The University of Burdwan
Syllabus for B.A./B.Sc. Honours
(1+1+1 Pattern)
In Economics
With Effect from 2015-16

Syllabus for BA/B.Sc. Honours (1+1+1 Pattern) in Economics
Student must have Mathematics/Business Mathematics or equivalent at Higher Secondary Level

Part-I

Paper – I - First Half:	**Microeconomic Theory - I**
Paper – I - Second Half:	**Macroeconomic Theory – I**
Paper – II - First Half:	**Selected Features of Indian Economy**
Paper – II - Second Half:	**Statistical Methods-I**

Part-II

Paper – III - First Half:	**Microeconomic Theory – II**
Paper – III - Second Half:	**Macroeconomic Theory – II**
Paper – IV - First Half:	**Mathematical Economics**
Paper – IV - Second Half:	**Statistical Methods – II**

Part-III

Paper – V - First Half:	**International Economics**
Paper – V - Second Half:	**Money and Capital Market**
Paper – VI - First Half:	**Development Economics**
Paper – VI - Second Half:	**Classical Political Economy**
Paper – VII - First Half:	**Econometrics & Quantitative Techniques**
Paper – VII - Second Half:	**Public Economics & Environmental Economics**
Paper – VIII - First Half:	**Indian Economic Planning**
Paper – VIII - Second Half:	**Computer Application & Project**

All Half-papers are of 50 Marks each with approximately 70 Lectures

Part-I
Paper – I
First Half

Microeconomic Theory - I

Full Marks: 50   **Number of Lectures: 70**

1. General Concept: **(02 Lectures)**

- Distinction between Microeconomics and Macroeconomics – concept of different Microeconomic units - commodity, consumer, firm, industry, market – concepts of equilibrium, - static, dynamic, comparative static and stability of equilibrium.

2. Theory of Demand: **(28 Lectures)**

- The Marshallian Approach: measurement of utility – derivation of demand curve – Consumer's surplus.

- Indifference curve approach: indifference curve and its properties, the consumer-pathological cases – price consumption curve and income consumption curve, - price effect, income effect and substitution effect, derivation of demand curve – Giffen paradox – market demand.

- The Revealed Preference approach, derivation of demand function from Revealed Preference approach.

- Elasticities of demand – price, income and cross elasticities, relation between price elasticity of demand, price and marginal revenue, relation between price elasticity and total expenditure.

3. Theory of Production and Cost.   **(20 Lectures)**

- Production function: the neo – classical production function – relation between total, Average and marginal productivities – law of variable proportions – the fixed coefficient Production function.

- Iso-Profit curve and Iso-cost line: definition of Iso- Profit curve, economic region of production, marginal rate of technical substitution, equilibrium of the producer - constrained output maximization and constrained cost minimization, output and Substitution effects – elasticity of substitution – expansion path, returns to scale -

Homogeneous and Homothetic production function, the Cobb Douglas and CES
Production function.

- Cost function: different concepts of costs, short run cost analysis and long run cost
  Analysis- relation between the expansion path and cost function – total, average and
  Marginal cost curves – long run cost curves as envelope of short run cost curves.

4. Theory of perfect competition: (20 Lectures)

- Perfect competition and pure competition—Short run and long run equilibrium of a
  competitive firm- Short run and long run supply curves—Long run equilibrium of the
  competitive industry- price determination in a competitive industry- existence,
  uniqueness and static stability of equilibrium –long run supply curves of the industry-
  effects of external economies and diseconomies – effect of change in cost – effect of
  imposition of tax- effect of price control.

References:
Robert S. Pindyck, DaniellRubinfeld, PremL.Mehta: Microeconomics, 7th Edn., Pearson
Koutsoyiannis : Microeconomic Theory
Ferguson and Gould   : Microeconomic Theory
H. Varian   : Intermediate microeconomics
Henderson and Quandt   : Microeconomic Theory

Syllabus for BA/BSc Honours (1+1+1 Pattern) in Economics

Part-I
Paper – I
Second Half

Macroeconomic Theory - I

Full Marks: 50   **Number of Lectures: 70**

1. Introduction: **(02 Lectures)**
  - Scope and nature of Macro Economics with emphasis on macroeconomic problems and Policies – Targets & Instruments of macroeconomic policy etc.

2. The National Income and Products Accounts: **(10 Lectures)**
  - Definition, Concepts and Measurement of GNP, NNP, GDP, NDP, NI, DI – The flow of product method and the flow of expenditure method; Concept of GDP deflator and Price Indices
  - Interrelation between measures of National Income in the absence and presence of Governmental sector and International Transactions
  - The Accounting Identity of Saving and Investment
  - Problems of using National Income as a measure of Economic Welfare.

3. The Simple Keynesian Model of Income Determination: **(12 Lectures)**
  - Keynesian Consumption Function and its properties – Factors affecting Consumption Expenditure – Saving Function & its properties;
  - The divergence between investment and saving motivations
  - Determination of National Income – nature of equilibrium – unemployment, full employment and inflation – stability of equilibrium
  - Comparative static analysis – the Multiplier analysis with and without governmental sector – Investment Multiplier, Government Expenditure Multiplier, Balanced Budget Multiplier; Limitations of the multiplier analysis.
  - The Paradox of Thrift

4. Introducing the Money Market   **(12 Lectures)**
  - Three motives of holding money - Transactions, Precautionary and Speculative motives

- Keynesian Liquidity Preference Theory - Indeterminacy of Rate of Interest in the Liquidity Preference Theory - the Liquidity Trap
- The Inventory Theoretic Approach to Transaction Demand for Money – Baumol and Tobin
- Supply of Money - Credit creation by commercial banks – Money Multiplier - Interest Sensitivity of Money Supply.

5. Interaction between Commodity Market & Money Market: (20 Lectures)
- Construction of the IS and LM curves – Determination of equilibrium value of Rate of Interest and National Income – Stability of equilibrium
- Comparative static analysis of shifts in Saving, Investment, Government Expenditure, Taxation, Money Demand, and Money Supply Schedules
- Relative effectiveness of Monetary and Fiscal policies in terms of IS-LM model.

6. The Classical System: (14 Lectures)
- The Classical view of Macro Economics in respect of the determination of Employment, Output and Prices.
- The classical quantity theory of money and its criticism; The Classical Theory of Rate of Interest - Loanable fund theory as a synthesis between Classical Theory and Keynesian Liquidity Preference Theory of Interest – the Complete Classical Model.
- Say's Law and Walras' law - The Dichotomy between the real and monetary sectors - Neutrality of money.

References:

Mankiew – Macroeconomics

Sikdar, S – Principles of Macroeconomics, OUP

D'souza, Erol – Macroeconomics, 2ⁿᵈ Edn. Pearson

Ackley – Macroeconomic Theory and Policy, 2ⁿᵈ Edn.

Branson – Macroeconomic Theory and Policy

Dornbusch and Fisher: Macroeconomics

Froyen – Macroeconomics-Theories and Policies, 10ᵗʰ Edn. Pearson

Levacic – Macro Economics

Andrew B. Abel, Ben S. Bernanke, Bean Croushore – Macroeconomics, 8ᵗʰ Edn. Pearson.

Part-I
Paper – II
First Half
Selected Features of Indian Economy

Full Marks: 50   **Number of Lectures: 70**

1. Structure of Indian Economy: **(25 Lectures)**

(a) Structure (Sectoral distribution) of National Income & its changes over time-Pre & Post independent period. (b) Occupational structure and its changes over time-pre & post independent period. (c) Inequalities in income distribution. (d) Poverty-Concepts & measurement. (e) Growth of population in India. (f) Unemployment-nature of unemployment-govt. policy in removing unemployment. (g) Unorganised labour market-Female & Child Labour.

2. Agriculture   **(20 Lectures)**

(a) Land tenure systems in British India. (b) Land reforms in the post-independent period. (c) Farm size & Productivity, (d) Growth trends of agricultural production in India with special references to green revolution. (e) Sources & Problems of agricultural Credit, agricultural marketing - Price elasticity of marketed surplus (f) Concepts of food security & Public distribution system in India.

3. Industry   **(15 Lectures)**

(a) Industrial development scenario in pre-independent India with special references to de-industrialization (decline of handicrafts). (b) Industrial Policy-1956, Pre-reform Period (1956) & Post reform Period 1991. (c) Industrial Licensing Policy. (d) Competition Policy. (e) Small scale industries-their role & problems faced by them – Govt. Policy in respect of SSIs.

4. Service   **(10 Lectures)**

(a) Growth and contribution of Service sector in India.(b) Indian IT industry – Problem & Prospect.

References

Dutta and Sundharam	:	Indian Economy
Mishra and Puri	:	Indian Economy
Agarwal	:	Indian Economy
BimalJalan	:	Indian Economy
V. K. R. V. Rao	:	India's National Income
P. Chowdhury	:	Indian Poverty and Development
Bhagwati and Chakraborty	:	Contributions to Indian Economic Analysis
Kapila (ed)	:	Indian Economy
Rudra	:	Political Economy of Indian Agriculture
A. K. Sen	:	Employment, Technology and Development
Joshi Little	:	Indian Economy

Syllabus for B.A. /B.Sc. Honours (1+1+1 Pattern) in Economics

Part-I
Paper – II
Second Half
Statistical Methods - I

Full Marks: 50   **Number of Lectures: 70**

1. Tabular and Diagrammatic Presentation of Data: **(08 Lectures)**
  - Statistical Data – classification and presentation – methods of collection of data – difference between variable and attributes – frequency distribution and its diagrammatic presentation – choice of class interval – diagrammatic representation of frequency distribution – frequency curve – cumulative frequency distribution (more than and less than) Ogive - (simple numerical exercise)

2. Measures of Central Tendency   **(12 Lectures)**
  - Arithmetic mean, median and mode (for both grouped and ungrouped data) – comparison of mean, median and mode – geometric mean and harmonic mean (for both grouped and ungrouped data) – composite mean (average from combined data) – properties for all these measures-(simple numerical exercise)

3. Measures of Dispersion   **(12 Lectures)**
  - Absolute measures – Range, mean deviation and Standard deviation and Quartile Deviation – Relative measures – curve of concentration - (simple numerical exercise)
  - Measurement of economic inequality: nature of distribution of income and wealth graduating from income distribution – Lorenz Curve representation of income distribution – Gini Coefficient and Lorenz Curve-(simple numerical exercise)
  - Moments and measures of skewness and Kurtosis: moments, skewness and kurtosis – definition – relationship between central and non-central moment – Sheppard's correction - (simple numerical exercise)

4. Bivariate Data: Simple Correlation and Regression Analysis   **(10 Lectures)**
  - Scatter diagram – simple correlation coefficient and its properties, its calculation from grouped and ungrouped data, limitations of correlation coefficient. Simple regression analysis – properties of regression line – relationship between correlation coefficient and regression coefficient. Spearman's rank correlation coefficient (without tie) – Kendall's rank correlation coefficient- (simple numerical exercise)

5. Multiple and Partial Correlation – three variable case – deduction of formula – Simple numerical Problems.   **(08 Lectures)**

6. Index Numbers   **(10 Lectures)**

- Purpose and uses of index number, problems of construction, different formulae for price and quantity index numbers, tests for index numbers, chain index, and cost of living index-(simple numerical exercise)

7. Time Series   **(10 Lectures)**

- Nature and decomposition of time series – analysis of trend—polynomial trend – exponential trend – non-linear growth curves – moving average method – seasonal component-(simple numerical exercise)

References:

Goon, Gupta and Dasgupta – Fundamental of Statistics, Vol. I & II

Goon, Gupta and Dasgupta – Basic Statistics

N. G. Das – Statistical Method (Part I & II)

Yule and Kendall – An Introduction to the Theory of Statistics

Gupta and Kapoor – Fundamental of Mathematical Statistics.

Part-II
Paper – III
First Half
Microeconomic Theory - II

Full Marks: 50   **Number of Lectures: 70**

1. Imperfect Competition: **(20 Lectures)**

- Theory of monopoly: Characteristics- AR and MR curves under monopoly-Relation among AR , MR and Elasticity of demand- Equilibrium under monopoly- major features of monopoly- index of monopoly power- price discrimination –when possible?- when desirable? – Degree of price discrimination- equilibrium under price discrimination- Is Price discrimination desirable? Equilibrium under Multiplan monopoly- Monopsony - Equilibrium under bilateral monopoly

- Monopolistic competition: Short run and long run equilibrium- excess capacity.

2. Theory of oligopoly: **(15 Lectures)**

- Characteristics of oligopoly- non-collusive oligopoly models of Cournot and Stackelberg – Collusive oligopoly – price leadership – market sharing model- price rigidity under Oligopoly.

3. Theory of factor pricing: **(20 Lectures)**

- Demand for factors of production - Determinants of price elasticity of demand for a factor – marginal productivity theory and its limitations

- Theory of wage - Choice between work and leisure – derivation of individual labour Supply curve – total labour supply curve – demand for labour – determination of Equilibrium in a competitive labour market- collective bargaining and wage rate.

- Theory of rent - Transfer earning and economic rent – quasi rent – Rent and price

- Theory of profit - Gross and net profit- elements of profit- risk and uncertainty theory- Innovation theory of profit.

4. General equilibrium and economic welfare   **(15 Lectures)**

- Partial and general equilibrium – a formal statement of general equilibrium approach- the Concept of Pareto optimum- Pareto optimality in consumption-Pareto optimality in Production-General Pareto optimality condition.

References:

Koutsoyiannis : Microeconomic Theory

Ferguson and Gould : Microeconomic Theory

H. Varian : Intermediate microeconomics

Henderson and Quandt : Microeconomic Theory

Robert S. Pindyck, DaniellRubinfeld, PremL.Mehta: Microeconomics, 7thEdn. Pearson

Full Marks: 50   **Number of Lectures: 70**

1. The Complete Keynesian Model: **(20 Lectures)**

- Introduction of the Labour Market – the Aggregate Demand and Aggregate Supply apparatus – the interaction between Commodity Market, Money Market and Labour Market – Determination of Equilibrium – Effects of changes in Money Supply and other factors – Comparison with the Classical system – Price Flexibility – Real Balance Effect and Full Employment.

2. Consumption function: **(10 Lectures)**

- Empirical findings regarding Consumption Function – Alternative Theories regarding its behaviour – Keynes, Smithies, Duesenberry, Friedman, Ando-Modigliani.

3. The Investment Function: **(15 Lectures)**

- The Keynesian analysis of Investment – The Marginal Efficiency of Investment, and its relation with the amount of Investment – Shortcomings of Keynesian analysis

- Net Present Value criterion and Marginal Efficiency criterion of Investment

- The Fixed Accelerator Principle of Investment – its Implications and Limitations.

- The Flexible Accelerator Principle of Investment – its Implications and Limitations, (Multiplier accelerator theory)

4. Theories of Inflation: **(15 Lectures)**

- The Quantity Theory approach to Inflation

- Demand Pull Inflation and Inflationary Gap analysis; Its shortcomings

- Concepts of Cost Push & Mark Up inflation

- The Philips Curve and the trade-off between Inflation and Unemployment – short-run and Long-run Philips Curve

- Consequences of inflation – Measures to control Inflation.

5. Economic Growth: **(10 Lectures)**

- The Harror-Domar Model – Assumptions – Implications – Actual Warranted and Natural Rates of Growth – The Knife Edge Problem

References:

Mankiew – Macroeconomics

Andrew B. Abel, Ben S. Bernanke, Bean Croushore – Macroeconomics, 8th Edn. Pearson.

Sikdar, S – Principles of Macroeconomics, OUP

D'souza, Erol - Macroeconomics

Ackley– Macroeconomic Theory and Policy, 2nd Edn.

Branson – Macroeconomic Theory and Policy

Dornbusch and Fisher: Macroeconomics

Froyen - Macroeconomics

Levacic – Macro Economics

Syllabus for BA/BSc Honours (1+1+1 Pattern) in Economics
Part-II
Paper – IV
First Half
Mathematical Economics

Full Marks: 50   **Number of Lectures: 70**

Linear Programming: **(Lectures 20)**

Linear Programming Technique as a Tool for Optimization – General Formulation of the LP Problem – Applications in Economics – Graphical Solutions of Some Standard Problems (Maximization & Minimization) – Concepts of Slack Variable, Basic Feasible Solution – Solution of Some Simple Problems by Simplex Method (Maximization Case only) – The Dual Problem – Economic Interpretation of Duality.

Input-Output Analysis: **(Lectures 20)**

Basic Concept of Input-output Analysis – Assumptions & Structure of the Leontief Static Open Model (2.2 Case) – Solution in such a Model – Hawkins-Simon Condition and its Economic Interpretation – Price System in L S O M (2.2 Case) with Economic Implications.

Basic Game Theory: **(Lectures 20)**

Basic Concepts & Assumptions of Game Theory – Two-Person Zero-Sum Game with Saddle Point – Concept of Dominance – Elements of Non-Zero-Sum Game – Prisoner's Dilemma – Concept of Nash Equilibrium.

Decisions under Uncertainty: **(Lectures 10)**

Maximin, Maximax, Hurwicz, Laplace and Savage Criterion for optimal Decision.

References:

A.C. Chiang- Fundamental Methods of Mathematical Economics, McGraw – Hill International Edition
Dorfman, Samuelson & Solow-Linear Programming and Game Theory: An Economic Analysis
N.D.Vora: Quantitative Techniques in Management, Tata McGraw-Hill
Sharma: Operation Research: Theory and Applications, Macmillan India Ltd.
W.J.Baumol: Economic Theory and Operations Analysis, Prentice Hall
Taro Yamane. Mathematics for Economist: An Elementary Syrvey

Full Marks: 50

1. **Set Theory**   **(Lecture: 05)**

    Set Notations – Universal Set – Subsets – Null Set – Finite & Infinite Sets – Convex Sets – -
    Convex Sets - Relationships between Sets – Basic Set Operations.

    Applications: Consumer Preference & Budget in terms of Sets

2. **Probability Theory**   **(Lecture: 10)**

   - Random Experiments – Sample or Outcome Spaces (Discrete and Continuous case) –
     Events and their Algebra – Mutually Exclusive, Equally Likely and Collectively
     Exhaustive Events – Probability: Classical and Axiomatic Definition – Complementary
     Event – Theorem of Total Probability – Conditional Probability – Theorem of Compound
     Probability – Independent Events, Bayes' Theorem.

3. **Random Variables and related concepts:**   **(Lecture: 10)**

   - Random Variables – Probability Mass and Density Functions - Expectation and
     Varianceof Random Variables (for Random Sampling With and Without
     replacement)

4. **Univariate Probability Distributions:**   **(Lecture: 10)**

   - Binomial, Poisson, Normal Distributions – Mean, Variance. Moment Generating
     Functions.

5. **Sampling Theory and Sampling Distributions:**   **(Lecture: 15)**

   - Population and Sample – Parameter and Statistic – Random Sampling – Practical
     Methods of Drawing Random samples – Random sampling Numbers – Sampling
     Distribution – Standard Error

   - Sampling Distributions associated with Normal Population, Expectation and Standard
     Error of Sample Mean, Chi-Square Distribution, Student's t Distribution,
     F-Distribution (definition and importance, properties and uses only)

7. **Estimation:**   **(Lecture: 10)**

   - Desirable Properties of estimators – Unbiasedness, Minimum Variance – Simple
     Methods of Point Estimation – Maximum Likelihood. Estimators and their properties –
     Maximum Likelihood estimation of the parameter of Binomial, Poisson and Normal
     Distribution.

8. **Testing of Hypothesis:**   **(Lecture: 10)**

Null hypothesis & Alternative Hypothesis – Confidence Intervals – Testing of Hypothesis – P-value – Type-I and Type-II Errors – Simple applications of tests for the Mean and Variance of a Univariate Normal Population.

References:

Nagar and Das – Basic Statistics

Mathai &Rathie – Probability and Statistics

Goon, Gupta and Dasgupta – Fundamentals of Statistics, Vol. I & Vol. II

R Spiegel and L.J. Stephen. Statistics, Schaum Series

Sheldon Ross: A First Course in Probability, 9[th]Edn. Pearson

E. Rukmangadachari: Probability and Statistics-Pearson

Syllabus for BA/BSc Honours (1+1+1 Pattern) in Economics

Part-III
Paper – V
First Half
International Economics

Full Marks: 50   **Number of Lectures: 70**

1. Theory of Trade   (25 Lectures)

- Absolute advantage theory of Smith
- The Ricardian theory – generalization of Ricardian model- the H-O Model, comparison of CA in the two (HO and Ricardo) – Commodity and Factor prices under trade- factor price equalization, factor intensity reversal and factor Prices- Leontief paradox, gains from trade and income distribution. Offer Curve, Rbynscki theorem, Metzler Paradox.

2. Balance of Payments and Problems of Adjustment   (20 Lectures)

- The mechanism of adjustment under fixed exch. Rates – automatic adjustment under Gold Standard- expenditure reducing and Expenditure switching policies – devaluation, the elasticity and absorption approaches – direct controls- mechanism of adjustment under flexible exchange rate and uncertainty, speculation and the stability of exchange rate and inflation- costs and benefits of flexible exchange rates.

3. Trade Intervention   (20 Lectures)

- Theory of Tariff and income distribution – the Stolper-Samuelson theorem, tariffs terms of trade and domestic prices, tariffs and national income, the optimum tariff, other effects of tariffs – quotas and quantitative trade restrictions -effects of quotas and quantitative trade restrictions and balance of payments- trading state, the infant industry argument
- Problems of international reserves and liquidity and of development finance

4. IMF and its role- as a source of international liquidity. SDRs, IBRD, World Bank**.**

                                                                       (05 Lectures)

References:

Soderstein, Bo   : International Economics, 2ⁿᵈ Edition
Kennen, P   : International Economics
Caves, Frankel and Jones : World Trade and Payments
Krugman and Obstfeld   : International Economics – Theory and Policy, 8ᵗʰ Edn. Pearson

Syllabus for BA/BSc Honours (1+1+1 Pattern) in Economics

Part-III
Paper – V
Second Half
Money and Capital Market

Full Marks: 50   **Number of Lectures: 70**

1. **Definition of Money Market:**   **(12 Lectures)**

   - Basic Concepts of Call money market, Commercial Bills market, Treasury Bills market, Short-Term loan market. Features and objectives of Money Market. Features of Developed Money Market.

2. **Commercial and the Central Bank**   **(15 Lectures)**

   - Nature and function of Central Bank and the money supply-different concept of money supply and their uses-credit creation and credit multiplier-theories of asset management-role of commercial banks in development.

   - Central Bank's functions-Central Bank and money market – Techniques of management-bank rate policy, open market operations and variable reserve ratio and selective instruments of credit control.

3. **Non-Banking Financial Intermediaries (NBFIs)**   **(10 Lectures)**

   - Distinction between commercial banks and NBFIs- validity of the distinction-Central bank's control over the NBFIs.

4. **Introduction to Capital Market**   **(15 Lectures)**

   - Basic Concept of organized and unorganized Capital Market. Distinction between Primary Market and Secondary market. Differences between Share and Bond.

5. **Operations of Indian Stock Market**   **(12 Lectures)**

   - Stock Exchanges in India – national and regional, Market Players, types of traded instruments, Trading – floor based and screen based, Stock Indices, Credit rating and Credit rating agencies.

6. **Capital Market Regulatory Authority**   **(6 Lectures)**

   - Role and Functions of Regulatory Authorities
   - Securities and Exchange Board of India (SEBI).

References:

S.B. Gupta: Monetary Economics-Institutions, Theory and Policy.

E. Gordon, K. Natarajan: Financial Markets and Services.

Varshney & Mittal: Indian Financial System

D.M.Mithani: Money Banking International Trade and Public Finance.

(Chapters 11,13,14,16,17,18).

Desai, V.: The Indian Financial System.

Machiraju, H. R.: Indian Financial System.

Bhole: Indian Financial System.

Bharati Pathak: Indian Financial System, 4thEdn. Pearson

Syllabus for BA/BSc Honours (1+1+1 Pattern) in Economics
Part-III
Paper – VI
First Half
Development Economics

Full Marks: 50   **Number of Lectures: 70**

1. Economic Development   **(10 Lectures)**

- Meaning of Development, different concepts of development –Sustainable development, Participatory development, Inclusive development, Human development, Growth and Development – Broad Indicators of Economic Development – Per capita Income – PQLI – Basic needs approach – Human Development Index – Gender Development Index – Gender Empowerment Measure - Human Poverty Index.

2. **Development and Underdevelopment as a Historical Process**   **(10 Lectures)**

- Dependency theory of Baran – Frank's Theory of colonial exploitation – Merchant Capital in shaping underdevelopment (Kay) – Emmanuel's theory of unequal exchange.

3. Persistence of Underdevelopment and Way to Develop   **(20 Lectures)**

- Characteristics of underdevelopment – Obstacles to underdevelopment – Trap Models – Vicious circle of poverty – Critical minimum effort thesis – Low level equilibrium trap – Process of cumulative causation – Concept of surplus labour – Surplus labour as potential saving – Economic development with unlimited supplies of labour (Lewis Model).

4. Development Strategy   **(7 Lectures)**

- Capital intensive Vs Labour intensive technique – Choice of technique in a labour surplus economy – Sustainable development.

5. Trade and Development   **(8 Lectures)**

- Trade as an engine of growth – Terms of trade and economic development (Prebisch – Singer Thesis) – Imports substitution Vs export promotion.

6. Historical Evolution from GATT to WTO   **(15 Lectures)**

- Objectives of GATT – Main resolutions of Uruguay Round – WTO – Objectives – Functions – Advantages and disadvantages of less developed countries – Role of less developed countries in the WTO regime.

References:

Thirlwall	:	Growth and Development
Debraj Roy	:	Development Economics
Meier (ed)	:	Leading Issues in Economic Development
K. Basu	:	A Critique of Less Developed Economy
Debesh Bhattacharya	:	Political Economy of Development
Pearce and Turner	: Economics of Natural Resources and the Environment

Syllabus for B.A. /B.Sc. Honours (1+1+1 Pattern) in Economics

Part-III
Paper – VI
Second Half
Classical Political Economy

Full Marks: 50   **Number of Lectures: 70**

1. Classical Background   **No. of Lectures: 20**

- Chief features of classical system, Adam Smith Labour Theory of Value, the Ricardian one sector model, Classical political economy and Marx.

2. Stages of Development   **No. of Lectures: 13**

- Marxian theory of stages of growth, Rostow's theory of stages of growth.

3. Marx's Theory of Value   **No. of Lectures: 12**

- Qualitative and quantitative aspects of value, commodity fetishism, constant and variable capital, circuits of capital, surplus value, organic composition of capital.

4. The Reproduction Schemes & Accumulation of Capital   **No. of Lectures: 10**

- Industrial reserve army, accumulation and technological change.

5. Origin of Surplus Value and Profits   **No. of Lectures: 15**

- The law of falling rate of profit - Theories of Crisis: Under consumption, realization crisis, disproportionality crisis.

References:

Ben Fine- Marx's capital

Sweezy- Theory of Capitalist Development.

M. Desai- Marxian Economics.

Blaug, M - [PDF]

Marc Blaug, Economic Theory in Retrospect, 3rd Edn.

Part-III
Paper – VII
First Half
Econometrics & Quantitative Technique

Full Marks: 50   **Number of Lectures: 70**

1. Econometrics: **(10 Lectures)**
- Concept - Types – theoretical and applied econometrics- importance and role of Econometrics in economics- Classical Methodology of Econometrics.

2. The Classical Linear Regression Model (Two variable case)   (20 Lectures)
- The Classical Ordinary Least Square Method (CLSM) – Assumptions – estimation of parameters in two variable case – Properties of least-square estimators – testing of regression coefficients – The Gauss-Markov Theorem – BLUE – Goodness of Fit- the Coefficient of determination R_2 – Numerical Problems.

3. The Classical Linear Regression Model (Three variable case)   (20 Lectures)
- The Classical Ordinary Least Square Method (CLSM) – estimation of parameters with Two independent variables – Violation of the Assumptions of CLSM – Multicollinearity, Heteroscedasticity and Autocorrelation (Concepts only).

4. Technique of Dynamic Analysis: **(20 Lectures)**
- Notion of Stationary values and Stability – First order Differential Equation-First and Second Order Linear Difference Equation with constant Terms

Applications: Domer's Analysis of Growth – Price Dynamics in a Competitive Market – The Cobweb Model – Dynamic Multiplier – Multiplier – Accelerator Interaction Model.

References:

Dominick Salvatore (2001): Schaum's Outline of Statistics and Econometrics, McGraw-Hill.

Fumio Hayashi (2000) Econometrics, Princeton University Press.

Maddala: Introduction to Econometrics

Greene, William H. (1999, 4ᵗʰEdn.) Econometric Analysis, Prentice Hall.

Gujrati, N Damodar (2011): Basic Econometrics.

Bruce E. Hansen (2014), University of Wisconsin

Peter Kennedy (2004): A Guide to Econometrics, Blackwell Publishers.

Pindyck, Robert S., and Daniel L. Rubinfeld (1998, 4ᵗʰEdn.) Econometric Methods and Economic Forecasts, McGraw-Hill.

Koutsoynnis: An Introduction to Econometrics

Part-III
Paper – VII
Second Half
Public Economics and Environmental Economics

Full Marks: 50   **Number of Lectures: 70**

1. Introduction to instruments and objective of Public Finance   (10 Lectures)

- Public goods and private goods; The three bases of public finance (stability etc).

- Externalities; Public Economics and Public Finance; Provisioning of Public Goods and Public Finance; Economy-Environment Interfaces

2. Principles of Taxation   (25 Lectures)

- Ability and benefit approaches – voluntary exchange model – degree of progression bases of taxation – income, expenditure wealth and commodities – income versus expenditure tax – shifting and incidence of taxes.

3. Compensatory Fiscal Policy   (20 Lectures)

- Effects of changes in govt. expenditure and taxation – balanced budget multiplier – public debt and its economic effects – anti-inflationary fiscal policy.

4. Environment Economy Interaction: (8 Lectures)

- Services of the environment – 1st Law and 2nd Law of Thermodynamics.

5. Pollutions and other environmental Degradations   (7 Lectures)

- Optimal level of pollution; the conflict between net private and net social benefits of pollution and abatement; Concept of WTP & WTA – A statement of Coase Theorem; Global Issues and the North-South Debate.

References:

Musgrave - Theory of Public finance

Subrata Gupta - Public Finance

Hanley Shogren& White - Environmental Economics

Titenberg - Environmental Economics

R.N. Bhattacharya Edn. - Environmental Economics An Indian perspective

B. Mishra – Public Financ

Syllabus for BA/BSc Honours (1+1+1 Pattern) in Economics

Part-III
Paper – VIII
First Half
Indian Economic Planning

Full Marks: 50   **Number of Lectures: 70**

1. Economic Planning   (Lecture: 20)

(a) Preparation for plan: A brief historical sketch – Bombay plan – Planning Commission and National Development Council (b) Objectives, Financing pattern and achievements of Indian plans. (c) Planning in a market-led economy (d) Preparation of Union Budgets –Components- Different Forms of Budget deficits - Fiscal Responsibility and Budget Management Act.

2. Fiscal Policy   (Lecture: 30)

(a) Objectives of Fiscal Policy. (b) Centre – State financial relation. (c) Composition of govt. revenue and expenditure. (d) Tax reforms since 1991. (e) Public debt.

3. Monetary Policy   (Lecture: 20)

(a) Objectives of RBI's monetary policy. (b) Structure of Indian money market. (c) Bank Nationalization and its achievements. (d) Banking and insurance sector reforms since 1991. (e) Capital market and its reforms since 1991.

References:

Dutta and Sundharam	:	Indian Economy
Mishra and Puri	:	Indian Economy
Dhingra, I.C	:	Indian Economy
Bhagwati and Chakraborty	:	Contributions to Indian Economic Analysis
Chakraborty	:	Development Planning: The Indian Experience
Wadhva	:	Some Problems of India's Economic Policy
Lucas and Papanek	:	Indian Economy
Jalan	:	Indian Economic Crisis
Nayaar	:	On Economic Liberalization
Kapila	:	Indian Economy
Budget Document	:	Govt. of India

Part-III
Paper – VIII
Second Half
Group A: Computer Application (Practical)

Full Marks: 25   **Number of Lectures: 70**

It is a Lab Based Practical Paper. The student shall learn the operations through hands – on Training followed by practical tests.

1. **The Nature and Sources of Data for Economic Analysis**   **(06 Lectures)**

   Types of Data – Time Series, Cross Section – Basic Data Presentation
   , Introduction to Excel/Spreadsheet, Excel Basic, Formulas and Functions, Sort and Filter.

2. **Graphical Representation of Data Sets:**   **(12 Lectures)**

   Pie Chart, Bar Chart, Histogram frequency Polygon, Ogive, Bivariate Scatter Diagram.

3. **Using Spreadsheet / Excel for Statistical Analysis Estimation of Descriptive Statistics:**

   Mean, Median, Mode, Standard Deviation, Simple Correlation, Rank Correlation,
   Correlation, Classical Regression.   **(12 Lectures)**

Group B: Project
Full Marks: 25   **(40 Lectures)**
(Project Report: 20 Marks)
(Viva-Voce: 05 Marks)

   Project: Introduction – Motivations – Literature Review – Objectives – Methodology –
   Estimator – Policy Suggestion – Bibliography

   Project to be done on a small Primary sample of size 20 or more observations.

References:

Data Analysis Using Microsoft Excel – Ash Narayan Sah Excel Books India

Excel 2010 For Dummies Colin Banfield, John Walkenbach

Gray Koop (2009), Analysis of Economic Data, 3rd Edition (University of Strathclyde, UK)