

Semester wise Detailed Structure 4YUG Programme DUAL Major -2024-25 (approved by 10th BoS held on 13.02.2024).

Name of the Department: **Economics**

Major: Economics

Semester: I					
S. No.	Course Type	Course Name	No. of Credits	Theory	Practicum
01.	DSC 1 Core	Microeconomics-I	4	3	1
02.	DSE 1 (Elective/Optional)	Indian Economic History (Mughal and British Period) Islamic Economics	2	1	1
03.	SEC 1	Data Visualization using Microsoft Excel	2	0	2
04	GE 1	An Introduction to the Microsoft Excel	2	1	1
05.	VAC1	Environmental Education /Environmental Science	2	1	1
Semester: II					
01.	DSC 2 Core	Macroeconomics-I	4	3	1
02.	DSE 2 (Elective/Optional)	Demography Fundamentals of Labour Economics	2	1	1
03.	SEC 2	Data Analysis using Microsoft Excel	2	0	2
04.	GE 2	Fundamentals of Data Analysis and Visualization in Microsoft Excel	2	1	1
05.	VAC2	Gender Studies Health Wellness, Yoga Education Sports & Fitness	2	1	1
Semester: III					
01.	DSC 3 Core	Microeconomics-II	4	3	1
02.	DSE 3 (Elective/Optional)	Basic Mathematics Fundamentals of Industrial Economics	2	1	1
03.	SEC 2	Data Analysis using Microsoft Excel	2	0	2
04.	GE 3	Basics of Data Management and Data Visualization in Microsoft Excel	2	1	1
05.	VAC 3	Understanding India Human Value and Professional Ethics Cyber Security	2	1	1
Semester: IV					
01.	DSC 4 Core	Macroeconomics-II	4	3	1
02.	DSE 4 (Elective/Optional)	Basic statistics Fundamentals of Economics of Education	2	1	1
03.	SEC 2	Data Analysis using Microsoft Excel	2	0	2
04.	GE 4	Microsoft Excel: Formulas, Functions, and Visualization	2	1	1
Semester: V					
01.	DSC 5 & 6 Core	Money and Banking Public Finance	4 4	3 3	1 1
02.	DSE 5 (Elective/Optional)	Mathematics for Economics Fundamentals of Health Economics	2	1	1
Semester: VI					
01.	DSC 7 &8 Core	Indian Economy Rural Economics	4 4	3 3	1 1
02.	DSE 6 (Elective/Optional)	Statistics for Economics Fundamentals of Islamic Banking	2	1	1

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.: <i>Modern Microeconomics</i> , Dominant Publishers, New Delhi, 2001
2.	Ferguson and Gould: <i>Micro Economics</i> , AITBS Publishers, New Delhi, 6 th Edition, 2000
3.	George J .Stigler: <i>The Theory of Price</i> , Prentice Hall College Div. Publication, 4 th Ed., 1987
4.	Gravelle and Rees: <i>Microeconomics</i> ; Pearson India, 3 rd Edition, 2007
5.	Joseph Stiglitz: <i>Economics</i> ,4 th Edition, W W Norton & Co. Publisher, 1998
6.	Pindyck, Rubinfeld and Mehta: <i>Microeconomics</i> , Pearson, 7 th Edition, 2009

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

Semester: I

Course Name: Indian Economic History (Mughal and British Period)

Course Type: DSE 1

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.

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, <i>Maqasid – e – Shariat</i> , 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 ابوالاعلیٰ 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

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.

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; Keynes'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): <i>Macroeconomics: Theory and Policy</i> , Macmillan Publishing Company, New York.
2.	Day, A.C.L. (1960): <i>Outline of Monetary Economics</i> , Oxford University Press, Oxford.
3.	Gupta, S.B. (1994): <i>Monetary Economics</i> , S. Chand and Co., Delhi.
5.	Lewis, M.K. and P.D. Mizan (2000): <i>Monetary Economics</i> , Oxford University Press, New Delhi.
6.	Shapiro, E. (1996): <i>Macroeconomic Analysis</i> , Galgotia Publications, New Delhi
7.	Sikdar, Shoumyen (2011): <i>Principles of Macroeconomics</i> , 2 nd Edition, Oxford University Press, India
8.	Case, Karl E. & Ray C. Fair: <i>Principles of Economics</i> , Pearson Education, Inc., 8th edition, 2007.

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.

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.

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.

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). <i>Excel 2019 Bible</i> . Wiley.
2.	Winston, W. L. (2019). <i>Microsoft Excel Data Analysis and Business Modeling</i> . Microsoft Press.
3.	Harvey, G. (2019). <i>Excel 2019 All-in-One For Dummies</i> . For Dummies.

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.: <i>Modern Microeconomics</i> , Dominant Publishers, New Delhi, 2001
2.	Ferguson and Gould: <i>Micro Economics</i> , AITBS Publishers, New Delhi, 6th Edition, 2000
4.	George J .Stigler: <i>The Theory of Price</i> , Prentice Hall College Div. Publication, 4 th Ed., 1987
5.	Gravelle and Rees: <i>Microeconomics</i> ; Pearson India, 3rd Edition, 2007
6.	Joseph Stiglitz: <i>Economics</i> ,4 th Edition, W W Norton & Co. Publisher, 1998
7.	Pindyck, Rubinfeld and Mehta: <i>Microeconomics</i> , Pearson, 7th Edition, 2009
8.	Salvator : <i>Micro Economics- Theory and Applications</i> , Oxford University Press, 2008
9.	Stonier & Hague: <i>A Text Book of Economic Theory</i> , Yogyakarta :Dwitungga,1989
10.	Varian H.R: <i>Intermediate Microeconomics</i> , Affiliated East- West Press Pvt. Ltd.,7 th Edition, 2006
11.	Walter Nicholson: <i>Microeconomic Theory</i> , South-Western Publication., 2001
12.	Case, Karl E. & Ray C. Fair: <i>Principles of Economics</i> , Pearson Education, Inc., 8 th edition, 2007

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

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 contributions 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 Delhi 1992
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.

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.

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). <i>Excel 2016 All-in-One For Dummies</i> . For Dummies.
2.	Provost, F., & Fawcett, T. (2013). <i>Data Science for Business</i> . O'Reilly Media.
3.	Collie, R., & Singh, A. (2015). <i>Power Pivot and Power BI: The Excel User's Guide to DAX, Power Query, Power BI & Power Pivot in Excel 2010-2016</i> . Holy Macro! Books
4.	Alexander, M., & Walkenbach, J. (2013). <i>Excel Dashboards and Reports</i> . Wiley.

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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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: <i>Post Keynesian Macroeconomic Theory</i> , Second Edition, 2011.
2.	Dornbusch, Rudiger, Fisher, Stanley and Startz, Richard (2018): <i>Macroeconomics</i> , 12/E. Tata McGraw-Hill Education
3.	Heijdra, Ben J (2015).: <i>Foundations of Modern Macroeconomics</i> . OUP Oxford
4.	Jha, Raghendra (2019): <i>Contemporary Macroeconomic Theory and Policy</i> . New Age International Pvt Ltd.
5.	Krugman, Paul, and Robin Wells (2018): <i>Macroeconomics</i> . Worth Publishers
6.	Gupta, S.B (2010): <i>Monetary Economics</i> , S. Chand and Co., Delhi.
7.	Lewis, M.K. and P.D. Mizan (2000): <i>Monetary Economics</i> , Oxford University Press, New Delhi.
8.	Shapiro, E (2013): <i>Macroeconomic Analysis</i> , Galgotia Publications, New Delhi

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

Unit	Course Content
I	Introduction: <ul style="list-style-type: none">• Basic Concepts: Population, Sample, Parameter, Frequency Distribution, Cumulative Frequency;• Data: Types of Economic Data; Structure of Economic Data Descriptive Statistics: <ul style="list-style-type: none">• Measures of Central Tendency; Mean, Median, Mode; Measures of Dispersion; Absolute and Relative Measures
II	Elementary Probability Theory: <ul style="list-style-type: none">• Sample Spaces and Events; Probability Axioms and Properties; Probability of a Single Event; Probability of Multiple Events Probability Distributions: <ul style="list-style-type: none">• Discrete Probability Distribution: The Binomial Distribution; The Poisson Distribution; Continuous Probability Distribution: The Normal Distribution
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

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.

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.

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). <i>Power Pivot and Power BI: The Excel User's Guide to DAX, Power Query, Power BI & Power Pivot in Excel 2010-2016</i> . Holy Macro! Books.
2.	Winston, W. L. (2019). <i>Microsoft Excel Data Analysis and Business Modeling</i> . Microsoft Press.
3.	Hennig, T., Jelen, B., & others. (2016). <i>Excel Charts and Graphs: Master Data Visualization in Excel</i> . Que Publishing.
4.	Provost, F., & Fawcett, T. (2013). <i>Data Science for Business</i> . O'Reilly Media. Alexander, M., & Kusleika, R. (2019). <i>Excel 2019 Power Programming with VBA</i> . Wiley.
5.	Alexander, M., & Walkenbach, J. (2013). <i>Excel Dashboards and Reports</i> . Wiley.

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: <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Structure of Financial Market in India; Primary and Secondary Markets. • 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 : <i>An Outline of Money</i> , Thomas Nelson & Sons, NY, 1941
02	K.P.M. Sundaram : " <i>Money, Banking & International Trade</i> ", Sultan Chand, 2010
03	L.V. Chandler: <i>An Introduction to Monetary Economics</i> , Manchester University Press
04	L.V. Chandler & S.M. Goldfield : <i>The Economics of Money and Banking</i> , Harper International Edition, 1977
05	M.H. De Kock : <i>Central Banking</i> , Palgrave Macmillan; 4th edition, 1974
06	Misra & Puri : <i>Indian Economy</i> ,Himalaya Publisher, Delhi, Latest Edition
07	R.S. Sayers : <i>Modern Banking</i> , OUP, 1938
08	Y.V. Reddy : <i>Monetary and Financial Sector Reforms in India</i> , UBSPD, New Delhi, 2000

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

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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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 Canons and Effects of Public Expenditure on Production Employment and Distribution- Causes of Growth of Public Expenditure
III	Public Budget & Debt <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <i>The Theory of Public Finance</i> , McGraw Hill, 2017
02.	Ghosh & Ghosh: <i>Economics of the Public Sector</i> , Prentice Hall, 2008.
03.	Allan, C.M.: <i>The Theory of Taxation</i> , Penguin, 1971.
04.	Atkinson, D. & Stiglitz, J.: <i>Public Economics</i> , McGraw Hill, 1980.
05.	Dalton, Hugh (1954): <i>Principles of Public Finance</i> , 4th edition, Routledge and Kegan Paul, London.
06.	Shankar Acharya: "Thirty Years of tax reforms in India" , Economic and Political Weekly, May 2015

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 Ia; Mathematics for Economists, Norton & Company, New York ,1994
04.	Sydsaeter K & Hammond P: Essential Mathematics for Economic Analysis (4edn) Pearson Education Ltd England ,2012

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	<p>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.</p>
II	<p>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</p>
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

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, 9 th 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.

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.

Unit	Course Content
I	<p>Rural Development: Concepts, Perspectives, and Approaches</p> <ul style="list-style-type: none"> • 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
II	<p>Drivers of Rural Development: Determinants, Agricultural Linkages, and Industrial Perspectives for Rural Transformation</p> <ul style="list-style-type: none"> • 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
III	<p>Rural Empowerment: Strategies for Sustainable Development and Inclusive Growth</p> <ul style="list-style-type: none"> • 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
IV	<p>Rural Credit Systems: Structures, Sources, and Alleviating Rural Indebtedness</p> <ul style="list-style-type: none"> • 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

Examination and Evaluation Pattern: As per University Norms

Text Books and References:

1. Chambers, R. (1985). Rural Development: Putting the Last First. Longman.
2. Desai, V. (2020). Rural Development in India. Mumbai: Himalaya Publishing House.
3. Deshpande, R.S. (2010). Agricultural Development in India: A Regional Perspective. Oxford University Press.
4. Gulati, A., & Acharya, S.S. (2018). Indian Agricultural Policy at the Crossroads: Priorities and Agenda for Reform. Academic Foundation.
5. Gupta, R.K. (2004). Rural Development in India. New Delhi: Atlantic Publishers.
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Journals:

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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

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	<p>Islamic Economic System and Islamic Banking</p> <ul style="list-style-type: none"> • 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 <i>Riba</i> • Comparison between conventional banking and Islamic banking <p>Historical Development of Islamic Banking</p>
II	<p>Islamic Banking and Its Operations</p> <ol style="list-style-type: none"> 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 <p>Critical evaluation of challenges faced by the Islamic banking industry</p>
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 Capital 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
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12	Bill Maurer, Anthropological and Accounting Knowledge in Islamic Banking and Finance: Rethinking Critical Accounts, <i>The Journal of the Royal Anthropological Institute</i> , 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, <i>Transactions of the Institute of British Geographers</i> , New Series, Vol. 32, No. 3 (Sep., 2007), pp. 313-330
14	MADIHA KHAN, Islamic Banking Practices: Islamic Law and Prohibition of Ribā, <i>Islamic Studies</i> , Vol. 50, No. 3/4 (Autumn - Winter 2011), pp. 413-422
15	Mahmood Yousefi, Ken McCormick, Sohrab Abizadeh, Islamic Banking and Friedman's Rule, <i>Review of Social Economy</i> , Vol. 53, No. 1 (SPRING 1995), pp. 65-87
16	Mohammad Afzal, Theory and Practice of Islamic Banking, <i>Pakistan Economic and Social Review</i> , Vol. 31, No. 2 (Winter 1993), pp. 102-117
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19	Muhammad Tahir Mansoori, Is "Islamic Banking" Islamic? Analysis of Current Debate on Sharī'ah Legitimacy of Islamic Banking and Finance, <i>Islamic Studies</i> , Vol. 50, No. 3/4 (Autumn - Winter 2011), pp. 383-411
20	T. R. Bishnoi, Banking Regulations and Islamic Finance, <i>Economic and Political Weekly</i> , 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