Semester wise Detailed Structure 4YUG Programme DUAL Major

Name of the Department: **Economics** **Major: Economics**

S. No.	Course Type	Course Name	No. of Credits	Theory	Practicum
Semester: I					
01.	DSC 1 Core	1. Microeconomics-I	4	3	1
02.	DSE 1 (Elective/Optional)	1. Indian Economic History (Mughal and British Period) 2. Islamic Economics 3.	2	1	1
03.	SEC 1	1. Data Visualization using Microsoft Excel (Major-1) 2.	2	0	2
04	GE 1	1. An Introduction to the Microsoft Excel 2.	2	1	1
05.	AEC1	1. 2. 3.	2	1	1
06.	VAC1	1. Environmental Education /Environmental Science	2	1	1
07.	IAPCD				
Semester: II					
01.	DSC 2 Core	1. Macroeconomics-I	4	3	1
02.	DSE 2 (Elective/Optional)	1. Demography 2.Fundamentals of Labour Economics 3.	2	1	1
03.	SEC 1	1. Data Visualization using Microsoft Excel (Major-2) 2.	2	0	2
04.	GE 2	1. Fundamentals of Data Analysis and Visualization in Microsoft Excel 2.	2	1	1
05.	AEC 2	1. 2. 3.	2	1	1
06.	VAC2	1. Gender Studies 2. Health Wellness, Yoga Education Sports & Fitness	2	1	1
07.	IAPCD		2*		2*
Semester: III					
01.	DSC 3 Core	1. Microeconomics-II	4	3	1
02.	DSE 3 (Elective/Optional)	1. Basic Mathematics 2. Fundamentals of Industrial Economics 3.	2	1	1
03.	SEC 2	1. Data Analysis using Microsoft Excel (Major-1) 2.	2	0	2
04.	GE 3	1. Basics of Data Management and Data Visualization in Microsoft Excel 2.	2	1	1
05.	AEC 3	1. 2. 3.	2	1	1
06.	VAC 3	1. Understanding India 2. Human Values and Professional Ethics 3. Cyber Security	2	1	1
Semester: IV					
01.	DSC 4 Core	1. Macroeconomics-II	4	3	1
02.	DSE 4 (Elective/Optional)	1. Basic Statistics 2. Fundamentals of Economics of Education 3.	2	1	1
03.	SEC 2	1. Data Analysis using Microsoft Excel (Major-2) 2.	2	0	2
04.	GE 4	1. Microsoft Excel: Formulas, Functions, and Visualization 2.	2	1	1
05.	AEC 4	1. 2. 3.	2	1	1
06.	VAC 4	1. 2. 3.	2	1	1
07.	**IAPCD**		2*		2*

Semester: V					
01.	DSC 5 & 6 Core	1. Money and Banking 2. Public Finance	4 4	3 3	1 1
02.	DSE 5 (Elective/Optional)	1. Mathematics for Economics 2. Fundamentals of Health Economics 3.	2	1	1
Semester: VI					
01.	DSC 7 &8 Core	1. Indian Economy 2. Rural Economics	4 4	3 3	1 1
02.	DSE 6 (Elective/Optional)	1. Statistics for Economics 2. Fundamentals of Islamic Banking 3.	2	1	1
Semester: VII (Hons.)					
01.	DSC 9 &10 Core	1. History of Economic Thought – I 2. Economics of Growth & Development	4 4	3 3	1 1
02.	DSE 7 (Elective/Optional)	1. Econometrics-I 2. Economics of Discrimination 3. 4.	2	1	1
Semester: VIII (Hons.)					
01.	DSC 11 &12 Core	1. History of Economic Thought – II 2. International Economics	4 4	3 3	1 1
02.	DSE 8 (Elective/Optional)	1. Fundamentals of Environmental Economics 2. Econometrics-II 3.	2	1	1
Semester: VII (Research) Major-1 (Economics)					
01	DSC 9 Core	Research Methodology	4	3	1
02.	IAPCD	Dissertation (Synopsis)	4		
Semester: VII (Research) Major-2 (Economics)					
01.	DSC 9 &10	1. Gender and Development 2. Economics of Natural Resources	4 4	3 3	1 1
02.	DSE	1. Health Economics 2. Behavioural Economics 3.	4	3	1
Semester: VIII (Research) Major -1 (Economics)					
01.	DSC 10 Core	1. Computer Applications in Research	4	3	1
02.	IAPCD	1. Dissertation 2. 3.	~~12~~ **08**		
Semester: VIII (Research) Major -2 (Economics)					
01.	DSC 11 Core	1. Urban Economics & Policy	4	3	1
02.	DSE	1. Socio-Economic Exclusion and Inclusive Policies 2. Economic Development and Policy in India 3.	4	3	1

Credit hours for different types of courses

The workload relating to a course is measured in terms of credit hours. A credit is a unit by which the coursework is measured. It determines the number of hours of instruction required per week over the duration of a semester (minimum 15 weeks).

Each course may have only a lecture component or a lecture and tutorial component or a lecture and practicum component or a lecture, tutorial, and practicum component, or only practicum component. For example, a three-credit lecture course in a semester means three one-hour lectures per week with each one-hour lecture counted as one credit. In a semester of 15 weeks duration, a three-credit lecture course is equivalent to 45 hours of teaching.

One credit for tutorial work means one hour of engagement per week. In a semester of 15 weeks duration, a one-credit tutorial in a course is equivalent to 15 hours of engagement.

A one-credit course in practicum or lab work, community engagement and services, and fieldwork in a semester mean two-hour engagement per week. In a semester of 15 weeks duration, a one-credit practicum in a course is equivalent to 30 hours of engagement.

A one-credit of Seminar or Internship or Studio activities or Field practice/projects or Community engagement and service means two-hour engagements per week.

Accordingly, in a semester of 15 weeks duration, one credit in these courses is equivalent to 30 hours of engagement. A course can have a combination of lecture credits, tutorial credits, and practicum credits.
For example, a 4-credit course with three credits assigned for lectures and one credit for practicum shall have three 1-hour lectures per week and one 2-hour duration field-based learning/project or lab work, or workshop activities per week In a semester of 15 weeks duration, a 4-credit course is equivalent to 45 hours of lectures and 30 hours of practicum.
Similarly, a 4-credit course with 3- credits assigned for lectures and one credit for tutorial shall have three 1-hour lectures per week and one 1-hour tutorial per week. In a semester of 15 weeks duration, a four –credit course is equivalent to 45 hours of lectures and 15 hours if tutorials.

Semester: I **Course Type: DSC 1 Core**
Course Name: Microeconomics-1 **No. of Credits: 04**

Course Objective:
The objective of this course is to provide the students with a basic understanding of the principles of microeconomics. At its core, the study of economics deals with the choices and decisions that have to be made in order to manage scarce resources available to the world. Microeconomics is the branch of economics that pertains to decisions made at the individual level, i.e., by individual consumers or individual firms after evaluating resources, costs, and tradeoffs. When we talk about the economy, we are referring to the marketplace or system in which these choices interact with one another.

Course Outcome:
In this course, the students would learn how and why the above mentioned decisions are made and how they affect one another in the economy. By the end of this course, students will have a strong grasp on the major issues of microeconomics including consumer and producer behaviour, the nature of supply and demand and the Cost and Revenue.

Unit	Course Content
I	**Introduction:** Meaning, Definition, Nature and Scope of Economics Problem of Scarcity and Choice-Three Central Problems of an Economy, Role of Price Mechanism, Limitations of Price Mechanism, and Role of Government, Production Possibility Frontier
II	**Price Mechanism:** Demand: Meaning, Demand Function, Factors Influencing Demand-Household Demand, Market Demand, Law of Demand, Exceptions to the Law of Demand, Expansion and Contraction of Demand, Increase and Decrease in Demand . Supply: Meaning, Supply Function , Factors Influencing Supply, Law of Supply, Exceptions to the Law of Supply, Expansion and Contraction of Supply , Increase and Decrease in Supply Determination of Equilibrium Price, Effects of Shifts in Demand and Supply Curves on Equilibrium Price, Elasticity of Demand-Price Elasticity-Price Elasticity, Income Elasticity and Cross Elasticity Elasticity of Supply- Definition, Measurement, Types, and Determinants
III	**Theory of Consumer's Behavior:** Concept of Utility, Cardinal Utility Analysis: Marshallian Approach- Law of Diminishing Marginal Utility, Exceptions to the Law of Diminishing Marginal Utility Ordinal Utility Analysis: Indifference Curve Analysis, Assumptions, Properties, Consumer's Equilibrium Through Indifference Curve Analysis Effect of the Changes in the Consumer's Income and Prices of Goods-Income, Substitution and Price Effects (Hicks and Slutsky Approaches), Separation of Income and Substitution Effects ,Inferior Goods and Giffen Goods, Limitation Of Indifference Curve Analysis Consumer's Surplus-Marshallianand Hicksian Approaches
IV	**Theory of Production, Cost and Revenue** Production -Concept, Short Run Production Function- Law of Variable Proportions, Long Run Production Function- Returns to Scale, Choice of Technology Iso-Quants & their Properties, Iso-Quant Map, Optimum Combination of Factors- Expansion Path Economies and Diseconomies of Scale Theory of Cost: Concept, Analysis of different Types of Cost; Total Cost, Marginal Cost, Average Cost; Traditional Theory of Cost; Theory of Revenue: Concept of Revenue, Total Revenue, Marginal Revenue, Average Revenue, Relationship Between Average Revenue and Marginal Revenue, Revenue Curves under different Markets.
Examination And Evaluation Pattern: As Per University Norms	
Text Books And References:	
1.	Chaudhri K.R.: *Modern Microeconomics*, Dominant Publishers, New Delhi, 2001
2.	Ferguson and Gould: *Micro Economics*, AITBS Publishers, New Delhi, 6th Edition, 2000
3.	George J .Stigler: *The Theory of Price*, Prentice Hall College Div. Publication, 4th Ed., 1987
4.	Gravelle and Rees: *Microeconomics*; Pearson India, 3rd Edition, 2007
5.	Joseph Stiglitz: *Economics* ,4th Edition, W W Norton & Co. Publisher, 1998

6.	Pindyck, Rubinfield and Mehta: *Microeconomics*, Pearson, 7th Edition, 2009
7.	Salvator : *Micro Economics- Theory and Applications*, Oxford University Press, 2008
8.	Stonier & Hague: *A Text Book of Economic Theory*, Yogyakarta ,Dwitungga,1989
9.	Varian H.R: *Intermediate Microeconomics*, Affiliated East- West Press Pvt. Ltd.,7th Edition, 2006
10.	Walter Nicholson: *Microeconomic Theory*, South-Western Publication., 2001
11.	Case, Karl E. & Ray C. Fair: *Principles of Economics*, Pearson Education Inc., 8th edition, 2007

Semester: I **Course Type: DSE 1**
Course Name: Indian Economic History (Mughal and British Period) **No. of Credits: 02**

Course Objective:

This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule. This course links directly to the course on India‘s economic development after independence in 1947.

Course Outcomes:

- Analyse and evaluate the performance of Indian Economy during the British Raj
- Identify the causes and policy that resulted in the situation of Indian Economy at the time of Independence.

Unit	Course Content
I	**Mughal India** Population, State and the Economy, Agricultural Production, Agrarian Crisis in Mughal India, Land Revenue System, Industry and artistry in the Mughal Era, Inland and Foreign Trade, Monetary System, Towns and Cities, Standards of Living, Technology and Capitalism in Mughal India, Usury, Economic crises after Aurangzeb
II	**British India** Transition to colonialism, Macro trends, Population, Trade, Structural Changes Agriculture, Industry, Mining, Finance Railways, de-industrialization, drain of wealth, Requirements and Priorities of the British
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01.	Tirthankar Roy, The Economic History of India 1857-1947, Oxford University Press, 3rd edition, 2011.
02.	Irfan Habib, Indian Economy 1858-1914, A People‘s History of India, Vol.28, Tulika, 2006.
03.	J. Krishnamurty, Occupational Structure, Dharma Kumar (editor), The Cambridge Economic History of India, Vol. II, (henceforth referred to as CEHI), 2005, Chapter 6. 5.

Semester: I **Course Type: DSE 1**
Course Name: Islamic Economics **No. of Credits: 02**

Course Objectives:

This course expounds on the principles of economy and policy in Islam. In doing so, it clarifies the differences between conventional and Islamic value systems and methodologies. It brings about a comprehensive understanding of Economic philosophy, system and institutions under the purview of Islamic law and principles.

Course Outcomes:

1. Understand the foundation of Islamic Economics.
2. Understand the features of Islamic Economics.
3. To have knowledge of the development of Islamic Economics.
4. Able to analyze the differences of Islamic Economic System with the existing economic systems.
5. Able to implement the Islamic Economics principles in various economic activities.

Unit	Course Content
I	**Overview of Islamic Economics** Points of contention, Sources, *Maqasid – e – Shariat*, Practices, Scholars
II	**Fundamental concepts** Ownership, Halal & Haram, Economic Resources, Production, Consumption, Public Policy, Institutions
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01.	Umar Chapra The Economic System of Islam
02.	AA Islahi, Contributions of Muslim scholars to economic thought and analysis:(11-905 AH/632-1500 AD)
03.	محاضرات معیشت و تجارت، ڈاکٹر محمود احمد غازی
04.	معاشیات اسلام، سید ابوالاعلی مودودی
05.	اسلام کا نظریہ ملکیت، ڈاکٹر نجات اللہ صدیقی
06.	Chapra, M. Umer. (2008). The Islamic Vision of Development in The Light of Maqasid al-Shariah. London: IIIT.
07.	Wilson, Rodney & El-Ashker, Ahmed. (2006). Islamic Economics: A Short History. Leiden: Brill

Semester: I **Course Type: SEC 1**
Course Name: Data Visualization using Microsoft Excel **No. of Credits: 02**

Course Objective:

In today's modern economies, data has gained heightened significance. The ability to analyze data is widely regarded as a valuable and essential skill. The primary aim of this course is to impart a foundational understanding of fundamental data concepts along with the introduction of MS word and MS Excel.

The course commences with an introduction to these basic data concepts, including methods for presenting and visualizing data through the use of graphs and tables in MS word and MS Office.

Course Outcome:

Upon finishing this course, participants will possess a comprehensive understanding of various data types and visualization techniques. Students will also appreciate the significance of different forms of tables and diagrams in effectively presenting data.

Unit	Course Content
I	**Data Demystified: Unveiling the Basics** 1.1 Meaning and definition of data. Importance and limitations of data 1.2 Sources of data: Primary and secondary. 1.3 Classification of data: Meaning and objectives, quantitative vs. qualitative classification. 1.4 Tabulation of data: General rules of tabulation, types of tabulation, formation of discrete and continuous frequency distribution.
II	**Visual Data Storytelling: Bringing Numbers to Life** **(Using MS Office and MS Excel)** 2.1 Introduction to MS Word: Creating and saving documents, formatting text, header and footer, page layout, spell checker and saving in different formats: 2.2 Introduction to Microsoft Excel: Window Components and features of MS Excel, Importing and exporting data, data cleaning, validation and presentation. Important Excel functions. 2.3 Diagram and graphs: Importance and types. 2.4 Tables: Techniques of construction, Types and features of tables, Difference between tables and graphs 2.5 Graphs: Techniques of constructing graphs. Types of graphs and their importance in data analysis 2.6 The choice of appropriate measure of visual presentation
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Berk, K. N., & Carey, P. (1998). Data Analysis with Microsoft Excel. Pacific Grove, CA: Duxbury Press.
02	Gupta, S. P. (2001). Statistical methods, sultan Chand & sons. New Delhi, 21.
03	Middleton, M. R. (2020). Data Analysis Using Microsoft Excel: Updated for Office 365. Cengage Learning. ISBN: 978-0357133913.

Semester: I **Course Type: GE 1**

Course Title: An Introduction to the Microsoft Excel **No. of Credits: 02**

Course Objective:

The objective of this paper is to provide students with a comprehensive understanding of Microsoft Excel, its applications, and its relevance in various contexts. This includes equipping students with a solid foundation in Microsoft Excel, ensuring they can navigate the interface, utilizing various tabs, and applying formatting and data modification techniques. The objectives also emphasize practical skills, preparing students for real-world scenarios where Excel proficiency is essential.

Course Outcome:

- Pupils make a Comprehensive Understanding of the basics of Microsoft Excel
- Students will demonstrate the proficiency in locating and utilizing various key components of Excel
- Students will understand the specific functions of each tab and use them effectively for various tasks.
- Students will acquire a solid foundation in Microsoft Excel, possessing the knowledge and skills necessary to navigate the software interface with confidence.

Unit	**Course Content**
I	**An introduction to the Microsoft Excel** Microsoft Excel: Overview and its applications, Importance of Microsoft excel, difference between Microsoft excel and SPSS, R and E-views. Components of the Microsoft excel window: The Microsoft Office Button: Quick Access Toolbar, Title Bar, The Ribbon, The Formula Bar, The Status Bar.
II	**Tabs and Worksheet in the Microsoft Excel** Tabs in Micro soft Excel: Home, Insert, Page layout, Formulas, Data, Review, View Tabs and their uses, Understanding the Formatting of the worksheet, Modifying the Worksheet, Name box, Sorting data alphabetically and numerically
Text Books and References:	
1.	Middleton, M. R. (2020). Data Analysis Using Microsoft Excel: Updated for Office 365. Cengage Learning. ISBN: 978-0357133913.
2.	Frye, C. (2019). Microsoft Excel 2019 Step by Step. Microsoft Press.
3.	Berk, K. N., & Carey, P. (1998). Data Analysis with Microsoft Excel. Pacific Grove, CA: Duxbury Press.

Semester: II **Course Type: DSC 2 Core**
Course Name: Macroeconomics-I **No. of Credits: 04**

Course Objectives:
The core objectives of this paper are to give concrete knowledge about the importance of macroeconomic analysis and important concepts in macroeconomics in a view that for a critical understanding of the economic system as a whole macroeconomic approach is essential. Study about the aggregates of the economy is more important to make policy formulations and solutions to many economic problems in this complex economic system.

Course Outcome:
Students comprehend the meaning and importance of macroeconomics and main concepts in macroeconomics their use and applications.
They develop insight on national income accounting, consumption and investment functions and multiplier effects in the economy which enable them to critically analyse the structure of particular economic systems.
Students also acquire knowledge about classical and Keynesian views on income and output determination.

Unit	**Course Content**
I	**Introduction:** Meaning, Nature and Scope of Macroeconomics; Microeconomics versus Macroeconomics; Macroeconomic Issues in Economy; Importance and Limitations of Macroeconomics. Concepts of National Income-GNP, NNP, GDP, NDP, and Related Concepts ; Nominal and Real Income; Actual and Potential GDP; Measurement of National Income; Difficulties of Measurement of National Income.
II	**Theories of Consumption and Investment:** Consumption Function, Keynes Psychological Law of Consumption; Factors affecting consumption. Investment Function; Types of Investment. Concept of Multiplier; Importance of the Concept of Multiplier; Leakages in Multiplier; Acceleration Principle.
III	**Theory of Output, Income & Employment:** Classical Theory of Income and Employment: Says Law of Market; Wage Price Flexibility and the full employment; Income and output determination in the classical framework; Keyne's objections to the classical theory. Keynesian Theory of Output, Income & Employment: The Keynesian Approach to the Determination of Income, Output and Employment – the Complete Keynesian Model; Equality Between Savings and Investment,
IV	**Keynesian Theory:** Income Determination With Government Sector; Fiscal Policy: Impact of Changes in Government Expenditure and Taxes; Export, Import and the Aggregate Demand; Four Sector Model of Income Determination, Aggregate Demand Aggregate Supply model
Examination and Evaluation Pattern: As per University Norms	
Reading List:	
1.	Ackley, G. (1976): *Macroeconomics: Theory and Policy*, Macmillan Publishing Company, New York.
2.	Day, A.C.L. (1960): *Outline of Monetary Economics*, Oxford University Press, Oxford.
3.	Gupta, S.B. (1994*): Monetary Economics*, S. Chand and Co., Delhi.
5.	Lewis, M.K. and P.D. Mizan (2000): *Monetary Economics*, Oxford University Press, New Delhi.
6.	Shapiro, E. (1996): *Macroeconomic Analysis*, Galgotia Publications, New Delhi
7.	Sikdar, Shoumyen (2011): *Principles of Macroeconomics*, 2nd Edition, Oxford University Press, India
8.	Case, Karl E. & Ray C. Fair: *Principles of Economics*, Pearson Education, Inc., 8th edition, 2007.

Semester: II **Course Type: DSE 2**
Course Name: Demography **No. of Credits: 02**

Course Objectives:
Demography provides valuable insights into the size, composition, distribution, and changes in populations over time. It explores factors such as fertility, mortality, migration, and aging, and their social, economic, and environmental implications. This course introduces students to the field of demography, focusing on the study of human populations and their dynamics. It covers topics such as population composition, fertility, mortality, migration, aging, and the relationship between population and development. The course emphasizes the application of demographic concepts, theories, and methods to analyze and interpret population data.

Course Outcomes:
- Pupils make an understanding about the importance of vital statistics in economics
- Students will comprehend the concepts like fertility, mortality and nuptiality
- Students are able to analyse various theories on demography
- Students able to understand the interdependence between population, environment and economic development.

Unit	Course Content
I	**Concepts of Demography:** Meaning, Scope and Subject matter of Demography - Demographic dividend - Sources of demographic data– census, vital registration, sample surveys; Fertility: Basic measures– TFR, GRR, NRR - Levels, trends and determinants - Fertility differentials Mortality: basic measures– IMR, MMR– levels, trends and determinants- Mortality differentials Nuptiality: Concepts-Analysis of marital status from census-Mean age at marriage-Synthetic and decadal synthetic cohort methods- Mean age at widowhood and divorce-Change in age pattern of marriage.
II	**Population Growth and Structures:** Theories of population growth– Malthusian theory, Theory of demographic transition, optimum theory, population as 'limits to growth' and as 'ultimate source'; Population projections-Stable, stationary and quasi-stationary populations, Population explosion– threatened or real, distant or imminent; Population and economic development, Population and environment, Population aging Age structure– measures, patterns and implications, Sex ratio– measures, patterns and determinants
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01.	Asha Bhende and Tara Kanitkar, Principles of Population Studies, Revised Edition, Himalya Publishing House, 2011.
02.	B.D. Mishra, An Introduction to the Study of Population, South Asian Publishing, New Delhi, 2004.
03.	Bogue Donald J. Principles of Demography, John Wiley, New York, 1969.
04.	Bose A, India's Basic Demographic Statistics, University press, New Delhi, 1996.
05.	Chaube P.K, Population Policy in India, Kenosha Publication, New Delhi, 2000.
06.	Henry. S .Shryock and J.S, Siegel, the Methods and Materials of Demography, 2004.
07.	K. B. Pathak and F. Ram. Techniques of Demographic Analysis. Himalyan Publishing House, 2013.
08.	Key fitz, Applied Mathematical Demography, John Willy, 1977.
09.	S.C. Gulati, Fertility in India: An Econometric Study of Metropolis, Sage Publication, New Delhi, 1988.
10.	Seth M, Women and Development: Indian Experience, Sage Publication, New Delhi, 2000.

Semester: II **Course Type: DSE 2**
Course Name: Fundamentals of Labour Economics **No. of Credits: 02**

Course Objectives:
In a globalised economy, the issues of labour market such as wage determination, employment policies, trade unions and collective bargaining has become very important and constantly changing especially for developing countries. In the case of India it becomes more critical and important as still bulk of labour force is in the unorganised sector, the issues of employment as well as livelihood and social security for the millions is important as economic growth of the country. This paper offers understanding of theoretical as well as empirical issues related to the labour market with special reference to India.

Course Outcomes:
- Upon successful completion of this course students would be able to
- Understand the Concepts, issues and challenges of labour and labour markets.
- Have exposure to Indian labour Data and its critical analysis
- Understand and analyse different policy initiatives taken by the government and other institutions
- Understand how decisions and actions affect the economy locally, nationally and internationally.

Unit	Course Content
I	**Labour Market:** Nature and characteristics of labour market in; Demand for labour in relation to size and pattern of investment; Supply of labour in relation to growth of labour force. Theories of wage determination; Concept of minimum wage, Inflation-wage relationship at micro and macro levels, Labour movement —internal and external; labour unions, Causes of industrial disputes and their settlement and prevention mechanism.
II	**State and Labour:** State and social security of labour — Concept of social security and its evolution; Social assistance and social insurance; Special problems of labour: Child labour, female labour, Discrimination and gender bias in treatment of labour; ;Labour legislation in India, Labour market reforms — Exit policy, need for safety nets.
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Chenery, Hollis Burnley, and T. N. Srinivasan (1988).Handbook of Development Economics. Elsevier,.
02	Datt, Gaurav.(1996), Bargaining power, wages and employment: an analysis of agricultural labour markets in India. Sage Publications.
03	Hajela, Prayag Das. (1998), Labour Restructuring in India: A Critique of the New Economic Policies. Commonwealth Publishers.
04	Jhabvala, Renana, and R. K. A. Subramanya. (2000), The Unorganised Sector: Work Security and Social Protection. Sage Publications.
05	Kaufman, Bruce E., and Julie L. Hotchkiss.(2006),The Economics of Labour Markets. Thomson/South Western.
06	Papola, T. S., P. P. Ghosh, and Alakh N. Sharma.(1993),Labour, Employment, and Industrial Relations in India: Presidential Addresses at ISLE Annual Conferences. Indian Society of Labour Economics.
07	Ratnam, C. S. Venkata.(2001), Globalization and Labour-Management Relations: Dynamics of Change. Sage Publications.

- Note: All recent literatures and research papers on relevant topics can be used as supplement to the prescribed reading materials.

Semester: I **Course Type: SEC 1**
Course Name: Data Visualization using Microsoft Excel **No. of Credits: 02**

Course Objective:

In today's modern economies, data has gained heightened significance. The ability to analyze data is widely regarded as a valuable and essential skill. The primary aim of this course is to impart a foundational understanding of fundamental data concepts along with the introduction of MS word and MS Excel.

The course commences with an introduction to these basic data concepts, including methods for presenting and visualizing data through the use of graphs and tables in MS word and MS Office.

Course Outcome:

Upon finishing this course, participants will possess a comprehensive understanding of various data types and visualization techniques. Students will also appreciate the significance of different forms of tables and diagrams in effectively presenting data.

Unit	**Course Content**
I	**Data Demystified: Unveiling the Basics** 1.1 Meaning and definition of data. Importance and limitations of data 1.2 Sources of data: Primary and secondary. 1.3 Classification of data: Meaning and objectives, quantitative vs. qualitative classification. 1.4 Tabulation of data: General rules of tabulation, types of tabulation, formation of discrete and continuous frequency distribution.
II	**Visual Data Storytelling: Bringing Numbers to Life** **(Using MS Office and MS Excel)** 2.1 Introduction to MS Word: Creating and saving documents, formatting text, header and footer, page layout, spell checker and saving in different formats: 2.2 Introduction to Microsoft Excel: Window Components and features of MS Excel, Importing and exporting data, data cleaning, validation and presentation. Important Excel functions. 2.3 Diagram and graphs: Importance and types. 2.4 Tables: Techniques of construction, Types and features of tables, Difference between tables and graphs 2.5 Graphs: Techniques of constructing graphs. Types of graphs and their importance in data analysis 2.6 The choice of appropriate measure of visual presentation
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Berk, K. N., & Carey, P. (1998). Data Analysis with Microsoft Excel. Pacific Grove, CA: Duxbury Press.
02	Gupta, S. P. (2001). Statistical methods, sultan Chand & sons. New Delhi, 21.
03	Middleton, M. R. (2020). Data Analysis Using Microsoft Excel: Updated for Office 365. Cengage Learning. ISBN: 978-0357133913.

Semester: II **Course Type: GE 2**
Course Name: Fundamentals of Data Analysis and Visualization in MS Excel **No. of Credits: 02**

Course Objective:

The basic objective of this course is to provide students with a strong foundation in performing basic mathematical calculations, utilizing Excel functions, creating and managing tables, and designing visually appealing charts. Through practical examples and hands-on exercises, students will develop skills that are directly applicable in data analysis and reporting tasks.

Course Outcome:

- Students will demonstrate proficiency in performing basic mathematical calculations and utilizing key Excel functions for efficient data analysis.
- Students will be able to create visually compelling charts for effective data representation.
- Pupils will get a holistic understanding of Excel, from fundamental calculations to advanced data visualization techniques.

Unit	Course Content
I	**Performing Basic Mathematical Calculations and Functions in Excel** Basic Mathematical calculations: Addition, Multiplication, Subtraction, Division and their examples. Functions in Excel: AutoSum, The SUM Function, The AVERAGE Function, The MAX Function, The MIN Function, the COUNT Function, The COUNTIF Function and their examples.
II	**Creating Tables and Basic Charts in Excel** Uses of Table and Charts, Creating new Tables, Manage Tables and their styles, filter and sort the table, Add or remove the rows and column from the tables, Apply various styles to tables, Creating new chart, Format the Charts, Types of Basic Charts: Column Chart, Bar Chart, Line Chart, Pie Chart and their Uses, Apply various layouts and styles to chart, insert boxes, shapes and images in charts
Text Books and References:	
1.	Alexander, M., & Kusleika, R. (2019). *Excel 2019 Bible*. Wiley.
2.	Winston, W. L. (2019). *Microsoft Excel Data Analysis and Business Modeling*. Microsoft Press.
3.	Harvey, G. (2019). Excel 2019 All-in-One For Dummies. For Dummies.

Semester: III **Course Type: DSC 3 Core**
Course Name: Microeconomics-II **No. of Credits: 04**

Course Objective:
The objective of this course is to make students understand the different kinds of markets and how they function. On one hand this course teaches the students the major characteristics of different market structures and the implications for the behaviour of the firm in the Product market and on the hand the course explains various theories on Rent, Interest, Wages as well as relationship between wages and productivity.

Outcome:
Upon successful completion of the course the students will be able to understand basic microeconomic terminology through defining and discussing the terminology as well as applying it to current microeconomic events; calculate microeconomic variables; use models to analyze the behaviour of individuals and firms; and analyze governmental policies and their effect on market outcomes and social well-being.

Unit	**Course Content**
I	**Market Structure, Equilibrium of the Firm & Industry under Perfect Market:** Meaning of Market, Features of Market, Different Types of Market, Forms of Market Structure Perfectly competitive Markets: Forms of Market Structure:- Imperfect Competitive Markets Meaning of Firm and Industry, Conditions of Equilibrium of Firm and Industry, Short Run Equilibrium under Identical Cost Conditions, Long Run Equilibrium under Identical and Different Cost Conditions.
II	**Equilibrium of the Firm & Industry under Imperfect Markets:** Monopoly: Meaning & Features, Average and Marginal Revenue Curves under Monopoly ,Equilibrium of the Firm under Monopoly, Discriminating Monopoly, Conditions of Equilibrium under Price Discrimination, Dumping, Monopolistic Competition: Meaning, Features, Assumptions, Short Run and Long Run Equilibrium of Firm under Monopolistic Competition, Group Equilibrium, Excess Capacity Oligopoly: Introduction, Main Features, Assumptions and Causes for the Existence of Oligopoly
III	**Alternative To Profit Maximization:** Principal-Agent theory, Non-maximizing Theories-Full Cost Theory, Satisfying Theory Sales maximisation theory; Williamson's Model; Marris Model.
IV	**Income Distribution and Factor Pricing** Income Distribution- Factor Productivity; ARP; MRP; VMP; AFC; MFC, Factor Price Determination under Different Market Conditions, Marginal Productivity Theory of Distribution Income Distribution: Rent and Wage, Income Distribution: Interest and Profit
Examination and Evaluation Pattern: As per University Norms	
Reading List:	
1.	Chaudhri K.R.: *Modern Microeconomics*, Dominant Publishers, New Delhi, 2001
2.	Ferguson and Gould: *Micro Economics*, AITBS Publishers, New Delhi, 6th Edition, 2000
4.	George J .Stigler: *The Theory of Price*, Prentice Hall College Div. Publication, 4th Ed., 1987
5.	Gravelle and Rees: *Microeconomics*; Pearson India, 3rd Edition, 2007
6.	Joseph Stiglitz:*Economics*,4th Edition, W W Norton & Co. Publisher, 1998
7.	Pindyck, Rubinfield and Mehta: *Microeconomics*, Pearson, 7th Edition, 2009
8.	Salvator : *Micro Economics- Theory and Applications*, Oxford University Press, 2008
9.	Stonier & Hague:*A Text Book of Economic Theory*, Yogyakarta :Dwitungga,1989
10.	Varian H.R: *Intermediate Microeconomics*, Affiliated East- West Press Pvt. Ltd.,7th Edition, 2006
11.	Walter Nicholson*: Microeconomic Theory*, South-Western Publication., 2001
12.	Case, Karl E. & Ray C. Fair:*Principles of Economics*, Pearson Education, Inc., 8thedition, 2007

Semester: III **Course Type: DSE 3**
Course Name: Basics Mathematics **No. of Credits: 02**

Course Objectives:
The objective of this paper is to introduce students with the basic mathematics that enables the study of economic theory at the undergraduate level. This course will enable the students to apply mathematical techniques to economic theory in general.

Course outcomes:
- Able to understand the essence of Mathematical techniques for study of economics
- Capable to mathematical logic behind the economic theories
- Capable to apply mathematical techniques in applied economics

Unit	Course Content
I	Real Numbers, Polynomials, Linear Equations, Quadratic Equations, Arithmetic Progressions, Coordinate Geometry, Sequence and Series, Straight Lines
II	Sets, relations and Functions, Permutations and Combinations, Limits and Continuity
Examination and Evaluation Pattern: As per University Norms	
Reading List:	
01.	Allen, R.G.D: Mathematical Analysis for Economists, Macmillan Press, London, 2000
02.	Chiang, A.C: Fundamental Methods of Mathematical Economics (4thEdition), McGraw Hill, New Delhi, 2005
03.	Simon C.P. & Blume la; Mathematics for Economists, Norton & Company, New York ,1994
04.	Sydsaeter K & Hammond P: Essential Mathematics for Economic Analysis (4edn) Pearson Education Ltd England ,2012

Semester: III **Course Type: DSE 3**
Course Name: Fundamentals of Industrial Economics **No. of Credits: 02**

Course Objectives:
In the contemporary world with globalization and liberalization, more and more attention is given to industry. This paper intends to provide knowledge to the students on the basic issues such as productivity, efficiency, capacity utilization and debates involved in the industrial development in India.

Course Outcomes:
- Able to understand and explain the factors affecting the growth of the industrial sector.
- Understand the economic aspect of the industrial sector of an economy
- Able to analyse the effect and cause relationship between industrial sector, other sectors of an economy and the economy as whole

Unit	Course Content
I	**Industry and Economic development:** Meaning and Characteristics of Industrialisation, Agriculture and Industrialisation; Role of Industrialisation: Determinants of Industrial growth, Economic Factors, Non-Economic factors; Problems of Industrialisation; Concept of Plant, Firm and Industry, Classification of Industry and Data Information
II	**Industrial Organization and Ownership Structure:** Organisational form: Public, Private, Joint and Cooperative Sectors; Public Sector Enterprises: Characteristics and Benefits, Limitations of Public Enterprises; Private Sector: Characteristics and features; Joint Sector: Characteristics, Advantages and Disadvantages; Cooperative Sector: Characteristics and Different types of Cooperative sectors; MNCs and Their Role.**Composition of** Industrial Sector**-**Significance of Size; Large,Medium and Small Scale Industries,Their contribution s and Problems faced,Industrial Policies of India.
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Ahluwalia, I.J., Industrial Growth in India, Oxford University Press, New Delhi 1995
02	Barthwal, R.R., Industrial Economics: An Introductory Text Book, Wiley Eastern Ltd., New Delhi1992
03	Brahmananda, P.R. and V.R. Panchamukhi (Eds.), The Development Process of The Indian Economy, Himalaya Publishing House, Bombay 1987
04	Cherunilam, F., Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai 1994
05	Desai, B., Industrial Economy in India (3rd Edition), Himalaya Publishing House, Mumbai 1999
06	Kuchhal, S.C., Industrial Economy of India (5th Edition), Chaitanya Publishing House, Allahabad 1980
07	Singh, A. and A.N. Sadhu, Industrial Economics, Himalaya Publishing House, Bombay 1988

Note: All recent literatures and research papers on relevant topics can be used as supplement to the prescribed reading materials.

Semester: III **Course Type: SEC 2**
Course Name: Data Analysis using Microsoft Excel **No. of Credits: 02**

Course Objective:

This course commences with the analyzing the central tendency and scatter in the data by using ubiquitous tool of data analysis: MS Excel. The second part of the course is dedicated to the basics of correlation and regression analysis.
Its primary goal is to acquaint students with Excel and furnish them with both the theoretical and practical comprehension of data's central tendencies, dispersion, correlation and regression.

Course Outcome:

Upon completion of this course, students will possess a foundational grasp of MS Excel, as well as a comprehensive understanding of various measures of central tendency and dispersion. The participants will also have the basic understanding of the correlation and Regression analysis and its application in data analysis
They will be well-versed in the strengths and weaknesses of these measures and proficient in calculating them using MS Excel.

Unit	Course Content
I	**Unlocking Data's Core: Central Tendency and dispersion with Microsoft Excel** 1.1 Introduction 1.2 Measures of central tendency: objectives and requisite of a good average 1.3 Arithmetic mean, Median and Mode: calculation, mathematical properties, merits and limitations 1.4 Measures of dispersion: Interquartile range, the quartile deviation, The mean deviation, the standard deviation. 1.5 Merits and limitations of different measures of dispersion
II	**Basics of Correlation and Regression Using Microsoft Excel** 2.1 Correlation: Concept, Importance and types of correlation. 2.2 Methods of studying Correlation. Karal Pearson correlation coefficient, Spearman Correlation coefficient. 2.3 Regression, Meaning, types and importance. 2.4 Regression line: One variable and two variables, Graphical representation. 2.5 Difference between Correlation and Regression 2.6 Limitations of the Regression analysis
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Berk, K. N., & Carey, P. (1998). Data Analysis with Microsoft Excel. Pacific Grove, CA: Duxbury Press.
02	Gupta, S. P. (2001). Statistical methods, sultan Chand& sons. New Delhi, 21.
03	Middleton, M. R. (2020). Data Analysis Using Microsoft Excel: Updated for Office 365. Cengage Learning. ISBN: 978-0357133913.

Semester: III **Course Type: GE 3**
Course Title: Basics of data management and data visualization in MS Excel **No. of Credits: 02**

Course Objectives:

The course aims to equip students with a comprehensive set of skills in data management and visualization using Microsoft Excel. The course also aims to enhance analytical skills, enabling students to organize, analyse, and interpret data effectively to make informed decisions. Additionally, the course aims to prepare students for practical applications in various contexts, including academic, professional, and research settings, where data management and visualization skills are essential.

Course Outcome:

- By the end of this course, the students will have acquired a robust skill set in Excel data management and visualization.
- Students will acquire essential skills in data visualization using Pivot Tables and Pivot Charts, empowering them to interpret and communicate insights effectively.
- Students will be able to confidently apply the skills of data management and visualization to practical scenarios.

Unit	Course Content
I	**Basics of Data Management** Basics of data Management: Sorting and filtering data, Conditional formatting of data, Data validation, Data importing and exporting, Data cleaning techniques
II	**Data visualization with Basic Pivot tables and Pivot Charts** Significance of data visualization, role of Pivot Tables and Pivot Charts in enhancing data visualization, creating a basic Pivot Table from raw data, Customizing Pivot Tables, Creating a basic Pivot charts from the raw data, Creating Pivot Charts from PivotTables
Text Books and References:	
1.	Harvey, G. (2015). *Excel 2016 All-in-One For Dummies*. For Dummies.
2.	Provost, F., & Fawcett, T. (2013). *Data Science for Business*. O'Reilly Media.
3.	Collie, R., & Singh, A. (2015). *Power Pivot and Power BI: The Excel User's Guide to DAX, Power Query, Power BI & Power Pivot in Excel 2010-2016*. Holy Macro! Books
4.	Alexander, M., & Walkenbach, J. (2013). *Excel Dashboards and Reports*. Wiley.

Semester: IV **Course Type: DSC 4 Core**
Course Name: Macroeconomics-II **No. of Credits: 04**

Course Objectives:
The objective of this paper is to give clear understanding about the importance of macroeconomic analysis in monetary perspective and to impart knowledge about general equilibrium model since all these are essential to understand the economic system in holistic manner.

Course Outcomes:
Students will acquire knowledge about income determination in an open economy along with IS-LM curve. They comprehend various approaches to money supply and theories of demand for money and their conceptual importance. Students also understand the concepts of inflation, business cycle, BoP and exchange rate and identify them as important macroeconomic variables.

Unit	Course Content
I	**Theories of Money** • Meaning, Types and Functions of Money; • Money Supply and Credit Creation; • High Powered Money and Money Multiplier • Demand for Money: Friedman's Quantity Theory of Money, Fisher's Equation ; Cambridge Version of Quantity Theory; Keynes's Transaction, Precautionary and Speculative Demand for Money;
II	**General Equilibrium Analysis** • Meaning and definition of the IS and LM curve; Derivation of the IS curve, Derivation of the LM Curve; • General Equilibrium Model of IS-LM, • Relative Effectiveness of Fiscal Policy, • Relative Effectiveness of Monetary Policy
III	**Theory of Inflation and Business Cycle:** • Meaning, and Types of Inflation; Determinants of Inflation; • Relationship between Inflation and Unemployment -the Philips Curve; Concept of Stagflation • Meaning and Types of Business Cycle; Phases of Business Cycle
IV	**Economic Growth** • Meaning and Determinants of Economic Growth; Harrod-Domar Model of Economic Growth Neo-Classical Growth Model-Solow Model, Augmented Solow Model
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
1.	Davidson, Paul: *Post Keynesian Macroeconomic Theory*, Second Edition, 2011.
2.	Dornbusch, Rudiger, Fisher, Stanley and Startz, Richard (2018): *Macroeconomics*, 12/E. Tata McGraw-Hill Education
3.	Heijdra, Ben J (2015).: *Foundations of Modern Macroeconomics*. OUP Oxford
4.	Jha, Raghbendra (2019): *Contemporary Macroeconomic Theory and Policy.* New Age International Pvt Ltd.
5.	Krugman, Paul, and Robin Wells (2018): *Macroeconomics.* Worth Publishers
6.	Gupta, S.B (2010): *Monetary Economics*, S. Chand and Co., Delhi.
7.	Lewis, M.K. and P.D. Mizan (2000): *Monetary Economics*, Oxford University Press, New Delhi.
8.	Shapiro, E (2013): *Macroeconomic Analysis*, Galgotia Publications, New Delhi

Semester: IV **Course Type: DSE 4**
Course Name: Basics Statistics **No. of Credits: 02**

Course Objectives:
This is a course on statistical methods for economics. It begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. It then develops the notion of basics of probability. The course objective is to introduce the students with use of statistics in the tools used by the economists to explain economic theory.

Course Outcomes:
- Analyse and make inference about economic situations of an economy
- Understand of the economy with reference to economic fundamentals
- Make statistical analysis of the economic facts

<table>
<tr><th>Unit</th><th>Course Content</th></tr>
<tr><td>I</td><td>Introduction:
• Basic Concepts: Population, Sample, Parameter, Frequency Distribution, Cumulative Frequency;
• Data: Types of Economic Data; Structure of Economic Data
Descriptive Statistics:
• Measures of Central Tendency; Mean, Median, Mode;
Measures of Dispersion; Absolute and Relative Measures</td></tr>
<tr><td>II</td><td>Elementary Probability Theory:
• Sample Spaces and Events; Probability Axioms and Properties; Probability of a Single Event; Probability of Multiple Events
Probability Distributions:
• Discrete Probability Distribution: The Binomial Distribution; The Poisson Distribution;
Continuous Probability Distribution: The Normal Distribution</td></tr>
<tr><td colspan="2">Examination and Evaluation Pattern: As per University Norms</td></tr>
<tr><td colspan="2">Text Books and References:</td></tr>
<tr><td>01.</td><td>Gupta, S.C. and V.K. Kapoor: Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi, 4th ed., 2014</td></tr>
<tr><td>02.</td><td>William G. Cochran: Sampling Techniques, John Wiley, 2007.</td></tr>
<tr><td>03.</td><td>Gujrati D: Basic Econometrics</td></tr>
</table>

Semester: IV **Course Type: DSE 4**
Course Name: Fundamentals of Economics of Education **No. of Credits: 02**

Course Objectives:
Education plays a crucial role in shaping individuals' lives, societal development, and economic progress. By applying economic analysis to the field of education, we gain valuable insights into the decision-making processes, resource allocation, and the overall functioning of educational systems. This course will provide a solid foundation in understanding the economic dimensions of education and its implications for individuals and societies. This course explores the economic analysis of education systems, policies, and outcomes. It examines the economic theories, concepts, and methodologies applied to the field of education, including the demand and supply of education, human capital theory, education financing, education policy, and the relationship between education and economic development.

Course Outcomes:
- Understand the economic principles and theories applied to education.
- Analyze the demand and supply of education and the factors influencing educational decisions.
- Apply economic tools to analyze educational outcomes and the efficiency of education systems.
- Critically assess the role of education in promoting economic development.
- Helps to understand different types and approaches to educational planning
- Analyse the role of financing in education

Unit	Course Content
I	**Introduction to Economics of Education:** Definition, scope and importance of economics of education; Economic theories applied to education- Human Capital Theory, Signaling Theory, Screening Theory, and Efficiency Wage Theory; Demand for Education- Determinants of demand for education, Economic analysis of education demand across different groups; Supply of Education- Factors influencing the supply of education, Analysis of educational markets and institutions.
II	**Education and Economic Development** Relationship between education and economic development, The role of education in enhancing productivity and innovation; Returns to education and earnings differentials, Education and Outcomes-employment, health and social outcomes; Meaning and types of Educational Planning, Approaches to educational planning- Manpower requirements approach, Social demand approach, social justice approach and The Rate of return approach; Role of financing in education, Public and private funding of education, Equity and efficiency in education finance.
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Becker, G.S (1974), Human Capital. 2nd Edn, NBER, New York.
02	Blang, M; An introduction to Economics of Education, Cambridge University Cohn, Press E and T.
03	Cohn, E and T. Gaske (1989), Economics of Education, Pergamum Press, London.
04	Dominic J. Brewer and Patrick J. McEwan (2010), Economics of Education, Routledge
05	Tilak. J.B.G (1989), Economics of Inequality in Education, Sage, New Delhi.
06	Woodhall, M; Cost – benefit Analysis in Educational planning, Columbia University Press, New York World Bank; The world Development Report, OUP, New York.
07	Eric A. Handshake, Stephen J. Machine, Lodger Woessmann. Handbook of the Economics of Education, Volume 4(2011), Amsterdam: North Holland.
08	J. B. G. Tilak, Educational Planning at Grassroots (2008), APH publishing house, New Delhi.

Semester: IV **Course Type: SEC 2**
Course Name: Data Analysis using Microsoft Excel **No. of Credits: 02**

Course Objective:

This course commences with the analyzing the central tendency and scatter in the data by using ubiquitous tool of data analysis: MS Excel. The second part of the course is dedicated to the basics of correlation and regression analysis.
Its primary goal is to acquaint students with Excel and furnish them with both the theoretical and practical comprehension of data's central tendencies, dispersion, correlation and regression.

Course Outcome:

Upon completion of this course, students will possess a foundational grasp of MS Excel, as well as a comprehensive understanding of various measures of central tendency and dispersion. The participants will also have the basic understanding of the correlation and Regression analysis and its application in data analysis
They will be well-versed in the strengths and weaknesses of these measures and proficient in calculating them using MS Excel.

Unit	Course Content
I	**Unlocking Data's Core: Central Tendency and dispersion with Microsoft Excel** 1.1 Introduction 1.2 Measures of central tendency: objectives and requisite of a good average 1.3 Arithmetic mean, Median and Mode: calculation, mathematical properties, merits and limitations 1.4 Measures of dispersion: Interquartile range, the quartile deviation, The mean deviation, the standard deviation. 1.5 Merits and limitations of different measures of dispersion
II	**Basics of Correlation and Regression Using Microsoft Excel** 2.1 Correlation: Concept, Importance and types of correlation. 2.2 Methods of studying Correlation. Karal Pearson correlation coefficient, Spearman Correlation coefficient. 2.3 Regression, Meaning, types and importance. 2.4 Regression line: One variable and two variables, Graphical representation. 2.5 Difference between Correlation and Regression 2.6 Limitations of the Regression analysis
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Berk, K. N., & Carey, P. (1998). Data Analysis with Microsoft Excel. Pacific Grove, CA: Duxbury Press.
02	Gupta, S. P. (2001). Statistical methods, sultan Chand& sons. New Delhi, 21.
03	Middleton, M. R. (2020). Data Analysis Using Microsoft Excel: Updated for Office 365. Cengage Learning. ISBN: 978-0357133913.

Semester: IV | **Course Type: GE 4**
Course Title: Microsoft Excel: Formulas, Functions, and Visualization | **No. of Credits: 02**

Course Objectives:

The objective of this paper is to provide students with a comprehensive understanding of advanced Excel including various advanced formulas, Functions and visualization techniques.

Course Outcome:

- After the completing of this course the students will have achieved an advanced level of proficiency in both data analysis and visualization.
- The pupils will be equipped with a diverse skill set, including advanced formulas, functions, and visualization techniques, enabling them to analyse complex datasets, derive meaningful insights and present data in a visually compelling manner.

Unit	Course Content
I	**Data analysing with Formulas and Functions** Logical functions: IF AND OR, Array formulas and advanced text manipulation: TEXTJOIN, CONCAT, TEXT functions, Lookup functions: VLOOKUP, HLOOKUP, INDEX, MATCH, Statistical functions for advanced analysis: COUNTIFS, SUMIFS, AVERAGE IFS
II	**Data Visualization with Advanced Pivot Tables and Advanced Charts** Advanced Pivot Table techniques slicers, timelines, custom calculations, Trend lines and annotations, Sparkline Types of Advanced chart, Gantt charts, Waterfall charts, creating dynamic charts with data validation, Tree map charts for hierarchical data visualization, Waterfall charts for displaying cumulative effect
Text Books and References:	
1.	Collie, R., & Singh, A. (2015). *Power Pivot and Power BI: The Excel User's Guide to DAX, Power Query, Power BI & Power Pivot in Excel 2010-2016*. Holy Macro! Books.
2.	Winston, W. L. (2019). *Microsoft Excel Data Analysis and Business Modeling*. Microsoft Press.
3.	Hennig, T., Jelen, B., & others. (2016). *Excel Charts and Graphs: Master Data Visualization in Excel*. Que Publishing.
4.	Provost, F., & Fawcett, T. (2013). *Data Science for Business*. O'Reilly Media. Alexander, M., & Kusleika, R. (2019). Excel 2019 Power Programming with VBA. Wiley.
5.	Alexander, M., & Walkenbach, J. (2013). Excel Dashboards and Reports. Wiley.

Semester: V **Course Type: DSC 5 Core**
Course Name: Money and Banking **No. of Credits: 04**

Course Objectives:
This course is an introduction to the economics of Money, Banking, Indian Money Market and Development Banking.

Course Outcomes:
Upon successful completion of the course, the student would be able to understand the structure and function of Central Bank, Commercial Banks and issues relating to monetary policies of the country.

Unit	Course Content
I	**Money: Basic Concepts:** • Money — Meaning, Functions and Classification; • The History of Money: Bartering to Bank notes • Measuring Money: M1, M2, M3, M4. Other Measures of Money Supply , Determinants of Money supply.
II	**Banking System.** • Banking System, Definition, Functions and Types of Banking System • Indian Banking system: Changing Role and Structure; • Nationalisation of Commercial Banks in India. Recent Reforms in Banking Sector in India
III	**Central Banking & Monetary Policy:** • Central Banking: Functions of a Central Bank; Quantitative and Qualitative Methods of Credit Control, Bank Rate Policy, Open Market Operations, Variable Reserve Ratio and Selective Methods; • Reserve Bank of India-Role & Functions • Current Monetary Policy of India. • RBI approach to money supply
IV	**Financial Markets:** • Structure of Financial Market in India; Primary and Secondary Martkets. Stock Market Stock Market and its Operations; • Stock Market Index, Methodologies for Calculating Stock Market Index, Stock Market indices in India, BSE Sensex, NSE Nifty.
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Geoffrey Crowther : *An Outline of Money*, Thomas Nelson & Sons,NY,1941
02	K.P.M. Sundaram : "*Money, Banking & International Trade*", Sultan Chand, 2010
03	L.V. Chandler: *An Introduction to Monetary Economics*, Manchester University Press
04	L.V. Chandler & S.M. Goldfield : *The Economics of Money and Banking*, Harper International Edition,197715
05	M.H. De Kock : *Central Banking*, Palgrave Macmillan; 4th edition, 1974
06	Misra & Puri : *Indian Economy* ,Himalaya Publisher, Delhi, Latest Edition
07	R.S. Sayers : *Modern Banking*,OUP,1938
08	Y.V. Reddy : *Monetary and Financial Sector Reforms in India*, UBSPD, New Delhi,2000

Note: all recent literatures and research papers on relevant topics can be used as supplement to the prescribed reading materials.

Semester: V **Course Type: DSC 6 Core**
Course Name: Public Finance **No. of Credits: 04**

Course Objectives:
This course gives an overview about government finance and expenditure and their instruments like taxation, Debt, Budget etc. It also discusses certain Indian Public Finance issues like tax reforms, fiscal federalism and centre state relation.

Course Outcomes:
- Students acquire knowledge related with basic public economic concepts like public good, merit good, structure of public expenditure, taxation, Debt, etc.
- Student able to understand the importance of public budget and its constituent elements
- This paper also help the students to get an insight into various Indian public finance related issues like fiscal federalism, centre state financial relation, tax reforms etc.

Unit	**Course Content**
I	**Introduction:** • Meaning and Scope of Public Finance, • Public Good and Private Good- • Pareto Efficiency, Equity and Social Welfare; • Market Failure and Role of Government • Externalities
II	**Public Revenue, Taxation &Expenditure:** • Sources of Public Revenue; Taxation – Meaning, Types and Canons of Taxation, Impact and Incidence of Taxes, Effects of Taxation, Characteristics of a Good Tax System, Optimal Tax and Excess Burden • Meaning, Classification and Principle of Public Expenditure Cannons and Effects of Public Expenditure on Production Employment and Distribution- Causes of Growth of Public Expenditure
III	**Public Budget & Debt** • Public Budget: Meaning, Need and Objectives of Budget, Kinds of Budget, Economic and Functional Classification of the Budget; Balanced and Unbalanced Budget; Balanced Budget Multiplier; Budget as an Instrument of Economic Policy • Meaning, Types and Sources of Public Debt- Burden of Public Debt and its Measurement, Effects of Public Debt, Public Debt Redemption Methods
IV	**Issues From Indian Public Finance:** • Working of Monetary and Fiscal Policies • Issues of India's Tax Systems • Analysis of Union Budget and Deficit financing • Fiscal Federalism and Centre State Financial Relation
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01.	Musgrave: *The Theory of Public Finance*, McGraw Hill, 2017
02.	Ghosh & Ghosh: *Economics of the Public Sector*, Prentice Hall, 2008.
03.	Allan, C.M.: *The Theory of Taxation*, Penguin, 1971.
04.	Atkinson, D. & Stiglitz, J.: *Public Economics*, McGraw Hill, 1980.
05.	Dalton, Hugh (1954): *Principles of Public Finance*, 4th edition, Routledge and Kegan Paul, London.
06.	Shankar Acharya: "*Thirty Years of tax reforms in India*" , Economic and Political Weekly, May 2015

Semester: V **Course Type: DSE 5**
Course Name: Mathematics for Economics **No. of Credits: 02**

Course Objectives:
The objective of this paper is to introduce the students with the mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics. This course will enable the students to apply mathematical techniques to economic theory in general.

Course outcomes:
- Able to understand the essence of Economic theories more clearly
- Capable to mathematical logic behind the economic theories
- Capable to apply mathematical techniques in applied economics

Unit	**Course Content**
Unit 1	Matrices, Exponential and Logarithmic Functions, Continuity and Differentiability, Application of Derivatives
Unit 2	Integration, Application of Integration, Vector Algebra, Linear Programming
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01.	Allen, R.G.D: Mathematical Analysis for Economists, Macmillan Press, London, 2000
02.	Chiang, A.C: Fundamental Methods of Mathematical Economics (4thEdition), McGraw Hill, New Delhi, 2005
03.	Simon C.P. & Blume la; Mathematics for Economists, Norton & Company, New York ,1994
04.	Sydsaeter K & Hammond P: Essential Mathematics for Economic Analysis (4edn) Pearson Education Ltd England ,2012

Semester: V **Course Type: DSE 5**
Course Name: Fundamentals of Health Economics **No. of Credits: 02**

Course Objectives:
Health economics is a dynamic field that lies at the intersection of economics and public health. This course offers an exciting exploration of the economic principles and theories applied to health and healthcare systems. Throughout this course, we will delve into various topics, including the demand and supply of healthcare, the role of health insurance and risk pooling, economic evaluation methods, efficiency and equity considerations, and the relationship between health and economic development.

Course Outcomes:
- Students able to comprehend importance of health in economic growth and analyse different economic theories and frameworks applied to healthcare
- Pupils understand the economic value of health and health care.
- Pupils comprehend economic dimensions like demand, supply and financing of health care
- Students are able to understand problems and prospects of health insurance

Unit	Course Content
I	**Introduction:** Introduction to Health Economics-meaning, scope and importance, Micro and Macro views of Health, Human Capital and Health; Economic theories and frameworks applied to healthcare- Grossman Model of Health Capital, Supplier-Induced Demand Theory, Information Asymmetry Theory, Principal-Agent Theory, Social Determinants of Health Theory, Demand-Side Moral Hazard Theory, etc; Demand and Supply of Healthcare- Determinants of healthcare demand, Analysis of healthcare supply and provider behaviour; Relationship between health and economic growth, Healthcare quality measures, and strategies for improving healthcare quality.
II	**Cost benefit analysis and Valuation of Health:** Efficiency and Equity in healthcare delivery, Introduction to cost-effectiveness analysis and cost-benefit analysis; Health policy interventions and their economic implications, Economic evaluation of healthcare interventions-Methods, tools, challenges and limitations; Economic determinants of health inequalities and disparities, Analysis of policies to address health disparities; Role of health insurance in healthcare access and utilization, Financing mechanisms and models in healthcare
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Baru, R.V. (1998), Private Health Care in India: Social Characteristics and Trends, Sage Publications, New Delhi.
02	Berman, P. and M.E. Khan (1993), Paying for India's Health Care, Sage Publications, New Delhi.
03	C. Phelps, Health Economics, Norton Publications, 2001
04	Drummond Et Al., Methods for the Economic Evaluation of Health Care Programmes, OUP, 1997.
05	Gold Et Al., Cost Effectiveness in Health and Medicine, Oup,1996
06	J. Newhouse and A, Culyer(Ed.) Hand Book in Health Economics, North-Holland, 2000
07	J. W .Henderson, & et a Health Economics and Policy, South Western, 2002
08	P. Zweifel and F. Breyer. Health Economics, OUP, 1997
09	Panchamukhi, P.R. (1980), Economics of Health: A Trend Report in ICSSR,A Survey of Research in Economics, Vol. VI, Infrastructure, Allied, Delhi.
10	S. Folland, C, Goodman and M. Stano, The Economics of Health and Health Care, Pearson, 3rd /4th Edition
11	World Bank (1993), The World Development Report, 1993: Investing in Health, Oxford University Press, New York

Semester: VI **Course Type: DSC 7 Core**
Course Name: Indian Economy **No. of Credits: 04**

Course Objectives: The objective of this Paper is to develop an understanding on the student about key features of the Indian economy, with a view to enable the students to make a critical view and analysis of the policies and problems in Indian economy. It also orient them by giving an insight into issues and challenges has been faced by the economy of Indian over years and its developmental efforts through the passage of time. All these comprehensions are necessary to infuse some depth knowledge about India's economic system in a holistic manner, as a sensible citizen of India, apart from the subject student belongs so that he can contribute to the nation's developmental processes positively. This course content will enable them to build critical evaluation of the problems discussed in this discourse.

Course Outcomes:
- Students enable to understand various features of Indian economy in detail
- It helps the students to develop comprehension on issues and challenges prevailed in India economy
- It helps to create critical evaluation among students about the problems and development issues of India
- It helps the students to understand importance of different sectors and their contributions to Indian economy.
- It creates and ability to suggest solutions and policy formulae for the development of Indian Economy

Unit	Course Content
I	**Structure of Indian Economy:** Growth and Development indicators; Sectoral contribution to GDP- Importance of Primary, Secondary and Tertiary sectors in Indian Economy;Informal and Formal Sectors; Economic reforms – Pre and Post reform issues; Brief appraisal of India's Five Year Plans, NITI Ayog.
II	**Problems of Indian Economy:** Regional disparity in income distribution- Extent of inequality, Causes of income inequality, policy measures to reduce income inequality; Poverty- absolute and relative poverty, Analysis of poverty in India- Poverty alleviation programmes; Unemployment–Nature, extent and types of unemployment in India; Policies on reducing Unemployment.
III	**Indian Agriculture and Industry:** Institutional and technological changes in Indian agriculture, Trends in agriculture production and productivity in major crops, New agriculture policy, Public distribution system (PDS), Food security and sustainable agriculture; Growth and pattern of industrialisation; New Industrial Policy, Linkage Between Economic Reforms and Economic Outcomes, Small-Scale Industry, SEZs, EPZs, Reasons for slow growth of Mechanised Production 16
IV	**Services and External sector:** Patterns of services growth, Types of services registering highest growth;Service Sector as Engine of Growth,Issues related with Services sector;Working of SEBI; FRBM Act; Trends in volume, direction, and composition of India's foreign trade; Role of FDI and MNCs; Back ground of economic reforms, Globalisation of Indian economy, WTO and its impact.
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Ahluwalia. I.J. and I.M.D Little, India's Economic Reforms and Development, (Essays in Honour of Manmohan Singh) Oxford University Press, New Delhi, 1999.
02	Arora R.C, Integrated Rural Development in India, S. Chand & Company limited, New Delhi, 1979.
03	Bardhan. P.K., the Political Economy of Development in India, 9th Edition, Oxford University Press, New Delhi, 1999.
04	Bawa. R.S. and P.S. Rainkhy, Structural Charges in Indian Economy, GurunanakDev University Press, Amritsar, 1993
05	Brahmananda, P.R. and V.R. Panchmukhi, Development Experience in Indian Economy, Interstate Perspectives, and Bookwell, Delhi, 2001.
06	Bhargawa, P.K, India's Fiscal Crises, Ashish Publishing House, New Delhi, 1991
07	ChandanaChakraborty, & C. Jayachandran. (2001). Software Sector: Trends and Constraints. Economic and Political Weekly, 36(34), 3255-3261. Retrieved from

	http://www.jstor.org/stable/4411028
08	Banerjee, N. (2004). Unravelling the Informal Sector. Labour, Capital and Society / Travail, Capital Et Société, 37(1/2), 28-45. Retrieved from http://www.jstor.org/stable/43158564
09	Datt and Mahajan. Indian Economy (72^{nd} ed), S.Chand Publication
10	Verma S., The Indian Economy, Unique Publisher
11	Kapila U.,Indian Economy(17th ed),Academic Foundation

Note: All recent literatures and research papers on relevant topics can be used as supplement to the prescribed reading materials.

Semester: VI **Course Type: DSC 8 Core**
Course Name: Rural Economics **No. of Credits: 04**

Course Objectives:
The objective of this paper is to provide students with core rural development insights impart analytical skills and develop students' capacities for Rural Development. This paper addresses key policy issues in rural development to familiarize the students with policy issues relevant to Indian economic system.

Course Outcomes:
On successful completion of the course, the student will be able to gain insight into the socio-economic structure of rural India .They will also understand the multi-dimensional problem and their solutions through the Govt.'s initiatives on Wage employment, self-employment and entrepreneurship development – special area development programs focusing on India's rural development.

<table>
<tr><th>Unit</th><th>Course Content</th></tr>
<tr><td>I</td><td>Rural Development: Concepts, Perspectives, and Approaches
Rural Development: Concept, Basic Elements, Scope, Importance, Nature and Problems of Rural Development,
Paradigms of Rural Development, Different Approaches to Rural Development: Indian Perspective, Gandhian Model of Rural Development</td></tr>
<tr><td>II</td><td>Drivers of Rural Development: Determinants, Agricultural Linkages, and Industrial Perspectives for Rural Transformation
Determinants of Rural Development- Natural Resources, Human Resources, capital Technology, Organisational and Institutional Framework, Relation between Rural Development and its Determinants.
Agriculture and Allied Sector Development, Role of Agriculture in Economic Development, Linkages between Agriculture & Non –Agriculture Sector, Rural Industrialization - Objectives, Characteristics,
Role of Rural industries in economic development, Need, Importance and problems of (a) Agro-based Industries (b) Small-scale and Cottage Industries.
Industrial Policies and Institutional Framework for Rural Industries, Rural Infrastructure Development,
Rural Marketing</td></tr>
<tr><td>III</td><td>Rural Empowerment: Strategies for Sustainable Development and Inclusive Growth
Equity, Growth and Target Oriented Rural Poverty Alleviation Programs
Rural Infrastructure for Socio-economic Development
Rural Livelihood Diversification- Rural Tourism for Sustainable Climate Change Adaptation and Resilience Building in Rural Communities
Education and Skill Development in Rural Communities
Digital Literacy and Connectivity in Rural India
Rural Healthcare Delivery Systems
Empowerment of Women in Rural India: Challenges and Strategies</td></tr>
<tr><td>IV</td><td>Rural Credit Systems: Structures, Sources, and Alleviating Rural Indebtedness
Rural Credit : Characteristics and Sources of Rural Credit
Reorganization of Rural Credit — Cooperatives, Commercial Banks, Regional Rural Banks; NABARD, PMJDY
Problem of Rural Indebtedness and its relief measures</td></tr>
<tr><td colspan="2">Examination and Evaluation Pattern: As per University Norms</td></tr>
<tr><td colspan="2">Text Books and References:</td></tr>
<tr><td colspan="2">Chambers, R. (1985). Rural Development: Putting the Last First. Longman.
Desai, V. (2020). Rural Development in India. Mumbai: Himalaya Publishing House.
Deshpande, R.S. (2010). Agricultural Development in India: A Regional Perspective. Oxford University Press.
Gulati, A., & Acharya, S.S. (2018). Indian Agricultural Policy at the Crossroads: Priorities and Agenda for Reform. Academic Foundation.
Gupta, R.K. (2004). Rural Development in India. New Delhi: Atlantic Publishers.
Pandit, V.N., & Saxena, R. (2014). Indian Agriculture: Performance, Growth, and</td></tr>
</table>

Challenges. Vikas Publishing House.

7. Radhakrishna, P.M., & Ramasamy, C. (2015). Indian Agricultural Economics. Oxford University Press.
8. Sharma, R.S., & Sharma, S. (2017). Agricultural Economics. Pragati Prakashan.
9. Singh, C.B., & Singh, R.K. (2012). Agricultural Economics. New Age International Publishers.
10. Singh, K. (2016). Rural Development. Sage Publications.

Journals:

1. B. Chatterjee, Rural Community Development In India / Le Developpement Des Communautes Rurales En Inde, Civilisations, Vol. 7, No. 2 (1957), pp. 187-19
2. B. J. Murton, Indigenous Regional Systems and Rural Development in Southern India,Geo Journal, Vol. 4, No. 1, South East Asia (1980), pp. 55-62Ashutosh Pandey, Gandhian Perspective of Rural Development, The Indian Journal of Political Science, Vol. 69, No. 1 (JAN. - MAR., 2008), pp. 141-148
3. B. M.,Painless Rural Development, Economic and Political Weekly, Vol. 19, No. 8 (Feb. 25, 1984), pp. 330-33
4. B. S. Baviskar,Cooperatives and Rural Development in India, Current Anthropology, Vol. 28, No. 4 (Aug. - Oct., 1987), pp. 564-565.
5. Behera M C, Globalising and Rural Development: Competing Paradigms and Emerging Realities, The Pakistan Development Review, Vol. 47, No. 1 (Spring 2008), pp. 115-117
6. Bhalla, G.S., & Singh, G. (2019). Impact of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on Rural Development in India. Journal of Rural Development, 38(2), 251-267.
7. Caroline Wesley, Children as Catalysts of Change: Children's Participation in Rural Development in In, Children's Environments, Vol. 12, No. 4 (December 1995), pp. 427-433
8. Mishra, P.K., & Choudhury, R.K. (2020). Role of Rural Development Programmes in Alleviating Poverty: A Study of Odisha. International Journal of Research in Social Sciences, 10(4), 121-136.
9. N. A. Mujumdar, Rural Development: New Perceptions ,Economic and Political Weekly, Vol. 37, No. 39 (Sep. 28 - Oct. 4, 2002), pp. 3983-3987
10. N. Kakwani, K. Subbarao, Rural Poverty and Its Alleviation in India**,** *Economic and Political Weekly*, Vol. 27, No. 18 (May 2, 1992), pp. 971-972 .
11. P. C. Randeria, Is Business Serious about Rural Development? Economic and Political Weekly, Vol. 15, No. 48 (Nov. 29, 1980), pp. M161-M16
12. Patel, H., & Mishra, S. (2017). A Review of Rural Development Programmes in India. International Journal of Management, Technology, and Social Sciences, 2(2), 19-25.
13. Rao, D.M., & Rao, K.V. (2021). Sustainable Rural Development: Issues and Challenges. Journal of Rural Studies, 78, 224-236.
14. Shishir Sharma, S. Chamala, Moneylender's Positive Image: Paradigms and Rural Development, Economic and Political Weekly, Vol. 38, No. 17 (Apr. 26 - May 2, 2003), pp. 1713-1720.
15. Singh, S., & Pathak, N. (2018). Role of Self-Help Groups in Rural Development: A Case Study of Uttar Pradesh. International Journal of Applied Research, 4(9), 88-92.
16. Suryakant Waghmore, Rural Development: Role of State, Economic and Political Weekly, Vol. 37, No. 29 (Jul. 20-26, 2002), pp. 3001-3003
17. UNDP India,Greening Rural Development in India, Volume I & II,2021 Barbara Harriss, The Role of Agro-Commercial Capital In Rural Development in South India, Social Scientist, Vol. 7, No. 7 (Feb., 1979), pp. 42-

Semester: VI **Course Type: DSE 6**
Course Name: Statistics for Economics **No. of Credits: 02**

Course Objectives:

This is a course on statistical methods for economics. It elaborates on methods of sampling and regression analysis that are fundamental to statistical analysis and inference. The course objective is to introduce the students with use of statistics in the tools used by the economists to explain economic theory.

Course Outcomes:

- Analyse and make inference about economic situations of an economy
- Understand of the economy with reference to economic fundamentals
- Make statistical analysis of the economic facts

Unit	**Course Content**
Unit 1	**Sampling:** Meaning of Sampling; Sample Size and Error of Margin; Types of Error, Sampling tests; t, F, Z, Chi Square; Difference between Sampling and probability distribution, Methods of Sampling: Probability and Non-Probability Sampling; Types of Probability Sampling and Non-Probability Sampling; Properties of Random Sampling
Unit 2	**Correlation and Regression:** Correlation: Meaning, Karl Pearson's Coefficient of Correlation, and Spearman's Rank Correlation. Regression: Meaning and Historical Origin; Modern Interpretation, use in Economics, Correlation VS Regression Simple Linear Regression Model: Two Variable Case Estimation of model by method of ordinary least squares; properties of estimators; goodness of fit; tests of hypotheses; scaling and units of measurement; confidence intervals; Gauss-Markov theorem; forecasting
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01.	Gupta, S.C. and V.K. Kapoor: Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi, 4th ed., 2014
02.	William G. Cochran: Sampling Techniques, John Wiley, 2007.
03.	Gujrati D: Basic Econometrics

Semester: VI **Course Type: DSE 6**
Course Name: Fundamentals of Islamic Banking **No. of Credits: 02**

Course Objectives:

The objective of this course is to provide a deeper understanding of Islamic banking and finance to the students. The course discusses the concepts of Islamic Banking and finance and prohibitions in-depth and also the application of these concepts in the real world of finance. The aim of this course is to develop analytical skills of the students so that they understand financial regulation and policies of Islamic as well as conventional banking systems.

Course Outcomes:
This course would enable the students to understand the range of Islamic financial instruments available for investors and corporations, current practices of Islamic banks, their relationship with non-financial corporations, merits and weaknesses of Islamic finance and the scope for co-operation between conventional and Islamic financial institutions.

Unit	Course Content
I	**Islamic Economic System and Islamic Banking** • Overview of Islamic banking principles and concepts • Islamic Economic System: Distribution of Wealth, Factors of Production in Socialist, Capitalist and Islamic Economic Systems • Islamic Perspective on *Riba* • Comparison between conventional banking and Islamic banking Historical Development of Islamic Banking
II	**Islamic Banking and Its Operations** 1. Outline of Conventional Banking System 2. Mode of Shari'ah Complaint Transactions & Type of Account 3. Islamic Law of Finance and Financing Techniques 4. Role of Religious Board in Islamic Banking 5. Co-Operations between Islamic Banking and Financial Institution. 6. Role of Islamic Bank in Economic Development 7. Conversion of Interest Based Banking to Islamic Interest-Free Banking: General Approach, Conversion On Liabilities Side/Asset Side , Related Issues Critical evaluation of challenges faced by the Islamic banking industry
Examination and Evaluation Pattern: As per University Norms	

Text Books and References:	
01.	Abu Umar Faruq Ahmad, Kabir M. Hassan, and Umar A. Oseni, Fundamentals of Islamic Banking and Finance ,2017
02	Brialle Kettle, Introduction to Islamic Finance, 2008
03	Briau Kettell, Introduction to Islamic Banking & Finance, Wiley Publication
04	Hans Visser,Islamic Finance ,Principles & Practice, Edward Elgar Publishing Ltd,2009
05	Hasan & Lewin Hand Book on Islamic Banking, Edward Elgar Publishing Limited,UK, 2007
06	Iqbal & David, Islamic Banking & Finance, Edward Elger, U.K
07	N. Schook, Islamic Banking & Finance, Spirams Press
08	Noureddine Krichene Islamic Captal Market,Theory & Practice, John Wiley & Sons,2012
09	Saeed, A., "Islamic Banking and Interest: A Study of the Prohibition of Riba and Its Contemporary Interpretation". Leiden, Netherlands, 1996
10	Sulaimau & Bashir, Islamic Banking & Finance IITT, Nigeria
11	Ashraf U. Kazi, Abdel K. Halabi,The Influence of Quran and Islamic Financial Transactions and Banking, *Arab Law Quarterly*, Vol. 20, No. 3 (2006), pp. 321-331

12	Bill Maurer, Anthropological and Accounting Knowledge in Islamic Banking and Finance: Rethinking Critical Accounts,*The Journal of the Royal Anthropological Institute*, Vol. 8, No. 4 (Dec., 2002), pp. 645-66
13	Jane Pollard, Michael Samers, Islamic Banking and Finance: Postcolonial Political Economy and the Decentring of Economic Geography,*Transactions of the Institute of British Geographers*, New Series, Vol. 32, No. 3 (Sep., 2007), pp. 313-330
14	MADIHA KHAN, Islamic Banking Practices: Islamic Law and Prohibition of Ribā, *Islamic Studies*, Vol. 50, No. 3/4 (Autumn - Winter 2011), pp. 413-422
15	Mahmood Yousefi, Ken McCormick, Sohrab Abizadeh, Islamic Banking and Friedman's Rule, *Review of Social Economy*, Vol. 53, No. 1 (SPRING 1995), pp. 65-87
16	Mohammad Afzal, Theory and Practice of Islamic Banking, *Pakistan Economic and Social Review*, Vol. 31, No. 2 (Winter 1993), pp. 102-117
17	Mohsin S. Khan, Islamic Interest-Free Banking: Reply to Doak, *Staff Papers (International Monetary Fund)*, Vol. 35, No. 3 (Sep., 1988), p. 537
18	Muhammad Anwar, Islamic Banking in Iran and Pakistan: A Comparative Study, *The Pakistan Development Review*, Vol. 31, No. 4, Papers and Proceedings PART II Eighth Annual General Meeting of the Pakistan Society of Development Economists Islamabad, January 7-9, 1992 (Winter 1992), pp. 1089-1097
19	Muhammad Tahir Mansoori, Is "Islamic Banking" Islamic? Analysis of Current Debate on Sharī'ah Legitimacy of Islamic Banking and Finance, *Islamic Studies*, Vol. 50, No. 3/4 (Autumn - Winter 2011), pp. 383-411
20	T. R. Bishnoi, Banking Regulations and Islamic Finance, *Economic and Political Weekly*, Vol. 25, No. 48/49 (Dec. 1-8, 1990), p. 2687
21.	Khan Javed Ahmed, Islamic Banking in India: Scope and Challenges, Institute of Objective Studies, New Delhi,2003
22.	Khan Javed Ahmed, Islamic Banking in India: Scope and Challenges, Institute of Objective Studies, New Delhi,2003
23.	Encyclopedia of Islamic Banking and Insurance, Institute of Islamic Banking and Insurance, London, 1995.
24.	Iqbal, Zamir & Mirakhor, Abbas, An Introduction to Islamic Finance Theory and Practice, Wiley & Son, Singapore, 2007.
25.	Bank Islam Malaysia Berhad, Kuala Lumpur, 1994.
26.	Kamal Khir, Gupta, Lokesh & Shanmugam, Bala, Islamic Banking: A Practical Perspective, Pearson Longman, Selangor, 2008

Semester: VII (Hons.) **Course Type: DSC 9 Core**
Course Name: History of Economic Thought-I **No. of Credits: 04**

Course Objectives: Contemporary economic science has evolved over many centuries. The evolution of economic ideas in each instance was as much a response to immediate economic problems and policy issues as much as it was a self-conscious attempt to refine earlier analysis by correcting mistakes and filling in the gaps in analysis. This course is a must to have a comprehensive understanding of present economics and how it came to be and what it is today.

Course Outcomes: Economic ideas did not evolve in isolation, but were an integral and important part of the evolution of modern social thought. Prevailing ideas of science, scientific rigour and measurement played a significant role in the shaping of economic science at each stage of its evolution. This course, tracing the history of economic thought, would enable the student to understand the evolving process of economic discipline.

Unit	Course Content
I	**Ancient and Medieval Economic Thought** • **Aristotle and Plato:** Concepts of wealth, value and private property (Aristotle's question of private vs. public property). • **Medieval Scholastics:** Thomas Aquinas and just price theory; evolution of economic thought through the Middle Ages. • **Mercantilism:** Main characteristics – emphasis on trade surplus, bullionism, and early state intervention. • **Physiocracy:** "Natural order" theory – land as sole source of wealth, laissez-faire policies (François Quesnay and the Tableau Économique).
II	**Mercantilist, Physiocratic, and Classical Economics** • **Mercantilist Examples:** Jean Bodin, Thomas Mun – monetary theories, colonial trade policies. • **Physiocratic Thought:** Taxation of land (single tax), ideas on free trade vs. agrarian economy. • **Adam Smith:** Division of labor, natural price and market, "invisible hand", value theory and distribution. • **David Ricardo:** Comparative advantage, labour theory of value, rents and distribution (stationary state). • **Thomas R. Malthus:** Theory of population, pressure of population on resources, and controversies (e.g. Malthus-Ricardo debates). • **J.S. Mill:** Synthesis of Classical ideas, views on utilitarianism and market economy
III	**Marxian Economics** • **Karl Marx:** Labour theory of value, surplus value, capitalist modes of production, theory of crisis and accumulation. • **Marxian Development:** Brief study of Marx's influence (Engels, Lenin; 20th-century Marxist economists). • **Critique of Capitalism:** Analysis of historical materialism and class struggle as presented by Marx
IV	**Islamic Economic Thought** • Contributions of Abu Yusuf, Al-Mawardi, Al-Ghazali, Ibn Taymiyyah, Ibn Khaldun (Ibn Khaldun's Muqaddimah and his advanced analysis of labour and supply). • Key concepts in early Islamic jurisprudence on commerce and property. • Ibn Khaldun's economic analysis (taxation, labour, and historical cycles). • Overview of later Islamic economic ideas (profit-sharing, welfare concepts, Zakat).
Examination and Evaluation Pattern: As per University Norms	
Text Books and References: • **Mark Blaug,** *Economic Theory in Retrospect* (5th Ed.), Cambridge University Press, 2016. • **Joseph A. Schumpeter,** *History of Economic Analysis*, Oxford University Press, 1954. • **Roger E. Backhouse & Bradley W. Bateman (eds.),** *Cambridge History of Economic Thought*, Cambridge University Press, 2021. • **Khurshid Ahmad,** *Introduction to Islamic Economics*, International Centre for Research in	

Islamic Economics, 1980.

- **Douglas North & Robert Thomas,** *The Rise of the Western World: A New Economic History*, Cambridge University Press, 1973.
- **Thomas K. McCraw (ed.),** *The Price of Freedom: A History of US Labor Markets*, Cambridge University Press, 2016.
- **The Elgar Companion to the History of Economic Thought**, Edward Elgar (latest edition).
- **Amitava Krishna Dutt,** *Indian Economic Thought: A 19th Century Perspective*, Oxford University

Semester: VII (Hons.) **Course Type: DSC 10 Core**
Course Name: Economics of Growth & Development **No. of Credits: 04**

Course Objectives & Outcomes

- Understand and distinguish economic growth vs. development
- Master key theoretical models and their real-world applications
- Analyze the roles of capital, technology, institutions, and human resources
- Critically evaluate public policy, planning mechanisms, and structural challenges
- Focus on sustainable and inclusive avenues of development.

Unit	Course Content
I	**Concepts & Measurement** • **Growth vs. Development**: Definitions, features of developing countries • **Classical & Modern Theories**: Adam Smith, Marx, Schumpeter • **Stages & Growth Models**: Rostow's stages; Harrod–Domar, Solow, Kaldor, Robinson, Meade • **Measurement Tools**: GDP/GNP, per-capita income, dev-gap
II	**Capital, Technology & Planning** • **Capital Formation**: Vicious cycle of poverty (Nurkse), accumulation measures • **Technology & Techniques**: Capital vs labor-intensive choice tests (Sen); Schumacher's intermediate technology; technology transfer • **Dual Economy & Development Strategies**: Lewis model, Rosenstein-Rodan's Big-Push, Leibenstein, Hirschman, Nurkse • **Planning Models**: Aggregate and sectoral methods – Mahalanobis, input–output, linear programming, optimization.
III	**Human Capital & Regional Development** • **Human Capital**: Concept, sources, HDI, role in growth • **Poverty & Inequality**: Lorenz curve, Gini coefficient; Poverty indicators – HPI, MPI, Happiness Index • **Regional Imbalances**: Causes, measuring imbalances, strategies to redress, regional planning methods • **Rural–Urban Migration**: Urbanization trends, demographic transition, Malthusian model
IV	**External & Inclusive Dimensions** • **International Economics**: Role of trade, aid, FDI/FII, multinationals in development • **Inclusive Development**: Gender and development; Food security; Education, health, nutrition • **Sustainability**: Sustainable development, Millennium Development Goals

Examination and Evaluation Pattern: As per University Norms

Suggested Reading List

Author(s) & Title	**Publisher**
Barro & Sala-i Martin, *Economic Growth*	MIT Press
Basu, *Analytical Development Economics*	OUP
Dasgupta, *Growth Theory*	OUP
Ghatak, *Intro to Development Economics*	Allen & Unwin
Hayami & Godo, *Development Economics*	OUP
Thirlwall, *Growth & Development*	Macmillan
Todaro & Smith,*Economic Development*	Pearson
Jhingan, *Economics of Development & Planning*	Vrinda

Semester: VII (Hons.)	**Course Type: DSE 7**
Course Name: Econometrics-I	**No. of Credits: 02**

Course Objectives:
This is a course on Econometrics-I. It gives an idea of basic theoretical foundations on regression analysis and its various assumptions. The course objective is to introduce the students with use of econometrics tools used by the economists to empirically test and verify the economic theories with real time data sets.

Course Outcomes:
After completion of the course, students will be able to

- understand the econometrics as a discipline distinct from mathematics and statistics
- understand the concepts of association among the variables and its application in economics
- apply econometrics tools to empirically test and verify the existing economic theories

Unit	Course Content
I	Meaning, definition, methodology of econometrics, data types, variables: Discrete random variables, expected value of random variables, function of discrete random variables, expected value rules, population variance of discrete random variables, Fixed and random components of a random variable, Continuous random variable, Population covariance, covariance and variance rules, probability density function of continuous random variable,
II	Regression Analysis, Assumption of Ordinary linear regression, BLUE properties of OLS, Hypothesis testing. Violations of Assumption, Detection and remedy of OLS assumptions: Heteroscedasticity, Autocorrelation and Multicollinearity problem, consequences and testing, omitted variable, errors in variable, multiple regression analysis
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01.	Christopher Dougherty. Introduction to Econometrics, 4th Editon.
02.	Asteriou, Dimitrios and Stephen Hall. Applied Econometrics: A Modern Approach Using Eviews and Microfit.
03.	Wooldridge, Jeffrey. Introductory Econometrics: A Modern Approach. Cengage Learning, 2012
04.	Das Panchana. Econometrics in Theory and Practice: Analysis of Cross Section, Time Series and Panel Data with Stata
05.	Koutsoyiannis, A. Theory of Econometrics. Palgrave Macmillan Limited, 2001
02.	Kleiber, C, and Achim Zeileis.Applied Econometric with R. Spinger

Semester: VII (Hons.) **Course Type: DSE 07**
Course Name: Economics of Discrimination **No. of Credits: 02**

Course Objectives

Students will:

- Understand key economic theories of discrimination, including Indian perspectives
- Analyze caste, gender, and religious disparities in labor markets, education, health, and wealth
- Explore empirical evidence and policy responses, with a focus on India
- Apply intersectional and comparative frameworks to assess economic exclusion

Unit	Course Content
I	**Theoretical Foundations and Mechanisms of Discrimination** **1.1 Economic Theories of Discrimination** • **Gary Becker**: Taste-based discrimination • **Kenneth Arrow**: Statistical discrimination • **Sukhadeo Thorat**: Caste-based exclusion in Indian labor markets • **Ashwini Deshpande**: Empirical approaches to caste and gender discrimination • **Intersectionality**: Crenshaw and Indian feminist economists **1.2 Labor Market Discrimination** • Wage gaps and occupational segregation • **Thorat's audit studies** on hiring bias against Dalits and Muslims • **NSSO & PLFS data** on employment disparities • Case: **Manual scavenging and informal labor exclusion** • Global comparison: Racial wage gaps in the U.S. and Europe **1.3 Education and Human Capital** • Discrimination in access and outcomes • **Thorat's work on educational exclusion** • Case: **Muslim girls and school dropout** • Global comparison: Indigenous education in Latin America **1.4 Health and Economic Inequality** • Disparities in health access and outcomes • **NFHS data** and caste-based health gaps • Case: **Maternal mortality among Dalit women** • Global comparison: Health discrimination in the U.S.
II	**Intersections, Empirical Evidence, and Policy Responses** **2.1 Intersectional Discrimination** • Gender × Caste × Religion × Region • Case: **Nomadic tribes and economic invisibility** • Comparative lens: Roma communities in Europe **2.2 Measuring Discrimination** • Audit studies, regression analysis, decomposition techniques • **Thorat's methodology in field experiments** • Use of **IHDS, NFHS, NSSO, SECC** datasets • MPI and Gender Inequality Index (GII) **2.3 Wealth, Credit, and Asset Access** • Discrimination in land and credit • **Thorat's analysis of housing and financial exclusion** • Case: **Gender budgeting and SC/ST Sub-Plan** • Global comparison: Redlining and housing discrimination **2.4 Policy and Legal Frameworks** • **Indian Constitution**: Articles 15, 16, 17 • **Reservation policies** and economic debates • **Thorat's policy recommendations** for inclusive growth • Global comparison: Affirmative action in South Africa and Brazil
Examination and Evaluation Pattern: As per University Norms	

Reading List

- Becker, Gary. *The Economics of Discrimination*. University of Chicago Press.
- Sen, Amartya. *Development as Freedom*. Oxford University Press.
- Deshpande, Ashwini. *Affirmative Action in India*. Oxford University Press.
- Thorat, Sukhadeo. *Dalits in India: Search for a Common Destiny*. Sage Publications.
- Thorat, Sukhadeo & Attewell, Paul. *The Legacy of Social Exclusion: A Correspondence Study of Job Discrimination in India*.
- Jodhka, Surinder. *Caste*. Oxford India Short Introductions.
- Sowell, Thomas. *Discrimination and Disparities*. Basic Books, 2018.
- Chetty, Raj et al. *Race and Economic Opportunity in the United States: An Intergenerational Perspective*. NBER Working Paper No. 24441.
- Bertrand, Marianne & Mullainathan, Sendhil. "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." *American Economic Review*, 2004.
- Darity Jr., William & Mason, Patrick L. "Evidence on Discrimination in Employment: Codes of Color, Codes of Gender." *Journal of Economic Perspectives*, 1998.

Semester: VIII (Hons.) **Course Type: DSC 11 Core**
Course Name: History of Economic Thought-II **No. of Credits: 04**

Course Objectives: Contemporary economic science has evolved over many centuries. The evolution of economic ideas in each instance was as much a response to immediate economic problems and policy issues as much as it was a self-conscious attempt to refine earlier analysis by correcting mistakes and filling in the gaps in analysis. This course is a must to have a comprehensive understanding of present economics and how it came to be and what it is today.

Course Outcomes: Economic ideas did not evolve in isolation, but were an integral and important part of the evolution of modern social thought. Prevailing ideas of science, scientific rigour and measurement played a significant role in the shaping of economic science at each stage of its evolution. This course, tracing the history of economic thought, would enable the student to understand the evolving process of economic discipline.

Unit	Course Content
I	**The Marginalist Revolution** • **Precursors to Marginalism:** Brief overview of Cournot, Thünen, Gossen. • **Jevons, Walras, Menger:** Introduction of marginal utility and marginal productivity; concept of equilibrium and methodological differences. • **Böhm-Bawerk, Wicksell, Fisher:** Refinements in capital theory, interest, and finance. • **Transition to Neoclassical School:** Marshall's role as synthesizer of classical and marginalist ideas (supply-demand diagram, ceteris paribus analysis).
II	**Neoclassical Economics (15 hours)** • **Alfred Marshall:** Laws of supply and demand, price determination, consumer/producer surplus, time element (short vs long run). • **Edgeworth, Pareto, and general equilibrium:** Walrasian equilibrium, Pareto efficiency, indifference curves. • **Neoclassical Distribution:** Marginal productivity theory of wages, rent, profit; micro-foundations of macroeconomics. • **Challenges and Extensions:** Welfare economics (Pigou), limitations of perfect competition; brief mention of alternative approaches (Walrasian vs Marshallian).
III	**Keynesian and Post-Keynesian Economics (15 hours)** • **John Maynard Keynes:** General Theory – effective demand, multiplier, liquidity preference, and short-run unemployment equilibrium. • **Neoclassical-Keynesian Debate:** The Cambridge controversies (Cambridge UK vs Cambridge US), IS-LM model as synthesis. • **Post-Keynesian School:** Michal Kalecki's profit theories, Joan Robinson's imperfect competition and growth theories, Nicholas Kaldor's distribution and growth. • **Later Developments:** Keynesianism vs Monetarism (Friedman), emergence of New Keynesian economics (price rigidity).
IV	**Indian Economic Thought and Contemporary Debates (15 hours)** • **Classical Indian Thought:** Principles from *Arthashastra* (Kautilya on state and market), *Tirukkural* (Thiruvalluvar on ethics of wealth). • **19th–Early 20th Century:** Dayanand Saraswati, Bankim Chandra (cultural economy), modernists like Naoroji (drain theory), Ranade, R.C. Dutt (colonial critique), Gokhale and J.K. Mehta. • **Nehruvian and Gandhian Economics:** Planned economy and industrialization (P.C. Mahalanobis), self-sufficient village economy and trusteeship (Gandhi). • **Post-Independence Thinkers:** B.R. Shenoy (free-market advocate), Amartya Sen (capability approach), contemporary planners (Ahluwalia). • **Contemporary Debates:** Globalization and development, inequality (Piketty, Stiglitz), ecological economics, behavioral economics, the future of capitalism
Examination and Evaluation Pattern: As per University Norms	
Text Books and References: • **Mark Blaug,** *Economic Theory in Retrospect* (5th Ed.), Cambridge University Press, 2016. • **Joseph A. Schumpeter,** *History of Economic Analysis*, Oxford University Press, 1954. • **Roger E. Backhouse & Bradley W. Bateman (eds.),** *Cambridge History of Economic Thought*, Cambridge University Press, 2021. • **Khurshid Ahmad,** *Introduction to Islamic Economics*, International Centre for Research in Islamic Economics, 1980.	

- **Douglas North & Robert Thomas,** *The Rise of the Western World: A New Economic History*, Cambridge University Press, 1973.
- **Thomas K. McCraw (ed.),** *The Price of Freedom: A History of US Labor Markets*, Cambridge University Press, 2016.
- **The Elgar Companion to the History of Economic Thought**, Edward Elgar (latest edition).
- **Amitava Krishna Dutt,** *Indian Economic Thought: A 19th Century Perspective*, Oxford University
- **Partha Dasgupta,** *Elements of a Theory of Economic Growth*, MIT Press, 2014.
- **Amit Bhaduri & Deepak Nayyar (eds.),** *The Intelligent Person's Guide to Liberalization*, Penguin India, 1996.
- **Pranab Bardhan,** *The Political Economy of Development in India*, Oxford University Press, 2019.
- **E. F. Schumacher,** *Small Is Beautiful: Economics as if People Mattered*, Vintage, 1973 (relevant for contemporary sustainability debate).
- **Joseph E. Stiglitz,** *Globalization and Its Discontents Revisited*, W.W. Norton, 2017.

Semester: VIII (Hons.) **Course Type: DSC 12 Core**
Course Name: International Economics **No. of Credits: 04**

Course Objectives:
This course introduces students to the core issues of international trade; it examines alternative trade theories, protectionism, trade restrictions. Trade policies, trade liberalization, free trade agreements. This course provides students with a basic knowledge of how international financial markets work. It also provides students with an understanding of exchange rates and why currency values fluctuate. Furthermore, the course is designed to acquaint the students with the changing role of financial markets in the process of growth and development.

Course Outcomes: Upon successful completion of this course students would be able to
- Understand the Concepts, issues and challenges International trade and Finance
- Know the importance of External sector in India's economic growth and development
- Application of International Economic Theory in the context of India
- Have exposure to Indian Economic Data and its critical analysis
- Issues and challenges of Bop in the context of India
- Understand and analyze different policy initiatives taken by the government and other institutions
- Understand how decisions and actions affect the economy locally, nationally and internationally.

Unit	**Course Content**
I	Theories of International Trade, Technology and factor endowments in explaining the emergence of trade, Concepts of terms of trade, their uses and limitations. Theory of Interventions (Tariffs, Quotas and non-tariff barriers); Economic effects of tariffs and quotas. Political economy of non tariff barriers, impact and welfare implications;
II	Balance of Payments Meaning and components of balance of payments; The process of adjustments, policies and direct controls for adjustment; Concept of Exchange rate, relative merits and demerits of fixed and flexible exchange rates in the context of growth and development in developing countries.
III	Emergence of trading blocs at the global level; Rationale and economic progress of SAARC/SAPTA and ASEAN regions. Theory of short-term capital movements and East-Asian Crisis and lessons for developing countries; International trade and financial institutions— Functions of GATT/WTO (TRIPS, TRIMS), UNCTAD, IMF, World Bank and Asian Development Bank — their achievements and failures; WTO and World Bank from the point of view of India.
IV	An overview of India's external sector, trends in India's BoPs, methods of financing foreign trade in India, role of foreign direct investment in India, importance of international finance to Indian economy. Problem of India's international debts, working and regulations of MNCs in India, instruments of export promotions and recent import and export policies and agenda for future.
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Bhagwati, Jagdish N.(1987) International Trade: Selected Readings. MIT Press.
02	Krugman, Paul R., Maurice Obstfeld, and Marc J. Melitz.(2012) International Economics: Theory and Policy. Pearson Addison-Wesley.
03	Sodersten, Bo, and Geoffrey Reed.(1999),International Economics.Macmillan.
04	Salvatore, Dminick.(2007),International Economics,8th ed. John Wiley & Sons.
05	Salvatore, Dminick.(2012), Introduction to International Economics, 3rd Edition, Wiley
06	Salvatore, Dminick.(2013), International Economics: Trade and Finance, 11th Edition, Wiley
07	Stern, R.M. (Ed.) International Trade and Finance, Cambridge University Press
08	Avadhani, V.A. International Finance: Theory and Practice, Himalaya Publishing House, Delhi
09	Apte, P.G.(1995) ,International Financial Management, Tata McGraw Hill, New Delhi, 1995.
10	Government of India, Economic Survey (various issues) Ministry of Finance
11	R.B.I. Reports on Currency and Finance (various issues).

Semester: VIII (Hons.) **Course Type: DSE 08**
Course Name: Fundamental of Environmental Economics **No. of Credits: 02**

Course Objectives:
This course aims to provide students with a foundational understanding of the relationship between the economy and the environment. It introduces key concepts such as Pigouvian Tax, Pareto Optimality, and the Environmental Kuznets Curve, emphasizing how economic tools can address environmental issues. The course examines major environmental problems like air, water, and noise pollution, and their impact on economic development. It also focuses on India's environmental policies and the role of pollution control boards. By the end of the course, students will be equipped to analyze environmental challenges through an economic lens and contribute to sustainable development solutions.

Course Outcomes:
By the end of this course, students will be able to:
1. Explain the fundamental principles and scope of environmental economics.
2. Analyze the interrelationship between economic development and environmental sustainability.
3. Interpret concepts such as Pigouvian tax, Pareto optimality, and the Environmental Kuznets Curve.
4. Identify major environmental problems and their economic implications.
5. Assess the effectiveness of environmental policies and regulatory institutions in India.
6. Understand the role of pollution control boards in environmental governance.

Unit	Course Content
I	**Introduction to Environmental Economics:** • Meaning of Environment and Environmental Economics, • Nature, significance and Scope of Environmental Economics, • Interlinkages between the economy and environment, • Concept of sustainable development, • Environmental Kuznet's Curve, • Pigouvian Tax, • Pareto optimality • Market Failure and Externalities (positive and negative)
II	**Environmental Problems and their Governance in India:** • Key Environmental Issues their causes, consequences and remedial measures • Air pollution, Water pollution, Noise Pollution, Land Pollution, • Effect of these problems on Economic Development, • Evolution of Environmental policies in India. • Pollution control boards and their function- • Central Pollution Control Board (CPCB), • State Pollution Control Boards (SPCBs), • Pollution Control Committees (PCCs)
Examination and Evaluation Pattern: As per University Norms	
Textbooks and References:	
01.	Bhattacharya, Rabindra N. *Environmental Economics: An Indian Perspective*. Oxford University Press, 2001.
02.	Field, Barry C., and Martha K. Field. *Environmental Economics: An Introduction*. 7th ed., McGraw-Hill Education, 2017.
03.	Hanley, Nick, Jason F. Shogren, and Ben White. *Environmental Economics in Theory and Practice*. 2nd ed., Palgrave Macmillan, 2013.
04.	Kolstad, Charles D. *Environmental Economics*. 2nd ed., Oxford University Press, 2010.
05.	Pearce, David W., and R. Kerry Turner. *Economics of Natural Resources and the Environment*. Harvester Wheatsheaf, 1990.
06.	Tietenberg, Tom, and Lynne Lewis. *Environmental Economics and Policy*. 7th ed., Pearson Education, 2018.
07.	Hussen, A.M. Principles of Environmental Economics, Routledge, London, 1999
08.	Karpagam M. Environmental Economics, Sterling publishers, New Delhi, 1993
09.	Bromely, D.W. (Ed.). Handbook of Environmental Economics, Blackwell, London, 1995

Semester: VIII (Hons.) **Course Type: DSE 08**
Course Name: Econometrics-II **No. of Credits: 02**

Course Objectives:
This course it gives an idea of advanced econometric theories and applications. The course objective is to introduce the students advanced version of the econometric theories in details and their application in economic research.

Course Outcomes:
After completion of the course, students will be able to

- understand and interpret the distributed lag models and simultaneous equations and their applications in economic research
- apply and interpret the dummy variable models
- understand the basics of time series and panel data econometrics and forecast real economic variables of interest.

Unit	Course Content
I	Distributive Lag Models, Simultaneous Equations Methods: meaning, and its application, The dummy variable for changes in intercept term, slope coefficient, dummy variable trap, dummy variables for testing in the regression coefficient
II	Time Series Analysis: Meaning, and application. AR, MR, ARIMA process, Unit root problem. Stationarity of time series. cointegration analysis. Vector Error Correction Model (VECM). Introduction of panel data analysis: Fixed effect and Random effect models. Hausman Test
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01.	Asteriou, Dimitrios and Stephen Hall. Applied Econometrics: A Modern Approach Using Eviews and Microfit.
02.	Das Panchana. Econometrics in Theory and Practice: Analysis of Cross Section, Time Series and Panel Data with Stata
03.	Gujarati, D. N. and Porter, D.C.(2009).Essentials of Econometrics, McGraw Hill, 4th edition, International Editio
	Wooldridge, Jeffrey. Introductory Econometrics: A Modern Approach. Cengage Learning, 2012
04.	Maddala, G.S. (2009). Introduction to Econometrics, John Wiley & Sons Ltd
05.	Kleiber, C, and Achim Zeileis.Applied Econometric with R. Spinger
06.	Walter Enders (2008), Applied Econometrics Time series, Wiley India
07.	Cowpertwait, P. S., & Metcalfe, A. V. (2009). *Introductory time series with R*. Springer Science & Business Media.
08.	Croissant, Y., & Millo, G. (2019). *Panel data econometrics with R*. Wiley.

Semester: VII (Research) Major-1 (Economics) **Course Type: DSC 09 Core**
Course Name: Research Methodology **No. of Credits: 04**

Course Objective:
This course is designed to provide a foundational understanding of empirical research in the field of Economics. It aims to introduce students to the philosophical and methodological underpinnings of applied economic research, equipping them with essential tools and techniques necessary for systematic inquiry. The course seeks to familiarize students with the research process, including the formulation of research questions, research designs, data collection methods, and the application of quantitative techniques. By the end of the course, students are expected to develop the competence to formulate a comprehensive research proposal encompassing an abstract, introduction, literature review, clearly defined research questions, ethical considerations, and an appropriate methodological framework for empirical investigation.

Course Outcomes:
This course will enable the students to understand fundamentals of applied economic research and its methodologies. After doing this course students will be able to select appropriate quantitative methodologies to conduct the study .This course will help them to identify appropriate research topics, select and define appropriate research problem and parameters, prepare a project proposal , organize and conduct research in a more appropriate manner and write a research report and thesis .This course will also familiarise them with basic approaches to qualitative research, case studies, in-depth interviews, focus group discussions. This course will also develop an understanding of the ethical dimensions of conducting research study in economics.

Unit	Course Content
I.	**Foundations of Economic Research Methodology** ● Foundation of Research: Meaning, Objectives, Motivation, Types, Approaches and Significance, ● Criteria of Good Research ● Research Methods vs. Research Methodology ● Overview of Research Process • Introduction to Quantitative & Qualitative Research
II.	**Problem Formulation and Research Design** • Defining the Research Problem: Meaning, Importance, and Techniques of Problem Identification • Selecting the Research Problem: Criteria and Relevance • Research Design: Meaning, Need, Features, Types, and Advantages • Sampling Design: Concept, Characteristics, Purpose, Steps, Criteria, Principles, and Types of Sampling
III.	**Data Collection and Survey Tools** • Sources of Data: Primary, Secondary, and Tertiary Sources • Methods of Data Collection: Observation, Interview, Questionnaire, Schedule, Case Study, and Other Methods
IV.	**Data Processing, Basic Analysis, and Report Writing** • Processing Data: Editing, Coding, Tabulation, Data Entry, Interpretation, and Diagrammatic Representation • Basic Statistical Analysis: Measures of Central Tendency (Mean, Median, Mode); Measures of Dispersion (Range, Interquartile Range, Mean Absolute Deviation, Standard Deviation); Measures of Asymmetry; Simple Regression and Multiple Correlation (Conceptual Overview) • Research Report Writing: Purpose, Types, Structure, Components, and Layout • Mechanics of Academic Writing and Precautions • Oral Presentation Techniques: Use of Visual Aids and Presentation Strategies • Publishing a Research Report: Understanding Impact Factor, Choosing the Right Journal, Ethical Considerations, Plagiarism, and Self-Plagiarism
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	

1. Ahuja Ram (2006) Research Methods, Rawat Publications, New Delhi
2. Alan Bryman, Emma Bell, Business Research Methods, 3/e, 2011, Oxford University Press

3.	C.R Kothari, (2006), Research Methodology 2/e, New Age International
4.	Kothari C.R. (2009), "Research Methodology- Methods and Techniques", New Age International Publishers, New Delhi
5.	Lipschultz, M.M. and S. Lipschultz (1982), Theory and Problems of Data Processing, Schum's Outline Series, McGraw Hill, New York
6.	Newman, W.L. (1991), Social Research Methods: Quantitative and Qualitative Approaches, Allen Bacon: London
7.	Raiyani J. R. (2012), "Research Methodology- Theory and Techniques", New Century Publications, New Delhi
8.	Rajaraman (2003), "Fundamentals of Computers", PHI Publication, New Delhi
9.	Rajaraman, V. (1996), Fundamentals of Computers, Prentice Hall of India, New Delhi
10.	Swain AKPC (2010),Research Methodology,Kalyani Publisher,New Delhi
11.	Verma R. K. & Verma G. (1989), "Research Methodology", Commonwealth Publishers, New Delhi
12.	Vijay Gupta, SPSS for Beginners, V. J. Books Inc., Canada
13.	Wilkinson, T. S. And Bhandarker, P. L., Methodology and Techniques of Social Research

Semester: VII (Research) Major-2 (Economics) **Course Type: DSC 09**
Course Name: Gender and Development **No. of Credits: 04**

Course Objectives

Course Outcomes

<table>
<tr><th>Unit</th><th>Course Content</th></tr>
<tr><td>I.</td><td>Foundations of Gender and Development
1.1 Introduction to Gender Theories
• Liberal, Radical, Socialist, Postcolonial, and Intersectional Feminism
• Gender vs. Sex: Conceptual Clarifications
1.2 Women's Role in Economic Development
• Historical and contemporary contributions
• Informal sector and unpaid labor
1.3 From Women to Gender:
• Conceptual Shifts in Development Discourse
• WID, WAD, GAD frameworks, Critiques and evolution
1.4 Contradictions in Feminist Approaches to Development
• Debates within feminist economics and development theory
• Global North vs. Global South perspectives
1.5 Contending Perspectives and Differing Voices
• Indigenous, Dalit, queer, and trans perspectives
• Grassroots vs. institutional narratives
1.6 Work, Gender Relations, and Globalization
• Gendered labor markets
• Migration, outsourcing, and care economies
1.7 Gender and Health
• Health Sector Reform, HIV/AIDS, and Intersectionality
• Reproductive rights and access
1.8 Gender and Education, Agriculture, and Environment
• Gender gaps in literacy and schooling
• Women’s roles in sustainable agriculture and climate resilience</td></tr>
<tr><td>II.</td><td>Gender Policy and Global Frameworks
2.1 Historical Perspectives on Gender Policy
• Colonial legacies and post-independence shifts
• Evolution of gender-sensitive governance
2.2 The Beijing Conference and South Asia
• Regional participation and outcomes
• Civil society engagement
2.3 Beijing Platform for Action: Issues and Expectations
• Critical areas of concern
• Monitoring and accountability mechanisms
2.4 Beijing +5, Beijing +10, and Beyond
• Progress, setbacks, and emerging challenges
• Role of UN Women and SDGs
2.5 Comparative Overview of Women’s Status in South Asia
• Country-level indicators and policy responses
• Regional cooperation and advocacy</td></tr>
<tr><td>III.</td><td>Dimensions of Gender Development
3.1 Evolution of the Concept of Gender Development
• Human Development Index (HDI) vs. Gender Development Index (GDI)
• Multidimensional Poverty Index (MPI) and gender
3.2 Demographic Imbalances and Gender
• Sex ratios, aging, and population policies
3.3 Gender Gaps in Education and Health
• Access, quality, and outcomes
• Intersectional disparities
3.4 Gender and Human Development</td></tr>
</table>

	• Capabilities approach (Amartya Sen, Naila Kabeer) • Empowerment metrics **3.5 Women in Decision-Making** • Political, economic, and social spheres • Barriers and enablers **3.6 Gender-Based Violence and Crime** • Female feticide, domestic violence, trafficking • Legal frameworks and justice systems **3.7 Political Participation of Women** • Representation, quotas, and leadership • Case studies from India and South Asia **3.8 Gender Discrimination in Land and Property Rights** • Legal, cultural, and economic dimensions • Policy reforms and grassroots resistance
IV.	**Social Change, Movements, and Technology** **4.1 Gender, Development, and Urban Social Change** • Urbanization, housing, and mobility • Gendered access to infrastructure **4.2 Women's Development and Inclusive Growth** • Role of SHGs, microfinance, and cooperatives • Inclusive policy design **4.3 Gender and People's Movements** • SEWA, Chipko, Narmada Bachao Andolan • Digital activism and youth-led movements **4.4 Gender, Empowerment, and Technology in India** • ICTs for development • E-governance, digital literacy, and online safety
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
Core Textbooks:	

Semester: VII (Research) Major-2 (Economics) **Course Type: DSC 10**
Course Name: Economics of Natural Resources **No. of Credits: 04**

Course Objectives:

This course aims to provide students with a foundational understanding of the economic dimensions of natural resources, including key concepts such as scarcity, sustainability, externalities, and resource classification. It explores the role of natural resources in economic development, examines challenges in the management of land, water, forest, and energy resources, and highlights the importance of efficient and equitable resource use. The course also introduces students to relevant theories and policy approaches, with a focus on sustainable development and environmental issues in the Indian context.

Course Outcome:

Upon successful completion of this course, students will be able to:

- Explain key concepts like scarcity, externalities, sustainability, and resource classification.
- Apply economic theories (e.g., Tragedy of the Commons, Coase Theorem) to real-world resource issues.
- Critically assess resource depletion, distribution, and management challenges.
- Analyse India's major environmental challenges and the policy frameworks aimed at sustainable development.
- Integrate economic reasoning into discussions on natural resource conservation and sustainable growth strategies.

Unit	Course Content
I	**Classification and Economic Aspects of Natural Resources:** • Meaning, Characteristics, and Classification of Resources: Renewable and Non-Renewable • Factors Influencing Availability, Distribution, and Use of Natural Resources • Natural Resources and Economic Development • Principles of Scarcity and Opportunity Cost in Resource Use • Efficiency and Equity in Resource Allocation • Resource Depletion and Technological Progress in Resource Management
II	**Fundamentals of Natural Resource Economics:** • Meaning, Nature, Objectives, and Importance of Natural Resource Economics • Basic Concepts: Resource Scarcity, Sustainability, Externalities, Common Property Resources • Interlinkages between Environment and Natural Resources • Economic Theories: Tragedy of the Commons, Coase Theorem
III	**Key Natural Resources:** • Land Resources: Land Use Patterns, classification of Land Soil Erosion, and Desertification • Forest Resources: Characteristics and Types of Forest resources, Economic Uses and Over-exploitation of Forest Resource • Water Resources: Surface and Groundwater Use, Overutilization, Conflicts Over Water • Energy Resources: Renewable and Non-Renewable Energy Sources, Growing Energy Needs, and Alternate Energy sources.
IV	**Sustainable Development and Environmental Challenges in India:** • Concept of Sustainability and Sustainable Use of Resource • Scope and Indicators of Sustainable Development • Measurement of Sustainable Development (including Green GDP) • Indian Perspective on Sustainable Development

	• Economic Growth and Environmental Degradation in India • Environmental Accounting and Green GDP • Mechanisms for Environmental Regulation in India; Environmental Laws and Their Implementation
Examination and Evaluation Pattern: As per University Norms	
Reading List:	
1.	Pearce, David W., and R. Kerry Turner. *Economics of natural resources and the environment*. Johns Hopkins University Press, 1989.
2.	Dhar, Pranab Kumar. *Indian Economy, Its Growing Dimensions*. Kalyani Publishers, 2000.
3.	Datt, Gaurav, and Ashwani Mahajan. *Indian economy*. S. Chana Publishing, 2017.
5.	Fisher, Anthony C. *Resource and environmental economics*. Cambridge University Press, 1981.
6.	Tietenberg, Tom, and Lynne Lewis. *Environmental and natural resource economics*. Routledge, 2023.
7.	Ahmed, M. Hussen. "Principles of Environmental Economics: Economics." *Ecology and Public Policy*.
8.	Bhattacharya, Rabindra N. Environmental Economics: An Indian Perspective. Oxford University Press, 2001.
9.	Field, Barry C., and Martha K. Field. *Environmental Economics: An Introduction*. 7th ed., McGraw-Hill Education, 2017.
10.	Hanley, Nick, Jason F. Shogren, and Ben White. *Environmental Economics in Theory and Practice*. 2nd ed., Palgrave Macmillan, 2013.
11.	Bromely, D.W. (Ed.) (1995), Handbook of Environmental Economics, Blackwell, London.

Semester: VII (Research) Major-2 (Economics) **Course Type: DSE**
Course Name: Health Economics **No. of Credits: 04**

Course Objectives:
This course is designed to develop an understanding about the relevance of economic concepts to the health care sector. More specifically to describe the system of health care financing and delivery arrangements in the health care sector and to impart an in depth understanding of the role of economic factors in the development of public policy are concerning health and health care sector.

Course Outcomes:
- Students able to understand measures of general health status
- Pupils understand the economic value of health and health care.
- Students are able to understand problems and prospects of health insurance
- Pupils comprehend economic dimensions like demand, supply and financing of health care

Unit	Course Content
I	**Introduction:** Introduction to Health Economics, Micro and Macro views of Health, Human Capital and Health, Economics Value and Demand for Health Care, Quality in Health Care, Measures of General Health Status.
II	**Cost and Valuation of Health:** Cost Analysis and Measuring Costs, Valuation of Quality of Life, Externalities in Health Care Markets, Assigning Monetary Values to Outcomes, Willingness to Pay Concept
III	**Health and insurance:** Health Insurance-Private and Public, Insurance Contacts, Optimal Insurance Coverage Informational Asymmetries in Health Insurance Markets, Free Rider Problem, Paying for National Health Insurance ,Competitive Market Model, Market Failures, Health Care Spending and Medical Care Reform, Public Policy in Medical Care Delivery.
IV	**Economic Dimensions of Health care:** Health dimensions of development; Determinants of health — poverty, malnutrition and environmental issues; Economic dimensions of health care — demand and supply of health care; Financing of health care and resource constraints;
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Baru, R.V. (1998), Private Health Care in India: Social Characteristics and Trends, Sage Publications, New Delhi.
02	Berman, P. and M.E. Khan (1993), Paying for India's Health Care, Sage Publications, New Delhi.
03	C. Phelps, Health Economics, Norton Publications, 2001
04	Drummond Et Al., Methods for the Economic Evaluation of Health Care Programmes, OUP, 1997.
05	Gold Et Al., Cost Effectiveness in Health and Medicine, Oup,1996
06	J. Newhouse and A, Culyer(Ed.) Hand Book in Health Economics, North-Holland, 2000
07	J. W .Henderson, Health Economics and Policy, South Western, 2002
08	P. Zweifel and F. Breyer. Health Economics, OUP, 1997
09	Panchamukhi, P.R. (1980), Economics of Health: A Trend Report in ICSSR,A Survey of Research in Economics, Vol. VI, Infrastructure, Allied, Delhi.
10	S. Folland, C, Goodman and M. Stano, The Economics of Health and Health Care, Pearson, 3rd /4th Edition
11	World Bank (1993), The World Development Report, 1993: Investing in Health, Oxford University Press, New York

Semester: VII (Research) Major-2 (Economics) **Course Type: DSE**
Course Name: Behavioural Economics **No. of Credits: 04**

Course Objectives:

This Course is designed to provide a fundamental understanding of Behavioural Economics. It draws upon the recent application of social psychology in the domain of Microeconomic and Macroeconomic decision making. This course also establishes the departures of human behaviour from the received economic behaviour.

Course Outcomes: Upon successful completion of this course students would be able to

- Establish differences in economic behaviour in the disciplines of neo-classical economics to the empirically tested and observed economic behaviour
- Identify the psychological foundations for economic decision making
- Identify the predictions of behavioural economic models

Unit	Course Content
I	Introduction Behavioural economics and the standard model, History and evolution of behavioural economics, Relationship with other disciplines, Objectives, scope and structure, Methodology
II	Social Preferences & Choice under Uncertainty Broadening rationality, Altruism, Fairness, Reciprocity, Social Image, Norms and Pressure Reference points, Prospect theory
III	Beliefs, Heuristics and Biases Self-Evaluation Bias, Projection Bias, Magical Beliefs, Causes of Irrationality: Emotional Distress, Memory, Cognitive Dissonance
IV	Behavioural Economics and Public Policy Psychology of Poverty, Poverty and Economic Decision Making, A case for Mindless Economics, Policy with Persuation
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
Essential Reference	
01	Klaes, Matthias, Wilkinson, Nick , An introduction to behavioral economics , Palgrave Macmillan (2012)
02	Edward Cartwright , Behavioral Economics, Routledge (2011)
Additional Reference	
03	Philip Corr, Anke Plagnol - Behavioral Economics - The Basics, Routledge_Taylor & Francis (2019)
04	Scott Huettel , Behavioral Economics- When Psychology and Economics Collide, The Teaching Company (2014)
05	Roger Frantz et al. (eds.) , Routledge Handbook of Behavioral Economics, Routledge (2016)

Semester: VIII (Research) Major-1 (Economics) **Course Type: DSC 10 Core**
Course Name: Computer Applications in Research **No. of Credits: 04**

Course Objectives:
The course aims to provide students with a comprehensive understanding of the role of computer applications in research. The course will equip students with essential tools for data collection, analysis, and presentation. It focuses on developing practical skills for using software and applications for statistical analysis, data visualization, literature review management, and academic writing. Students will also gain familiarity with essential research methodologies, tools for ethical research, and effective communication of research findings using digital platforms.

Learning Outcomes:
By the end of this course, students will be able to apply computer applications in various stages of research, such as data collection, analysis, and presentation. They will be proficient in using statistical and qualitative analysis software, data visualization tools, and reference management systems. Students will be able to produce well-organized research reports and presentations using computer-based tools and will have a clear understanding of ethical considerations and the use of technology in research.

Unit	**Course Content**
I	Introduction to research methodologies and the role of computers in research. Overview of research design and types of data (qualitative and quantitative). Basics of data collection tools, including surveys, questionnaires, and databases. Introduction to research software such as MS Excel for basic data analysis, Google Scholar, and academic databases for literature review.
II	Statistical data analysis using software tools. Introduction to STATA. Data management in STATA, Importing and exporting data, Descrptive statistics and Graphs and Charts. Introduction to advanced statistical methods such as ANOVA and Chi-square tests. Hands-on experience with software for data analysis and interpretation.
III	Introduction to SPSS and R. Basic concepts, Importance and understanding. Doing descriptive statistics. Correlation and Regression.
IV	Managing references and academic writing tools. Introduction to reference management software like Zotero, Mendeley, and EndNote. Citation styles: APA, MLA, and Chicago. Using these tools for managing references and creating bibliographies. Exploring writing and collaboration tools such as Google Docs, LaTeX, and Overleaf for academic writing. Techniques for writing research papers and articles with the help of grammar and plagiarism-checking tools.
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Stair, R. & Reynolds, G. (2012). *Fundamentals of Information Systems*. Cengage Learning6.
02	Northgate Academy. Introduction to Computer Applications4.
03	Sikkim University, Ph.D. Coursework Syllabus: Computer Applications7.
04	Additional readings and tutorials from software documentation (Microsoft Office, Zotero, SPSS, R, NVivo, etc.).

Semester: VIII (Research) Major-2 (Economics) **Course Type: DSC 11 Core**
Course Name: Urban Economics and Policy **No. of Credits: 04**

Unit	Course Content
I	**Introduction to Urban Economics and Urbanization:** Definition and scope of urban economics; theories of city formation (Central Place Theory, Monocentric/bid-rent model); agglomeration economies and externalities; urbanization trends globally and in; challenges of urban growth (congestion, pollution, slums etc).
II	**Land, Housing and Infrastructure:** Urban land and housing markets (bid-rent, density, zoning); land-use regulation and planning (master plans, development control); housing demand and supply, affordable housing, slum rehabilitation (e.g. Pradhan Mantri Awas Yojana – Urban); infrastructure and public utilities (transportation networks, water, sanitation, electricity); transport and mobility issues in; urban infrastructure programs (Smart Cities, AMRUT, metro projects).
III	**Urban Labour, Migration and Poverty:** Urban labor markets: formal vs informal sectors; patterns of rural–urban migration and linkages; urban unemployment and underemployment; urban poverty and inequality (spatial concentration in slums); livelihoods in informal city economies; policies for urban livelihoods (e.g. National Urban Livelihoods Mission).
IV	**Urban Governance and Policy:** Urban local governments in India (Municipal Corporations, Municipalities, Nagar Panchayats as per the 74th Constitutional Amendment); urban fiscal issues (property tax, municipal finance, state transfers); urban planning and land acquisition laws; major policy initiatives (Jawaharlal Nehru National Urban Renewal Mission, Smart Cities Mission, AMRUT); role of public–private partnerships and citizen participation; case studies of urban policy interventions (e.g. smart city projects, metro rail).
S. No.	**Reference**
1	Mohanty, P.K. (2014). *Cities and Public Policy: An Urban Agenda for India*. SAGE Publications.
2	O’Sullivan, A. (2011). *Urban Economics*, 8th ed., McGraw-Hill.
3	MoHUA (2016). *National Urban Policy Framework*. Government of India.
4	World Bank (2015). *Leveraging Urbanization in South Asia*.
5	Ahluwalia, I.J. et al. (2014). *Urbanisation in India*. SAGE Publications.
6	UN-Habitat (2020). *World Cities Report: The Value of Sustainable Urbanization*.
7	Jain, G. & Anand, A. (2021). *Urban Mobility in India*. Centre for Policy Research (CPR).

Semester: VIII (Research) Major-2 (Economics) **Course Type: DSE**
Course Name: Socio-Economic Exclusion and Inclusive Policies **No. of Credits: 04**

Course Objectives:
This course aims to provide students with a theoretical and empirical understanding of socio-economic exclusion and the policy frameworks designed to promote inclusion, with a specific focus on India. It explores historical antecedents, conceptual frameworks, sectoral exclusions, and state interventions to address systemic inequalities.

Course Outcomes:
This course, tracing the history of socio-economic exclusion, would enable the students to understand the evolving processes of exclusion and inclusion in the society. They would also learn to identify the ways and means of inclusion to minimize the existing socio- economic inequalities in the society.

Unit	Course Content
I	**Perspective on Socio-economic Exclusion and Inclusion** Concept, Scope, Nature, Forms, Features and Factors responsible for Socio-economic Exclusion. Strength and limitations of Social Exclusion.
II	**Theoretical Debates on Socio-Economic Exclusion** Paradigms of Social Exclusion-Hillary Silver, Current Debates on Social Exclusion -Human Rights Approach-Ruth Levitas**,** Capability Approach-Amartaya Kumar Sen,Comparative Analysis of Exclusion in Developed and Developing Societies
III	**Sectoral and Group-Based Exclusion in India** • Overview of Excluded Groups in India: Social and Sectoral Dimensions • Gender and Socio-Economic Exclusion: Feminisation of Poverty • Minority Exclusion: Indian Muslims and Insights from the Sachar Committee Report • Socio-Economic Exclusion of Dalits, Scheduled Tribes, Other Backward Classes • Exclusion of Persons with Disabilities and Intersectional Disadvantages
IV	**Inclusive Policies and Institutional Interventions in India** • Overview of Social Safety Nets • Prime Minister’s Fifteen Point Programme for Minorities • Human Development Goals and the Sustainable Development Goals • Poverty Alleviation Schemes: MGNREGA, NRLM, PDS, Mid-Day Meal Scheme • Statutory Social Security Measures and Affirmative Action • Critical Evaluation of Policy Impact and Implementation Gaps
Examination and Evaluation Pattern: As per University Norms	
Text Books and References:	
01	Amartya Sen,Social Exclusion: Concept, Application, And Scrutiny, Social Development Papers No. 1 Office of Environment and Social Development Asian Development Bank June, 2000
02	Bryne, David, Social Exclusion, London: Open University Press, 2006
03	De Haan, Arjan, Social Exclusion: Towards A Holistic Understanding of Deprivation, London: Department for International Development, 1999
04	Dev mahindra S (2015) Inclusive Growth in India, Oxford University Press, New Delhi
05	Dev,M S,Inclusive Growth in India,Oxford University Press,Nedelhi,2015
06	Dreze, Jean and Amartya Sen, Eds., India: Economic Development and Social Opportunities, New Delhi: Oxford University Press, 1995
07	Jehangir, Jawaid and Shankar Bose, Eds., Minorities of India, Problems and Prospects, New Delhi, Manak Publications, 2007
08	Kabeer, N., 'Social Exclusion, Poverty and Discrimination: Towards an Analytical Framework', IDS Bulletin, 31: 4, Institute of Development Studies, Brighton, 2000
09	Karat Brinda,Survival and Emancipation,Three Essays Collective,Gurgaon,Haryana,2005
10	Kothari, Rajni ,Social Exclusion : Historical, Institutional and Ideological Dimensions. In Social Exclusion: Essays in Honour of Dr. Bindeswar Pathak (A.K. Lal ed.), Concept Publishing Company New Delhi, 2003
11	Lal, A.K., Ed., Social Exclusion: Essays in Honour of Dr. Bindeshwar Pathak, Delhi: Concept, 2003
12	Polly V ,Introduction: The Capability Approach and Human Rights, Journal of Human Development and Capabilities ,A Multi-Disciplinary Journal for People-Cantered Development ,Volume 12, - Issue 1: On Human Rights and Capabilities,2011
13	Praful Bidwai, Combating Muslim Exclusion, Frontline, Volume 23 - Issue 23 :: Nov. 18-Dec. 01, 2006

14	Prasad, R.R. Social Exclusion: Concept, Meaning and Scope. Ideological Dimensions. In Social Exclusion: Essays in Honour of Dr. Bindeswar Pathak , Concept Publishing Company, New Delhi, 2003
15	Siddiqui, Farida "Social Exclusion of Indian Muslims and Constitutional Provisions for their Inclusion", Journal of Social Exclusion Studies, New Delhi Volume 4, No.1, February 2014
16	Silver, Hilary,"Social Exclusion and Social Solidarity: Three Paradigms", International Labour Organisation, 1994
17	Wadhwa, K.L., Minority Safeguards in India, New Delhi: Thomson Press, 1975
18	Whitekar, Ben, Ed., Minorities-A Question of Human Rights?, Oxford: Pergamon Press, 1984
19	Yadav, Sushma and Anil Dutta Mishra, Gender Issues in India: Some Reflections, New Delhi, Radha, 2003

1. Sen, A. (2000). *Social Exclusion: Concept, Application and Scrutiny*. Asian Development Bank.
2. Thorat, S., & Newman, K. S. (2010). *Blocked by Caste: Economic Discrimination in Modern India*. Oxford University Press.
3. Kabeer, N. (2000). *Social Exclusion, Poverty and Discrimination: Towards an Analytical Framework*. IDS Bulletin.
4. Government of India. (2006). *Sachar Committee Report*. Ministry of Minority Affairs.
5. Deshpande, S. (2011). *Contemporary India: A Sociological View*. Penguin.
6. India Exclusion Report (Various Years). *Centre for Equity Studies*.
7. UNDP. (2010). *Human Development Report: The Real Wealth of Nations*.
8. Rawal, V. (2008). *Social Exclusion and Discrimination: Concept, Measurement and Application*.

Semester: VIII (Research) Major-2 (Economics) **Course Type: DSE**
Course Name: Economic Development and Policy in India **No. of Credits: 04**

Course Objective

To delve deeper into India's post-Independence economic trajectory, with emphasis on sectoral performance, structural shifts, policy frameworks, and institutional dynamics.

Course Outcomes

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

1. Analyze sector-specific growth performances and policy impacts in agriculture, industry, finance, and external trade.
2. Critically evaluate India's economic reforms since 1991 on macro variables, poverty, and inequality.
3. Understand the interplay between institutions, governance, planning bodies, and environmental sustainability.
4. Apply relevant economic theories and policy frameworks to contemporary Indian economic challenges.

<table>
<tr><th>Unit</th><th>Course Content</th></tr>
<tr><td>I</td><td>Agriculture & Industry: Policies & Performance
• Role and significance of agriculture in India's economy
• Pre- and post-Green Revolution trends
• Institutional support: credit, pricing, MSP, food security & public distribution
• Land reforms and regional variations
• Patterns of industrial growth across policy regimes
• Small-scale industries: role, challenges, and reforms
• Public sector's historical role and post-1991 reform path</td></tr>
<tr><td>II</td><td>Services, Foreign Trade & External Sector
• Growth of services and foreign capital in industry
• Trends in trade, BOP, and exchange rate regimes
• Trade policy evolution: ISI to liberalization
• India's stance in global trade institutions like WTO
• FDI flows, export promotion, adjustment policies</td></tr>
<tr><td>III</td><td>Macro issues, Growth, Distribution & Human Development
• Inflation dynamics: measurement, causes, and social cost
• Unemployment: types (frictional, structural), natural rate concepts
• Labor market issues: Phillips curve, sacrifice ratio, expectations
• Structural change: sectoral shifts, urban–rural disparities
• Poverty, inequality (Gini, Lorenz), and their trends
• Human development indices, demographic challenges</td></tr>
<tr><td>IV</td><td>Planning, Institutions & Environmental Issues
• Evolution of planning: Five-Year Plans → NITI Aayog
• Institutional framework: land ownership, public institutions, governance
• Economic-environment linkages: pollution, sustainability, climate issues</td></tr>
<tr><td colspan="2">Examination and Evaluation Pattern: As per University Norms</td></tr>
<tr><td colspan="2">Recommended Readings</td></tr>
<tr><td>01</td><td>Mishra & Puri – Indian Economy</td></tr>
<tr><td>02</td><td>Dutt & Sundaram – Indian Economy</td></tr>
<tr><td>03</td><td>Uma Kapila (ed.) – Indian Economy since Independence</td></tr>
<tr><td>04</td><td>IC Dhingra – Indian Economy</td></tr>
<tr><td>05</td><td>Bhagwati & Desai – India: Planning for Industrialization</td></tr>
<tr><td>06</td><td>Ahluwalia (ed., 2002) – State-Level Performance under Economic Reforms</td></tr>
<tr><td>07</td><td>Dreze & Sen – Economic Development & Social Opportunity</td></tr>
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