SOPHIA COLLEGE (Autonomous)

DEPARTMENT OF ECONOMICS

FYBA SYLLABUS

COURSE STRUCTURE FOR SEMESTER I &II

(APPLICABLE FROM ACADEMIC YEAR 2019-2020)

FYBA ECONOMICS PAPER- I

PREAMBLE:

The Board of Studies in Economics, Sophia College for Women (Autonomous) has finalized the syllabi of the paper at the FYBA which will be made effective from the Academic Year 2018-19. The syllabus of FYBA Economics Paper I for Semester I & II offered to the students of Sophia College has been enlisted below.

Allotment of Lectures:

The allotment of lectures is as per the common guidelines stipulated by the Academic Council for Humanities of University of Mumbai.

SYLLABUS FOR F.Y.B.A. ECONOMICS SEMESTER I

MICROECONOMICS PAPER – I

Subject Code – SBAECO101

Course Objective:

1. To introduce the students to the basic building blocks of microeconomics.
2. The course familiarizes students with the basic concepts of Micro economics, theories and its application.

3. The students should be able to build on these constituents in the later years so as to be able to analyse the relevance of economic theory to policies and decision making.

Course Outcome:

1. Students will be able to explain human behavior by applying the basic principles of microeconomics.
2. Students will be able to apply the graphical approach to obtain equilibrium price and quantity in a competitive market.
3. Students will be able to demonstrate with the help of graphs, the impact of government intervention on the market equilibrium.
4. Students will be able to apply the knowledge to the working of production and cost associated with business firms.

Syllabus:

Module I: Basic Principles and Concepts of Micro Economics

10 basic principles of Economics- Micro & Macro- economic- Positive & Normative economics Partial & General Equilibrium- Price index number - Managerial Economics- Graphs, functions and slope.

Module II: Markets, Demand and Supply, Price Equilibrium

Meaning of Market- Demand theory- Individual and market demand- Changes and Shift of demand - Supply theory- Individual and market supply- Changes and Shift of supply- determination of equilibrium price - changes in market equilibrium- elasticity of demand- types of demand elasticity- price ceiling- price floor- consumer surplus.

Module III: Production, Cost and Revenue Analysis

Production function, Law of Variable proportions- Returns to Scale- Isoquants- Concepts of Revenue- TR, AR, MR, Short run cost concepts and its derivation- LRAC & its derivation - Cobb Douglas production function

References:

1. Ahuja H.L., Advanced Economic Theory

2. Dwivedi, D.N. Micro Economics: Theory and Applications

3. Lipsey and Chrystal, Economics

4. Mankiw, N.G., Principles of Economics

5. Salvatore, D. Micro Economics

Additional Reference list would be provided in class.

SYLLABUS FOR F.Y.B.A. ECONOMICS SEMESTER II

(APPLICABLE FROM ACADEMIC YEAR - 2018-19)

ECONOMICS PAPER – I

MACROECONOMICS

Subject Code – SBAECO201

Course Objective:

1. This course is designed to introduce the students to the basic building blocks of macroeconomics.
2. The course familiarizes students with the basic concepts of Macroeconomics using an open economy framework, theories and its application.
3. The students should be able to build on these constituents in the later years so as to be able to analyse the relevance of macroeconomic theory to policies and decision making.

Course Outcomes:

1. Students will be able to calculate GDP, GNP and National Income.
2. Students will be able to critically analyse the classical theory of income and employment.
3. Students will be able to calculate equilibrium national income with the help of a simple macroeconomic model.
4. Students will be able to explain the accelerator theory of investment.
5. Students will have indepth understanding of the external sector and its practical aspects.

Syllabus:

Module 1: Concepts and Definitions

National Income Accounting concepts, GDP, GNP and PCI, NNP, GDP Deflator, Real & Nominal quantities, GDP at purchasing power parity- Circular flow in closed & open economy- Business cycles-Inflation - Monetary policy- Fiscal policy - Estimation of National income in India.

Module 2: Consumption, Investment and Employment

Say's law of market- Theory of Effective demand- Consumption function-Investment function Multiplier- Accelerator- MEC & Rate of interest- Relevance of Keynesian theory.

Module 3: External Sector

Trade theory - Concept of BOP, Structure- Types of Disequilibrium in BOP- Measures to Correct it- FOREX market, its function and players- Exchange rate Determination- Fixed & Flexible Exchange rates.

References:

1. Ahuja H.L., Macroeconomics Theory & Policy

2. Dwivedi, D.N. Macroeconomics Theory & Policy

3. Mankiw, N.G., Principles of Macroeconomics

Additional Reference list would be provided in class.

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SOPHIA COLLEGE (AUTONOMOUS)

DEPARTMENT OF ECONOMICS

SYBA SYLLABUS

SYBA PAPER II

SYBA PAPER III

SYBA :APPLIED COMPONENT

SOPHIA COLLEGE (AUTONOMOUS)

SYBA ECONOMICS PAPER- II

COURSE STRUCTURE FOR SEMESTER III & IV

(APPLICABLE FROM ACADEMIC YEAR 2019-2020)

PREAMBLE:

The Board of Studies in Economics, Sophia College for Women (Autonomous) has finalized the syllabi of papers at the SYBA which will be made effective from the Academic Year 2019-20. The syllabus of SYBA Economics Paper II for Semester III offered to the students of Sophia College has been enlisted below.

Allotment of Lectures:

The allotment of lectures is as per the common guidelines stipulated by the Academic Council for Humanities of University of Mumbai.

SYLLABUS FOR S.Y.B.A. ECONOMICS SEMESTER III

ECONOMICS PAPER – II

MICROECONOMICS

Subject Code – SBAECO301

Course Objectives:

1. To develop the student's understanding of basic working of microeconomic units.
2. To understand the market structures existing in the economy.
3. To help the student apply microeconomics to the real world.

Course Outcomes:

1. Understand the consumers behavior in the product market.
2. Understand the different market structures and identify them in the real world.
3. Understand the working of the factor market.

Module 1: Consumer theory

Concepts of utility, theory of equi-marginal utility and consumers equilibrium, Indifference curve approach, Utility maximization and consumer's equilibrium, income effect, price effect, substitution effect, consumers surplus, Revealed preference theory.

Module –II: Market Structure's

Perfect Competition, Monopoly, Oligopoly, Price Discrimination and Cartels.

Module –III: Factor Markets:

Theory of Rent, Marginal productivity theory of Labour, Theory of Profit and Interest

References:

1. Ahuja H.L. Principles of Micreconomics, 2016.
2. Lipsey & Chrystal, Economics, 13th edition.
3. Mankiw N. Gregory, Principles of Macroeconomics, 2015.
4. Mansfield Edwin, Microeconomics: theory/ application.
5. McConnell Campbell, Microeconomics: Principles, Problems &

Policies.

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SYLLABUS FOR S.Y.B.A. ECONOMICS SEMESTER IV

ECONOMICS PAPER – II

MACROECONOMICS

Subject Code – SBAECO401

Course Objective:

1. To familiarize the students with the basic concepts of Macroeconomics & its application.
2. The syllabus aims to acquaint the students with the working of the macroeconomic system & the recent changes that have taken place.
3. Examine the working of the fiscal system.

Course Outcome:

1. Increased awareness about the macroeconomy.
2. Students will be able to understand the practical aspects of the banking sector.
3. Students will understand the role of government and various instruments of fiscal policy.

Module 1: Money

Concept of money- Supply of money- CRR, CDR - High powered money- Money multiplier current measures of money supply in India –velocity of circulation-Quantity theory of money Friedman's equation and Cambridge equations.

Module 2: Financial Sector

Central Banking- Commercial Banking- Monetary Policy.

Module 3: Government Sector

Public Goods- Merit Goods- Fiscal policy- instruments- Public Revenue- Tax and Non-Tax

revenue - Direct & Indirect tax, GST- Public Expenditure, Public Debt- types, Internal & External debt- Subsidies.

References:

1. Gupta S.B., Monetary Economics, S.Chand & Company ltd, Delhi.

2. Bhole L.M. Financial Institutions & Markets, Tata McGraw – Hill Publication, New Delhi.

3. Musgrave R A & P B Musgrave, Public Finance in theory & Practice, New York McGraw – Hill International Edition.

4. T. N. Hajela, Public Finance, Ane Books pvt. ltd.

5. Dalton Hugh, Principles of Public Finance, Allied Publishers, New Delhi. 6. Reserve Bank of India (various issues) Report on Currency & Finance, RBI, Mumbai. 7. www.rbi.org

SOPHIA COLLEGE (AUTONOMOUS)

SYBA ECONOMICS – PAPER III

COURSE STRUCTURE FOR SEMESTER III & IV

(APPLICABLE FROM ACADEMIC YEAR 2019- 2020)

The Board of Studies in Economics, Sophia College for Women (Autonomous) has finalized the syllabus of Economics Paper III at the SYBA for Semester III which will be made effective from the Academic Year 2019-20. In Semester III, students will study contemporary economic issues with respect to the Indian economy in the context of the Economic Survey of the Government of India.

SYLLABUS FOR S.Y.B.A. ECONOMICS SEMESTER III

ECONOMICS PAPER – III

INDIAN ECONOMY: THE CONTEMPORARY CONCERNS

Course Code – SBAECO302

Course Objectives:

1. To familarise students with the contemporary policy issues related to the Indian Economy.
1. To create awareness about the importance of federal finance management/fiscal discipline.
2. To acquaint students with the development parameters for the Indian Economy.

Course Outcomes:

1. Students will be able to comprehend the district/state/national level data represented in the form of a graph/diagram.
2. Students will be able to analyze pros & cons associated with the proposed / existing government schemes.
3. Students will be able to understand the mechanism of constructing the various types of development indicators.

Syllabus:

Module 1: Overview of the Indian Economy and the concept of UBI

Ten New Facts on the Indian Economy – The Conceptual/Philosophical case for UBI and case against UBI - Arguments in Favor and Against UBI - How can UBI overcome the issues of misallocation and leakages of resources? - Can UBI improve financial inclusion? - Will UBI lead to moral hazard and reduce labor supply? - What are the guiding principles for setting up UBI? - What are the prerequisites for introducing UBI? - Is there fiscal space to finance UBI?

Module 2: Fiscal Framework: The World is Changing, Should India Change Too? Fiscal Responsibility and Budget Management (FRBM) Act - Why is there a need for countercyclical fiscal policy in India? - Debt dynamics with the help of an equation for debt sustainability. Fiscal Rules: Lessons from the States. Fiscal Responsibility Legislation (FRL) - Impact of FRL on Budget process - Impact of FRL on Deficits - Lessons for future fiscal rules - Review of Fiscal developments.

Module 3: Income, Health and Fertility Convergence, Social Infrastructure, Employment and Human Development

Income convergence/divergence within India - Consumption convergence/divergence within India - Health Convergence within India with room for improvement against International standard - Total Fertility rate convergence (India and World) - Interpreting Graphs/Data regarding Income/Life Expectancy/ Infant mortality rate/Total fertility rate (For All Indian States) Trends in Social Services Expenditure by General Government (Centre and States) - Progress in Labor Reforms- Gender gap in Labor Force Participation Rate and Earnings: Global Comparison – Political Empowerment of Women.

References

1. Economic Survey 2016-17 published by Government of India, Ministry of Finance, Department of Economic Affairs, January 2017. Chapter 5, 6, 9 & 10.

2. Economic Survey 2017-18, Volume 1, Preface, Chapter 1, published by Government of India, Ministry of Finance Department of Economic Affairs Economic Division, January, 2018. 3. Economic Survey 2017-18, Volume 2, Chapter 1, 2&10, published by Government of India, Ministry of Finance Department of Economic Affairs Economic Division, January, 2018.

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SYLLABUS FOR S.Y.B.A. ECONOMICS SEMESTER IV

ECONOMICS PAPER – III

DEVELOPMENT ISSUES OF MAHARASHTRA'S ECONOMY

Course Code SBAECO402

Course Objectives:

1. To enable students to read & comprehend policy documents such as government reports, economic survey, budget etc.
2. To help students understand the developmental disparity in the regional economies of the Indian States.
3. To sensitize students about the developmental aspirations of the marginalized communities/ regions such as the tribals/Vidarbha, Marathwada regions of Maharashtra.
4. To sensitize students about the water crisis in Maharashtra with emphasis on the effective management of water resources.

Course Outcomes:

1. Students will be able to identify the Vidarbha, Marathwada & Rest of Maharashtra regions on the district map of Maharashtra.
2. Students will know the differences in the historical, social & economic backgrounds of the three regions of Maharashtra.
3. Students will be able to understand the factors responsible for the relative developmental lag for Vidarbha & Marathwada regions.
4. Students will be able to analyse & compare the development indicators for the tribals & Non tribal communities.
5. Students will understand the severity of water resource exploitation & challenges of

water resource management.

6. Students will know the present status of Maharashtra's health sector.
7. Students will be able to comprehend the measurements of indicators of connectivity.

Syllabus:

Module 1: Introduction to Maharashtra's economy & Importance of Tribal Areas

Introduction to Maharashtra's Economy – Backdrop, Demography, Key Indicators of Development, Macroeconomics development of the Regions, Paradigm Shift. Present Status of tribal communities, Comparison with States, PCI, Poverty, Overview of Nutrition, Health & Education, Causes of Deprivation, and Reforms to be undertaken.

Module 2: Water Resources Management & Effects of Urbanization

Availability of Water resources, government policy, overview of irrigation development (No division – wise discussion), Water Harvesting- Ground water management. General Overview of Rural & Urban areas water supply, Issues /Challenges of urbanization

Module 3: Health and Connectivity

Health: The Kelkar Committee approach to health, Regional disparities, Health Care Systems, Health outcomes, Recommendation and Strategies.

Connectivity – Introduction, General Overview of Roads, Railways, Ports, Airports and Broadband, Resources required for Connectivity**.**

References:

1. Report of the High-Level Committee on Balanced Regional Development Issues in Maharashtra, Planning Department, Government of Maharashtra (2013).
2. Maharashtra Human Development Report 2012: Towards Inclusive Human Development, YASHADA (2014).
3. Economic Survey of Maharashtra 2018-19, Directorate Of Economics And Statistics, Planning Department, Government Of Maharashtra, Mumbai (June 2019).

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SOPHIA COLLEGE (AUTONOMOUS)

SYBA APPLIED COMPONENT PAPER: INVESTMENT ANALYSIS

COURSE STRUCTURE FOR SEMESTER III &IV

(APPLICABLE FROM ACADEMIC YEAR 2019- 2020)

PREAMBLE:

The Board of Studies in Economics, Sophia College for Women (Autonomous) has finalized the syllabi of papers at the SYBA which will be made effective from the Academic Year 2019-20. The syllabus of SYBA Investment Analysis for Semester III offered to the students of Sophia College has been enlisted below.

Allotment of Lectures:

The allotment of lectures is as per the common guidelines stipulated by the Academic Council for Humanities of University of Mumbai.

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SYLLABUS FOR S.Y.B.A. APPLIED COMPONENT PAPER

SEMESTER III

INVESTMENT ANALYSIS

Subject Code: SBAACP302

PREAMBLE: The paper deals with the instruments of investment and their evaluation. It also explores Security markets and their functioning. It is aimed at equipping students with relevant valuation methods in evaluating investment instruments.

Course Objectives :

1. To introduce the concept of investment and familiarize students with various investment alternatives.
2. To provide an understanding of the financial market and its regulators.
3. To equip students with the basic skills required to understand the significance of time value of money.

Course Outcomes:

1. Students will be able to list down the basic attributes of different investment alternatives.
2. Students will be able to calculate holding period return on an investment.
3. Students will be able to compare and evaluate different investment alternatives.
4. Students will be able to describe how the primary market and secondary market operate.
5. Students will be able to compare the primary market and secondary market.
6. Students will be able to describe the role of SEBI as a regulator of the capital market.
7. Students will be able to calculate future value and present value of a single amount or an annuity.
8. Students will be able to calculate EMI on a loan amount.

Syllabus

Module 1: Overview of Investment Instruments

Concept of investment – Characteristics of Investment: risk, return, safety, liquidity, marketability, tax shelter

Deposits with bank, post office deposits, company fixed deposits , certificate of deposits , corporate paper, PPF, Equity shares Bonds or debentures, preference shares, Mutual Funds, SIP, futures contract, options, swaps, retirement products, commodities market, gold, real estate

Module 2: Security Markets and their Regulation

Primary Market: Functions, selling mechanism. Secondary Market: Functions, Operations. Securities and Exchange Board of India: Objectives, Powers and Functions. IRDA

Module 3: Valuation Methods

Compounding: Calculating future value, application in investment
decision Discounting: Present value, application in investment decision
Annuities: Future value and present value, buying an annuity
Perpetual annuities: investment in preferred stock
How Inflation and taxes affect investment decision
Valuation of bonds

References:

1. Chandra Prasanna (2012), Investment Analysis and Portfolio Management, Tata McGraw-Hill Publishing Company Ltd, New Delhi.

2. Bodie Zvi, Merton Robert, Cleeton David (2009), Financial Economics, Pearson Education Limited, New Delhi

3. Levy Haim, Post Thierry (2005), Investments, Pearson Education Limited, England

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SYLLABUS FOR S.Y.B.A. APPLIED COMPONENT PAPER

SEMESTER IV

INVESTMENT ANALYSIS

COURSE CODE: SBAACP402

PREAMBLE: The paper aims to provide a conceptual framework for analysing securities. Module 1 deals with various theories of investment analysis. Module 2 and 3 are based on fundamental analysis and technical analysis respectively which are two different stock investment strategies.

Course Objectives:

1. To introduce different investment theories and their application in investment decisions.
2. To introduce to students fundamental and technical analysis approaches to investment analysis.
3. To equip students with computational skills required to calculate fundamental value of a security
4. To enhance the ability of students to read charts and to apply them to investment decisions.

Course Outcomes:

1. Students will be able to Calculate portfolio return and portfolio risk.
2. Students will be able to explain the different levels of market efficiency.
3. Students will be able to apply CAPM to identify overvalued and undervalued securities.
4. Students will be able to calculate financial ratios and comment on the financial position of a company
5. Students will be able to differentiate between fundamental and technical analysis
6. Students will be able to calculate value of a security based on given information
7. Students will be able to understand the various chart patterns
8. Students will be able to identify signals to buy stock and sell stock from various chart formations.

Syllabus

Module 1: Theories of Investment Analysis

Modern Portfolio Theory: Portfolio return, risk, diversification and optimal portfolio –Capital Asset Pricing Model –Efficient Market Theory

Module 2: Fundamental Analysis

Meaning of fundamental analysis– Macroeconomic analysis – Industry analysis – company analysis – estimation of intrinsic value

Module 3: Technical Analysis of the Market

What is technical analysis? – Charting techniques- Trend & Trendline – Chart formations – Moving averages & its advantages – Technical Indicators – Evaluation of Technical analysis

References:

Chandra Prasanna (2012), Investment Analysis and Portfolio Management, Tata McGraw-Hill Publishing Company Ltd, New Delhi.

Bodie Zvi, Merton Robert, Cleeton David (2009), Financial Economics, Pearson Education Limited, New Delhi

Levy Haim, Post Thierry (2005), Investments, Pearson Education Limited, England

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SOPHIA COLLEGE (Autonomous)

DEPARTMENT OF ECONOMICS

TYBA SYLLABUS

COURSE STRUCTURE

(APPLICABLE FROM ACADEMIC YEAR 2020-2021)

TYBA ECONOMICS- (SEMESTER –V)

PREAMBLE:

The Board of Studies in Economics, Sophia College for Women (Autonomous) has finalized the syllabi of papers at the TYBA which will be made effective from the Academic Year 2020-2021. The syllabus of TYBA has been framed keeping in view the recent trends in the subject of economics. The papers which would be offered to the students of Sophia College at TYBA in Semester V and Semester VI have been enlisted below. A broad overview of the structure, followed by the syllabi of individual papers, is given below.

DURATION:

The course shall be a full time course.

The duration of B.A. course shall be of Three years /Six Semesters.

- FYBA: SEMESTER – I & II (One paper each semester)
- SYBA: SEMESTER – III & IV (Two papers each semester)
- TYBA: SEMESTER – V & VI (Six papers each semester)

PATTERN:

The T.Y.B. A. [Entire Economics] Course shall have 12 papers. Every semester shall have six papers, each carrying 100 marks. However students can opt for a combination of any two subjects (Economics and any other subject) in which every semester shall have three papers of each subject.

Allotment of Lectures:

The allotment of lectures is as per the common guidelines stipulated by the Academic Council for Humanities of University of Mumbai.

SOPHIA COLLEGE (Autonomous)

TYBA ECONOMICS- (SEMESTER –V)
COURSE STRUCTURE
(APPLICABLE FROM THE ACADEMIC YEAR 2020-2021)

The following Economic papers would be offered to the TYBA students of Sophia College in Semester V:

MICROECONOMICS – III: PAPER IV

SEMESTER V- COURSE CODE SBAECO501

Course Objectives:

1. To improve students' understanding of the microeconomics concepts through applications to oligopoly decision making in the real world.
2. To make students understand the general equilibrium framework of economic analysis & introduce them to the basic principles of welfare economics.
3. To introduce students to the problems resulting from information asymmetry in economic decision making. To familarize students with the fundamental principles of behavioral economics.

Course Outcomes:

1. Students will be able to identify the difference between the pure & differentiated oligopoly.
2. Students will be able to compare, on the basis of different behavioural assumptions, the various types of duopoly and oligopoly models.
3. Students will be able to draw a diagram/ solve algebraic equations to determine equilibrium level of output & price for the various types of oligopoly models.
4. Students will be able to comprehend the application of game theory concepts in oligopoly

decision making.

5. Students will be able to distinguish between partial and general equilibrium framework of economic analysis.
6. Students will understand the concept of Pareto Optimality & will be able to state the conditions under which it is attained.
7. Students will be able to draw an Edgeworth box diagram & explain the existence of a general equilibrium in exchange, production & resource allocation.
8. Students will be able to explain the similarities and differences between the perfect competition and Pareto Optimality conditions.
9. Students will be able to understand the principles of maximum social welfare.
10. Students will be able to describe the importance of information & the role of search cost.
11. Students will be able to discuss the problems resulting from information symmetry in the used car market, insurance market, credit market & labor market.
12. Students will be able to understand psychological dimensions of human behaviour & will be able to explain the importance of assumption of rationality in economic decision making.

Syllabus:

Module I: Oligopoly Behaviour & Game Theory

Features of Oligopoly, Pricing & Output decisions under oligopoly : the Cournot model – the Bertrand model - the Edgeworth model – the Chamberlin model – the Kinked demand curve model – Collusion and Cartels – Price Leadership : Low Cost, Dominant Firm.

Basic Concepts in Game Theory & its application to Oligopoly: dominant strategy equilibrium – Battle of Sexes game – Nash equilibrium – Prisoner's dilemma, Price and non price competition & Cartel cheating,- Extensive form games – game tree - Solving finite extensive form game.

Module II: General Equilibrium and Welfare Economics

Interdependence in the Economy – General Equilibrium and its Existence -The Pareto Optimality

Condition of Social Welfare, Marginal Conditions for Pareto Optimal Resource Allocation, Perfect Competition and Pareto Optimality - Kaldor- Hicks Compensation Criterion - Arrow's Impossibility Theorem.

Module III: The Economics of Information

The economics of search - Searching for the lowest price - Markets with Asymmetric Information : Market for Lemons and adverse selection, Signaling & Screening, The Principals, Agents & Moral Hazard, Using Contracts to Reduce Moral Hazard- Asymmetric Information in Labor Markets: Efficiency Wage Theory.

Behavioural Economics: human decision making differs from that of the rational individual of conventional economic theory.

References:

1. Jeffrey M. Perloff , Microeconomics, 7th edition, Pearson Education, Inc., publishing as Addison-Wesley, 2015.

2. Robert S. Pindyck & Daniel L. Rubinfeld, Microeconomics,8th edition, Pearson Education, Inc., publishing as Prentice Hall, 2013.

3. Robert H. Frank, Microeconomics & Behaviour, 9th edition, McGraw-Hill Education, New Yourk, 2015.

4. Mankiw, N. Gregory, Principles of Microeconomics,7th edition, Cengage Learning, 2015.

5. Mansfield, Edwin, Micro-economics: Theory & Applications, 5th edition, W.W. Norton & Company, New York, 1985.

6. Salvatore, D., Microeconomics: Theory and Applications, New Delhi Oxford, New Delhi, Oxford University Press, 2006.

ECONOMICS OF DEVELOPMENT: PAPER V

SEMESTER V- COURSE CODE SBAECO502

Course Objectives:

1.This course is designed to acquaint students with diverse concepts related to economic growth and development by giving special emphasis on structural issues related to the process of development.

2. To understand the various theories of development, study development indicators and Sen's views on development.

3. An attempt is made to create an awareness about the pressing problems in the path of development such as inequality, poverty and technological aspects and the policy options to deal with these problems.

Course Outcomes:

1. Students will be able to think critically about the issues related to growth and development.

2. Understand development achievements globally and critically examine the policies undertaken by governments.

3. Students will be able to analyze the role of technology in the development process.

Module 1: Concepts of Economic Growth and Development

Meaning of Growth and Development, Importance of growth rate - Basis of change in GDP measurement in India,– Concept of human development, HDI, GDI, Sustainable development – Green GDP – Three core values of development – Capability Approach.

Module 2: Structural Issues in Development Process

Big push theory – Schultz theory of human capital –Schumpeter's theory of development, Lewis's model of growth, Solow's growth model- Role of Education, Health & nutrition in economic development - Role of Infrastructure in economic development –Role of technology in economic development - Types of technical progress.

Module 3: Inequality, Poverty and Development

Measures of poverty and inequality – Kuznets inverted U-hypothesis – Policy options for poverty alleviation – Inclusive growth – Microfinance –Schumacher's Concept of Intermediate/

Appropriate technology, Green technology.

References:

1. Todaro, Michael P. and Stephen C. Smith. Economic Development, 8e. Delhi: Pearson Education, 2003. 2. Thirlwall, A.P. Growth and Development 8e. New York: Palgrave MacMillan, 2005. 3. Meier, Gerald M. and James E. Rauch. Leading Issues in Economic Development, 8e. New Delhi: Oxford Univ. Press, 2006.

4. Baldwin, Economic Development: Theory, History and Policy, Willy Publishers, 1957 5. Sinha Francis, Microfinance self Help Groups in India: Living up to Their Promises, Practical Action Publishing, England, 2009.

ECONOMICS OF AGRICULTURE AND COOPERATION: PAPER VI

SEMESTER V - COURSE CODE SBAECO503

Course Objectives:

1. This paper aims at providing an overview of the role of agriculture in the economic development of the country and the salient features associated with agricultural productivity and agricultural labour.

2.The pertinent aspects related to agricultural credit, agricultural marketing as well as the global problems existing in the marketing are dealt in.

3. Discuss the features of agricultural policy relating to price, agricultural inputs and discuss the issue of agrarian crisis and farmers' suicide.

Course Outcomes:

1. Students will understand the role of agriculture in economic development with reference to the stages of economic development.
2. Students will be able to identify the cropping seasons & the types of crops grown during these seasons.
3. Students will be able to analyse the causes of low agricultural productivity.
4. Students will be able to explain the most important dimensions of effective water management.
5. Students will be able to suggest measures to improve the condition of agricultural labour.
6. Understanding of the rural credit market and practical real life problems of agricultural marketing.

7. Students will be able to critically analyse agricultural price policy in India.
8. Students will be able to evaluate the various schemes of the Food Security Programme in India.
9. Students will be able to appraise the existing policies on agricultural inputs like fertilizer and power.
10. Students will be able to highlight the features of crisis in the agriculture sector and describe the situations of farmers' suicide in India.

Syllabus:

Module 1: Agricultural Productivity

Role of agriculture in economic development - Cropping Pattern -Agricultural Productivity, Causes of Low Productivity in Agriculture - Measures taken to improve the Agricultural Productivity in India - Water Management and agricultural development - Agricultural labour: Problems and suggestions.

Module 2: Agricultural Credit and Marketing

Agricultural Credit- Sources of Credit - Co-operative Credit and Agriculture, Commercial Banks and Regional Rural Banks, microfinance- NABARD - Rural Indebtedness,. Agricultural Marketing: Types of Agricultural Marketing - Problems of Agricultural Marketing - Measures to correct it - National Agricultural Market - WTO and Indian Agriculture.

Module 3: Agricultural Policy

New Agricultural Policy & recent developments in agricultural policy
Agricultural Price Policy in India and Its evaluation
Subsidies on Agricultural Inputs
Food Security in India
Agricultural Crisis and Farmers' Suicide

References:

1. Bilgram, S.A.R, Agricultural Economics, Himalaya Publication House, Delhi, 1966 2. Raj K.N,

Essays in Commercialization of Indian Agriculture, Oxford University Press, New Delhi, 1988. 3. Thamarajalaxmi R, Intersectoral Relationship in Developing Economy, Academic Foundation, Delhi, 1994.

4. Memoria C. B, Agricultural Problems of India, Kitab Mahal Allahabad, 1979.

5. Datt and Sundaram, Indian Economy, S.Chand & Company, New Delhi, 2012.

6. Mishra &Puri, Indian Economy, Himalaya Publishing House, New Delhi,2012. 7. World Development Report 2008: Agriculture for Development

MATHEMATICAL AND STATISTICAL TECHNIQUES FOR ECONOMIC ANALYSIS: PAPER VII

SEMESTER V -COURSE CODE SBAECO504

Preamble

A plethora of data has emerged at an exponential rate and it is the description, interpretation and understanding of these data and drawing of accurate conclusions that is imperative for a student of Economics. The aim of this paper is to provide students with the mathematical and statistical skills and understanding needed for 'knowing why' and 'when' to apply these techniques.

Course Objectives:

1. To introduce students to the basic mathematical & statistical tools, which will enable them to apply these to economic decision making.
2. To equip the students with quantitative skills that will help them in better understanding of economics.
3. To facilitate the description,interpretation and understanding of data.
4. To enhance the computational & numerical skills, ability to interpret numerical data & diagramatic presentations required to analyse economic concepts.

Course Outcomes:

1. Students will be able to apply mathematical approach to study market equilibrium and impact of indirect tax on market equilibrium.
2. Students will be able to differentiate single variable functions and apply the differentiation method to optimise economic functions.
3. Students will be able to solve a system of linear equations using method of matrix
4. Students will be able to apply the method of matrix in Economics.
5. Students will be able to identify the different types of data.
6. Students can classify & present numerical data using tables, graphs & diagrams.

7. Students will be able to compute mean, median, mode & measures of dispersion (absolute & relative).
8. Students will be able to graphically locate the mode & median.
9. Students will be able to draw graphs showing (based on the relative positions of mean, median & mode) positively skewed & negatively skewed frequency distributions.
10. Students will be able to understand the construction of the Lorenz Curve.
11. Students will be able to describe the merits & demerits of measures of central tendency & dispersion.
12. Students will be able to identify the specific uses of these measures to specific situations/problems.
13. Students will be able to compute the probability of an event using the classical definition of probability.
14. Student will be able solve problems based on application of binomial & normal distributions
15. Students will be able to understand and apply the properties of the probability distributions for the random variable(for discrete & continuous)to solve numerical problems.

Module 1: Equations, Graphs and Derivatives

A. Microeconomic applications of equations and graphs

Linear and non-linear relationships in economic analysis

Market demand and supply models, impact of taxes

B. Derivatives and their applications in various areas of economic analysis

Derivative and the rules of differentiation

Higher order derivatives

Application of derivatives: Increasing and decreasing functions, Concave and convex functions, relative extremes, inflection point

Application of derivatives in Economics: Obtaining marginal functions, price elasticity of demand, Optimising economic functions

Module 2: Linear Algebra

Matrices and basic operations on matrices

Determinant of a matrix

Rank of a matrix

Inverse of a matrix

Cramer's rule

Input-Output Analysis and policy implications

Module 3: Descriptive Statistics and graphing techniques for presenting data

Concept of primary and secondary data along with tabulation and graphs – Measures of

central tendency (only arithmetic-mean, median, and mode) – Absolute and relative measures of dispersion (range, quartile deviation, mean deviation and standard deviation) with simple applications – Measures of skewness and kurtosis – Lorenz Curve.

Module 4: Elementary Probability Theory

Sample space and events– Mutually exclusive, exhaustive and complimentary events– Conditional probability– Binomial probability distribution– Nature and Properties of the Normal Probability Distribution; Standard Scores and the Normal Curve; The Standard Normal Curve: Finding Areas when the Score is Known, Finding Scores when the Area is Known.

References:

1. Dowling Edward T: Introduction to Mathematical Economics, Schaum Outline Series in Economics, Tata McGraw -Hill, New Delhi, 2004.

2. Dowling Edward T: Theory and Problems of Mathematical Methods for Business and Economics, McGraw –Hill, 1993.

3. Gupta S.P.: Statistical Methods, S. Chand, New Delhi, 2014.

4. Lerner Joel J and P.Zima: Theory and Problems of Business Mathematics, McGraw Hill,New York, 1986.

5. Sancheti D.C. and V.K. Kapoor: Statistics-Theory, Methods and Applications, S. Chand,New Delhi, 2014.

6. Chiang A. C.: Fundamental Methods of Mathematical Economics, 3rd edition, McGraw-Hill, 1984.

7. Peter Goos and David Meintrup: Statistics with JMP: Graphs, Descriptive Statistics, and Probability, John Wiley & Sons, Ltd, 2015.

INTRODUCTION TO ECONOMETRICS: PAPER VIII(A)

SEMESTER V - COURSE CODE SBAECO505(A)

Preamble: *The objective of this course is to impart a basic understanding of econometrics. The student will be able to appreciate the theoretical basis of the subject. At the same time, it will*

enhance the student's ability to apply theoretical techniques to the problems of the real world.

Course Objectives:

1. To develop a way of thinking in quantitative terms.
2. To impart a basic statistical knowledge that will aid in understanding econometrics.
3. To analyse economic data using the method of regression

Course Objectives: Students will be able to

1. Apply binomial, poisson and normal distribution to calculate probability
2. Conduct test the hypothesis on mean using z and t test
3. Conduct test of hypothesis on variance using chi-square and F -test.
4. Estimate simple regression model using OLS
5. Report and interpret simple regression model results
6. Interpret multiple regression model results

Syllabus:

Module 1: Idea of a random variable

Concept of a random variable: Discrete and continuous

Expectation and variance of a random variable

Discrete random variables: Bernoulli, Binomial, Poisson

Continuous random variables: The normal distribution

Bivariate random variables: Joint and Marginal distribution

Conditional probability, Conditional mean and conditional variance

Covariance, Correlation

Central Limit Theorem (without proof)

Module 2: Statistical Inference

Estimation: Point and Interval estimation

Hypothesis testing: The Null and Alternate hypotheses

Significance testing for mean using Z distribution when population variance is known The

Chi-square distribution and testing for sample variance with known population variance

The F distribution and comparing sample variances

The t distribution and hypothesis tests when population variance in unknown

Module 3: Regression Analysis

Two variable regression model

The concept of the PRF and SRF

Classical assumptions of regression

Derivation of the OLS estimators and their variance

Gauss-Markov Theorem: Properties of OLS estimators under classical

assumptions Tests of Hypothesis, confidence intervals for OLS estimators

Measures of goodness of fit: R square and its limitations, adjusted R square and its

Limitations Multivariable Regression Model

Analyzing summary of multivariable regression model

References:

1. Gujarati Damodar (2012), Basic Econometrics, Tata McGraw Hill Education Private Limited, New Delhi.

2. Hatekar Neeraj (2009), Econometrics: The First Principles: A Friendly Introduction (using R), Sage Publications India Pvt Ltd.

3. A.H. Studenmund (2017), A Practical Guide to using Econometrics, Pearson India Education Services Pvt. Ltd.

4. Dougherty Christopher , (2011), Introduction to Econometrics, Oxford University Press. 5. Salvatore Dominick, Theory and Problems of Statistics and Econometrics, Schaum's outline series.

6. Sancheti D.C. and V.K. Kapoor: Statistics-Theory, Methods and Applications, S. Chand, New Delhi.

ENVIRONMENTAL ECONOMICS: PAPER VIII(B)

SEMESTER V- COURSE CODE SBAECO505(B)

Course Objectives:

1. The course focuses on the evolution of environmental economics , global environmental problems and measuring sustainability.
2. In particular, students will get acquainted with the economic valuation of environmental goods.
3. To sensitize students about the global & local environmental challenges.
4. To create awareness about environmental policy issues with reference to the developing & developed countries.

5. To improve understanding regarding the classification and mechanism of the various policy Instruments.
6. To sensitize students about the major concerns related to the effective implementation of the policy.

Course Outcomes:

1. Students will be able to list out and explain the problems in managing the environmental resources.
2. Students will be able to understand the nature of the environmental resources as: public good.
3. Students will develop analytical skills to understand the management of environmental resources using the common pool resource framework.
4. Students will be able to appreciate the complexity of the transboundary environmental challenges.
5. Students will be able to judge the efficacy of the environmental policy based on a specified criteria.
6. Students will be able to describe the relative merits & demerits of the various environmental policy instruments.
7. Students will be able to explain (with diagram) the mechanism involved in the working of the various policy instruments.
8. Students will be able to evaluate a case study related to the design & implementation of environmental policy in the context of developing countries.
9. Students will be able to analyze the difference between rigorousness (or permissiveness) of the environmental policy framework in the developed country & the poor country.

Syllabus:

Module 1: Introduction to Environmental Economics

Introduction, Definition, scope, evolution and growth of environmental economics- Perspectives in environmental economics - Rio declaration, Agenda 21, Kyoto protocol - Economy & environment linkage - Economic development & environment - Consequences of environment mismanagement - Environmental Kuznets curve - Sustainable development-Environmental accounting..

Module 2: Measuring benefits of environmental improvements & Global Environmental Issues

(A) Economic value of Environment- Measurement method:-market based and non-market based methods, contingent valuation, travel cost method, hedonic price method, risk assessment and

perceptions.

(B) The global environment - Trans-boundary environmental problems –global warming, greenhouse effect, economics of climate change, Ozone Layer Depletion, Acid Rain, Micro Plastics Pollution, Destruction of bio-diversity- Nuclear Energy & Environment – Local Environmental Issues.

Module 3: The design and implementation of Environmental Policy

Overview- Importance of Environmental Policy-objectives/goals of environmental policy-Criteria for evaluating environmental policies, Environmental Policy Instruments-types of instruments environmental Standards, Pigovian taxes and effluent fees, tradable permits, carbon credits, property rights and Coase theorem. Issues in implementation of environmental policy-National Environmental Policy.

References:

1. Barry C. Field and Martha K. Field (2017): Environmental Economics: An Introduction, MacGraw Hill.

2. Charles Kolstad (2000): Environmental Economics, Oxford University Press, New York. 3. Anil Shishodia and Katar Singh (2007): Environmental Economics: Theory and Applications, Sage Publications.

4. Ahmed M. Hussen,(2004): Principles of Environmental Economics, Routledge, New York. 5. Roger Perman, Yue Ma, James McGilvray Michael Common (2003): Natural Resource and Environmental Economics, Pearson Education Limited.

HISTORY OF ECONOMIC THOUGHT: PAPER IX

SEMESTER V- COURSE CODE SBAECO506

Course Objectives:

1. To expose students to the contributions made by the celebrated economists to the field of economics.
2. To enhance students' understanding about the evolution of economic ideas.
3. To enable students to appreciate the importance of the Nobel Prize winning contribution of the Nobel Laureate.
4. To encourage students to carry out a project/assignment with a presentation exploring life, work and celebrated work & its applications to modern day economics by eminent scholars.

Course Outcomes:

1. Students will be able to describe the main features of Mercantilism, Physiocracy & Classisac School ideology.
2. Students will be able to analyse Adam Smith's views on division of labour, productive& unproductive labour, theory of value and capital accumulation.
3. Student will be able to evaluate Ricardo’s views on theory of value, rent & distribution(with diagram).
4. Students will be able to distinguish between the difference between the Smith’s & Ricardo’s approach to theory of value.
5. Students will be able to comprehend Karl Marx’s concepts of dynamics of social changes, theory of values, surplus value, profit and crisis of capitalism and contemporary relevance.
6. Students will be able to critically explain the economic views (taught in the class) of Marshall, Pigou and Keynes.
7. Students will be able to examine & present the life, work and applications of the celebrated work by the post Keynesian economists.

Syllabus:

Module 1: **Classical Period**

Adam Smith (1723- 1790) - Division of labour, Productive vs. unproductive labour, theory of value, capital accumulation & development.

David Ricardio (1772- 1823) - Value, theory of rent & distribution.

Karl Marx (1818-1883) - dynamics of social changes, theory of values, surplus value, profit and crisis of capitalism and contemporary relevance.

Module 2: **Marshall, Pigou & Keynes**

Alfred Marshall (1842 - 1924): Role of time in price determination, economic methods, ideas of consumer's surplus, representative firm, external and internal economies, quasi-rent.

Arthur Cecil Pigou (1877-1959) : Pigou Effect, Pigovian tax

John Maynard Keynes (1883 - 1946): The General Theory of Employment, Interest & Money.

Module 3: Post Keynesian Developments

Milton Friedman (1912 - 2006), Don Patinkin (1922 -1995), Robert Lucas (1937), Arthur Laffer (1940)

Nobel Prize Winning work in recent times by **:** A. K. Sen (1998), Joseph Stiglitz (2001), Paul Krugman (2008), Jean Tirole (2014), Angus Deaton (2015), Richard Thaler (2017), Michael Kremer, Abhijit Banerjee, Esther Dufflo (2019).

References:

1. Gide, O. and G. Rist , A History of Economic Doctrine, George Harrop Co., London, 1956.

2. Roll, E, A History of Economic Thought, Faber Landon, 1973.

3. Dasgupta A. K, Epochs of Economic Theory Oxford University Press. New Delhi, 1985. 4. Schumpeter, J.A, Ten Great Economist, Oxford University Press, New York, 1951. 5. Ghosh and Ghosh, Concise History of Economic Thought, Himalaya Publishers,1996. 6. Puttaswamaiah K, Nobel Economists – Lives and Contributions, Indus Public Co., New Delhi, 1995.

7. Lokanathan. V., A History of Economic Thought 10th Edition, S Chand & Company Limited, New Delhi ,2018.

8. Jürgen Georg Backhaus (ed) , Handbook of the History of Economic Thought: Insights on the Founders of Modern Economics, Springer Science+ Business Med

END

SOPHIA COLLEGE (Autonomous)

TYBA ECONOMICS- (SEMESTER –VI)

COURSE STRUCTURE

(APPLICABLE FROM ACADEMIC YEAR 2020-2021)

PREAMBLE:

The Board of Studies in Economics, Sophia College for Women (Autonomous) has finalized the syllabi of papers at the TYBA which will be made effective from the Academic Year 2020-2021. The syllabus of TYBA has been framed keeping in view the recent trends in the subject of economics. The papers which would be offered to the students of Sophia College at TYBA in Semester V and Semester VI have been enlisted below. A broad overview of the structure, followed by the syllabi of individual papers, is given below.

DURATION:

The course shall be a full-time course.

The duration of B.A. course shall be of Three years /Six Semesters.

- FYBA: SEMESTER – I & II (One paper each semester)
- SYBA: SEMESTER – III & IV (Two papers each semester)
- TYBA: SEMESTER – V & VI (Six papers each semester)

PATTERN:

The T.Y.B. A. [Entire Economics] Course shall have 12 papers. Every semester shall have six papers, each carrying 100 marks. However students can opt for a combination of any two subjects (Economics and any other subject) in which every semester shall have three papers of each subject.

Allotment of Lectures:

The allotment of lectures is as per the common guidelines stipulated by the Academic Council for Humanities of University of Mumbai.

SOPHIA COLLEGE (Autonomous)

COURSE STRUCTURE

(APPLICABLE FROM THE ACADEMIC YEAR 2020-2021)

TYBA ECONOMICS- (SEMESTER –VI)

The following Economic papers would be offered to the TYBA students of Sophia College in Semester VI:

MACROECONOMICS: ECONOMICS PAPER IV

SEMESTER VI, COURSE CODE: SBAECO601

Preamble:

This course introduces the students to formal modelling of a macroeconomic theory with analytical tools. It covers goods & financial markets equilibrium in the closed and the open economy. It analysis the implications of openness on goods & financial markets, discusses the Mundell Fleming Trilemma and the benefits and costs of fixed and flexible exchange rates. It also intends to familiarize students with a brief history of the international monetary system and the role of key international institutions in managing the financial crisis.

Course Objectives:

1. To introduce the students to formal modelling of a macroeconomic theory with analytical tools.
2. To make students understand the implications of openness on goods & financial markets,
3. To discuss the Mundell Fleming Trilemma and the benefits and costs of fixed and flexible exchange rates.
4. To familiarize students with a brief history of the international monetary system.

Course Outcomes:

1. Students will be able to explain and derive (graphically & algebraically) the IS & LM relationship.
2. Students will be able to identify factors affecting the slopes & position of the IS & LM curves.
3. Students will be able to analsye the effects of different slopes of IS & LM curves on the efficacy of monetary and fiscal policy..
4. Students will be able to understand the implications of openness for goods & financial markets equilibrium.
5. Students will be able to describe the advantages and advantages of fixed/ Flexible exchange rates.
6. Students will be able to understand the concepts of nominal, real,effective exchange rates.
7. Students will be able to solve numerical problems based on open economy equilibrium equations for goods/financial markets.
8. Students will be able to suggest the policy mix given a situation related to macroeconomic problems.
9. Students will be able to explain the policy trilemma in macroeconomics,
10. Students will be able to trace the evolution of international exchange standards.
11. Students will be able to understand the factors leading to the currency crisis.
12. Students will be able to analyse the link between the banking, debt and financial crisis.

Module 1: The Goods Market & Financial Markets in the Closed Economy: (17 lectures)
Product Market Equilibrium (IS) curve - Derivation of IS Curve: algebraic & graphical method, Factors influencing slope & position of the IS Curve -Fiscal & Monetary Policy & the IS curve. Assets Markets Equilibrium (LM) curve - Derivation of LM curve: algebraic & graphical method, Factors influencing the slope & position of the LM curve. Fiscal & Monetary Policy & LM curve. General Equilibrium in the IS - LM curves Model. Nature of Equilibrium - Fiscal & Monetary Policy efficacy & slopes of the IS & LM curves.

Module 2: The Goods Market & Financial Markets in the Open Economy and Mundell-Fleming: (17 lectures)

Trade Balance and its implications for GDP calculations, Export and Import Functions, The Real Exchange Rate and why it matters, why equilibrium GDP is consistent with a trade imbalance, Fiscal and Exchange Rate Policy with a Fixed Exchange Rate. The IS & LM equations for the open economy, Uncovered Interest Parity and its implications for exchange rate determination, the combined IS/LM/UIP model; Fiscal and Monetary Policy under Fixed and Flexible Exchange Rates, The Mundell-Fleming trilemma.

Module 3: International Monetary System and Financial Crisis (17 lectures)

A brief history of international monetary system: The Gold Standard (1815 to 1914), The Inter-War Period (1919 – 1939), The Gold Exchange Standard- Bretton Wood (1944 to 1971), the collapse of the Bretton Woods system, The Ushering of Flexible Exchange Rates and Currency Instability (1971-1985), The Current System of Managed Floats and Targeted Inflation: 1985 – Present.

Key institutions: International Monetary Fund & the World Bank.

The choice of exchange rate regime: Fixed vs. Flexible Rates- Exchange Rate Crises, The relation between Exchange Rate crises and other kinds of crises (banking crises, debt, financial crises, etc.).

References

1. Blanchard, Oliver; Macroeconomics (4th edition, 9th impression), Pearson education, New Delhi, India.

2. Dornbusch R S, Fischer and R Startz; Macroeconomics, 8e Tata Mc Grow Hill, New Delhi 2004.

3. Froyen, R. T.; Macroeconomics: Theory and Policy, Pearson Education Asia, Delhi 2001.

4. Mankiw, Gregory; Macroeconomics, 6e, Worth Publishers, New York, 2003.

5. Salvatore, D.; International Economics, Printice Hall, New York, 1997.

6. Robert Feenstra & Alan Taylor, International Macroeconomics, 2nd ed.

SOPHIA COLLEGE (Autonomous)

INTERNATIONAL ECONOMICS: ECONOMICS PAPER V

SEMESTER –VI COURSE CODE: SBAECO602

Course Objectives:

1. This course develops a systematic exposition of models which explain the composition, direction, and consequences of international trade, and the determinants and effects of trade policy.
2. Provide students with an analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years.
3. Describe country specific case studies. Analyze the role of trade in economic development and discuss the role of regional trade blocs.

Course Outcomes:

1. Understand the nature, scope and theories of international trade. Applicability of trade theories to the real world situation.
2. Critically analyze the role of MNCs, and FDI in the development process. t
3. Understand the importance of new trade agreements, trade instruments and regional trade blocs in the global economy.

Module 1: Introduction of International economics and trade theories (17 lectures)

Importance of the study of International Economics - Distinction between domestic & international Trade. Adam Smith's Theory of International Trade, The Ricardian Theory - Heckscher- Ohlin Theory of International Trade, Leontief Paradox- Terms of trade, Law of reciprocal demand and offer curves

Module 2: **International Trade and Economic Development** (17 lectures)

An overview of world trade - pattern of trade, gravity model. Trade as an engine of growth, Vent for Surplus- Concepts of terms of trade- Prebisch – Singer thesis - Export Orientation and Import substitution: India vs South Korea, Understanding China's growth. Trade problems of developing countries, International Capital flows - FDI: The concept and role, FDI Inflows- FDI Outflows, MNC's, BPO's.

Module 3: **Trade Policy, Restriction and Economic Integration** (17 lectures)

Instruments of trade policy; International Commodity Agreements, Protectionism - Why countries cooperate? - GATT, GATS, - Trans – Pacific Partnerships

References:

1. Paul Krugman, Maurice Obstfeld, and Marc Melitz, International Economics: Theory and Policy, Addison-Wesley (Pearson Education Indian Edition), 9th edition, 2012.

2. Dominick Salvatore, International Economics: Trade and Finance, John Wiley International Student Edition, 10th edition, 2011.

3. Gordon Hanson, „The Rise of Middle Kingdoms: Emerging Economies in Global Trade", Journal of Economic Perspectives, Spring 2012.

4. Melitz M. and Trefler D., "Gains from Trade When Firms Matter", Journal of Economic Perspectives, Spring 2012.

5. Kindleberger Charles P, International Economics, Homewood, USA, 1978

6. Bo Sodersten and Geofrey Reed, International Economics, Palgrave Macmillan, 1994.

INDIAN FINANCIAL SYSTEM: ECONOMICS PAPER VI

SEMESTER VI, COURSE CODE: SBAECO603

Course Objectives:

1. The basic purpose of this paper is to acquaint students with various components of the Indian financial system, its working and the trends that have taken place over the years especially since financial sector reforms.
2. Acquaint the students with the role of RBI' Monetary policy framework, role of NBFI's, NBFC's and financial services like insurance, mutual fund etc.
3. To Provide a detailed understanding of how capital market and money market operates and recent reforms in the capital market and money market

Course Outcomes:

1. Students will be able to describe the various components of financial systems.
2. Students will be able to explore the role of financial markets, institutions, markets and services.
3. Students will be able to analyse the relationship between financial sector development & economic development.
4. Examine RBI's monetary policy and transmission mechanism of monetary policy. Familiarize with the operations and growth of financial markets and services.
5. Students will be able to differentiate between the capital market and money market.
6. Students will be able to describe the operations in the secondary market.
7. Students will be able to state the features of different instruments traded in the money market.
8. Students will be able to state the recent reforms in the capital market and money market.
9. Students will be able to evaluate the role of SEBI as a regulator of the capital market in India.
10. Students will be able to explain the basic terms and concepts in the debt market and describe the debt market operations.

Syllabus

Module 1: Indian Financial System: Structure, Trends and Turns (13 lectures)

Meaning and components of the Financial System - Financial System and Economic Development - Indicators of Financial Development: FR, FIR, NIR and IR – Overview of financial sector reforms since 1990s – Trends and turns in Indian financial sector: 1950-2017.

Module 2: Monetary Policy of RBI, NBFI's and NBFC's in India (13 lectures)

Monetary policy of the RBI –Changes in RBI monetary policy since1990s - Monetary Policy Committee (MPC), Management of Non-Performing Assets (NPAs); Capital Adequacy Norms - Basel Accord III. Transmission Channels of Monetary policy

Non-Banking Financial Intermediaries in India, NBFC's in India - Insurance sector, Investment/Merchant banking, Mutual funds, Credit Rating agency, Payment Banks, Mudra Bank

Module 3: Money and Capital Markets in India (13 Lectures)

Money Market: Components/ Instruments of organized money market – Features of Indian Money Market– Reforms in the money market.

Capital Market: Structure of the Indian Capital Market – Recent Developments in the Capital Market – Role of SEBI - Interlink between Money Market and Capital Market - Overview of Debt Market in India

References:

1. Pathak, Bharati, The Indian Financial System –Markets, Institutions, and Services, Pearson Education, New Delhi, 2008.

2. Bhole, L. M, Financial Institutions and Markets, Growth and Innovation, Tata McGraw-Hill, New Delhi, 2008.

3. Khan, M.Y, Financial Services, Tata McGraw Hill, New Delhi, 2007.

4. Reserve Bank of India (various issues) Report on Currency and Finance, RBI, Mumbai. rbi.org.

5. Rakesh Mohan &Partha Ray, Indian Financial Sector: Structure, Trends & Turns; IMF Working Paper (WP/17/7). https://www.imf.org> Issues > 2017/01/20

6. Dutta Abhijit, Indian Financial System, Excel Books, Delhi, 2012.

MATHEMATICAL AND STATISTICAL TECHNIQUES FOR ECONOMIC ANALYSIS: ECONOMICS PAPER VII SEMESTER VI -COURSE CODE-SBAECO604

Preamble: *This paper proposes to equip the students with analyzing skills with sound footing of relevant mathematical and statistical techniques. Economic analysis and interpretation of data cannot be carried out in the absence of knowledge of these techniques narrated here.*

Course Objectives:

1. Develop the requisite quantitative skills needed for application of mathematical techniques in economics.
2. Apply the methods of partial differentiation and integration in solving problems and understanding of economics
3. To equip students with the tool to study the relationship between two or more variables.

4. To introduce the concept of linear regression using OLS.
5. To expose students to the concepts of index numbers & time series.

Course Outcomes:

1. Students will be able to use the method of partial differentiation to obtain various functions like marginal revenue, marginal product, marginal cost
2. Students will be able to calculate price, income and cross elasticity of demand given the demand function.
3. Students will be able to calculate constrained optimisation problems in economics
4. students will be able to apply integration method to obtain various economic functions like total revenue, total cost, consumption function ,etc
5. Students will be able to apply integration to calculate present value, consumer's surplus, producer's surplus,
6. Students will be able to apply a method of integration learning curve to calculate labour requirement.
7. Students will be able to compute numerical problems based on correlation & regression analysis.
8. Students will be able to solve numerical problems based on index numbers and time series analysis.
9. Students will be able to describe the application & limitations of index numbers.

Syllabus:

Module1: Techniques and applications of partial derivatives **(13 lectures)**

Functions of several variables and partial derivatives

Second order partial derivatives

Optimisation of multivariable functions

Constrained optimisation with Lagrange multiplier and its economic interpretation.

Marginal productivity, Income and price elasticities of demand

Homogeneous production functions and returns to scale

Cobb-Douglas production function

Module 2: Integral Calculus **(13 lectures)**

Integration and Definite integral

Using integration to find area under the curve

Economic applications

Present value of cash flows (present value of a sum to be received in future and present value of a stream of future income)

Consumer's and Producer's Surplus

Learning curve

Module 3: Correlation and Regression **(13 lectures)**

The meaning and significance of Correlation Analysis

Scatter plot of Bivariate Distributions: Correlation and Causation

Karl Pearson's coefficient of correlation

Spearman's rank correlation coefficient

Simple regression analysis- Method of Least Squares

Regression Lines and Regression Coefficients

Relationship between correlation coefficients and regression coefficients.

Module 4: Index Numbers and Time Series **(13 lectures)**

Simple and composite index numbers

Construction, uses and problems of index numbers

Laspeyre's, Paasche's and Fisher's Index numbers

Cost of living index numbers-real income – wholesale price index number

Splicing of index numbers

Components of time series

Estimation and forecasting of trend by the Least Squares Method

References:

1. Dowling Edward T: Introduction to Mathematical Economics, Schaum's Outline Series in Economics, Tata McGraw Hill, New Delhi, 2004

2. Lerner Joel J and P. Zima: Theory and Problems of Business Mathematics, McGraw Hill, New York, 1986.

3. Dowling Edward T: Theory and Problems of Mathematical methods for Business and Economics, McGraw –Hill, 1993

4. Gupta S.P.: Statistical Methods, S. Chand, New Delhi.

5. Sancheti D. C. and V. K. Kapoor: Statistics-Theory, Methods and Applications, S. Chand, 4New Delhi

THEORY AND PRACTICE OF ECONOMETRICS: PAPER VIII(A)

SEMESTER VI - COURSE CODE SBAECO605(A)

Preamble: *The paper aims to help students understand the art of model building. It focuses on building the appropriate model and testing it statistically to apply it to the practical problems in forecasting and analysis.*

Course Objectives:

1. To help understand the assumptions underlying the method of OLS and consequences of its violations.
2. To give an understanding of basic knowledge of how to detect and treat violations of OLS assumptions.
3. To introduce advanced methods and techniques in econometrics.

Course Objectives: Students will be able to

1. Explain the consequences of violation of assumption underlying the OLS method of estimating a regression model.
2. Detect problems like multicollinearity, heteroscedasticity, autocorrelation, omitted variables bias in the regression model.
3. Treat problems like multicollinearity, heteroscedasticity and autocorrelation in the regression model.
4. Explain the methods used in estimating panel data models.
5. Describe the method of estimating the Distributed lag model.
6. Define the concept of stationarity.
7. State the properties of AR(1), MR(1) and ARMA models.

Syllabus:

Module 1: Generalised Least Squares **(17 Lectures)**

Autocorrelation & Heteroscedasticity: Meaning, implication, tests, remedy: FGLS & GLS

Multicollinearity: Nature of the problem, sources, consequences, detection: VIF and remedial measures

Module2: Regression and Causality **(17 Lectures)**

Errors in measurement of independent variable

Omitted Variable Bias

Instrumental variables , estimation and inference

Simultaneity bias, identification and instrumental variables

Module 3: Topics in Econometrics **(17 Lectures)**

Introduction to Panel data: Fixed and random effects

Introduction to time series models; Classical decomposition of time series, moving average models, linear and log linear trends.

Distributed lag model

References:

1. Gujarati Damodar (2012), Basic Econometrics, Tata McGraw Hill Education Private Limited, New Delhi.

2. Hatekar Neeraj (2010), Principles of Econometrics An Introduction [Using R], Sage Publications India Pvt Ltd.

3. A.H. Studenmund (2017), A Practical Guide to using Econometrics, Pearson India Education Services Pvt. Ltd.

4. Dougherty Christopher , (2011), Introduction to Econometrics, Oxford University Press.

5. Salvatore Dominick, Theory and Problems of Statistics and Econometrics, Schaum's outline series.

DEVELOPMENT THEORY AND EXPERIENCE: ECONOMICS PAPER VIII (B)

SOPHIA COLLEGE (Autonomous)

SEMESTER VI, COURSE CODE: SBAECO605B

Course Objectives:

1.This is the second paper of economic development sequence. The course begins with demographic concepts and their evolution during the process of development. Students would also understand the problem of the aging population and India's population policy.
2. To explore the structural transformation process for the developing countries.
3. To make students aware about the field of RCT's as a new evolving field of research in economics. The structure of rural agricultural markets and contracts is linked to the particular problems of enforcement experienced in poor countries.
4.To sensitize students about the environmental policy debates.

Then it focuses on the structural transformation theories, the theory migration and discusses the link between migration and development. The course ends with the
issues related to environment and development.

Course Outcomes:

1. Students will be able to understand the demographic changes taking place globally.
2. A realistic view of the Agricultural sector and understanding about the emerging field of research in economics.
3. Students will be able to explain with the help of a diagram Lewis Model, Structural change model.
4. Students will be able to trace the trends in urbanization with reference to India.
5. Students will be able to evaluate the policies related to the urban informal sector.
6. Students will be able to understand the differences in the formal and informal sector activities.
7. Students will be able to appreciate the role of migration in the process of development.
8. Students will be able to describe the main features of the Harris- Todaro model.
9. Students will be able to examine the relationship between economic development & environmental quality.
10. Students will be able to analyse issues related to air pollution, groundwater exploitation & deforestation.

Module I: Demography and Development (17 lectures)

Demographic concepts; birth and death rates, age structure, total fertility rates,fertility and mortality; demographic transitions during the process of development; gender bias in preferences and outcomes and evidence on unequal treatment within households; connections between income, mortality and fertility choices; Aging population- Social & Economic Challenges & Policy Implications. Population Stabilization; Population policy in India

Module II: Structural Transformation (17 lectures)

The Lewis model –Clark-Fisher model of structural change, Urbanization: Trends and Projections with reference to India, Urbanization and Development, Causes of urbanization, Urban informal sector, Policies for the urban informal sector, Migration and development, Economic theory of rural-urban migration: Harris-Todaro migration model.

Module III: (17 lectures)

(A) Modern Development Economics

RCT and its Applications; Role of Agriculture in Economic Development, Market Failure and Agriculture, The distribution of land ownership; Land reform and its effects on productivity; contractual relationships between tenants and landlords; Land Acquisition; Nutrition and Labor Productivity; Rural Credit Market; Inter-linkages between Rural Factor Markets

(B)The Environment and Development

Module III (b): The Environmental Policy Debates –

The relationship between economic development and environmental quality. The causes of over-use of environmental capital by humans: common pool resources, Development & Forests, Ground Water Policy, Air Pollution. Nordhaus' model examining the consequences of climate policy interventions, for example carbon taxes.

References-

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INTERNATIONAL TRADE, POLICY AND PRACTICE: ECONOMICS PAPER IX SEMESTER VI, COURSE CODE: SBAECO606

Preamble: *This course is designed for exploring contemporary issues related to the International Trade Policy and Practice. The main objective of this course is to familiarize students with current issues in the field of International Trade Theory and Policy.*

Course Objectives:

1. To trace advances in the development of international trade theory.
2. To explore contemporary policy issues related to international trade.
3. To discover the issues involved in the settlement of international trade transactions & finance.

Course Outcomes:

1. Students will be able to explain the three theorems associated with the modern theory of trade.
2. Students will be able to identify the contributions made by Heckschr, Ohlin, Samulson, Stolper, Rybezynski and others to the field of international trade theory.
3. Students will be able to prove using graphical presentation the effect of free trade on international factor prices.
4. Students will be able to describe the effect of free international trade on factor incomes.
5. Students will be able to trace the impact of different factor intensities on their incomes.
6. Students will be able to explain the pattern of international trade with imperfect competition.
7. Students will be able to analyze the effect of technological progress & economies of scale on trade patterns.
8. Students will be able to evaluate arguments for and against free trade.
9. Students will be able to evaluate arguments for and against protectionism.
10. Students will be able to distinguish between the tariff and nontariff instruments of trade policy.
11. Students will be able to analyse with the help of a diafram the economic effects of tariff.
12. Students will be able to make relative comparison between tariff, quota, subsidies and voluntary restraints.
13. Students will be able to argue for & against Free & Flexible Exchange Rate Regimes.
14. Students will be able to understand the emergence of the trade blocs & working of EU,WTO & G20.
15. Students will be able to explain the evolution of the international financial system.
16. Students will be able to discuss the issues related to the capital account convertibility.

Module 1: Introduction to advances in International Trade Theory (13 lectures)

The three basic theorems of the Heckscher-Ohlin-Samuelson model: the factor-price equalization theorem, Stolper-Samuelson theorem, the Rybczynski theorem, Specific Factors and Income Distribution: The Specific Factor Model, New Trade Theories: trade theories based on economies of scale, imperfect competition, and differences in technological changes among nations.

Module 2: International Trade Policy & Emerging New international Economic Order. (13 lectures)

The political economy of trade policy: Case for and against free trade, Protectionist Trade Policy, Instruments for regulating trade: Tariffs, Non-Tariff Instruments - Import Quota, Voluntary Restraints of Exports, Export Subsidies, technical, administrative, and other regulations. International Negotiations and trade policy: Regional Integration Versus Multilateralism - Regional Trade Blocs- Types -WTO, EU & G 20.

Module 3: International Monetary Relations **(**13 lectures)

Foreign Exchange Rate: Concepts - Spot and Forward rates - Foreign Exchange rate determination: short run and long run – Fixed and flexible exchange rate system,

Balance of Payments: Current Account, Capital Account, Currency Convertibility.

Emerging Global Financial Architecture: Meaning of the term "global financial architecture"-emerging trends, Analysis of the three aspects of the trilemma- monetary independence, exchange rate stability, and financial openness.

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2. Paul R Krugman, Maurice Obstfeld and Melitz Mark, International Economics: Theory and Policy, Princeton University, USA, 2015.

3. Dennis R Appleyard, Alfred J Field, International Economics, McGraw-Hill, USA, 2013.

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6. Bo Sodersten and Geofrey Reed, International Economics, 3rd Edition, Palgrave Macmillan; (May 15, 1994)

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