouns • Usage of Near Future tense • Talk about weather • Write a simple post card	

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN No

Christine Andant, Catherine Metton, Annabelle Nachon, Fabienne Nugue,	A Propos - A1, Livre de l'élève et Cahier d'exercices.	Langers International Pvt. Ltd.	2010	978-9380809069
Collins Dictionaries	Easy Learning French Complete Grammar, Verbs and Vocabulary	Collins	2016	978-0008141721
Nikita Desai, Samapita Dey Sarkar	Apprenons La Grammaire Ensemble - French	Langers International Pvt. Ltd.	2017	978-8193002681

German Grammar

L	T	P	Total Credits
1	0	0	1

	Lecture Hours
Module I: Time (Uhrzeit); People and the World: Land, Nationalität und Sprache	**4**
- Introduction of time; Read text related to time and teach the students the time expressions; Exercises related to Time - Adverbs of time and time related prepositions - Vocabulary: Countries, Nationalities, and their languages - Negation: "nicht/ kein" - Ja/Nein Fragen. - All the colors and color related vocabulary, adjectives, and opposites - Exercises and comprehension for the same.	
Module II: Irregular verbs (unregelmässige Verben)	**5**
- Introduction to irregular verbs and their conjugation e.g. fahren, essen, lesen etc - Read a text related to the eating habits of Germans - Vocabulary: Obst, Gemüse, Kleiderstück with usage of irregular verbs - Free time and hobbies - Food and drinks	
Module III: Accusative case: articles and pronouns (Akkusativ Kasus: Artikel und Pronomen)	**4**
- Introduction to the concept of object (Akkusativ) - Formation of sentences along with the translation and difference between nominative and accusative articles - Usage of accusative Definite articles - Usage of accusative Indefinite articles	
Module IV: Accusative case: possessive pronouns (Akkusativ Kasus: Possessivpronomen) Family and Relationship	**5**
- Accusative Personal Pronouns: Revision of nominative personal pronouns, introduction of accusative. Applicability of pronouns for both persons and things. - Usage of accusative Personal Pronouns - Introduction of accusative possessive pronouns - Difference between nominative and accusative possessive pronouns - usage of accusative possessive pronouns	

Text / Reference Books:

Author	Title	Publisher	Year	ISBN No	Pages
Dora Schulz, Heinz	Deutsche	Max	1984	978-	-

Griesbach	Sprachlehre Fur Auslander	Hueber Verlag		3190010066	
Hartmut Aufderstrasse, Jutta Muller, Helmut Muller	Themen Aktuell: Glossar Deutsch	Max Hueber Verlag	2003	978-3190816903	-
Giorgio Motta	Wir Plus Grundkurs Deutsch fur Junge Lerner Book German Guide	Goyal Publishers	2011	9788183072120	248

Punjabi Language & Literature-II

L	T	P	Total Credits
1	0	0	1

Course content and syllabus

	Weightage (%)	Teaching Hours
Unit I:	**25%**	**4 hours**
ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਹਾਣੀ ਦਾ ਅਧਿਐਨ (ਕਥਾ ਕਹਾਣੀ) ਕਹਾਣੀ ਵਿਸ਼ਾ-ਵਸਤੂ/ਸਾਰ,ਪਾਤਰ-ਚਿਤਰਨ ਕਹਾਣੀਕਾਰ ਦੇ ਜੀਵਨ ਅਤੇ ਰਚਨਾ ਬਾਰੇ ਮੁੱਢਲੀ ਜਾਣਕਾਰੀ		
Unit II:	**25%**	**4 hours**
ਦਫ਼ਤਰੀ ਚਿੱਠੀ-ਪੱਤਰ ਰਚਨਾ ਚਿੱਠੀ-ਪੱਤਰ ਲੇਖਣ ਕਲਾ,ਮਹੱਤਤਾ ਅਤੇ ਕਿਸਮਾਂ ਦਫ਼ਤਰੀ ਚਿੱਠੀ-ਪੱਤਰ ਰਚਨਾ ਦੇ ਜ਼ਰੂਰੀ ਅੰਗ ਅਤੇ ਵੱਖ-ਵੱਖ ਵਿਸ਼ਿਆਂ ਅਨੁਸਾਰ ਵਿਹਾਰਕ ਅਭਿਆਸ		
Unit III:	**25%**	**5 hours**
ਵਿਆਕਰਨ ਸਿਧਾਂਤ ਅਤੇ ਵਿਹਾਰ 1. ਪੰਜਾਬੀ ਅਰਥ ਬੋਧ ਅਰਥਾਂ ਦੇ ਆਧਾਰ ਦੇ ਸ਼ਬਦਾਂ ਦੀਆਂ ਕਿਸਮਾਂ ਅਤੇ ਉਦਾਹਰਨਾਂ, ਸਮਾਨਰਥਕ ਸ਼ਬਦ, ਬਹੁਅਰਥਕ ਸ਼ਬਦ, ਵਿਰੋਧਾਰਥਕ ਸ਼ਬਦ, ਬਹੁਤੇ ਸ਼ਬਦਾਂ ਦੇ ਸਥਾਨ ਤੇ ਇੱਕ ਸ਼ਬਦ ਮੁਹਾਵਰੇ, ਅਖਾਣ : ਪਰਿਭਾਸ਼ਾ ਅਤੇ ਉਦਾਹਰਨਾਂ 2. ਪੰਜਾਬੀ ਵਾਕ ਬੋਧ ਵਾਕ ਪ੍ਰੀਭਾਸ਼ਾ,ਵਾਕ ਦੇ ਤੱਤ, ਪੰਜਾਬੀ ਵਾਕ ਤਰਤੀਬ ਵਾਕ ਵਰਗੀਕਰਨ:ਕਾਰਜ ਦੇ ਅਧਾਰ ਤੇ ਵਾਕਾਂ ਦੀਆਂ ਕਿਸਮਾਂ, ਬਣਤਰ ਦੇ ਅਧਾਰ ਤੇ ਵਾਕਾਂ ਦੀਆਂ ਕਿਸਮਾਂ		
Unit IV:	**25%**	**5 hours**
ਵਿਆਕਰਨ ਸਿਧਾਂਤ ਅਤੇ ਵਿਹਾਰ		

1. ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਤੇ ਗੁਰਮੁਖੀ ਲਿੱਪੀ		
2. ਭਾਸ਼ਾ, ਉਪਭਾਸ਼ਾ,ਟਕਸਾਲੀ ਭਾਸ਼ਾ ਅਤੇ ਪੰਜਾਬੀ ਦੀਆਂ ਉਪਭਾਸ਼ਾਵਾਂ		

Course Learning Outcomes:
- Understand modern Punjabi Stories.
- Interpret the importance of letter writing
- Analyze the Punjabi language structure and grammar.
- Examine the impact and importance of Punjabi dialects and Gurmukhi script on Punjabi language.

Text / Reference Books:

AUTHOR	TITLE	Publisher	Year of publication	ISBN	Pages
ਡਾ. ਧਨਵੰਤ ਕੌਰ (ਸੰਪਾ.),	**ਕਥਾ ਕਹਾਣੀ**	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਪੰਜਾਬ ਯੂਨੀਵਰਸਿਟੀ ਚੰਡੀਗੜ੍ਹ	2009	-	-
ਸੁਰਿੰਦਰ ਸਿੰਘ ਖਹਿਰਾ (ਸੰਪਾ.),	**ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਵਿਆਕਰਨ ਅਤੇ ਬਣਤਰ**	ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ,ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ ਪਟਿਆਲਾ	2015	-	-
ਡਾ.ਹਰਕੀਰਤ ਸਿੰਘ,	**ਕਾਲਜ ਪੰਜਾਬੀ ਵਿਆਕਰਨ ਅਤੇ ਲੇਖ ਰਚਨਾ**	ਪੰਜਾਬ ਸਟੇਟ ਯੂਨੀਵਰਸਿਟੀ ਟੈਕਸਟ ਬੁੱਕ ਬੋਰਡ,ਚੰਡੀਗੜ੍ਹ	1999	-	-
ਡਾ. ਪ੍ਰੇਮ ਪ੍ਰਕਾਸ਼ ਸਿੰਘ	**ਕਾਲਜ ਪੰਜਾਬੀ ਵਿਆਕਰਨ ਅਤੇ ਲੇਖ ਰਚਨਾ**	ਮਦਾਨ ਪਬਲੀਕੇਸ਼ਨਜ਼, ਪਟਿਆਲਾ	2002	-	-
ਡਾ. ਬੂਟਾ ਸਿੰਘ ਬਰਾੜ	**ਪੰਜਾਬੀ ਵਿਆਕਰਨ ਸਿਧਾਂਤ ਅਤੇ ਵਿਹਾਰ**	ਚੇਤਨਾ ਪ੍ਰਕਾਸ਼ਨ, ਪੰਜਾਬੀ ਭਵਨ,ਲੁਧਿਆਣਾ	2012	-	-
ਡਾ. ਬੂਟਾ ਸਿੰਘ ਬਰਾੜ	**ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਸ੍ਰੋਤ ਅਤੇ ਸਰੂਪ**	, ਵਾਰਿਸ ਸ਼ਾਹ ਫ਼ਾਉਂਡੇਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ	2012	-	-
ਦੁਨੀ ਚੰਦ੍	**ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦਾ ਵਿਆਕਰਣ**	, ਪੰਜਾਬ ਯੂਨੀਵਰਸਿਟੀ ਪਬਲੀਕੇਸ਼ਨ ਬਿਊਰੋ, ਚੰਡੀਗੜ੍ਹ	1995	-	-
ਜੋਗਿੰਦਰ ਸਿੰਘ ਪੁਆਰ ਅਤੇ ਹੋਰ	**ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦਾ ਵਿਆਕਰਨ**	ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਕਾਦਮੀ ਜਲੰਧਰ	2003	-	-

	(ਭਾਗ 1,2,3),				
ਸੁਖਵਿੰਦਰ ਸਿੰਘ ਸੰਘਾ	**ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਵਿਗਿਆਨ**	ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਕਾਦਮੀ ਜਲੰਧਰ	2010	--	-
ਅਗਨੀਹੋਤਰੀ,ਵੇਦ	ਪਰਿਚਾਇਕ ਭਾਸ਼ਾ ਵਿਗਿਆਨ	ਦੀਪਕ ਪਬਲਿਸ਼ਰਜ਼ ਜਲੰਧਰ	1981	-	-

History and Culture of Punjab-II

L	T	P	Total Credits
1	0	0	1

	Lecture Hours
Unit I:	**4**
The Mauryan Empire: Social, economic, and religious life Buddhism and Jainism: Impact on Punjab with special reference to 4th Buddhist Council. The Kushans: Impact of Kanishka's rule on Punjab	
Unit II:	**5**
Gandhara School of Art: Salient features. The Guptas: Cultural and scientific developments. Position of Women: Under the Mauryas, the Guptas and the Vardhanas.	
Unit III:	**4**
Depiction of Punjab in the accounts of Chinese travellers: Fahien and Huen Tsang: Main developments in literature. Education: Significant developments; Taxila	
Unit IV:	**5**
Society and Culture on the eve of the Turkish invasion of Punjab. Punjab in the Kitab-ul-Hind of Alberuni.	

Text / Reference Books:

1.Joshi, L.M (ed.): **History and Culture of the Punjab, Part-I,** Publication Bureau, Punjabi University, Patiala, 1989 (3rd ed.)

2.Joshi, L.M and Fauja Singh**: History and Culture of the Punjab, Vol. I,** Punjabi University, Singh(eds), Patiala, 1977

3.Prakash**, Buddha: Glimpses of Ancient Punjab,** Punjabi University, Patiala, 1983

4.Thapar, Romila: **A History of India**, Vol. I, Penguin Books, 1966

5.Basham, A.L: **The Wonder That was India**, Rupa Books, Calcutta (18th rep.),1992

6.Sharma, B.N: **Life in Northern India**, Munshi Ram Manohar Lal, Delhi, 1966

Environmental Studies-II

L	T	P	Total Credits
2	0	0	2

	Lecture Hours
Unit-1- Environmental Pollution	**9**
Environmental Pollution: types, Cause, effects and controls –Air, water, soil, chemical and noise pollution. Nuclear hazard and human health risk Solid waste Management-control measures of urban and industrial waste. Pollution case studies.	
Unit-2- Environmental Policies and practices	**9**
Environmental Policies and practices: Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture. Environment laws: Environment Protection Act; Air (Prevention and Control of Pollution) Act; Water (Prevention and Control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act, international agreements: Montreal and Kyoto protocols and convention on biological diversity(CBD), The Chemical Weapons Convention (CWC). Natural reserves, tribal population and rights and Human-wildlife conflict in Indian context.	
Unit-3- Human communities and the Environment	**9**
Impacts on environment, human health and welfare. Carbon foot-print. Resettlements and rehabilitation of project affected persons, case studies. Disaster management: floods, earthquake, cyclone and landslides. Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan. Environmantal ethics: Role of Indian and other religions and cultures in environmental conservation. Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).	
Unit-4- Field work	**9**
Visit to an area to document environmental assets: river/forest/flora/fauna, etc. Visit to local polluted Site-Urban/Rural/Industrial/Agricultural Study of common plants, insects, birds and basic principles of identification. Study of simple ecosystems-pond, river, Delhi Ridge, etc.	

Text / Reference Books:

Author	Title	Publisher	Year of publication	ISBN	Pag
William P. Cunningham, Mary Ann Cunningham	Principles of Environmental Science	McGraw-Hill	2019	9781260219715	--
William P. Cunningham, Mary Ann Cunningham, Barbara Woodworth Saigo	Environmental Science: A global concern,	McGraw-Hill	2021	9781260363821	--

Gurjar B. R., Molina L.T., Ojha C.S.P. (Eds.)	Pollution: Health and Environmental Impacts	CRC	2010	9781439809624	--
Elaine M.A. and Bugyi G.(Eds.)	Impact of Water Pollution on Human Health and Environmental Sustainability (Practice, Progress, and Proficiency in Sustainability)	Idea Group, U.S	2016	978-1466695597	--
Bryant E.	Natural Hazards, 5th Edition	Cambridge University Press	2004	978-0521537438	--
Keith Smith	Environmental Hazards Assessing Risk and Reducing Disaster	Oxford University Press	2013	978-0415681063	--

BA+MA Integrated (Economics) Honours- 5 years (3rd semester)

S.No	Course Code	Course Title	Course Type	Credits			Credit Units
				L	T	P	
1	ECN 201	Intermediate Microeconomics-I	Core Course	6	0	0	6
2		Intermediate Macro Economics-I ECN 202	Core Course	6	0	0	6
3	ECN203	Statistical methods for Economists	Core Course	6	0	0	6
4	ECN204	Public Finance	Allied Course	6	0	0	6
5	ECN 205	Research Methodology-I	Employability & Skill Enhancement Course	2	0	0	2
		Total Credits		26			

Intermediate Microeconomics-I

Course content and syllabus

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

	Lecture Hours
Unit I: Consumer Theory	28
- Budget constraint; properties of budget set, how budget line changes. - Preference; Indifference curves, Marginal rate of substitution. - Utility; perfect substitutes, perfect complements, - Choice; optimal choice; neutrals and bads, discrete goods, concave preferences. - Demand; income offer curves and Engel curves, price offer curve and demand curve. - Revealed preference, Weak Axiom of Revealed Preference, Strong Axiom of Revealed Preference - Index Numbers, Price Indices.	
Unit II: Consumer Behavior	28
- Slutsky equation; the substitution effect, the income effect, sign of substitution effect, the total change in demand, rates of change, Law of demand and compensated demand curve. - Buying and Selling: Net and Gross Demands, The Budget Constraint, Changing the Endowment, Price Changes, Offer Curves and Demand Curves - The Slutsky Equation Revisited, Use of the Slutsky Equation - Intertemporal choice and Slutsky Equation - Uncertainty and risk aversion: Choice involving risk, Describing Risk, Different Preferences towards Risk, Reducing Risk, Demand for Risky assets, Trade off between Risk and Return	
Unit III: Production Behavior	26
- Technology : Inputs and Outputs, Describing Technological Constraints, Examples of Technology - Fixed Proportions, Perfect Substitutes - Properties of Technology, The Marginal Product, The Technical Rate of Substitution, Diminishing Marginal Product Diminishing Technical Rate of Substitution The Long Run and the Short Run, Returns to Scale Production Functions ; - Homogenous and homothetic production functions; - Cobb Douglas and CES production functions : Properties ; - Elasticity of substitution ; Eulers theorem.	
Unit IV: Competitive Firm Behavior	26

• Perfect competition: Assumptions: theory of a firm under perfect competition, demand and revenue; • Equilibrium of the firm in the short run and long run; • long run industry supply curve: Increasing, decreasing and constant cost industries. • Price controls: Price Ceiling; price floors; production import quotas • Welfare: allocative efficiency under perfect competition.	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Develop an understanding of basic elements of consumer theory.
- Assess diverse situations of production theory.
- Analyze the functioning of perfectly competitive market.
- Evaluate the impact of microeconomics on individual decision making as consumers & producers.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Gregory Mankiw	Economics: Principles & Applications	Thomson Press (India) Ltd	2008	978-8131505779	
C. Snyder and W. Nicholson	Fundamentals of microeconomics	Cengage Learning	2010	978-8131514085	684
Hal Varian	Intermediate microeconomics: A modern approach	W. W. Norton	2010	978-8176710657	
H.L. Ahuja	Principles Of Microeconomics	S Chand Publishing	2016	978-9352533305	872

Intermediate Macroeconomics I

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

Course Contents/syllabus:

	Lecture hours
Unit 1: The labour market	**26**

• Wage determination; wages, prices and employment. • Natural rate of unemployment; from employment to output		
Unit 2 : Aggregate demand and aggregate supply curves	**28**	
• Derivation of aggregate demand and aggregate and supply curves • Interaction of aggregate demand and supply to determine equilibrium output, price level and employment		
Unit 3 : Inflation, unemployment and expectations	**26**	
• Theories of Inflation: Classical Quantity Theory • Philips curve: Short Run • Adaptive and rational expectations • Long Run Expectation augmented Philips Curve • Concepts of NAIRU and NRU • Critique of Friedman Philips Curve • Policy ineffectiveness debate		
Unit 4 : Microeconomic foundations	**28**	
• Consumption: Keynesian consumption function • Fisher's theory of optimal intertemporal choice • Lifecycle and permanent income hypotheses • rational expectations and random walk of consumption expenditure • Investment: determinants of business fixed investment • Residential investment and inventory investment • Demand for money		

Course Learning Outcomes:
- This course enables students to analyse the macroeconomic performance of various countries using formal analytical tools.
- It also allows them to evaluate important macroeconomic policies and their implications on economy.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Abel, A., Bernanke, B	Macroeconomics	Pearson Education	2016	9780134167398	672
Blanchard, O.	Macroeconomics	Pearson Education	2018	9789353945220	576
Dornbusch, R., Fischer, S., Startz, R	Macroeconomics, 12th ed	McGraw-Hill	2018	9780073375922	636
Mankiw, N	Macroeconomics	Worth	2016	9789386668424	408

		Publishers			

Statistical Methods for Economists

	L	T	P/S	SW/FW	Total Credit Units
Course content and syllabus	6	0	0	0	6

	Lecture Hours
Unit I: Introduction and Measures of Central Tendency and Dispersion	**26**
- Meaning and scope of statistics, Collection of data, presentation of data, diagrammatic representation of data. Attributes and variables, discrete and continuous frequency distribution of a variable. - The distinction between populations and samples and between population parameters and sample statistics - Measures of Central Tendency- Mean, Median, Mode; definition, measure, properties, merits and demerits. - Measures of Dispersion- Meaning, importance, absolute and relative measures of dispersion.	
Unit II: Correlation Analysis and Regression Analysis	**26**
- Correlation Analysis: Significance and meaning and types of correlation, Methods of correlation analysis: Scatter diagrams, Karl Pearson's correlation, Spearman's rank correlation, Properties of Correlation. - Regression analysis: Meaning and types of Regression, Regression Lines, Relationship between correlation and regression coefficients.	
Unit III: Probability Theory	**28**
- Elementary probability theory: Sample spaces and events; probability axioms and properties; counting techniques; conditional probability and Bayes' rule; independence - Random variables and probability distributions: Defining random variables; probability distributions; expected values and functions of random variables; properties of commonly used discrete and continuous distributions (uniform, binomial, exponential, Poisson, hypergeometric and Normal random variables) - Random sampling and jointly distributed random variables: Density and distribution functions for jointly distributed random variables; computing expected values of jointly distributed random variables; covariance and correlation coefficients	
Unit IV: Index Numbers and Time Series Analysis	**28**
- Index Numbers: Meaning, scope and limitations, types, formulae. - Tests for the consistency of index numbers. - Time Series Analysis: Introduction, Objectives, models of time series, Identification of trend-and measurement of variations in time series. Secular, Cyclical, Seasonal and irregular variations.	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Clear understanding of the key concepts and principles of statistics
- Estimate population parameters based on random samples and test hypotheses about these parameters
- Knowledge relating to data analysis techniques, data visualization over a period of time.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
J. Devore	Probability and statistics for engineers	Cengage Learning	2012	978-8131518397	768
R. Larsen and M. Marx	An introduction to mathematical statistics and its applications.	Prentice Hall.	2011	978-0134871745	640
I. Miller and M. Miller	J. Freund's mathematical statistics with applications	VK Global Publications Private Limited	2017	978-9332519053	476

Public Finance

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

Course content and syllabus

	Lecture Hours
Unit I: Introduction to Public Finance	26

• Meaning, Nature, Scope and Importance of Public Finance • Private Finance • Principle of Maximum Social Advantage • Market Failure, Public Goods, Private Goods, Merit Goods, Free Riding, Externalities, Coase Theorem	
Unit II: Public Revenue	**26**
• Sources of Revenue: Tax and Non-Tax • Cannons of Taxation • Types of direct and indirect taxes, proportional, progressive, regressive, single, multiple taxes • Taxable capacity • Concept of Tax Elasticity and Tax Buoyancy • Incidence & impact: Dalton and Musgrave concept of incidence of taxation • Theories of Incidence of Taxation: Diffusion, concentration and the modern theory • Structure and Trends of Tax Revenue in India	
Unit III: Public Expenditure and Public Debt	**28**
• Meaning and reasons for the growth of Public Expenditure • Principles of Public Expenditure • Development and Non-Development Expenditure, • Effects of Public Expenditure: on production, distribution of resources and on economic development and stability • Theories: Wagner's Law, Peacock-Wiseman, Colin-Clark's critical limit theory, determinants • Public Debt: Meaning, types, sources of internal and external public debt, effects, methods of repayment • Trends in India, FRBM Act	
Unit IV: Indian Public Finances	**28**
• Tax System: structure and reforms • GST in India • Budget: concepts, instruments and objectives, deficits and public debt; • Fiscal federalism in India: Fiscal Policy for development, allocation, distribution and Stabilization	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Clear understanding of the key concepts and principles of public finance
- Analyze government policy from the viewpoint of equity and efficiency
- Critically appraise the role of the state

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
B.P. Tyagi	Public Finance	Jai Prakash Nath Co.	2015	978-9384538378	768
H.L. Bhatia	Public Finance	VK Global Publications Private Limited	2012	978-9325960008	698
R. Musgrave and P. Musgrave	Public Finance in Theory and Practice	McGraw Hill International Edition	2017	978-0070596931	648

Research Methodology-I

Course Contents/syllabus:

L	T	P/S	SW/FW	Total Credit Units
2	0	0	0	2

	Lecture Hours
Unit-1 Introduction to Research	9
- Foundations of Research: Meaning, Objectives, Motivation, Utility. - Concept of theory, empiricism, deductive and inductive theory. - Characteristics of scientific method – Understanding the language of research Concept, Construct, Definition	
Unit-2 Research Process and Data	9
- Research Process, Concept and Importance in Research, - Types of Research. - Research Design: Definition, types of research design-descriptive, exploratory and experimental.	
Unit-3- Data	9
- Data Collection: Definition of Primary and Secondary Data – Difference between primary and secondary Data- Sources, Characteristics, Advantages and Disadvantages of Primary and Secondary data - Data types and sources: Qualitative and Quantitative data, - Scales of Measurement; - Institutions and Sources of Secondary data for Research in Economics	
Unit-4- Questionnaire	9
- Designing Sample questionnaires: Questionnaire Construction - Understanding of Observation method, Personal Interviews, Telephonic Interview, Mail Survey, Email/Internet survey	

Course Learning Outcomes: At the end of this course, the students will be able to
- Understand the importance and types of research.

- Comprehend with various research designs and data collection techniques.
- Appraise with various sampling procedures and analyze data through various techniques.

Text / Reference Books:

Author	Title	Publisher	Year of publication	ISBN	Pages
R. Kothari	Research Methodology: Methods and Conditions	Tata New Age international Publishers, India	2019	978-9386649225	480
Deepak Chawla and Neena Sondhi	Research Methodology: Concepts and Cases.	Vikas Publishing, India	2016	978-9325982390	680
D. Cooper	Business Research Methods	McGraw-Hill Education	2018	978-9353161194	890

BA+MA Integrated (Economics) Honours- 5 years (4ⁿᵈ semester)

S.No	Course Code	Course Title	Course Type	Credits			Credit Units
				L	T	P	
1	ECN 206	Intermediate Microeconomics-II	Core Course	6	0	0	6
2	ECN 207	Intermediate Macro Economics-II	Core Course	6	0	0	6
3	ECN 208	Introductory Econometrics	Core Course	6	0	0	6
4	ECN 209	Environmental Economics	Allied Course	6	0	0	6
5	ECN 210	Research Methodology-II	Employability &	2	0	0	2

		Skill Enhancement Course					
		Total Credits		26			

Intermediate Microeconomics-II

Course content and syllabus

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

	Lecture Hours
Unit I: Imperfect Competition	28
- Monopoly; shapes of AR and MR curves, Monopolist's output and pricing decision; - Absence of SS curve in Monopoly, shifts of demand curve - Monopoly Power: measurement of market power; Rule of thumb for pricing, Sources of Monopoly power, Social costs of monopoly power- Rent Seeking - Regulation of Monopoly - Natural Monopoly - Multiplant monopoly - Price discrimination; Capturing consumer surplus, Three degrees of price discrimination, Inter temporal; peak-load pricing; two-part tariff - Monopolistic competition: price and output determination in short and long run, concept of excess capacity - Economic efficiency and resource allocation	
Unit II: Imperfect Competition- Strategic Decision Making	28
- Oligopoly; Price leadership; - Cournot, Stackleberg and Bertrand Models - Competition Vs Collusion: Prisoner's Dilemma - Price Rigidity: Paul Sweezy Kinked DD Curve Model - Price Siganalling and Price Leadership: Low cost firm, Dominant size of Cartel Pricing - Game theory and competitive strategies - Dominant Strategy; Mixed strategies - Repeated and Sequential games	
Unit III: General Equilibrium, Efficiency and Welfare	26
Meaning of Partial and General Equilibrium Analysis, Pareto Optimality Criteria: 3 marginal conditions, Equilibrium and efficiency under pure exchange and production using Edgeworth Box and Contract Curve, overall efficiency	

• Welfare economics; Value Judgements, Social welfare functions: Bergson-Samuelson Social Welfare Function Classical Utilitarian or Benthamite Welfare Function, Weighted sum of Utilities Welfare Function, Minimax or Rawlsian social welfare function • Isowelfare Curves, Utility Possibility Curve and Grand UPC, Welfare maximisation, envy and equity • Compensation Criteria: Kaldor, Hicks and Scitovsky		
Unit IV: Market Failure	**26**	
• Externalities; Production and Consumption, Negative Externalities and Inefficiency, Positive Externalities and Inefficiency, Ways of Correcting Market Failure: Emission Standards, Emission Fees, Stand Vs Fee, Transferable permits • Externalities and Property Rights: Bargaining, Coase Theorem • Public Goods: characteristics, Provision of Public Goods, Free Riding, Different Levels of Public Goods. Common Property Resources • Asymmetric Information: Market for Lemons, Market Signalling, Adverse Selection, Moral Hazard, Principal-Agent Problem.		

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Develop an understanding of basic elements of monopoly and monopolistic competition.
- Assess diverse situations of strategic decision-making situations.
- Analyze the functioning of General equilibrium and welfare.
- Evaluate the impact of market failure situations like externalities, public goods and asymmetric information.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Gregory Mankiw	Economics: Principles & Applications	Thomson Press (India) Ltd	2008	978-8131505779	
C. Snyder and W. Nicholson	Fundamentals of microeconomics	Cengage Learning	2010	978-8131514085	684

Hal Varian	Intermediate microeconomics: A modern approach	W. W. Norton	2010	978-8176710657	
H.L. Ahuja	Principles Of Microeconomics	S Chand Publishing	2016	978-9352533305	872

	Lecture hours
Unit 1: Economic growth	**28**
- Harrod-Domar model - Solow model - Golden rule - Technological progress - Economics of ideas - Engines of growth - Modern theories of endogenous growth	
Unit 2 : Business cycles	**26**
- History of Business Cycles - Traditional theories of business cycles: Sun-spot theory, Hawtrey monetary theory, Karl Marx Under consumption theory and Hayek's monetary version of over investment theory - Views of Different Schools of Thoughts on the occurrence of Business Cycles: Classicals, Keynes, Monetarists, New Classicals and Rational Expectations - Real business cycle theory - New Keynesian models of sticky prices	
Unit 3 : Open economy models	**28**
- Short-run open economy models; Mundell-Fleming model : in case of fixed and flexible exchange rate regime; - Exchange rate determination; - Purchasing power parity; - Asset market approach; - Dornbusch's overshooting model; - Monetary approach to balance of payments; - International financial markets	
Unit 4 : Fiscal and monetary policy	**26**
- Economic stability through expansionary and tight monetary policy - Economic stability through discretionary and non-discretionary fiscal policy - Active or passive; monetary - Policy objectives and targets; their trade-off and Tinbergen's fixed target approach - Rules versus discretion: Time consistency; - The government budget constraint; - Government debt and Ricardian equivalence	

Intermediate Macroeconomics-II
   Course content and syllabus

Course Learning Outcomes:
- This course will enable students to combine their knowledge of the working of the macroeconomy with long run economic phenomena like economic growth, technological progress, R&D and innovation.
- It will also enable students to understand business cycles and the concomitant role of policies.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Abel, A., Bernanke, B	Macroeconomics	Pearson Education	2016	9780134167398	672
Blanchard, O.	Macroeconomics	Pearson Education	2018	9789353945220	576
Dornbusch, R., Fischer, S., Startz, R	Macroeconomics, 12th ed	McGraw-Hill	2018	9780073375922	636
Mankiw, N	Macroeconomics	Worth Publishers	2016	9789386668424	408

Introductory Econometrics

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

Course content and syllabus

	Lecture Hours
Unit I: Introduction to Econometrics	**26**
• Nature and Scope of Econometrics, • Methodology of Econometrics. • Specification of an econometric model. • Nature of Data used in estimation.	
Unit II: Simple and Multiple Regression Models	**26**

• Estimation of model by method of ordinary least squares; • properties of the least squares estimators (BLUE properties), • the Gauss-Markov theorem. • Goodness of fit-R2& Adjusted R2 • Tests of hypotheses; • confidence intervals.	
Unit III: Econometric Problems	**28**
• Relaxing the Assumptions • Multicollinearity: Nature, Consequences, Detection and Remedial measures of the problems • Heteroscedasticity: Nature, Consequences, Detection and Remedial measures of the problems • Autocorrelation: Nature, Consequences, Detection and Remedial measures of the problems	
Unit IV: Specification Errors	**28**
• Tests of Specification and misspecification • Omission of a relevant variable; • Inclusion of irrelevant variable; • Errors of measurement in dependent and independent variables. • Model Selection Criteria.	

Course Learning Outcomes: By the end of the course student will be able to

- Comprehend the nature and scope of econometrics and development of regression models and the estimation methods.
- Identify the problems which may arise in the error term and the corresponding remedial measures for the same.
- Analyze econometric models to explain certain economic relationships and their implementation for drawing inferences for the same.
- Develop among the judgement of the model specification for econometric estimation.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
D. Gujarati	Basic Econometrics	New York: McGraw Hill	2015	978-0070597938	1002
G.M.K. Madnani	Introduction to Econometrics: Principles and	Oxford and IBH Publishing Co. Pvt Ltd	2012	9788120417199	635

	Applications				
G. Maddala	Introduction to Econometrics	New York: MacMillan	2017	9780023745454	464

Environmental Economics

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

Course content and syllabus

	Lecture Hours
Unit I: Introduction to Environmental Economics	**26**
- Nature and significance of environmental economics, definition and scope of environmental economics, basic theory, market system and the environment – welfare and environment – the economics of externalities. - Review of microeconomics and welfare economics - The theory of externalities: Pareto optimality and market failure in the presence of externalities, property rights and the Coase theorem	
Unit II: Environmental Policy and Solutions	**26**
- The design and implementation of environmental policy: overview; Pigouvian taxes and effluent fees; - tradable permits; choice between taxes and quotas under uncertainty; Implementation of environmental policy - Solutions to environmental problems: Conventional Policy – Environmental Standards, Efficiency of Environmental Standards, Command and Control Approach, Market Based Policy – Pollution Charges and Environmental Subsidies, Deposit Refund System, Environmental Regulations in India.	
Unit III: International environmental problems	**28**
- International Environmental Problems : Trans-boundary environmental problems; - Measuring the Benefits of Environmental Improvements , - Non-Market values and measurement methods;	
Unit IV: Sustainable Development	**28**
- Sustainable Development Concepts; measurement. - Environmental Accounting – Concept, - Economics of climate change; trade and environment - Common Property Resources and LDCs	

Course Learning Outcomes: By the end of the course student will be able to

- Acquire the fundamental understanding of nature and significance of Environmental Economics.
- Examine various solutions to environmental problems.
- Appraise the matters relating to international environmental problems.
- Develop fundamental understanding of pollutants that travel across country boundaries and how environmental regulations affect trade flows

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
C. Kolstad	Intermediate environmental economics	Oxford University Press.	2010	978-0198091783	416
Raj Madhu	Environmental Economics	Ivy Publishing House.	2001	978-8178900063	
Jhingan M.L & Sharma, Chander K.	Environmental Economics, Theory Management & Policy	Vrinda Publications	2009	978-8182811140	

Research Methodology-II	L	T	P/S	SW/FW	Total Credit Units
	2	0	0	0	2

Course Contents/syllabus:

	Lecture Hours
Unit-1 Sampling	9
• Sampling: Concepts of Statistical Population, Sample, Sampling Frame, Sampling Error, Rule of thumb for Sample Size Selection, Non-Response. Characteristics of a good sample.	
Unit-2- Probability Sampling	9
• Probability Sample – Simple Random Sample, Systematic Sample, Stratified Random Sample & Multi-stage sampling. Determining size of the sample – Practical considerations in sampling and sample size.	
Unit-2 Data Processing, Cleaning and Coding	9
• Errors in surveys: Misunderstanding of questions and answers; problem of non-response • Processing of survey data: Cleaning of data and its coding	
Unit-4-Ethics and Data Analysis	9
• Ethics and scientific integrity: Standards of conduct, privacy in data • Data Analysis: Tabulation of Data & Data Preparation, Descriptive statistics, Correlation, Regression, Report Writing.	

Course Learning Outcomes: At the end of this course, the students will be able to
- Understand the importance and types of sampling.
- Comprehend with various probability sampling and data collection techniques.
- Appraise with data analysis through various techniques.
- Execute report writing and presentation of results.

Text / Reference Books:

Author	Title	Publisher	Year of publication	ISBN	Pages
R. Kothari	Research Methodology: Methods and Conditions	Tata New Age international Publishers, India	2019	978-9386649225	480
Deepak Chawla and Neena Sondhi	Research Methodology: Concepts and Cases.	Vikas Publishing, India	2016	978-9325982390	680
D. Cooper	Business Research Methods	McGraw-Hill Education	2018	978-9353161194	890

BA+MA Integrated (Economics) Honours- 5 years (6th semester)

S.No	Course Code	Course Title	Course Type	Credits			Credit Units
				L	T	P	
1		Indian Economy-II	Core	6	0	0	6
2		Economics of Growth and Development-II	Core	6	0	0	6
3		Behavioral Economics	Allied	6	0	0	6
4		International Trade and Trading Systems	Allied	6	0	0	6
5		Contemporary Economic Issues-II	Employability & Skill Enhancement Course	2	0	0	2
		Total Credits		26			

Indian Economy-II

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

Course Contents/syllabus:

	Lecture hours
Unit 1: Macroeconomic policies and their impact	**28**
• Macro economic policies: Meaning, Scope, Objectives, Formulation • Need for and Advent for macroeconomic policies • Instruments and Transmission Mechanism of Monetary Policy • Limitations and Effectiveness of Monetary Policy • Recent Monetary Policy of India • Fiscal Policy: kinds, instruments, target variables • Fiscal Policy and Macroeconomic Goals • Crowding Out/ In of Fiscal Policy, Limitations • Recent Fiscal Policy of India • Impact on Employment, Output and Income	
Unit 2 : Policies and performance in agriculture	**26**
• Agriculture and its Development in India: Features of Indian Agriculture. • New Agricultural Strategy in India (Green Revolution). • Economic Liberalization and Indian Agriculture. • Agriculture during post Green revolution	
Unit 3 : Policies and performance in industry and services	**28**
• Industry and Public sector in India: Phases of Industrial Growth in India, • Appraisal of the Industrial Policy resolution of 1956, 1980 and 1991. • Performance of Public sector Undertakings in India and its Evaluation. • Privatization – Nature and Extent in India. • Service Sector in India: Service Sector Growth-Pattern and Future Prospects. • Sustainability of Services Led Growth in India. • Need for Infrastructure and Government strategy on Infrastructure Development in India. • Small scale industries and MSMEs in India	
Unit 4 : The state of financial sector in India	**26**
• Financial Sector and its Development in India: Structure of the Financial System in India. • Nationalization of Banks – Causes and Evaluation of Performance. • Banking Sector Reforms since 1991. Capital Market – Growth, Problems and Reforms since 1991. • Role of Securities Exchange Board of India (SEBI). • Financial Scams and the role of SEBI in checking Financial scams • Implications of financial sector reforms	

List of Professional Skill Development Activities (PSDA):

1. Understand the economic development during post reform period and write a Term assignment.
2. Write a seminar paper on impact of reforms on different sectors of Indian economy.

Course Learning Outcomes: At the end of the course, a student will be able to understand how the role of economic policies in shaping and improving economic performance in agriculture, manufacturing and services.

- Clear understanding of the Indian Economy during post reform period
- Analyze the impact of reforms on various sectors of the economy
- Critically assess the reform measures and its impact on growth, employment and structural transformation of the economy.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Bardhan, P	Awakening giants, feet of clay: Assessing the economic rise of China and India	Princeton University Press	2012	9780198068327	526
Dreze, J., Sen	India: An uncertain glory	Allen Lane	2013	9780141992624	480
Bhagwati, J., Panagariya	India's tryst with destiny	Collins Business	2012	9789351367765	340

Economics of Growth and Development-II

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

Course Contents/syllabus:

	Lecture hours
Unit 1: Demography and Development	**28**
- Demographic concepts; birth and death rates, age structure, fertility and mortality; - Demographic transitions during the process of development; gender bias in preferences and outcomes and evidence on unequal treatment within households; - Connections between income, mortality, fertility choices - Human capital accumulation; - Migration	
Unit 2 : Land, Labour and Credit Markets	**26**
- The distribution of land ownership - Land reform and its effects on productivity - Contractual relationships between tenants and landlords - Land acquisition - Nutrition and labor productivity - Informational problems and credit contracts; - Microfinance;	

• Inter- linkages between rural factor markets	
Unit 3: Environment and Sustainable Development	**26**
• Defining sustainability for renewable resources; • A brief history of environmental change; • Common-pool resources; environmental externalities and state regulation of the environment; • Economic activity and climate change • Sustainable Development Goals	
Unit 4 Globalisation	**28**
• Globalisation in historical perspective; • The economics and politics of multilateral agreements • Trade, production patterns and world inequality • Financial instability in a globalised world	

List of Professional Skill Development Activities (PSDA):

1. Capable to understand India's various development issues from a comparative perspective and creatively articulate them in the form of newspaper article or publish in other electronic media.
2. Critically analyse the globalisation and development process and present a seminar paper

Course Learning Outcomes: This course teaches the student various aspects of the Indian economy, as well as important themes relating to the environment and sustainable development. It also introduces them to some issues of globalisation.
- Clear understanding of the relation between population and process of development
- Analyze the particular problems of underdeveloped countries.
- Critically appraise the role of globalization and process of development

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Sen, A	Development as freedom	Oxford University Press	2000	9780385720274	384
Deaton, A	The great escape: Health, wealth and the origins of inequality	Princeton University Press	2013	9780385720274	376
Banerjee, A., Benabou, R., Mookerjee, D. (eds.)	Understanding poverty	Oxford University Press.	2006	9780195305203	496

Behavioral Economics

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

Course Contents/syllabus:

	Lecture Hours
Unit I: Introduction to Behavioural Economics	**26**
- Nature of Behavioural Economics - Methodolgical approach - Theory and evidence - Origins of behavioural economics-Neo classical and behavioural approaches to studying economics - Relationship with other disciplines	
Unit II: Foundations of Behavioural Economics	**26**
- Application of Behavioural economics: Case studies on loss aversion, Money illusion, Altruism - Values, Preferences and Choices: The standard model- Axioms, assumptions and definitions - The neuroscientific basis of utility - Case studies on Abstention and Drug addiction - Beliefs, Heuristics and Biases: The standard model- probability estimation- self evaluation bias- causes of irrationality - Case studies on Fakes and Honesty	
Unit III: Decision Making under risk and uncertainty	**28**
- Prospect theory - Reference points - Loss Aversion - Shape of utility function - Decision weighting - Case studies on Endowment Effect and Loss Aversion	
Unit IV: Behavioural Game Theory	**28**
- Nature of behavioral game theory - Mixed strategies- Bargaining- Iterated games- Signaling- Learning - Case studies on Market entry in Monopoly and Impasses in bargaining and self-serving bias.	

List of PSDA Activities:
1. Every student to present a case study with respect to bounded rationality
2. Each student to submit a report on instances of bounded rationality from their personal experiences.

Course Learning Outcomes: By the end of the course student will be able to

Understand the methodological approach in behavioural economics and contrast it with standard economic models.
Understand the psychological dimensions such as cognition, moral motivations and social interactions in explaining economic behaviours and outcomes
Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Edward Cartwright	Behavioural Economics	Routledge	2011		
Erik Angner	A Course in Behavioral Economics	Palgrave Macmillan	2012		
Dan Ariely	Predictably Irrational: The Hidden Forces that Shape Our Decisions	Harper Collins	2009		
Richard Thaler and Carl Sunstein	Nudge: Improving Decisions about Health, Wealth and Happiness	Penguin UK	2009		
Kahneman, Daniel and Amos Tversky	Choices, Values and Frames	Cambridge University Press	2000		
Camerer, Colin, Loewenstein, George, and Rabin, Matthew (eds.),	Advances in Behavioral Economics	Russell Sage Foundation and Princeton University Press	2003		
Colin Camerer	Behavioral game theory: experiments in strategic interaction	Princeton University Press	2003		

International Trade and Trading Systems	L	T	P/S	SW/FW	Total Credit Units
Course content and syllabus	6	0	0	0	6

	Lecture Hours
Unit I: Introduction to International Trade	**26**
- What is international economics about? - An overview of world trade. - Stylized facts about international trade - Important institutions in Global Trading system: GATT, WTO - Trade and Economic Development	
Unit II: Classical Neoclassical Trade Theories	**26**
- Adam Smith's Absolute Advantage Trade theory - Ricardian trade theory (notion of comparative advantage and gains from trade due to specialisation); - an introduction to the distributional effects of trade; the specific factor model; - Heckscher-Ohlin theory: Rybczinski and Stolper-Samuelson theorems; - Heckscher-Ohlin theorem; - Factor price equalisation	
Unit III: New trade theories	**28**
- External economies of scale, internal economies of scale; - Krugman model; firm heterogeneity; - International movement of factors; - Introduction to the theory of multinational firms	
Unit IV: Trade policy	**28**
- Instruments of trade policy; tariffs, quotas, export subsidies, voluntary export restraints. - The economics of trade policy; political economy of trade policy; controversies in trade policy. - Economics Integration: Multilaterism, Custom Unions, Free Trade Area	

List of PSDA Activities:
1. Every student to present an analysis absolute and comparative advantage trade principles..
2. Each student to submit an in-depth analysis of different instruments of trade policy.

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Establish their understanding of the economic concepts of trade theory
- Demonstrate and compare the economic welfare effects of free trade and protection
- Analyze the usefulness and problems related to topics in international trade
- Project their critical understanding of trade policies.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Paul Krugman	International Economics: Theory and Policy	Pearson Education	2017	978-9332586550	792
D.L. Salvatore	International Economics	Prentice Hall	2012	978-1118177938	720
Krugman, P., Obstfeld, M., Melitz, M	International Economics - Theory and Policy	Pearson Education	2018		785

Contemporary Economic Issues-II

Course content and syllabus

L	T	P/S	SW/FW	Total Credit Units
2	0	0	0	2

Unit 1: Economic Survey- Some Aspects
- State of the Economy
- India's Medium term growth outlook
- Fiscal Development
- Monetary Management and Financial Intermediation
- Prices and Inflation

Unit 2 : Economic Survey- Infrastructure and Environment

Social Infrastructure and Employment
Physical and Digital Infrastructure
Climate Change and Environment

Unit 3 : Policy Initiatives
- Agriculture and Food Management
- Industry
- Services

Unit 4 : External Sector and Stock market
- FDI Status and Issues in India
- Permanent Residency Status for Foreign Investors
- WTO Reforms and India's Stance
- Reforms in IMF Quota
- Indian Stock market and fluctuations in the Stock market in post Covid period.

List of Professional Skill Development Activities (PSDA):

1. Able to understand government policies and will in general be informed participants in economic decision making and write a Term assignment about the recent State/Central Budget.

Course Learning Outcomes:
- By the end of the course Students will be able to understand government fiscal policies and will be able to participate in the discussion on Economic survey and Union and State Budgets.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Chakraborty, P	Intergovernmental fiscal transfers in India: Emerging trends and realities. In P. Patnaik (ed.): Macroeconomics	Oxford University Press	2015	9780199458950	456
Kapila, U	Fiscal and budgetary developments in Indian economy since independence	Academic Foundation	2016	9789332703742	819
Reddy, Y	Continuity, change and the way forward: The fourteenth finance commission.	Economic and Political Weekly	2015	0012-9976(ISSN)	27- 36
Economic Survey for the last 5 years					
Centre for Budget and Governance Accountability. Recent reports					

BA+MA Integrated (Economics) Honours- 5 years (5th semester)

S.No	Course Code	Course Title	Course Type	Credits			Credit Units
				L	T	P	
1	ECN301	Indian Economy-I	Core	6	0	0	6
2	ECN302	Economics of Growth and Development-I	Core	6	0	0	6
3	ECN303	Applied Econometrics	Allied	6	0	0	6
4	ECN304	Political Economy of India	Allied	6	0	0	6
5	ECN305	Contemporary Economic Issues-I	Employability & Skill Enhancement Course	2	0	0	2
		Total Credits		26			

Indian Economy I

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

Course Contents/syllabus:

	Lecture hours
Unit 1: State of Economy	**28**
- Economic Development since Independence: State of the Indian economy at the Independence. - Changes in the structure of the Indian economy. - Adoption of Planning in India. Objectives, Strategy and Appraisal of Panning in India. - Outcomes of Planning in India - State Vs Market Debate	
Unit 2 : Population and Education	**26**
- Human Capital: Demography, health and education - Demographic Transition in India: Changes in fertility rates, Infant Mortality and Sex Ratio and Life Expectancy - Education Policies in Independent India	

• Growth of Educational Institutions and Enrolment Ratio	
Unit 3 : Growth and Inequality	**28**
• Inequality: Concept, Inequality axioms; empirical evidence in India; measures to overcome the inequality • Comparison of commonly used inequality measures: Lorenz curve, Gini coefficient, coefficient of variation and Theil's index • Connections between inequality and development: Kuznet inverted-U hypothesis • Poverty measurement (methodology); Poverty gap, Multidimensional Poverty Index; characteristics of the poor • Unemployment: concept, measures and policy interventions and outcomes	
Unit 4 : Indian Economy in Comparative perspective	**26**
• International comparisons with emerging economies such as China, Brazil, South Korea • International comparisons with its developed counterparts	

Course Learning Outcomes: At the end of the course, a student should be able to understand the development paradigm adopted in India since independence and evaluate its impact on economic as well as social indicators of progress and well-being**.**

List of Professional Skill Development Activities (PSDA):

1. Understand the development paradigm adopted in India since independence and write a Term assignment.

2. Write a seminar paper on evaluate India's development strategy during post-independence period and its impact on economic as well as social indicators of progress and well-being

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Bardhan, P	Awakening giants, feet of clay: Assessing the economic rise of China and India	Princeton University Press	2012	9780198068327	526
Dreze, J., Sen	India: An uncertain glory	Allen Lane	2013	9780141992624	480
Bhagwati, J., Panagariya	India's tryst with destiny	Collins Business	2012	9789351367765	340

	L	T	P/S	SW/FW	Total Credit Units
Economics of Growth and Development-I	6	0	0	0	6

Course content and syllabus

	Lecture hours
Unit 1: Conceptions of Development	**27**
- Concept and meaning of economic growth and development - Measurement of economic development, Alternative measures of development, Documenting the international variations in these measures - Sources of economic growth and development. - Factors in economic development: Natural Resources, Population, Capital, Human resource development and Infrastructure - Comparing development trajectories across nations and within them. - Sustainable development and SDGs (Conceptualization, Concerns, Indicators, and Remedial Measures)	
Unit 2 : ~~Underdevelopment and Development- Growth models~~ Theories and Models of Economic growth and development	**27**
- Theories: David Ricardo, Karl Max, Schumpeter and Rostow's theory of stages of economic growth - Vicious circle off poverty and Nelson's low-level equilibrium trap, Nurkse's theory of disguised unemployment. - Dependency theory of underdevelopment: **Imperialism and Colonialism; New Imperialism, new colonialism and dependency: its forms and effects.** - Meaning of Dualism, its characteristics and forms (Dualistic theories) - Growth models: Application and review of Harrod-Domar model, Solow model and its variants - Endogenous growth models- Romer's model and Lucas Model - Evidence on the determinants of growth	
Unit 3 : Investment and Labour	**27**
- Investment Criteria: Need and types of investment criteria: Social Marginal Productivity criteria, Capital Turnover criteria, Re-investment criteria, Time-series criteria and Balance of Payments criteria - Labour theories: Lewis's theory of unlimited supply of labor, Fei-Ranis theory - Choice of Technique: Labour-intensive vs Capital-intensive. - Labour Market reforms- Safety requirements, National Commissions of labour, Globalisation and labour markets. - Migration and Development: Todaro model of growth	
Unit 4 : Political Institutions and the Functioning of the State	**27**
- The determinants of democracy - Alternative institutional trajectories and their relationship with economic performance - Within-country differences in the functioning of state institutions; - State ownership and regulation; - Government failures and corruption	

Course Learning Outcomes:
- This course introduces students to the basics of development economics, with in-depth discussions of the concepts of development, growth, poverty, inequality, as well as the underlying political institutions

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Sen, A	Development as freedom	Oxford University Press	2000	9780385720274	384
Deaton, A	The great escape: Health, wealth and the origins of inequality	Princeton University Press	2013	9780385720274	376
Banerjee, A., Benabou, R., Mookerjee, D. (eds.)	Understanding poverty	Oxford University Press.	2006	9780195305203	496

Applied Econometrics

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

Course content and syllabus

	Lecture Hours
Unit I: Simultaneous Equations Models	**26**
- Nature of SEM's, Simultaneous Equation Bias, Identifications Problem. - Rank and Order Conditions. Testing Identification of Economic Models. - Estimation of SEM'S : ILS, 2SLS, 3SLS .Method of Instrumental Variables	
Unit II: Dummy variables and Qualitative Response Regression Models	**26**

• Dummy Explanatory Variables and Their Use to Test Equality to Two Regressions; Chow Test and Dummy Variable Approach. • Nature of Qualitative Response models. • Description and Estimation of Linear Probability Model and Problems. • Logit , Probit and Tobit Models.		
Unit III: Panel Data Models	**28**	
• Introduction: Advantages and Issues Involved in Utilizing Panel Data. • Simple Panel Data Models: Fixed Effects (LSDV) and Random Effects Approach. • Distributed Lag and Autoregressive Models: • Introduction and Nature of Distributed Lag (DL) & Auto Regressive (AR) Model. Koyck Approach for • Estimation of DL & AR Models Rationalization of Koyck Approach by Adaptive Expectation and • Partial Adjustment Hypothesis; Almon's Polynomial Approach.		
Unit IV: Time Series Analysis	**28**	
• Testing Casuality in Economics: Granger Causality Test. • Stationarity, Test of Stationarity, Spurious Regression, Unit Roots, Dickey-Fuller • Test, Cointegration, Engle Granger Test. • Forecasting: AR, MA and ARIMA processes, Box Jenking Methodology. • Vector Auto Regression (VAR) Model, Introduction, Formulation, Estimation and Problems.		

List of PSDA Activities:

1. Every student to present simultaneous equation modelling.
2. Each student to submit an analysis of Time series and panel data.

Course Learning Outcomes: By the end of the course student will be able to

- Initiate effective use of econometrics for economic problems through regression analysis.
- Have theoretical and practical understanding of time series data
- Have theoretical and practical understanding of panel data
- Develop analytical abilities among students for data handling and econometric modelling.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
D. Gujarati	Basic Econometrics	New York: McGraw Hill	2015	978-0070597938	1002

G.M.K. Madnani	Introduction to Econometrics: Principles and Applications	Oxford and IBH Publishing Co. Pvt Ltd	2012	978812041719 9	635
G. Maddala	Introduction to Econometrics	New York: MacMillan	2017	978002374545 4	464

Political Economy

L	T	P/S	SW/FW	Total Credit Units
6	0	0	0	6

Course content and syllabus

	Lecture hours
Unit 1: Analysing Social Change in Historical Perspective	**28**
- Political Economy: Concept and evolution, Brief understanding of Political economy approach; - Historical Materialism: Concept and theory, The method of historical materialism and its Criticism; - Pre-communism to Slavery, Disintegration of slavery - Feudalism, The transition from feudalism to capitalism;	
Unit 2 :Capitalism as an Evolving Economic System	**26**
- Capitalism: Basic features; Capitalism as a historical process – alternative perspectives - Accumulation and crisis; - Monopoly capitalism— alternative perspectives	
Unit 3 :The State in Capitalism	**26**
- The state and the economy – contestation and mutual interdependence; the state as an arena of conflict - Imperialism – the basic foundations; Imperialism and the classes; Imperialism and the states, Limits of Imperialism - The making of socialist consciousness	
Unit 4 : Changing Dynamics of Capitalist Production	**28**
- Capitalist development in the pre-Second World War period, - The 'Golden Age' and later - Organisational Form and Labour Process: Fordist and Post-Fordist production - The changing dynamics of the organisation of production, markets and labour process - The evolution of the multinational corporations and their economic logic - The contemporary forms value chain networks and forms of inter-firm governance - The changing nature of employment, job security and labour rights	

List of Professional Skill Development Activities (PSDA):

1. Students learn to assimilate from a diverse range of opinions and crystallize their own thought processes and standpoints. This also helps them to develop advanced writing, presentation and research skills.
2. The course further enables them to comprehend a larger view of the world around us by analysing the existing social and political structures and their links with the economic processes.

Course Learning Outcomes:

- To develop critical thinking by exposing them to elements of economic thought, juxtaposing ideas and theoretical structures based largely on original texts and journal articles.
- It exposes the social science dimension of economics to the students.
- Provides them skills to think and analyse in an interdisciplinary manner.
- Enables the students for pursuing studies in diverse related areas such as development studies, economic sociology, critical geography, gender studies.
- It prepares the students to face the practical world of work, where economics, business, civil society organisations, social institutions and politics often cohabit in a complex interlinked structure

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Baran, P	The political economy of growth	Pelican	1973	9780140214659	589
Habib, I	Capitalism in history	Social Scientist	1995	-	23, 15-31
Schumpeter, J	Capitalism, socialism and democracy	Routledge	1976	0415107628	431

Contemporary Economic Issues-I

L	T	P/S	SW/FW	Total Credit Units
2	0	0	0	2

Course content and syllabus

Contents	Lecture hours
Unit 1: Preliminary Concepts	**9**

• Fiscal policy, areas of government spending in India • Capital and revenue expenditure, plan and non-plan expenditures • Deficits (fiscal, primary, revenue), impact of fiscal deficits on the economy • Capital receipts, revenue receipts, tax and non-tax revenue, direct and indirect taxes, need for rationalisation of tax structure, Goods and Services Tax (GST)		
Unit 2 : Union Budget and Taxation	**9**	
• Need for the budget, understanding the process of budget making in India • Analysis of fiscal and revenue deficits • Analysis of sources of revenue and expected growth in revenue, • Tax simplification • Improvement in administration		
Unit 3 : Analysis of Union Budget	**9**	
• Analysis of expenditure pattern and expected growth in expenditure • Actual, revised and budget estimates • Zero-base budgeting • Gender budgeting • Fiscal devolution and centre-state financial relations • Thrust areas of budget • Sectors that have received higher/lower shares of expenditure • The reasons and consequences thereof • Steps proposed to ensure effective spending.		
Unit 4 : Schemes and Policies	**9**	
• Ease of Doing Business • Aatamnirbhar Bharat Abhiyan • Schemes related with Agriculture and Rural Development • Schemes related with Housing and Urban Development • Schemes related with Technology, Education and Skill Development • Schemes related with Employment and Poverty Alleviation • GST ANALYSIS • How GST has Affected Small Business		

List of Professional Skill Development Activities (PSDA):
1. Able to understand government policies and will in general be informed participants in economic decision making and write a Term assignment about the recent State/Central Budget.

Course Learning Outcomes:
- By the end of the course student will be able to critically assess current economic issues that India facing.
- Students will have the capability understand and critically assess the government policies to address the economic issues and able to write a term paper on any one of the economic issues.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Chakraborty, P	Intergovernmental fiscal transfers in India: Emerging trends and realities. In P. Patnaik (ed.): Macroeconomics	Oxford University Press	2015	9780199458950	456
Kapila, U	Fiscal and budgetary developments in Indian economy since independence	Academic Foundation	2016	9789332703742	819
Reddy, Y	Continuity, change and the way forward: The fourteenth finance commission.	Economic and Political Weekly	2015	0012-9976(ISSN)	27- 36

BA+MA Integrated (Economics) Honours- 5 years (7th semester)

S.No	Course Code	Course Title	Course Type	Credits			Credit Units
				L	T	P	
1	ECN 601	Microeconomics: Theory and Practices- I	Core Course	5	0	0	5
2	ECN 602	Macroeconomics: Theory and Practices- I	Core Course	5	0	0	5

				L	T	P/S	SW/FW	Total Credits
3	ECN 603	Quantitative Techniques for Economists- I	Core Course	5	0	0		5
4	ECN 604	International Economics	Core Course	5	0	0		5
5	ECN 605	Agricultural Economics	Discipline Specific Elective Course	4	0	0		4
6	ECN 606	Industrial Economics	Discipline Specific Elective Course	4	0	0		4
7		Professional &Business Communication-I	Value Added Course	1	0	0		1
8		Self-Development and Interpersonal Skills-I	Ability Enhancement Course	1	0	0		1
Note:	1 Discipline Specific Elective to be chosen from 2 being offered							
		Total Credits				26		

	L	T	P/S	SW/FW	Total Credit Units
Course Title: **Microeconomics: Theory & Practices-I**	5	0	0	0	5

Course Contents/syllabus:

	Lecture Hours
Unit I: Central Ideas of Economics	**22**
- How do People Make Decisions? People: face 'Trade Offs'; Incur Opportunity Costs and Gain Benefits of Decisions; Think at the Margin and Respond to Incentives. - How do People Interact? Specialization and Exchange can make each party 'Better Off' Market often work efficiently, The Invisible Hand;	

• Three Coordination Tasks in the Economy: Which Commodity be Produced and How much of it? Who should produce it and how? Who should Consume and How much of it? • Methodology of Economics as a Social Science: Alternative Processes of Construction of Positive Economic Theories. • Equilibrium: Concept, Stability, Existence and Uniqueness of Equilibrium. • Types: Static and Dynamic Equilibrium. Partial and General Equilibrium. • Stability Analysis: Marshallian and Walrasian Approaches.	
Unit II: Analysis of Consumer Choice under Certainty, Consumer Surplus, Application of Indifference Curves	**23**
• Cardinal Analysis, Ordinal Utility Approach; Revisiting Consumer Equilibrium and Effects of Changes in Relative Prices and Money Incomes and Derivation of 'Marshallian' and 'Compensated' Demand Curves. • Consumer Surplus: Hicks' and Marshall's Approach. • Application of Indifference Curves: Cash Subsidy Vs. Kind Subsidy: Income Leisure Choice; Intertemporal Choice of Consumption. • Revealed Preference Theory and Consistency of Choice. • Market Demand: The Role of Network Externalities; 'Bandwagon', 'Veblen' and 'Snob' Effects.	
Unit III: Analysis of Consumer Behavior under Uncertainty and Asymmetric Information	**23**
• Analysis of Consumer Choice under Uncertainty: Measurement of Risk. Expected Utility and Preferences towards Risk. Why do people gamble (insure)? Risk Return Trade Off. Reducing Risk. • Analysis of Consumer Behavior under Asymmetric Information: Hidden Actions: Principals, Agents and Moral Hazard. • Hidden Characteristics: Adverse Selection Problem. • Market and Government Responses to the Problems of Moral Hazard and Adverse Selection.	
Unit IV: Production and Cost Theory	**22**
• Theory of Production and Costs: Production, Input Choice and Cost with One Variable Input. Law of Returns to Variable Proportions and Choice of Optimum Quantity of an Input. • Derivation of Short Run Cost Curves from Productivity Curves of a Variable Factor of Production. • Reserve Capacity and the Shape of Short Run Cost Curves. • Multiple Input Decisions: The Choice of Optimal Techniques of Production and Factor Combinations. Factor Price Changes: Substitution and Output Effects. Elasticity of Input Substitution.	

• Constant, Increasing and Decreasing Returns to Scale. Expansion Path and derivation of Long Run Cost of Production Curves. • Economies and Diseconomies of Scale: Shape of Short and Long Run Costs Curves: Theory versus Empirical Evidence. Multi Product Firms and Dynamic Changes in Costs: Economies of Scope; The Learning Curve Analysis. • Euler's theorem; Technical progress and production; Cobb–Douglas, CES and their properties, Traditional and modern theories of costs – Derivation of cost functions from production function; (C–D and CES).	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Develop an understanding of central ideas of economics and microeconomics concepts and explanations.
- Assess diverse situations of Consumer Choice under Certainty, Consumer Surplus, Application of Indifference Curves Analyze the characteristics of perfect and imperfect markets with their relevance.
- Analyze the Consumer Behavior under Uncertainty and Asymmetric Information
- Evaluate the Theory of Production and Costs in the context of individual decision making as producers.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Gregory Mankiw	Economics: Principles & Applications	Thomson Press (India) Ltd	2008	978-8131505779	
N. Gregory Mankiw	Principles of Microeconomics	Cengage Learning India Pvt. Ltd	2015	978-9386668295	520
H.L. Ahuja	Principles Of Microeconomics	S Chand Publishing	2016	978-9352533305	872
Mass Colell	Microeconomics Theory	Oxford	2016	978-0198089537	998
A. Koutsoyiannis	Modern	Macmillan			

| | | Microeconomics | Press | | | |

	L	T	P/S	SW/FW	Total Credit Units
Course Title: Macroeconomics: Theory & Practices-I	5	0	0	0	5

Course Contents/syllabus:

	Lecture Hours
Unit I: Introduction to Macroeconomics and national income accounting and Income and Employment Determination	**22**
- National Income: Basic Concepts, Measurement of National Income and - Difficulties; Domestic and National Product and their Components, - National income at factor cost and at Market Prices, Real and nominal GNP; - National Income and Welfare, Social Accounting and its significance, - System of National Accounts; Measurement of national Income in India. - Income and Employment Determination: Integrated Classical and Keynesian Models of Income and Employment Determination; commodity, money (including bond market of Keynes), and labour markets. Wage-Price Flexibility and Automatic Full Employment: Classical Versus Keynesian Approach.	
Unit II: Consumption Theories	**23**
- Consumption and Consumption Function: Keynes Consumption and saving functions under Psychological law of consumption, Consumption Puzzle: Absolute Income hypothesis, Relative Income hypothesis, Permanent Income hypothesis and Life Cycle Hypothesis. - Consumption under Uncertainty: Random Walk Hypothesis; Interest Rate and Saving; Consumption and Risky Asset: Consumption CAPM.	
Unit III: Investment Theories	**23**
- Investment Function: Inducement to invest – Marginal efficiency of investment and Marginal efficiency of capital criterion; the accelerator and investment behavior; Jorgenson's Model. - Investment and Investment Function: Type of Investment, Role of investment using Investment Multiplier, Classical and Keynesian Theories of Investment, Accelerator Theory of Investment, Neo-Classical Theory of Investment and Tobin's-q	

Theory of Investment. Effects of Uncertainty, Kinked and Fixed Adjustment Costs, Investment in the Housing Market.		
Unit IV: DD and SS for Money Theories	**22**	
• Money: Concept of money; A behavioral model of money supply determination, High powered money and money multiplier; control of money supply. Classical and Keynesian approach to demand for money; Post–Keynesian approaches to demand for money – Patinkin and the Real Balances Effect, Approaches of Baumol and Tobin; Friedman and modern quantity theory. • Supply of Money: Theoretical Debate and Empirical Attempts to define money; Components of Supply of Money, Credit Creation by Commercial Banks, Money Multiplier. Demand for Money: Classical Quantity Theory, Keynesian Theory, Baumol and Tobin's Contributions. Friedman's Restatement of Quantity Theory of Money.		

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Develop an understanding of macroeconomics concepts and explanations for the comprehension of income and output determination
- Asses the concept of consumption with various consumption theories
- Enable students to understand and comment upon real economic issues like inflation, money supply, GDP and their interlinkages.
- Critically evaluate various macroeconomic policies in terms of a coherent logical structure and appraise economic issues and public policy by using economic models.
- Analyse the investment theories with relevant models
- Analyze the dd and SS of money theories in the macroeconomic context.
- **Text / Reference Books:**

Author	Title	Publisher	Year of Publication	ISBN	Pages
A.Abel, B.Bernanke	Macroeconomics	Pearson Education	2016	9780134896441	651
O. Blanchard	Macroeconomics	Pearson Education	2018	978-9332587601	624
Dornbusch, R., Fischer,	Macroeconomics	McGraw-Hill.	2018	978-9339221188	680

	S., Startz, R.					

	L	T	P/S	SW/FW	Total Credit Units
Course Title: Quantitative Techniques for Economists-I	5	0	0	0	5

Course Contents/syllabus:

	Lecture Hours
Unit I: Differentiation	22
• Review of Simple differentiation; Partial and total derivatives; Homogenous function; Euler's theorem, Maxima and Minima of a function of two independent variable; Constrained optimization; Lagrange's method. • Application of Derivatives in Economics: Elasticity of demand; Partial elasticities; Competitive and Complementary Commodities; Optimization Problems in cost, Revenue etc.	
Unit II: Growth Rates, Matrices and Equations	23
• Growth Rate and its Measurement; Present Value and its Applications. • Matrices: Review of adjoint, Determinants and inverse of matrices; Rank of Matrix; Linear Independence and Dependence of Vectors/Matrices; Solutions of Equations (upto three) by Matrix Inverse and Gauss elimination Methods; • Consistency of Equations; Quadratic Forms – Types and Properties. Simple Economic Applications.	
Unit III: Correlation and Regression Analysis & Probability Theory	23
• Multiple and Partial Correlation involving three Variables. • The Linear Regression Model; Finding the Multiple Linear Regression Equation and Coefficients upto two explanatory variables: Interpretation of the Coefficients, R^2 and adjusted R^2. • Probability Theory: Classical, empirical and Axiomatic Definitions of Probability. Laws of Addition and Multiplication (with examples); Bayes Theorem and its applications. Concept of Random Variable; probability mass and density functions; Expected Values, Moments (definition and types); Moments Generating Function (definition and properties).	
Unit IV: Index Numbers and Time Series Analysis	22
• Concepts of Price Relative, Quantity Relative and Value Relative. Laspeyer's, Paasche's and Fisher Index Numbers. Test of an Ideal Index Number.	

• Base shifting, Splicing and deflating of Index Numbers. Problems in the Construction and Limitation of Index Numbers. • Time Series Analysis: Definition and components. Methods of Trend Measurement: Quadratic, Exponential and Modified Exponential. Seasonal Indices by Methods of Simple Average, Ratio to moving Average and Ratio to Trend.	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Establish their understanding of Differentiation and its applications in Economics
- Demonstrate the measurement of growth rates, matrices and consistency of equations
- Analyze the usage of correlation, regression and probability theory
- Facilitating the comprehension and application of Index Numbers and Time Series Analysis

Text / Reference Books:

AUTHOR	TITLE	Publisher	Year of publication	ISBN	Pages
K. Sydsaeter, P. Hammond	Mathematics for economic analysis	Pearson Educational	2002	978-8177581041	800
Simon, C. and L. Blume	Mathematics for Economists	Norton London	2018	978-8130916002	956
Sheldon M. Ross	Introduction to Probability Models	Academic Press	2009	978-0123756862	800

Course Title: International Economics

L	T	P/S	SW/FW	Total Credit Units
5	0	0	0	5

Course Contents/syllabus:

	Lecture Hours
Unit I:Theories of International Trade	**22**
• What is international economics about? • Trade and Economic Development • Pure Theories of International Trade: Adam Smith's Absolute Advantage Trade theory, Comparative Advantage, Opportunity Cost and Factor-Endowments.	

• Theorem of Factor Price Equalization, Empirical testing of Absolute cost and Comparative Cost and Heckscher-Ohlin theory of trade. • Reciprocal Demand, Offer Curve Analysis and determination of international prices. • New Theories of International Trade: market structure, economies of scale, intra-industry, product differentiation and technology	
Unit II: Terms of Trade & Tariffs	**22**
• Gain from trade and its distribution • Terms of Trade: concept and measurement; Secular Deterioration thesis of terms of trade • Emmanuel's theory of unequal exchange • Free Trade vs Protection • Tariff: Concept, Theory of Tariffs, Effects of Tariffs: Partial and General Equilibrium Analysis, Optimum and effective rates of tariff. • Stopler-Samuelson theorem • Political Economy of Non-tariff barriers	
Unit III: Foreign Exchange & Balance of Payment	**23**
• Exchange rates: Spot and Forward, Fixed and Flexible • Foreign exchange risks, Hedging and Speculation • Determination of Foreign exchange: Mint Parity Theory, Purchasing Power Parity, Monetary Approach and Portfolio Balance Approach. • Optimum Currency Area • Balance of Payments: concept and component, Equilibrium and Disequilibrium in Balance of Payments. Adjustments under different exchange rate systems • Policy for correcting disequilibrium in balance of payments: Expenditure reduction & switching, Devaluation & Absorption approach, Exchange controls and Monetary approach	
Unit IV: Regional Economic Integration & International Monetary System(IMS)	**23**
• Theory of regional economic integration: forms of economic integration, static and dynamic effects of a custom union and free trade areas • National Security and International Trade regimes (WTO, TRIPS, TRIMS, NAFTA, SAPTA). India and WTO • Regional Economic Groupings: SAARC, NAFTA, EU, ASEAN and BRICS	

• International Monetary System: Gold Standard, the Rise and Fall of Bretton Wood System, IMF; IBRD; ADB and IFC: Functions, Organization and lending mechanism • Theory of International Reserves				

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Understand the concept of international trade by analyzing the various theories of trade.
- Evaluate the role of tariff and non-tariff barriers on the flow of goods outside the geographical boundaries of a nation.
- Develop an understanding of the concept of exchange rates and the importance of Balance of payments for a nation.
- Assess the role of regional economic integration and International monetary system in this era of globalization.

Text/ Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Paul Krugman	International Economics: Theory and Policy	Pearson Education	2017	978-9332586550	792
D.L. Salvatore	International Economics	Prentice Hall	2012	978-1118177938	720
Krugman, P., Obstfeld, M., Melitz, M	International Economics - Theory and Policy	Pearson Education	2018		785
Rana, K.C. & Verma, K.N.	International Economics	Vishal Publishing Co.	2017	978-9382956372	728

	L	T	P/S	SW/FW	Total Credit Units
Course Title: Agricultural Economics	4	0	0	0	4

Course Contents/syllabus:

	Lecture Hours
Unit I: Introduction, Role of Agriculture and Agricultural Transformation	**18**
- Introduction: Nature and Scope of Economics of Agriculture; Specificities of Farm Organization and Agricultural Production and Markets; Inter-sector Linkages of Agriculture [Backward and Forward Linkages]. - Interface between Agriculture and Industry; Land Reforms, Agriculture Development during Planning Periods; Green Revolution; Growth, Productivity and Regional Disparities in Indian Agriculture; Agrarian Crisis and Farmer Suicide - Schultz Theory of Transformation of Traditional Agriculture Mellor's Model of Agricultural Development; Hayami- Ruttan Induced Innovation Model of Agricultural Development, Lewis, FEI-Ranis and Baserp's model. - Agricultural Transformation: Indian Experience.	
Unit II: Agricultural Production	**18**
- Uniqueness of Agricultural Production; Various Types of Factor-Product, Factor-Factor and Product-Product Relations; Cobb-Douglas and CES Production Functions. - Role of Farm Size and Structure in Equilibrium, Productivity, and Return to Scale. - Sources and Barriers to Agricultural Development. - Farm Size and Productivity Relationships	
Unit III: Structure, Uncertainty and Issues in Agriculture	**18**
- Institutional Structure – Nature of emerging agrarian structure – co-operative farming and its evaluation with reference to productivity, employment and income distribution, Environment and soil erosion, sustainable development. Organic farming – meaning, techniques of organic farming and its scope in India. - Risk and Uncertainty in Agriculture: Nature and Types of Risks and Uncertainties in Agriculture, Public Policies and Farm Level Measures to Reduce Risk and Uncertainties. - Environmental Issues in Agriculture; Farm Management: Basics; Agricultural Marketing: Existing Structure, Problems, Costs and Efficiency in the markets, Marketing Reforms, Innovations in Agricultural Marketing System	
Unit IV: Demand and Supply for Farm Products	**18**

• Demand for Farm Products: Characteristics of Demand for Farm Products; Quantity and Quality Components of Demand for Food; Forecasting of Demand for Food Products. • Supply of Farm Products: Characteristics of Supply of Farm Products, Supply Response of Farm Products; Role of Price and Non-Price Factors in Inducing Aggregate Supply, Empirical Supply Response Functions and Evidence.	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Establish their understanding of the nature, scope and role of Agriculture in an economy and transformation agriculture through technical theories
- Demonstrate the agricultural production through different production functions
- Analyze the Institutional Structure, Risk and Uncertainty and Issues in Agriculture
- Project their critical analysis of dd and SS of agricultural goods.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Karl, E. & Witt, L.	Agriculture and Economic Development.	New York: McGraw Hill Company	1964		
Southworth, H. & Johnston, B	Agricultural Development and Economic Growth.	New York : Cornell University Press.	2011		
Subrata, G. & Ingersent, K.	Agriculture and Economic Development.	London : Harvestor Press Ltd.	1984		
Tsakok, I.	Success in Agricultural Transformation : What It	New York: CambridgeUniversity Press.	2011		

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	L	T	P/S	SW/F W	Total Credit Units
Course Title: Industrial Economics	4	0	0	0	4

Course Contents/syllabus:

	Lecture Hours
Unit I: Introduction	**18**
• Industrial Economics – Meaning, Nature and Scope, Concept and organization of the firm, ownership, control and objectives of the firm, passive and active behaviour of the firm. • Constraints of Proprietorship. Advantages of Modern Corporation. • Critiques of Profit Maximization Hypothesis. • Non-profit Maximization models: Boumol, Williamson, Marris and Cyert and March. • Critical overview of Non-Profit Maximization Hypothesis	
Unit II: Market Structure and Theories of Industrial Location	**18**
• Monopoly Power and Oligopolistic Market Structure. Measures of Sellers' Concentration and advantages of the HHI index. Deterministic Explanation of Sellers' Concentration: Economies of Scale, Barriers to Entry, Mergers, Size and Growth of Markets; Stochastic Explanation • Market Structure: Seller's concentration, product differentiation, entry conditions, economies of scale, market structure and profitability, and market structure and innovation; • Theories of industrial location: Weber and Sargent Florence, factors affecting location; Industrial Finance in India.	
Unit III: Market Conduct	**18**
• Market Conduct under Oligopoly: Concepts and Overview of Outcomes under Interdependence: • Concepts of Cournot and Bertrand Rivalry, Collusive Conduct and Dominant Firm Behaviour and Potential Competition. • Limit Price and Contestable Markets. • Non-Price Competition with Reference to Advertising: Dorfman-Steiner Condition and its Critique. • Evolution of Structure-Conduct-Performance Hypothesis	
Unit IV: Market Performance and Public Policy	**18**

• Market Performance: Market Structure and Profitability; Collusion versus Efficiency. • Issue of Allocative Efficiency. • Issues of Productive Efficiency and Sub-Optimal Capacity; factors explaining sub-optimal capacity. • Public Policy towards Market Structure, Conduct and Performance. • Optimality of Perfect Competition. • Costs of Monopoly: Theoretical Issues and Empirical Measurement of Social Welfare Loses. • Evolution of Govt. of Indian Policy towards Monopolistic and Restrictive Practices: Theoretical issues.	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Establish their understanding of the basic concepts of firm and industryand overview of non profit maximization hypothesis
- Demonstrate the elements of market structures and theories of industrial location
- Analyze the structure, conduct and performance of oligopolistic market structures
- Project their critical understanding of market performance of different market structures and related issues.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Stephen Martin	Industrial Economics : Economic Analysis and Public Policy.	McMillan Publishing Co., NewDelhi	1993	978-0023767869	664
R. Clarke	Industrial Economics	Blackwell Publishers, Oxford.	1985		
Wiliam, G Shephered	The Economics of Industrial Organization Analysis, Market Policies.	Prentice Hall International	1997	978-0135684863	447

FM Scherer & DavidRoss	Industrial Market Structure and Economic Performance	Boston Houghton Mifflin Company	1980	978-0395307267	632

Course Title: Professional & Business Communication—I

Course Contents/Syllabus:	
Unit I: Workplace Communication	**W %**
Nature and process of communication: Linear concept, Aristotle's Model, Shannon-W Model; importance of communicating effectively; stages of communication: ideation, encoding, transmission, decoding and response; barriers to effective communication: physiological, socio-psychological, cultural, language, and organizational, incorrect assumptions, information overload, semantic barriers; guidelines to overcome communication barriers; channels of communication: downward, upward, horizontal, & diagonal;goals of organizational communication: receiver understanding, receiver response, favourable relationship and organizational goodwill.	**25**
Unit II: Communication for Team Building and Leadership	
Nature and types of organizational communication; relevance of communication in organization and business; critical listening; functions of nonverbal communication; effective use of nonverbal communication; characteristics of interpersonal communication; creating a positive communication climate; problem solving in teams; effective leadership communication; emotionally intelligent communication; giving and receiving feedback; overcoming barriers to listening.	**25**
Unit III: Effective Presentation Skills	
Pre-presentation jitters; preparation and practice; delivering a presentation; qualities of a skilful presenter; capturing and maintaining attention; handling questions; Power point presentations.	**25**
Unit IV: Communication Strategy and Professional Writing	
7 Cs of communication; using unbiased language; writing process: pre-writing, writing & post-writing; neutral and positive messages; negative messages; persuasive messages; letters, memo. Report Writing: Functions of a report, Types	**25**

of reports**,** Format of the reports, Use of Visuals-Charts, Tables, Pictures

Course Learning Outcomes: Students will be able to:

- Understand the nature, scope, and power of communication processes.
- Understand the relevance of communication in organizations.
- Analyze communication situations and audiences to make choices about the most effective and efficient ways to communicate and deliver messages.
- Communicate effectively in teams and culturally diverse audiences.
- Write grammatically correct business documents using appropriate business styles.
- Create effective résumés, cover letters, and follow-up messages.
- Participate effectively in group discussions and interviews.

References:

AUTHOR	TITLE	Publisher	Year of publication	ISBN	Pages
1. **P. D. Chaturvedi and Mukesh Chaturvedi**	*Business Communication: Concepts, Cases and Applications*	Pearson Education	2006	9788131701720	516
2. **Courtland L Bovee, John V Thill and Mukesh Chaturvedi**	*Business Communication Today*	Pearson Education	2009	9788131721209	582
3. **Peter W. Cardon**	*Business Communication: Developing Leaders for a Networked World*	McGraw Hill Education (India) Edition	2015	9789339221607	526

Course Title: Self-Development and Interpersonal Skills
Course Contents/syllabus:

	Weightage (%)
Unit I: Understanding Self and Worth	**40%**
Formation of self concept Dimension of Self Components of self; Self Competency; Meaning and Nature of Self Esteem Importance & need of Self Esteem; Steps to enhance Self Esteem; Self Esteem at work	
Unit II: Emotional Intelligence: Brain Power	**15%**
Introduction to EI; Difference between IQ, EQ and SQ Relevance of EI at workplace; Self assessment, analysis and action plan	

Unit III: Managing Emotions and Building Interpersonal Competence	20%
Need and importance of Emotions; Healthy and Unhealthy expression of emotions Anger: Conceptualization and Cycle Developing emotional and interpersonal competence; Self assessment, analysis and action plan	
Unit IV: Leading Through Positive Attitude	**25%**
Understanding Attitudes; Formation of Attitudes; Types of Attitudes; Effects of Attitude on: Behavior, Perception, Motivation, Stress, Adjustment, Time Management, Effective Performance Building Positive Attitude	

Course Learning Outcomes: At the end of this course, the students will be able to:

- To apply cutting edge scientific insights about human behaviour, and learn how to change human behavior by altering the "context" in which people act rather than how they think

- Understand state-of-the-art methodological and statistical approaches that are necessary to evaluate the effectiveness of behavioral change.

- Apply behavioral science knowledge and skills to develop insights on individuals and society

- Analyze the nature of human behavior and the impact of factors that influence how humans feel, think and act at an individual, group and societal level

- Evaluate the influence of values and attitudes on human behavior

Text / Reference Books:

AUTHOR	TITLE	Publisher	Year of publication	ISBN	Pages
Singh A.	Achieving Behavioural Excellence for Success	Wiley Publication	2012	978812658027	248
Towers, Marc	Self Esteem	American Media	1995	9781884926297	68
Pedler Mike, Burgoyne John, Boydell Tom	A Manager's Guide to Self-Development	McGraw-Hill	2006	978-0077114701	288

Covey, R. Stephen	Seven habits of Highly Effective People	Simon & Schuster Ltd	2013	978-1451639612			432
Khera Shiv	You Can Win	Macmillan	2005	978-0333937402			290
Gegax Tom	Winning in the Game of Life	Harmony Books	1999	978-0609603925			318
Singh, Dalip	Emotional Intelligence at Work	Sage Publications	2006	9780761935322			196
Goleman, Daniel	Emotional Intelligence	Bantam Books	2007	9780553095036			352
Goleman, Daniel	Working with E.I	Bantam Books	1998	9780553104622			383

BA+MA Integrated (Economics) Honours- 5 years(8ᵗʰ Semester)

S.No	Course Code	Course Title	Course Type	Credits			Credit Units
				L	T	P	
1	ECN612	Microeconomics: Theory and Practices- II	Core Course	5	0	0	5
2	ECN 607	Macroeconomics: Theory and Practices- II	Core Course	5	0	0	5
3	ECN 608	Quantitative Techniques for Economists- II	Core Course	5	0	0	5
4	ECN 609	Economics of Growth and	Core Course	5	0	0	5

		Development					
5	ECN610	Monetary Economics and Banking System	Discipline Specific Elective Course	4	0	0	4
6	ECN611	History of Economic Thought	Discipline Specific Elective Course	4	0	0	4
7		Professional &Business Communication-I	Value Added Course	1	0	0	1
8		Self-Development and Interpersonal Skills-I	Ability Enhancement Course	1	0	0	1
Note:	1 Discipline Specific Elective to be chosen from 2 being offered						
		Total Credits		26			

	L	T	P/S	SW/FW	Total Credit Units
Course Title: Microeconomics: Theory and Practices- II	5	0	0	0	5

Course Contents/syllabus:

	Lecture Hours
Unit I:Analysis of Competitive and Monopoly Markets	**22**
- Profit Maximization and Equilibrium of a Firm and Industry in the Short Run and Long Run under Perfect Competition including the Supply Curve. - Consumers' and Producers' Surplus and Efficiency of Perfect Competition. - Welfare Effects of an Excise Tax, Import Tariff, Price controls (supports) and Production Quotas. - Monopoly: Source, Measurement and Welfare Costs and Dynamic benefits of Monopoly Power. Monopoly Price Discrimination. Output and Welfare Comparisons with Single Price Monopoly. Inter–temporal Price Discrimination and Peak Load Pricing. Two part tariffs and Tie-in Sales. - Public Policy toward Monopoly	
Unit II: Analysis of Monopolistic Competition, Oligopoly, Strategic	**23**

Decision Making and Firm Behavior	
• Stylized Facts for Monopolistic Competition, A firm's Short and Long Run Equilibrium with Differentiated Products and Selling Costs (Advertisement). Chamberlin's model Group equilibrium. • The Issue of Excess Capacity under Monopolistic Competition. The debate over Advertising. • Oligopoly: Cournot, Stackellberg and Kinked demand Curve. • Leadership Models. Collusion and Cartels. • Game Theory and Economics of Cooperation: Dominant Strategy and Nash Equilibrium. The Prisoner's Dilemma, Mixed Strategies, Repeated Games, Collusion and Tit-for-Tat Strategy, repeated games, threats, commitments and credibility. • Public Policy towards Oligopoly. Contestable Markets, Full cost pricing rule, limit pricing theory. • Analysis of Firm Behavior: Baumol's sales revenue maximization model; Williamson's model of managerial discretion; Marris model of managerial enterprise	
Unit III: Marginal Productivity Theory and Factor Pricing	**23**
• Neo-classical approach – Marginal productivity theory; Modern Theory of distribution; technical progress and factor shares. • Markets for Factor Inputs: Factor Pricing under Perfect Competition: Demand for a Factor Input when One Input is Variable. Demand for a Factor Input when Several Inputs are Variable. Market Demand for a Labour. Supply of Labour by an Individual: Trade Off between Work and Leisure. Wage rate determination. Factor Pricing under Imperfect Competition: Wage rate determination with Monopolistic Power in Product Market, Monoposonistic Power in Factor Market; Bilateral Monopoly. Competitive Buyer Firm versus Monopoly Union. • Elasticity of factor Substitution; Technological Progress and Income Distribution; Pricing of fixed factors: Rents and Quasi Rents; Adding up Problem and Product Exhaustion Theorem.	
Unit IV: General Equilibrium and Welfare Economics	**22**
• Partial and General Equilibrium, equity-efficiency trade off; Path to General Equilibrium; Two-factor, two-commodity, Two-consumer General Equilibrium System. • Pigovian welfare economics; Measurement of social welfare, Pareto optimal conditions; Perfect competition and pareto optimality; Compensation principle; Social welfare function: Burgeson's criterion, grand utility possibility frontier and welfare function; market failure, externalities and property rights, public goods, incomplete information; Theory of Second Best, Arrow's impossibility theorem;	

Course Learning Outcomes: By the end of the course student will be able to critically assess

current and future metrics, research technologies, and research data output related to the subject.

- Establish their understanding of analysing the dynamics of competitive and monopoly markets
- Demonstrate the working of monopolistic competition and oligopoly markets with focus on strategy making and economics of cooperation.
- Analyze the process of pricing the factors of inputs in different types of markets
- Comprehension of Partial and General Equilibrium analysis and the subject matter of welfare economics

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Gregory Mankiw	Economics: Principles & Applications	Thomson Press (India) Ltd	2008	978-8131505779	
C. Snyder and W. Nicholson	Fundamentals of microeconomics	Cengage Learning	2010	978-8131514085	684
Hal Varian	Intermediate microeconomics: A modern approach	W. W. Norton	2010	978-8176710657	
H.L. Ahuja	Principles Of Microeconomics	S Chand Publishing	2016	978-9352533305	872

	L	T	P/S	SW/FW	Total Credit Units
Course Title: Macroeconomics: Theory and Practices-II	5	0	0	0	5

Course Contents/syllabus:

	Lecture Hours
Unit I: Closed and Open Economy Modelling: IS-LM and IS-LM-BP Framework	22
- IS and LM Framework - Derivation, Properties, Shifts and Rotations of IS and LM Curves under closed and open economy systems. - Derivation, Properties, Shifts, and Rotations of BP Curve. - Simultaneous Equilibrium in Money and Product Markets. Impact of Opening-up on simultaneous equilibrium (i.e., IS-LM-BP simultaneous equilibrium).	

• Monetary and Fiscal Policies: Objectives, Conflicts among Objectives. Relative Effectiveness of Monetary and Fiscal Policies under Different Situations in IS-LM-BP Framework. • International Trinity and Quadrilemma choices under IS-LM-BP framework. • Mundell–Fleming model–Asset markets. • Monetary approach to balance of payments.	
Unit II: Theories of Inflation	**23**
• Inflation: Effects of Inflation. Theories of Inflation: Quantity Theory, Keynesian Theory, Monetarist views on Inflation, Modern theory of Inflation, Structural Theory. • The menu of policy choices: Philips Curve Analysis –Short Run and Long Run views. Natural Rate of Unemployment hypothesis; Tobin's modified Philips curve; Adaptive expectations and rational expectations; Policies to control inflation. • The Monetarist-Keynesian Debate and the Phillips Curve.	
Unit III: Theories of Trade/Business Cycles	**23**
• Trade Cycle: Pure Monetary Theory; Monetary over investment theory; Schumpeter's innovation theory; Keynes' theory, Hansen–Samuelson Accelerator–Multiplier Interaction Model, Hicks trade cycle Model, Kaldor Model, Goodwin model of endogenous cycles. • Global Recession and Euro-Area Crisis. • Real Business Cycle Model: Disturbances and Propagation mechanism. • Macroeconomic Policy in Real Business Cycle Model.	
Unit IV: Recent Developments in Macroeconomics	**22**
• The New classical critique of micro foundations, the New classical approaches; Policy implications of New classical approach; New Keynesian Approach. • The New Classical School: Rational Expectations Hypothesis: Dynamic Time Inconsistency, Policy Ineffectiveness Proposition. The Random Walk of GDP: The Relative Importance of AD and AS. • The New-Keynesian School: Real and Nominal Wage-Price Rigidity Models - Menu Costs Model, Implicit Wage Contract Models, Efficiency Wage Models, Insider-Outsider Models.	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Establish their understanding of the closed and open economy models with focus on International Trinity and Quadrilemma choices under IS-LM-BP framework

- Demonstrate the working mechanism of different theories of inflation
- Analyze the theories explaining business cycles
- Project their critical analysis of recent developments in the macroeconomics.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Abel, A., Bernanke, B	Macroeconomics	Pearson Education	2016	9780134167398	672
Blanchard, O.	Macroeconomics	Pearson Education	2018	9789353945220	576
Dornbusch, R., Fischer, S., Startz, R	Macroeconomics, 12th ed	McGraw-Hill	2018	9780073375922	636
Mankiw, N	Macroeconomics	Worth Publishers	2016	9789386668424	408

Course Title: Quantitative Techniques for Economists-II	L	T	P/S	SW/FW	Total Credit Units
	5	0	0	0	5

Course Contents/syllabus:

	Lecture Hours
Unit I: Integration and Differential Equations- Economic Applications	**22**
- Integration: Indefinite and Definite, Integration of a Function of only one Variable; Methods of Integration; Substitution and Partial Fraction. - Application of Integration in Economics; Consumers' and Producers' Surplus; Finding Demand Function, Maximum Profit and Capital Growth Equation. - Differential Equations: Introduction, Solution of Differential equations – Variable-separable, Homogenous, Exact, Linear and Bernoulli's form cases; Solution of Linear Differential Equation with Constant Coefficients. - Economic Applications w.r.t. Demand, Revenue, Cost Functions and Simple Market Equilibrium Models.	
Unit II: Difference Equations and Linear Programming- Economic Applications	**23**

• Difference Equations: Solution of a Difference Equation and Simple Economic Applications. • Linear Programming: Definition, Assumptions, Formulation and Solution of LPP (Feasible, Basic and Optimal Solutions) by graphical and simplex method. Dual Problem: Solution of Primal and Dual Problems by Simplex Method and their Interpretation.		
Unit III: Probability and Statistical Inference- Economic Applications	**23**	
• Probability Distributions: Properties (including derivation of mean and variance) and Applications of Binominal, Poisson and Normal Distributions. • Statistical Inferences: Concepts of parameter, statistic and standard error (including its utility). • Sampling Distribution of a Statistic, Distribution of Sample Mean, Properties of an Ideal Estimator; Unbiasedness, Consistency, Efficiency and Minimum Variance. • Interval Estimation and Confidence Interval for mean, single proportion and difference of proportions.		
Unit IV: Hypothesis Test Theory	**22**	
• Tests of Significance: Large and Small Sample Tests based on Normal and t Distribution, Test of Significance of Mean, Difference between means, Simple Correlation Coefficient and Simple Regression Coefficient, test based on F and Z Distribution (Fisher's Z Statistics). • Chi-Square Tests: Conditions for Chi-Square Test; Application of χ^2 Distribution – Test for Goodness of Fit, Independence and Specified Value of the Variance. • Analysis of Variance: Applications with regard to one way and two way classifications.		

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Establish their understanding economic application of integration and differential equations
- Demonstrate the economic applications of difference equations and LPP
- Analyze the probability theory and statistical inference for application purpose
- Develop the comprehension of different types of tests of significance for hypothesis testing.

Text / Reference Books:

Author	Title	Publisher	Year of Publicatio	ISBN	Pages

				n		
J.Devore	Probability and statistics for engineers	Cengage Learning	2012	978-813151839 7	768
R. Larsen and M. Marx	An introduction to mathematical statistics and its applications.	Prentice Hall.	2011	978-013487174 5	640
I. Miller and M. Miller	J. Freund's mathematical statistics with applications	VK Global Publication s Private Limited	2017	978-933251905 3	476

	L	T	P/S	SW/F W	Total Credit Units
CourseTitle: Economics of Growth and Development	5	0	0	0	5

Course Contents/syllabus:

	Lecture hours
Unit 1: Economic Growth & Development	**23**
- Meaning, measurement, sources of economic growth and the concept of sustainable development - Factors in economic development: Natural Resources, Population, Capital, Human resource development and Infrastructure - Human Development Index (HDI) and Physical Quality Life Index (PQLI) - Economic Development and Structural change: theories of Kuznet and Chenery - Perpetuation of underdevelopment: Vicious circle of poverty, circular causation and structural view of underdevelopment	
Unit 2 : Theories of Growth and Development	22
- Theories of Growth: Harrod-Domar, Solow, Meade, Joan Robinson and Kaldor - Theories of Development: Classical, Marx and Schumpeter - Approaches to development: Social Dualism, Technological Dualism and Financial Dualism - Models of Dualistic Growth: Lewis, Ranis and Fei and Jorgenson - Rostow stages of economic growth	
Unit 3 : Growth Model and Strategies	**23**
- Development Strategies: Big Push, Balanced Growth, Unbalanced Growth and Critical Minimum Efforts - Migration and Development: Todaro model of growth	

• Endogenous Growth Models: Lucas and Romar • Dependency theory of Development: Paul Baran, Frank and Samir Amin • Theory of Convergence and Divergence: Barro and Sala-i-Martin • Technical Progress: Hicks, Harrod and Learning by doing	
Unit 4 : Globalization & Development	**22**
• Agriculture and development • Trade and Development: International trade as an engine of economic growth, Two-gap theory, import substitution vs export promotion, Prebisch, Singer and Myrdal views • Capital Formation: Concept, Importance and the role of capital formation in Developing countries • Foreign Investment and Foreign Aid in economic development	

Course Learning Outcomes:

This course introduces students to the basics of development economics, with indepth discussions of the concepts of development, growth, strategies,as well as the highlighting the importance of globalization..

- Clear understanding of the concept of growth and development.
- Evaluate various theories for the growth and development of a nation.
- Critically analyze the various growth models and strategies for the development purposes.
- Highlight the importance of globalization in the process of development.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Todaro, M.P. & Smith, S.C.	Economic Development	Pearson Education	2017	978-9332585539	896
Sen, A	Development as freedom	Oxford University Press	2000	9780385720274	384
Deaton, A	The great escape: Health,	Princeton University Press	2013	9780385720274	376

	wealth and the origins of inequality				
Banerjee, A., Benabou, R., Mookerjee, D. (eds.)	Understanding poverty	Oxford University Press.	2006	9780195305203	496

	L	T	P/S	SW/FW	Total Credit Units
Course Title: Monetary Economics and Banking System	4	0	0	0	4

Course Contents/syllabus:

	Lecture Hours
Unit I: Money & Supply of Money	**18**
- Money: Concept, Evolution and Functions - Types of Money - Role of Money in different economic Systems - Supply of Money: Concept and Component of Money Supply - Approaches to measure Money Supply: Classical approach, Monetarist Approach, Gurley and Shaw Approach and Radcliffe Committee Approach - Velocity of Circulation of Money and factors affecting velocity of circulation of money - Theory of Money Supply - Mechanism of Money Supply in India	
Unit II: Demand for Money & Interest rates	**18**
- Theories of demand for Money: Classical theory, Keynesian theory, Portfolio Balance Approach, The Risk Aversion theory of Liquidity Preference and Friedman's approach - Rate of Interest: Determination, theories of the term structure of interest rates: Expectation theory, Liquidity Premium theory, Market Segmented theory and Preferred Habitat theory - Nature and Structure of interest rates in India	
Unit III: Financial Markets & Banking System	**18**

• Money and Capital Market in India: concepts, functions, constituents and defects • Measures to reform the Indian money and capital market in india: suggestions and improvements • Commercial Banks in India: functions, progress, credit creation and its failures • Co-operative banks and Regional Rural Banks in India • Nationalization of banks in India: Objectives and achievements.		
Unit IV: Central Bank & the Monetary Policy	**18**	
• Central Bank: definition, functions and role of Central Bank in less developed economies • RBI: Organizational set-up, departments, objectives, functions, achievements and failure; recent policies and banking sector reforms. • Monetary Policy: objectives, targets and indicators • International Monetary System: Working and lending operations of IMF, IBRD, IFC and Asian Development Banks		

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Develop an understanding of broad concept of money and theories of money supply.
- Analyze the concept of demand for money and interest rates in India.
- Enable students to understand the functions of the financial markets & banking system in India.
- Evaluate the role of banking system, central bank and monetary policy.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Bhole, L, Mahukud, J.	Financial Institutions And Markets	Tata McGraw-Hill.	2017	978-9352605415	
Fabozzi, F., Modigliani, F., Jones, F., Ferri, M.	Foundations Of Financial Markets And Institutions	Pearson Education	2014	978-9332536784	704

Khan, M	Indian Financial System	Tata McGraw-Hill	2019	978-9353167301	1008
Mishkin, F., Eakins, S.	Financial Markets And Institutions	Pearson Education	2018	978-1292215006	696
TR Jain, V K Ohri	Money and Banking	VK Global Publications Pvt Ltd	2020	978-9350586938	
N K Sinha	Money, Banking & Finance	BSC Publishing	2018	9788190458948	538
Michael Brandl	Money, Banking, Financial Markets and Institutions	Cengage Learning India Pvt. Ltd.	2019	978-9353502232	
Dr. D.D.Chaturvedi / Dr. Anand Mital	Money and Banking	Kitab Mahal Publishers	2018	978-8122506358	292
R. Glenn Hubbard, Anthony P O'Brien	Money, Banking and Financial System	Pearson Education	2019	978-9353069858	656

L	T	P/S	SW/FW	Total Credit Units
4	0	0	0	4

Course Title: History of Economic Thought
Course Contents/syllabus:

	Lecture Hours
Unit I: Evolution of Ancient, Medieval and Modern Economic Thought	**18**
- Ancient Economic Thought: Hebrew thought, Greek Thought: Plato & Aristotle and Roman Thought, Ancient Indian economic thought-Arthasaastra - Medieval Economic Thought: : Ideas of Saint Thomas and Nicholas - Beginning of Modern Economic Thought: Mercantilism: Its origin and content - economic ideas of Petty, Cantillon, Locke and Hume. Physiocracy: Natural order, primacy of agriculture, social classes and circulation of wealth.	
Unit II: Classical Economic Thought	**18**

	The Classical System: Adam Smith- Division of Labour, theory of value and distribution, economic growth and international trade; David Ricardo- Theory of value and distribution, foreign trade, economic development and theory of rent; T.R. Malthus- Theory of Population, theory of gluts; J.S. Mill- Leissez faire and protection; J.B. Say- Law of Markets; Karl Marx: dynamics of social change, theory of value and surplus value, theory of capitalist competition.	
Unit III: Marginilism and Neo-Classical Economic Thought	**18**
	The Marginalists and Neo-Classicism: Precursors to marginalism- Gossen, Jevons, Menger and Walras; The Austrian School- Wiser and Bohm-Bawerk: Theory of capital and distribution; K. Wicksell and the Swedish School; Wicksteed on laws of distribution; The American Contribution: Clark, Walker and Schumpeter on the theory of growth and business cycles; Marshallian Economics: Price determination and elasticites, consumer surplus, costs and economies, rent and profit.	
Unit IV: Keynesian and Post Keynesian Economic Thought	**18**
	• Keynes and Post Keynesian developments: Marginal efficiency of capital and investment, theory of wages and interest, underemployment equilibrium and the role of fiscal policy, theory of multiplier and business cycles; Post Keynesian developments in consumption function, quantity theory of money, inflation, business cycles and economic growth. • Keynesian Economics: Keynes on Neoclassical ideology of Self-Adjusting Markets; Theoretical Setting of Keynes's Analysis; Analysis of Great Depression, Ideological Foundations of Keynes's Ideas. Kaleckian Version: Political Aspects of Full Employment; Distribution of Income.	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Establish their understanding of evolutions ancient, medieval and modern economic thought.
- Demonstrate the theoretical development of classical thought by Smith, Ricardo, Malthus, Mill etc.
- Analyze the transitioning of classical thought to neo-classical thought
- Appraise the development of Keynesian and post Keynesian thought.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Smith, A.,	The Causes and	RHUS,	2003	978-9387779464	1144

	Nature of the Wealth of Nations	Annotated Edition			
Sen, A	Development as Freedom	Oxford University Press	2000	9780195655261	366
Gide, C., & Rist, C.	Early Histories of Economic Thought, 1824-1914: History of economic doctrines (Vol. 8)	Taylor & Francis US	2000	978-1295710386	702
Schumpeter, J. A	History of Economic Analysis	Routledge.	2006	978-0195105599	1260
Screpanti, E., & Zamagni, S.	An Outline of the History of Economic Thought	Oxford University Press	2005	978-0199279142	584

L	T	P/S	SW/FW	TOTAL CREDIT UNITS
2	0	0	0	2

Course Title: Computer Applications in Economics
Course Code:
Credit Units: 2
Course Level: PG

Course Objectives: The objective of this subject is to provide conceptual knowledge of the information technology to the future economists. This subject highlights the topics like Database Management, Networking, Internet and application of IT.

Prerequisites: Basic Knowledge of computers, understanding of internet domains.

Course Contents/syllabus:

	Weightage (%)
Unit-1 World of Computers	**9**
Introduction to world of Computers, Structure of Computer System, Computers in Home (Reference, Education & Communications, Entertainment an Digital Media Delivery, Smart Appliances, Home Computers), Computers in Education, Computers in workplace (productivity and decision making, customer services, communications), Computers on the move (Portable and Hand held computers, Self-Service kiosks, GPS Applications), Types of Computer (Size and Technology	

wise), Support Systems - Hardware and Software.	

Unit-2- Computer Networks and Internet Technology	9
Introduction to Computer Networks, Networking components, Classification and types of Networks, Network Topologies – Overview with Advantages and Disadvantages, Client Server Architecture, LAN concepts, Introduction to Internet (History, Concepts & Myths), Difference between Internet, Intranet and Extranet, Domain Name Service, Censorship and Privacy issues.	
Unit-3- Database Management System	9
Introduction, Need for DBMS, Components of DBMS, Benefits of DBMS over Traditional File System, classification and types of Database Models, Database Approach – Its benefits and disadvantages, Concept of Data Warehouses and Data Marts. Introduction to MS-Access.	
Unit-4-Application of IT in Business and Future Trends in Technology	9
Functional areas of an organization, Role of Information Technology: HRM, Finance and Accounts Management, Marketing Management, Information System Management, Operation Management, Disaster Recovery Planning, Cloud Computing, Green Computing, Big Data.	

Note: Familiarization with MS-Access and Internet shall be done in class, as they require hands-on training.

Course Learning Outcomes: At the end of this course, the students will be able to:
- Develop the understanding and practical exposure to the techniques of Information Technology
- Apply various terminologies used in the operation of computer systems in a business environment
- Provide the best chance of growth of an organization in the new age
- Enhance the analytical and design skills which are applicable in all Business Functional Areas

Text / Reference Books:

Author	Title	Publisher	Year of publication	ISBN	Pages
Charles Parker, Deborah Morley	Understanding Computers: Today & Tomorrow	CENGAGE	2014	9781285767307	440
V. Rajaraman, Neeharika Adabala	Fundamentals of Computers	Prentice Hall India	2014	9788120350670	448
Pradeep K. Sinha , Priti Sinha	Computer Fundamentals : Concepts, Systems & Applications	BPB Publications	2004	9788176656752 7	536
Pradip K. Chande, Parag Kulkarni	IT Strategy for Business	Oxford University Press	2008	9780195694475	440

BA+MA Integrated (Economics) Honours- 5 years(9th Semester)

S.No	Course Code	Course Title	Course Type	Credits			Credit Units
				L	T	P	
1	ECN	Basic Econometrics	Core Course	5	0	0	5
2	ECN	Economics of Planning	Core Course	5	0	0	5
3	ECN	Research Methods for Economists	Core Course	5	0	0	5
4	ECN	Political Economy of Development	Discipline Specific Elective Course	4	0	0	4
5	ECN	Economics of Environment and Demography	Discipline Specific Elective Course	4	0	0	4
6	ECN	Financial Institutions and Markets	Discipline Specific Elective Course	4	0	0	4
7		Entrepreneurial Skills	Skill Enhancement Course	2	0	0	2
Note:	2 Discipline Specific Electives to be chosen from 3 being offered						
		Total Credits		25			

Course Title: Basic Econometrics

L	T	P/S	SW/FW	Total Credit Units
5	0	0	0	5

Course Contents/syllabus:

	Lecture Hours
Unit I:Linear Regression Model: Problem of estimation	**22**
• Meaning, Nature and Scope of Econometrics; Concepts of Population Regression Function and Sample Regression Function; Simple (two variable) • Linear Regression Model: Assumptions, Estimation, Properties (Gauss-Markov Theorem (BLUE) and Consistency); • Interval estimation and Testing of hypothesis of individual coefficients (t-statistics); overall significance of the model (F-statistics), Coefficient of Determination and Goodness of fit through R-square and Adjusted R-square, Predictions	
Unit II: Multiple Regression Models	**22**
• Multiple (K-variable) Linear Regression Model: Assumptions, Estimation, Properties (Gauss-Markov Theorem (BLUE) and Consistency); Extension of regression models: regression through origin, Scaling and units of measurement • Functional forms in regression models: log-linear, and semi-log models; Choice of functional forms (MDW test); • Introduction to Non-Linear Regression Models, • Dummy variable Models - Dummy variable trap, ANOVA and ANCOVA, Applications including seasonal analysis, and checking for structural stability	
Unit III: Econometric Problems &Specification Errors	**23**
• Multicollinearity: Meaning, nature, causes, consequences and remedial measures (Ridge Regression); Heteroscedasticity: Meaning, nature, causes, consequences and remedial measures (Methods of weighted least square and generalised least square regression); Autocorrelation: Meaning, nature, causes, consequences and remedial measures; • Econometric Modelling: Model Specification and Diagnostic Testing. Tests of Specification and misspecification • Omission of a relevant variable; • Inclusion of irrelevant variable; • Errors of measurement in dependent and independent variables. • Model Selection Criteria.	
Unit IV: Basics of Time Series and Dynamics Models	**23**
• Time series basic concepts: Stochastic Process (stationary and non-stationary process), Unit root process, Integrated Stochastic Process; Test of Stationarity: Graphical Analysis, and Unit root tests (Dickey-Fuller (DF) test, Augmented Dickey-Fuller (ADF)test, Phillips-Perron(PP)tests, Difference stationary and trend stationary process; Seasonality analysis;	

• Dynamic Econometrics Models: Autoregressive and Distributed lag models; Simultaneous Equation models: Structural and reduced form equations, Identification (Rank and Order conditions) and Estimation problems; Methods of estimation: ILS and 2SLS methods. • Nature of SEM's, Simultaneous Equation Bias, Identifications Problem. • Rank and Order Conditions. Testing Identification of Economic Models. • Estimation of SEM'S : ILS, 2SLS, 3SLS .Method of Instrumental Variables	

Course Learning Outcomes: By the end of the course student will be able to

- Comprehend the nature and scope of econometrics and development of regression models and the estimation methods.
- Identify the problems which may arise in the error term and the corresponding remedial measures for the same.
- Analyze econometric models to explain certain economic relationships and their implementation for drawing inferences for the same.
- Develop among the judgement of the model specification for econometric estimation.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
D. Gujarati	Basic Econometrics	New York: McGraw Hill	2015	978-0070597938	1002
G.M.K. Madnani	Introduction to Econometrics: Principles and Applications	Oxford and IBH Publishing Co. Pvt Ltd	2012	9788120417199	635
G. Maddala	Introduction to Econometrics	New York: MacMillan	2017	9780023745454	464

Course Title: Economics of Planning

L	T	P/S	SW/FW	Total Credit Units
5	0	0	0	5

Course Contents/syllabus:

	Lecture hours

Unit 1: Role & Importance of Planning	20
- Meaning, Objectives and Importance - Types of Planning - Requisites for successful planning - Planning in different economic systems - Role of planning in a developing countries like India	
Unit 2 : Choice of Technique & Investment Criteria	24
- Choice of technique: Sen-Dobb Thesis, Labour-intensive vs Capital-intensive - Technical Progress: Hicks, Harrod and Learning by doing - Choice of technique in underdeveloped countries - International transfer of technology: channels, importance and problems in transfer of technology - Investment Criteria: Need and types of investment criteria: Social Marginal Productivity criteria, Capital Turnover criteria, Re-investment criteria, Time-series criteria and Balance of Payments criteria	
Unit 3 : Project Evaluation	24
- Meaning, Origin and Rationale - Project planning and commercial profitability criteria - Cost-Benefit analysis: meaning and technique - Shadow Prices: Concept, importance and the methods to compute shadow prices	
Unit 4 :Indian Planning	22
- Evaluation of Indian planning after Independence : Strategies for Indian development plans: the initial phase (Mahalanobis Strategy), its failure and departures from Mahalanobis strategy of development - The New Development Strategy - Resource Allocation: Investment Pattern in Indian Plans - Assessment of Indian Planning: Targets and Achievements	

Course Learning Outcomes: At the end of the course, a student will be able to understand how the role of economic planning in shaping and improving economic performance of a nation.

- Clear understanding of the role and importance of planning for a country.
- Analyze the impact of different investment criteria for the growth of an economy.
- Demonstrate the role and importance of Project planning and cost-benefit analysis.
- Critically assess the strategies for the planned economic development of India

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Todaro, M.P. &	Economic Development	Pearson Education	2017	978-9332585539	896

Smith, S.C.					
Puri, V.K. & Mishra, S.K.	Indian Economy	Himalaya Publishing House	2018	978-9352991730	769
Datt, R. & Sundharam	Indian Economy	S. Chand Publishing	2021	978-9352531295	965

L	T	P/S	SW/FW	Total Credit Units
5	0	0	0	5

Course Title: Research Methods for Economists

Course Contents/syllabus:

	Lecture Hours
Unit I:Introduction to Research Methodology	**22**
• Meaning and Objectives of Research, Types of Research and its Approaches, Techniques of Defining the Research Problem. • Reviewing the Literature, Use of Mendeley and MS-Word in Citing the Literature, Various Formats of Writing the reference/bibliography. • Research Design: Meaning, need and Types	
Unit II: Data Collection Techniques	**22**
• Questionnaire Method: Types, Format and Pre-Testing of Questionnaires. Techniques for Increasing Response of Respondents. • Interview Method: Types, Process and Rules of Interviews. Factors affecting interview. Interviewer's Bias. Selection and Training of Interviewers. • Observation Method: Types of Observations.	
Unit III: Measurement and Scaling Techniques	**23**
• Measurement Scales: Types of Measurement Scales, Types and Components of Measurement. • Accuracy of Measurement and Reliability Testing. Increasing Reliability. • Sampling Techniques: Simple Random Sampling; PPS Sampling; Stratified Random Sampling; Multistage Sampling (Applications only).	
Unit IV: Testing of Hypotheses	**23**
• Parametric Tests: Applications of t, z, and F-test Statistics. • Non-Parametric Tests: Application of χ^2-, McNemar, Kolmogorov-Smirnov, Sign, Wilcoxon Signed, Mann Whitney, Rank-Sum, Kruskal-Wallis, Kendall's Coefficient Tests.	

Course Learning Outcomes: By the end of the course student will be able to

- Comprehend the meaning, nature and scope of research methodology
- Acquire knowledge and understanding of different data collection techniques
- Having knowledge of different measurement and scaling techniques
- Developing knowledge about parametric and non parametric tests for hypothesis testing.

Text / Reference Books:

Author	Title	Publisher	Year of publication	ISBN	Pages
R. Kothari	Research Methodology: Methods and Conditions	Tata New Age international Publishers, India	2019	978-9386649225	480
Deepak Chawla and Neena Sondhi	Research Methodology: Concepts and Cases.	Vikas Publishing, India	2016	978-9325982390	680
D. Cooper	Business Research Methods	McGraw-Hill Education	2018	978-9353161194	890

Course Title: Political Economy of Development

L	T	P/S	SW/FW	Total Credit Units
5	0	0	0	5

Course Contents/syllabus:

	Lecture hours
Unit 1: Introduction to Political Economy	**18**
- Concept: Scientific Social World outlook - Idealism and materialism - Metaphysics and dialectics; Law of dialectics, Category of philosophy and theory of cognition - Dialectical and Historical materialism: its theory and methods, dialectical materialism - Mode of Production and social superstructure: Factors constituting and forces governing mode of production, Social superstructure and its elements - Historical Social Formations - Asiatic mode of production	
Unit 2: Nation, Security and Geo Politics	**18**
- The Concepts of Nation: State and Nation – State: Theories and Elements of State - National Power and its Components	

• Key Concepts of Security : National Security, Regional Security, Comprehensive Security, Common Security, Equal Security • National Security Objectives : Core Values, National Interests. • Challenges to Security : Individual, Sub – National; National, Regional and International Levels. • Concepts of Geopolitics and Geo – Strategy		
Unit 3 : Marxian Concept and Imperialism	**18**	
• Marxian Political Economy and Analysis of Capitalism • Development of Capitalism in agriculture • Nature and process of planning in Capitalism • Market mechanism and methods of accumulation • Primitive socialist and capitalist methods • Concept of imperialism • Emergence of monopoly capitalism • Role of banks in monopoly capitalism • Imperialism and the state		
Unit 4 : Transition to Socialism	**18**	
• Concept of neo-colonialism, forces against neo-colonialism and imperialism • Transition period • Problem and policies during socialism • Role of Planning, market mechanism and the distribution of income & wages • The changing dynamics of the organisation of production, markets and labour process • Strategies for third world development		

Course Learning Outcomes: At the end of this course, the students will be able to

- To develop an understanding to a broader concept of political economy.
- Highlight the role and importance of Marxian concept in political economy.
- Provides them skills to think and analyse in an interdisciplinary manner and the issues related to imperialism.
- Enables the students to understand the complexities of the transition to socialism.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Baran, P	The political economy of growth	Pelican	1973	9780140214659	589
Habib, I	Capitalism in	Social	1995	-	23, 15-31

	history	Scientist			
Schumpeter, J	Capitalism, socialism and democracy	Routledge	1976	0415107628	431

L	T	P/S	SW/FW	Total Credit Units
4	0	0	0	4

Course Title: Economics of Environment & Demography
Course Contents/syllabus:

	Lecture hours
Unit 1: Demography and Development	**18**
• Meaning and scope of Demography • Components of Population growth and their interdependencies • Theories of Population: Malthusian theory of population and Optimum theory of population • Theory of Demographic transition • Population and development	
Unit 2 : Concepts of Demography	**18**
• Fertility: importance of the study of fertility, Total fertility rate, Gross reproduction rate and net reproduction rate; factors affecting fertility • Nuptiality: concepts and analysis of marital status; trends in the age of marriage • Mortality: trends of mortality in India; foetal and infant mortality; factors for dealing in mortality • Methods of Population Projections	
Unit 3: Migration, Population & Environment	18
• Urbanization and development process • Population, economy and environment linkage • Changing characteristics of population in India • Population in border areas and border security. • Migration: concept, importance and factors affecting migration • Growth and distribution of rural-urban population in developed and developing countries • Environmental Issues : Global Warming, Desertification, Acid Rains, Industrial Pollution, Deforestation.	
Unit 4: Government Policies	**18**
• Environment: necessity as a public good, causes of environment degradation and the policies for controlling pollution • Poverty and environment degradation: microplanning for environment preservation: water-sheds, joint forest management and self-help groups • Role of state in environment preservation: review of environmental legislation in India	

• Evolution of Population policies in India; New Population Policy			

Course Learning Outcomes: This course teaches the student various aspects of the Indian economy, as well as important themes relating to the environment and sustainable development. It also introduces them to some issues of globalisation.

- Clear understanding of the relation between population and process of development.
- Examine a complete picture of various concepts of demography and the methods of population projections.
- Analyze the linkage between the population growth and environment degradation.
- Critically appraise the role of governmentin preserving environment.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Sen, A	Development as freedom	Oxford University Press	2000	9780385720274	384
Bogue, D.J.	Principles of Demography	John Wiley & Sons	1969	978-0471086208	930
Banerjee, A., Benabou, R., Mookerjee, D. (eds.)	Understanding poverty	Oxford University Press.	2006	9780195305203	496
Puri, V.K. & Mishra, S.K.	Indian Economy	Himalaya Publishing House	2018	978-9352991730	769
Datt, R. & Sundharam	Indian Economy	S. Chand Publishing	2021	978-9352531295	965
Kumari, N.	Demography Principles	ABD Publishers	2022	978-8183768801	304

	L	T	P/S	SW/FW	Total Credit Units
Course Title: Financial Institutions & Markets **Course content and syllabus**	4	0	0	0	4

	Teaching Hours
Unit-I Introduction to Financial Institutions & Markets	**18**
- Meaning and Evolution of Financial System in India - Financial System and Economic Development - Central Banking -The Reserve Bank of India - Stock Exchanges in India: , Functions and Significance and its Working &The Securities and Exchange Board of India - FinancialIntermediaries- CommercialBanks,InsuranceCompanies,MutualFundsand Development Banks - Development Banking Institutions: Viz. IDBI, IFCI ,ICICI, RBI, NABARD, - SIDBI ,and EXIM Bank-Objectives, Operations, Schemes of Financing,	
Unit-II-Introduction to Financial Services; Merchant Banking	**18**
- Financial Services – Meaning, nature, scope, significance and types; Fund Based &Fee Based Financial Services - Merchant banking services including new issue management- Prospectus of Public Offering, Book Building, IPO and FPO, Green shoe Option, Underwriter, Registrar and Share Transfer Agent, Stock broking, Depositories, Custodial services and short selling and securities lending and borrowing services - Investments Policy, Portfolio Management and Resource Mobilization Efforts	
UNIT III: Venture Capital; Mutual Funds; Credit Rating	**18**
- Features and Types of Venture Capital, Various Stages of Venture Capital Financing, Factors affecting investment decision, Investment nurturing, Venture capital Exit strategies, Venture Capital Firms in India - Mutual Funds–meaning, structure and types, NAV, Mutual Funds in India - Credit Rating - Meaning, types, Need for credit rating, Factors affecting creditrating,RatingprocessandmethodologyCreditRatingAgenciesinIndia, Securitization of Debt, SARFAESI Act 2002- Background- Purpose of the Act-Main Provisions	
Unit-IV-Leasing and Factoring; Mergers Acquisitions	**18**
- Leasing- Essentials, Operating and Financial Lease, Sale and Leaseback- Other classifications, Leasing Vs Hire purchase - Factoring-Parties involved- Process of Factoring, Functions of a Factor- DifferentFormsofFactoringServices,FactoringandForfeitingandBilldisco	

	unting–meaning,mechanism& comparison
	• Mergers and Acquisitions - Expansion of business firms- Internal and external expansion; Forms of Combinations- merger, acquisition and take over; Reasons for merger; Types of mergers; Legal aspects involved & Valuation methods; Forms of financing mergers; Types of takeover-Defense strategies against hostile takeovers; Mergers in India • Recent trends in financial services-Shadow Banking, Angel Funds, Hedge funds

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Explain basic concepts and different types of financial institutions &markets.
- Describe the structure and functioning of financial services and merchant banking.
- Demonstrate their knowledge related to regulatory framework for venture capital and mutual funds.
- Critically analyze the role and importance of mergers and acquisitions.

Text/ReferenceBooks:

Author	Title	Publisher	Yearof publication	ISBN	Pages
Machiraju	Indian Financial System	Vikas Publishing House	2010	978-8125939818	474
Varshney P.N.&M ittal D.K	Indian Financial System	Sultan Chand & Sons	2015	978-8180548246	-
Sasidharan	Financial Services and System	Tata McGraw Hill	2008	9780070668058	700
M.Y.Khan,	Financial Services	Tata McGraw-Hill	2009	9780070681996	-

Nalini Prava Tripathy	Financial Services	PHI Learning	2007	978-8120332454	348
Bhole,L.M	Financial Markets and Institutions	Tata McGraw Hill	2009	9780070080485	999

L	T	P/S	SW/FW	Total Credit Units
2	0	0	0	2

Course Title: Entrepreneurial Skills
Course Contents/syllabus:

	Teaching Hours
Unit-1 Introduction to Entrepreneurial Ecosystem	5
Concept of entrepreneurship, entrepreneur's role, task and personality, theoretical perspective of entrepreneurship, entrepreneurial intention, entrepreneurial orientation, type of entrepreneurship, Understanding the entrepreneurial perspective in individuals, developing creativity and understanding innovation, Importance of entrepreneurship	
Unit-2- Evaluating Entrepreneurial Options	5
Understanding the idea and an opportunity. The opportunity creating, shaping, recognizing and seizing. Screening venture opportunities, gathering information and analyzing. Evaluating venture opportunities and develop startup strategy.	
Unit III: Entrepreneurial Skills	4
Communication Skills, Importance of Communication to an Entrepreneur, Communication Style, Effective Communication for Business Development, Personal Selling, Elevators Pitch, Different types of Markets, Leadership & Motivational Skills. Creativity and Innovation, Role of Creativity & Innovation in Entrepreneurship, Design Thinking, Risk & Resilience, Decision Making, Planning and Organizing.	
Unit-IV: Understanding Start up Financial Requirements	4
Feasibility analysis sand risk taking ability-An overview of startup finance and sources of finance. Understanding the business model and financial projections, how to forecast expenses and revenue. Gathering the resources developing entrepreneurial marketing and operational plan. Role of government institutions.	

Course Learning Outcomes: By the end of this course, students will be able to

1. Understand the benefits and limitations of Entrepreneurship
2. Formulate and apply entrepreneurial skills to solve daily societal problems.
3. Identify various communication strategies for business development,
4. Evaluate themselves as responsible entrepreneurs and apply design thinking skills

Text / Reference Books:

Author	Title	Publisher	Year of publication	ISBN	Pages
Peter F. Drucker	Innovation and Entrepreneurship	Harper Business	2006	978-0060851132	288
Robert J. Calvin	Entrepreneurial Management	McGraw-Hill	2005	9780071450928	295
Robert D. Hisrich, Veland Ramadani	Effective Entrepreneurial Management	Springer Publications	2016	9783319504650	230
Steve Mariotti	Entrepreneurship and Small Business Management	Pearson publishers	2014	978-0133767186	720

BA+MA Integrated (Economics) Honours- 5 years(10th Semester)

S.No	Course Code	Course Title	Course Type	Credits			Credit Units
				L	T	P	
1	ECN	Advanced Econometrics	Core Course	5	0	0	5
2	ECN	Indian Economy: Development and Strategy	Core Course	5	0	0	5
3	ECN	Public Economics	Core Course	5	0	0	5

4	ECN	Economics of Health and Education	Discipline Specific Elective Course	4	0	0	4
5	ECN	Rural Economics	Discipline Specific Elective Course	4	0	0	4
6	ECN	Dissertation	Non Teaching Credit Course	4	0	0	4
7		Computer Applications	Skill Enhancement Course	2	0	0	2
Note:	2 Discipline Specific Electives to be chosen from 3 being offered						
		Total Credits				25	

Course Title: Advanced Econometrics

L	T	P/S	SW/FW	Total Credit Units
5	0	0	0	5

Course Contents/syllabus:

	Lecture Hours
Unit I: Time Series Econometric Modelling	22
- Approaches to time Series Forecasting; - Univariate Time series modelling: AR, MA, ARMA and ARIMA models; Box-Jenkin Methodology; - Multi-variate Time series modelling: OLS, Spurious Regression, Co-integration, Causality analysis (Granger and Sim); Granger representation theorem; Vector Auto-regression (VAR) and Vector Error Correction Models (VECM); - Volatility modelling: ARCH and GARCH models	
Unit II: Dummy variables and Qualitative Response Regression Models	22
- Limited Dependent variable Models - Nature of qualitative response Models; - Linear Probability Model and its applications;	

• Bivariate and Multinomial Logit and Probit Models: Assumptions, Estimation (grouped and un-grouped models), interpretations and applications; • Tobit model: Assumptions, Estimation, interpretations and applications; • Conditional logit and probit models; Instrumental variable logit and probit models and their applications. • Introduction to quintile regression.	

Unit III: Panel Data Models	**23**
• Introduction: Advantages and Issues Involved in Utilizing Panel Data. • Basics of panel data analysis and Panel Unit root tests; • Estimation of panel data regression models: Pooled regression method, fixed effect Approach, and Random effect models; • Dynamic Panel data modelling; Panel co-integration, Panel Vector Autoregression (VAR) and Panel Vector Error Correction Models (VECM), Fully Modified Ordinary Least Square (FMOLS) regression, Dynamic OLS models; • Limited dependent variable models using Panel data.	
Unit IV: Applications	**23**
• Applications – Introduction to E-views, STATA and R; • Time series econometric modelling using E-views; • Estimation of Limited Dependent Variable Models using STATA; • Panel Data Modelling using E-views, STATA and R;	

Course Learning Outcomes: By the end of the course student will be able to

- Initiate effective use of econometrics for economic problems through regression analysis.
- Have theoretical and practical understanding of time series data
- Have theoretical and practical understanding of panel data
- Develop analytical abilities among students for data handling and econometric modelling.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
D. Gujarati	Basic Econometrics	New York:	2015	978-0070597938	1002

		McGraw Hill			
G.M.K. Madnani	Introduction to Econometrics: Principles and Applications	Oxford and IBH Publishing Co. Pvt Ltd	2012	9788120417199	635
G. Maddala	Introduction to Econometrics	New York: MacMillan	2017	9780023745454	464

Course Title: Indian Economy: Development and Strategy

L	T	P/S	SW/FW	Total Credit Units
5	0	0	0	5

Course Contents/syllabus:

	Lecture hours
Unit 1: State of Economy	**23**
• Indian Economy (1857-1947): Evolution of Land Tenure System, Commercialization of agriculture, Demographic development and Rural Indebtedness • Economic consequences of the British Rule • Need for planned economic development • Basic strategies for development of Indian Economy under Planning • Changes in the strategies of Indian Planning: Role of NITI Aayog • Role of Public and Private sector in India • Saving and Capital Formation in India	
Unit 2 : Sectoral Growth	**22**
• Agriculture: Role, Importance and Production structure of the Indian Agriculture • New Agriculture Strategy and Green Revolution in India • Industrial Sector: Role, Importance and the Production structure of Indian Industrial Sector • Industrial Policy: 1948, 1956 and 1991 • Small Scale Industries: MSME's and their problems • Growth and contribution of Service Sector in India • Special Economic Zone (SEZ): Policy, Features and Problems	
Unit 3 : Major Economic Issues	**23**
• Poverty: Concept, Measurement, empirical evidence in India and poverty alleviation programmes • Inequality: Concept, causes for inequalities and Government policy and measures to overcome inequalities in India • Unemployment: concept, measures and employment generation programmes in India	

• Problem of Population in India and measure to control it • Inflation: factors causing rise in prices in India, consequences of Inflation and anti-inflationary policy of the government • Regional Imbalances: concept, magnitude of regional imbalances in India and regional planning policy in India	
Unit 4 : Indian Economy in Global Competitive Environment	**22**
• Foreign Capital in India: Component, need and foreign investment inflows in India • Trade Policy: Import and Export Policy in Pre-reform and Post-reform period • India's External Debt • Economic Reforms in India: the policy of Liberalization, Privatization and Globalization • Multinational Corporations, FERA & FEMA • Globalization, WTO and the Indian Economy • International comparisons with its developed counterparts	

Course Learning Outcomes: At the end of the course, a student should be able to understand the development paradigm adopted in India since independence and evaluate its impact on economic as well as social indicators of progress and well-being**.**

- Clear understanding of the state of economy before independence and after independence.
- Evaluate various dimensions of sectoral growth in India.
- Critically analyze the various economic issues like poverty, unemployment, inflation, imbalances etc in the process of development.
- Highlight the importance of globalization in the process of development.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Todaro, M.P. & Smith, S.C.	Economic Development	Pearson Education	2017	978-9332585539	896
Bardhan, P	Awakening giants, feet of clay: Assessing the economic rise of China and India	Princeton University Press	2012	9780198068327	526

Dreze, J., Sen	India: An uncertain glory	Allen Lane	2013	9780141992624	480
Bhagwati, J., Panagariya	India's tryst with destiny	Collins Business	2012	9789351367765	340
Puri, V.K. & Mishra, S.K.	Indian Economy	Himalaya Publishing House	2018	978-9352991730	769
Datt, R. & Sundharam	Indian Economy	S. Chand Publishing	2021	978-9352531295	965

L	T	P/S	SW/FW	Total Credit Units
5	0	0	0	5

Course Title: Public Economics

Course Contents/syllabus:

	Lecture Hours
Unit I: Subject Matter of Public Goods Provision and Justice	**22**
- Comparison of Provision of Private Goods and Public Goods in General Equilibrium (Pareto's Optimality criteria.) - Equity in Distribution. Various approaches to distributive Justice. - Public Choice and Fiscal Policies. Voting rules. - Various Approaches of Equity in Taxation: Benefit Principle including Lindahl Theory. Ability to Pay Approach. - Incidence analysis of taxation in various markets. - Effects of Taxation on Work Effort, Savings and Investment.	
Unit II: Public Expenditure and Budget	**23**
- Meaning, Importance and Causes for the increase in Public Expenditure - Canons of Public Expenditure - Classification of Public Expenditure and the theories of the growth of Public Expenditure: Wagner's Hypothesis, Wiseman and Peacock Hypothesis and Colin Clark's Critical Limit Hypothesis - Effects of Public Expenditure on Production and distribution - Public Budget: Concept, types and objectives; Zero Base Budgeting; FRBM Act	

• Deficit Financing: Concept and its relation with Inflation, Deficit Financing in India.	
• Issues relating to Public Debt: Debt Burden Analysis and Management of Public Debt, Domar's	
• concept of Debt Sustainability Public Debt in India.	
• Need for rule based fiscal consolidation. Fiscal Responsibility and Budget management (FRBM) act,	
• 2003. Recent amendments to FRBM act	
Unit III: Public Revenue and Public Debt	**25**
• Concept and sources of Public Revenue: Tax and Non-tax	
• Canons of Taxation	
• Types of Direct and Indirect taxes, Proportional, Progressive, Regressive, Digressive, Single and Multiple taxation, Specific and AD VALOREM tax.	
• Principles of Taxation: Principle of Equity, The Benefit or Quid Pro Quo Principle and the Ability to Pay Principle. The Cost of Service theory	
• Impact, Incidence and Shifting of Taxation; theories of Tax Shifting : concentration theory, diffusion theory and the modern theory.	
• Taxable Capacity, Tax Buoyancy, Tax Elasticity and the problem of double taxation	
• Effects of Taxation	
• Public Debt: Meaning, Growth, Composition and the method of repayment	
Unit IV: Indian Public Finances	**20**
• Union Finances: Trends in Revenue and Expenditure of Government of India	
• Financial Relations between Centre and State	
• Fiscal federalism in India: Fiscal Policy for development, allocation, distribution and Stabilization	
• Fiscal Reforms in India	
• Centre – State Financial Relations in India: Assessment of Horizontal and vertical imbalances.	
• Role of Finance commissions.	
• Basics of Defence Planning, Determinants of Defence Expenditure and Defence Budgeting.	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Clear understanding of the key concepts and principles of public finance.

- Demonstrate the importance of Public expenditure for the development of an economy.
- Evaluate the complete topic of Public revenue and importance of public debt for the growth of a nation.
- Critically evaluate the hierarchy of Indian Public Finances.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
B.P. Tyagi	Public Finance	Jai Prakash Nath Co.	2015	**978-9384538378**	768
H.L. Bhatia	Public Finance	VK Global Publications Private Limited	2012	978-9325960008	698
R. Musgrave and P. Musgrave	Public Finance in Theory and Practice	McGraw Hill International Edition	2017	978-0070596931	648
Priyanka Srivastava	Public Economics	Empire Books International	2020	978-93-90039-15-9	256
Janak Raj Gupta	Public Economics in India: Theory and Practice	Atlantic Publishers & Distributors(P) Ltd	2011	978-8126915644	616

	L	T	P/S	SW/FW	Total Credit Units
Course Title: Rural Economics	4	0	0	0	4

Course Contents/syllabus:

	Lecture Hours
Unit I: Introduction to Rural Economy	**18**
• Introduction: Rural Dynamics & Characteristics	

• Rural Economy: Problems, Challenges and Opportunities • Features: Commercialization of Agriculture, Rural society under the impact of Urbanization and Institutional Participation • Changing Agrarian Economy: Modernization of Agriculture & its progress in India • Rural Farm and Non-Farm sector • Declining Role of Agriculture	
Unit II: Rural Development	**18**
• Employment and its barriers • Rural Employment Generation Programme: NRLM & MGNREGA • Approaches for Rural Development: Rapid Rural Appraisal (RRA) & Participatory Rural Appraisal (PRA). • Sustainable Development in Rural Sector. • Technology for Rural Growth: ICT	
Unit III: Planning for Development in Rural Areas	**18**
• Rural Planning: Levels & functions • Decentralization in Planning: Block-level Planning & District-level Planning • Role of Co-operative societies in rural development • Community Capacity Building Programmes • Voluntary Agencies/ NGOs to support rural sector	
Unit IV: Rural Entrepreneurship	**18**
• Meaning & its role in rural development • Concept of Agri-preneurship • Role of Micro-Finance Institution in rural development • Role of Self-help Groups • Micro, Small & Medium Enterprizes in Rural India • Rural industrialization	

Course Learning Outcomes: By the end of the course student will be able to critically assess current and future metrics, research technologies, and research data output related to the subject.

- Establish the understanding of the nature, scope and role of rural economy.
- Demonstrate the role of various employment generation programmes for rural development.
- Evaluate the importance of planning for development in rural areas.
- Highlight the role and importance of Rural entrepreneurship for the growth of rural areas.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Karl, E. & Witt, L.	Agriculture and Economic Development.	New York: McGraw Hill Company	1964		
Sharma, N.K.	Rural Economics	R B S A Publishers	1995	978-8185813417	
Singh, K. & Shishodia, A	Rural Development: Principles, Policies and Management.	SAGE Publishers India Private Ltd.	2016	978-9351509981	392

Course Title: Economics of Health and Education
Course Contents/syllabus:

	L	T	P/S	SW/FW	Total Credit Units
	4	0	0	0	4

	Lecture hours
Unit 1 Role of health and education in human development	**18**
- Importance of Poverty Alleviation - Concept and Significance of Human Capital Formation - Health and Education Outcomes - Relationship of Health and Education with Macroeconomic Performance	
Unit 2 : Topics in health economic theory	**18**
- Demand for health, - Grossman's model of demand for health, - Information asymmetry in healthcare demand, and the health insurance market, - Physician induced demand, - Adverse selection and moral hazard in health insurance	
Unit 3 : Economic evaluation of health care	**18**
- Cost effectiveness and cost-benefit analysis - Valuing life - Public policy in the health sector; - Externalities in health and health care; - Rationale for government intervention in the health sector	
Unit 4 : Education:	**18**
- Investment in human capital; - Rate of return to education: private and social - Quality of education; - Signalling of human capital; - Theories of discrimination; - Gender and caste discrimination in India	

Course Learning Outcomes: At the end of the course, a student should learn the role of health and education in human development.

- They will be able to apply economic theory to understand the demand for health care, market failure in health insurance, economic evaluation of health care programmes and the role of public policy in the healthcare industry.
- They will also learn to analyse the returns to education, its role in labor market signalling, and the progress of schooling in India.
- They will also be exposed to the theories of discrimination.

Text / Reference Books:

Author	Title	Publisher	Year of Publication	ISBN	Pages
Bhattacharya, J., Hyde, T., Tu, P	Health Economics	Palgrave Macmillan	2014	9781137029966	624
Ehrenberg, R., Smith	Modern labor economics: Theory and public policy 11th ed	Addison Wesley	2012	9780133462784	650
World Health Organisation	The economics of the social determinants of health and health inequalities: A resource book	World Health Organisation	2013	9789241548625	124

Course Title: Dissertation- NTCC

Course Title: Computer Applications in Economics

Course Contents/syllabus:

	Lectures
Unit-1 World of Computers	**9**
Introduction to world of Computers, Structure of Computer System, Computers in Home (Reference, Education & Communications, Entertainment an Digital Media Delivery, Smart Appliances, Home Computers), Computers in	

Education, Computers in workplace (productivity and decision making, customer services, communications), Computers on the move (Portable and Hand held computers, Self-Service kiosks, GPS Applications), Types of Computer (Size and Technology wise), Support Systems - Hardware and Software.

Unit-2- Computer Networks and Internet Technology	9
Introduction to Computer Networks, Networking components, Classification and types of Networks, Network Topologies – Overview with Advantages and Disadvantages, Client Server Architecture, LAN concepts, Introduction to Internet (History, Concepts & Myths), Difference between Internet, Intranet and Extranet, Domain Name Service, Censorship and Privacy issues.	
Unit-3- Database Management System	**9**
Introduction, Need for DBMS, Components of DBMS, Benefits of DBMS over Traditional File System, classification and types of Database Models, Database Approach – Its benefits and disadvantages, Concept of Data Warehouses and Data Marts. Introduction to MS-Access.	
Unit-4-Application of IT in Business and Future Trends in Technology	**9**
Functional areas of an organization, Role of Information Technology: HRM, Finance and Accounts Management, Marketing Management, Information System Management, Operation Management, Disaster Recovery Planning, Cloud Computing, Green Computing, Big Data.	

Note: Familiarization with MS-Access and Internet shall be done in class, as they require hands-on training.

Course Learning Outcomes: At the end of this course, the students will be able to:
- Develop the understanding and practical exposure to the techniques of Information Technology
- Apply various terminologies used in the operation of computer systems in a business environment
- Provide the best chance of growth of an organization in the new age
- Enhance the analytical and design skills which are applicable in all Business Functional Areas

Text / Reference Books:

Author	Title	Publisher	Year of publication	ISBN	Pages
Charles Parker, Deborah Morley	Understanding Computers: Today & Tomorrow	CENGAGE	2014	9781285767307	440
V. Rajaraman, Neeharika	Fundamentals of Computers	Prentice Hall India	2014	9788120350670	448

Adabala					
Pradeep K. Sinha , Priti Sinha	Computer Fundamentals : Concepts, Systems & Applications	BPB Publications	2004	9788176567527	536
Pradip K. Chande, Parag Kulkarni	IT Strategy for Business	Oxford University Press	2008	9780195694475	440