# S. S. Jain Subodh P.G. College (Autonomous)
# Jaipur

## FACULTY OF SCIENCE PROGRAMME

## THREE-YEAR UNDERGRADUATE PROGRAMME IN SCIENCE

## Subject/Discipline: Economics

**(Syllabus as per NEP-2020 and Choice Based Credit System)**

**Medium of Instruction: Hindi/English**

**w.e.f. Academic Session 2023-24**

# Courses for B.Sc.

**CBCS Scheme for B.Sc**

| Sem. | Economics (Credits) (DSC / DSE) | General Elective (Credits) GE | Ability Enhancement Course (Credits) AECC | Skill Enhance-men t Course (Credits) SEC | Internship/ Apprenticeship/ Project/ Community Outreach 4 | Total Cred its TC | Value Addition Course (Credits) VAC |
|---|---|---|---|---|---|---|---|
| **I** | DSC-I (2)<br>Micro Economics- I | | English(2) | | | 8 | Choose One From a Pool Of Courses(2)<br>● Digital Empow er-ment (2)<br>Financial Literacy (2) |
| | DSC-II (2)<br>Indian Economy -I | | | | | | |
| | Practical I (2) | | | | | | |
| **II** | DSC-I (2)<br>Micro Economics - II | | Hindi (2) | | | 8 | |
| | DSC-II (2)<br>Indian Economy -II | | | | | | |
| | Practical II(2) | | | | | | |
| **III** | DSC-I (2)<br>Macro Economics -I | Choose One From A Pool Of Courses GE-I(2) | | Computer Science(2) | | 10 | |
| | **Choose One From Pool Of Course**<br>DSE-I(A) (2)<br>Introduction to Statistics and Mathematics for Economics-I | | | | | | |
| | DSE-II(B) (2)<br>History of Economic Thought-I | | | | | | |
| | Practical III (2) | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | Choose One From A Pool Of Courses(2) |
| **IV** | DSC-I (2)<br>Macro Economics - II | Choose One From A Pool Of Courses GE-II(2) | | Environmental Sc. And Sustainable Development (2) | | 10 | |
| | **Choose One From Pool Of Course**<br>DSE- I(A) (2)<br>Introduction to Statistics and Mathematics for Economics-II | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | DSE-II(B) (2) History of Economic Thought-II | | | | | | • Digital Empowerment (2) • Financia l Literacy (2) |
| | Practical IV(2) | | | | | | |
| **V** | DSE-I (2) International Trade and Development Economics | | | Mental ability and reasoning (2) | | 8 | |
| | **Choose One From Pool Of Course** DSE -I(A) (2) Application of Mathematics in Economics -I | | | | | | |
| | DSE -II(B) (2) Environmental Economics-I | | | | | | |
| | DSE -III(C) (2) Economy of Rajasthan -I | | | | | | |
| | Practical V ( 2) | | | | | | |
| **VI** | DSC -1(2) Public Finance | | | Anandam - Joy of giving (2) or NCC/NSS/ RO VERS And RANGER/ Red ribbon club/sports/ extra curricular and co-curricular activities(2) | | 8 | |
| | **Choose One From Pool Of Course** DSE -I(A) (2) Application of Mathematics in Economics-II | | | | | | |
| | DSE -II(B) (2) Environmental Economics-II | | | | | | |
| | DSE-III(C) (2) Economy of Rajasthan-II | | | | | | |
| | Practical VI ( 2) | | | | | | |

- Student has to complete value added course (VAC-Credit 2) either in first year or second year.
- Student may select Generic Elective paper in Semester III & IV from the pool of courses given. The GE paper must be from the other faculty of discipline.
- Project work / dissertation is considered as a special course involving application of knowledge in solving / analysing / exploring a real life situation / difficult problem. A project / dissertation would be of 2 credits. A project / dissertation work will be given in lieu of a discipline specific elective paper

Key: CC = Core Course; AECC = Ability Enhancement Compulsory Course; SEC = Skill Enhancement Course; DSE = Discipline Specific Elective; GE = Generic Elective

## 1. Eligibility

10+2 with 48% from Rajasthan Board / CBSE from Rajasthan state and 60% for CBSE or any other equivalent recognized Board from other state.

## 2. Scheme of Examinations

# B.Sc. : Scheme of Examination

## Semester I

| Paper Code | Nomenclature of the Paper | End Sem. Exam Theory Marks | Internal Marks | Total Marks | |
|---|---|---|---|---|---|
| | | Science | Science | Science | |
| | | Max. | Max. | Max. | Min. |
| BSEC101 | Micro Economics- I | 35 | 15 | 50 | 20 |
| BSEC102 | Indian Economy- I | 35 | 15 | 50 | 20 |
| BSEC151 | Economics Practical-I | 30<br>Practical Report- 15<br>Written Test- 05<br>Viva-voce- 10 | 20 | 50 | 20 |

**Passing marks are 40% including the CIA**

## Semester II

| Paper Code | Nomenclature of the Paper | End Sem. Exam Theory Marks | Internal Marks | Total Marks | |
|---|---|---|---|---|---|
| | | Science | Science | Science | |
| | | Max. | Max. | Max. | Min. |
| BSEC201 | Micro Economics- II | 35 | 15 | 50 | 20 |
| BSEC202 | Indian Economy- II | 35 | 15 | 50 | 20 |
| BSEC251 | Economics Practical-II | 30<br>Practical Report- 15<br>Written Test- 05<br>Viva-voce- 10 | 20 | 50 | 20 |

**Passing marks are 40% including the CIA**

## Semester III

| Paper Code | Nomenclature of the Paper | End Sem. Exam Theory Marks | Internal Marks | Total Marks | |
|---|---|---|---|---|---|
| | | Science | Science | Science | |
| | | Max. | Max. | Max. | Min. |
| BSEC301 | Macro Economics- I | 35 | 15 | 50 | 20 |
| BSEC302 A | Introduction to Statistics and Mathematics for Economics-I | 35 | 15 | 50 | 20 |
| BSEC302 B | History of Economic Thought-I | 35 | 15 | 50 | 20 |
| BSEC351 | Economics Practical-III | 30<br>Practical Report- 15<br>Written Test- 05<br>Viva-voce- 10 | 20 | 50 | 20 |

**Passing marks are 40% including the CIA**

## Semester IV

| Paper Code | Nomenclature of the Paper | End Sem. Exam Theory Marks | Internal Marks | Total Marks | |
|---|---|---|---|---|---|
| | | Science | Science | Science | |
| | | Max. | Max. | Max. | Min. |
| BSEC401 | Macro Economics- II | 35 | 15 | 50 | 20 |
| BSEC402 A | Introduction to Statistics and Mathematics for Economics-II | 35 | 15 | 50 | 20 |
| BSEC402 B | History of Economic Thought-II | 35 | 15 | 50 | 20 |
| BSEC451 | Economics Practical-IV | 30<br>Practical Report- 15<br>Written Test- 05<br>Viva-voce- 10 | 20 | 50 | 20 |

**Passing marks are 40% including the CIA**

## Semester V

| Paper Code | Nomenclature of the Paper | End Sem. Exam Theory Marks | Internal Marks | Total Marks | |
|---|---|---|---|---|---|
| | | Science | Science | Science | |
| | | Max. | Max. | Max. | Min. |
| BSEC501 | International Trade and Development Economics | 35 | 15 | 50 | 20 |
| BSEC502 A | Application of Mathematics in Economics -I | 35 | 15 | 50 | 20 |
| BSEC502 B | Environmental Economics-I | 35 | 15 | 50 | 20 |
| BSEC502 C | Economy of Rajasthan-I | 35 | 15 | 50 | 20 |
| BSEC551 | Economics Practical-V | 30<br>Practical Report- 15<br>Written Test- 05<br>Viva-voce- 10 | 20 | 50 | 20 |

**Passing marks are 40% including the CIA**

## Semester VI

| Paper Code | Nomenclature of the Paper | End Sem. Exam Theory Marks | Internal Marks | Total Marks | |
|---|---|---|---|---|---|
| | | Science | Science | Science | |
| | | Max. | Max. | Max. | Min. |
| BSEC601 | Public Finance | 35 | 15 | 50 | 20 |
| BSEC602A | Application of Mathematics in Economics–II | 35 | 15 | 50 | 20 |
| BSEC602B | Environmental Economics-II | 35 | 15 | 50 | 20 |
| BSEC602C | Economy of Rajasthan-II | 35 | 15 | 50 | 20 |
| BSEC651 | Economics Practical-VI | 30<br>Practical Report- 15<br>Written Test- 05<br>Viva-voce- 10 | 20 | 50 | 20 |

**Passing marks are 40% including the CIA**

## Examination Scheme (Theory Paper)

| Particular | No. of questions | Marks of each question | Total Marks |
|---|---|---|---|
| | SCIENCE | SCIENCE | SCIENCE |
| I | 10<br>Questions (very short answer questions) of mark 1 each . Attempt any 7 Ques. | 7*1=7 | 07 |
| II | 4 Question from each unit with internal choice | 4*7 | 28 |

# B.SC. Semester Structure
## Course Details

### B.SC. I Semester

| S.NO. | Subject Code | Course Title | Course Category | Credit | Contact Hours Per Week | | | ESE Duration (Hrs.) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | L | T | P | THEORY | PRACTICAL |
| 1. | BSE C101 | **Micro Economics-1** | **DSC** | **2** | **2** | | | **3** | |
| 2. | BSE C102 | **Indian Economy-1** | **DSC** | **2** | **2** | | | **3** | |
| 3. | BSE C151 | **Economics Practical-I** | **DSCP** | **2** | | | **4** | | **4** |

### B.SC. II Semester

| S.NO. | Subject Code | Course Title | Course Category | Credit | Contact Hours Per Week | | | ESE Duration (Hrs.) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | L | T | P | THEORY | PRACTICAL |
| 1. | BSE C201 | **Micro Economics-II** | **DSC** | **2** | **2** | | | **3** | |
| 2. | BSE C202 | **Indian Economy-II** | **DSC** | **2** | **2** | | | **3** | |
| 3. | BSE C251 | **Economics Practical-II** | **DSC** | **2** | | | **4** | | **4** |

## B.SC. III Semester

| S.NO. | Subject Code | Course Title | Course Category | Credit | Contact Hours Per Week | | | ESE Duration (Hrs.) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | L | T | P | THEORY | PRACTICAL |
| 1. | BSE C301 | **Macro economics-1** | **DSC** | **2** | **2** | | | **3** | |
| 2. | BSE C302 A | **Introduction to Statistics and Mathematics for Economics-I** | **DSE** | **2** | **2** | | | **3** | |
| 3 | BSE C302 B | **History of Economic Thought-I** | **DSE** | **2** | **2** | | | **3** | |
| 4 | BSE C351 | **Economics Practical-III** | **DSC** | **2** | | | **4** | | **4** |

## B.SC. IV Semester

| S.NO. | Subject Code | Course Title | Course Category | Credit | Contact Hours Per Week | | | ESE Duration (Hrs.) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | L | T | P | THEORY | PRACTICAL |
| 1. | BSE C401 | **Macro Economics-II** | **DSC** | **2** | **2** | | | **3** | |
| 2. | BSE C402 A | **Introduction to Statistics and Mathematics for Economics-II** | **DSE** | **2** | **2** | | | **3** | |
| 3 | BSE C402 B | **History of Economic Thought-II** | **DSE** | **2** | **2** | | | **3** | |
| 4 | BSE C451 | **Economics Practical-IV** | **DSC** | **2** | | | **4** | | **4** |

## B.SC. V Semester

| S.NO. | Subject Code | Course Title | Course Category | Credit | Contact Hours Per Week | | | ESE Duration (Hrs.) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | L | T | P | THEORY | PRACTICAL |
| 1. | BSE C501 | International Trade and Development Economics | DSC | 2 | 2 | | | 3 | |
| 2. | BSE C502 A | Application of Mathematics in Economics - I | DSE | 2 | 2 | | | 3 | |
| 3 | BSE C502 B | Environmental Economics-I | DSE | 2 | 2 | | | 3 | |
| 4 | BSE C502 C | Economy of Rajasthan-I | DSE | 2 | 2 | | | 3 | |
| 5 | BSE C551 | **Economics Practical-V** | DSC | 2 | | | 4 | | 4 |

## B.SC. VI Semester

| S.NO. | Subject Code | Course Title | Course Category | Credit | Contact Hours Per Week | | | ESE Duration (Hrs.) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | L | T | P | THEORY | PRACTICAL |
| 1. | BSE C601 | Public Finance | DSC | 2 | 2 | | | 3 | |
| . | BSE C602 A | Application of Mathematics in Economics–II | DSE | 2 | 2 | | | 3 | |
| 3 | BSE C602 B | Environmental Economics-II | DSE | 2 | 2 | | | 3 | |
| 4 | BSE C602 C | Economy of Rajasthan-II | DSE | 2 | 2 | | | | |
| 5 | BSEC651 | **Economics Practical-VI** | DSC | 2 | | | 4 | | 4 |

## 4. Course Outcome

The program aims to:

1. Train students in basic economic theory;
2. Equip students with the mathematical and statistical techniques necessary for a proper understanding of the discipline;
3. Discuss real world economic issues and problems facing the country and the world;
4. Enable students to understand proper policy responses to economic problems;
5. Train students to collect primary data and learn sampling techniques;
6. Train students to use statistical and econometric methods to arrive at conclusions about the validity of economic theories;
7. Train students to learn the art of economic modeling.

# B.Sc. Semester-I

## Paper–I Micro Economics-I(2) (BSEC 101)

**Duration: 3 hrs.**
**Max. Marks: 35 (For Science)**

## Course Objective

This course intends to expose the students to the basic principles in Microeconomics and their applications. The course will illustrate how microeconomic concepts can be applied to analyze real-life economic situations.

## Course Learning Outcomes

The students learn some basic principles of microeconomics and interactions of supply and demand, production function, efficiency and welfare.

### Unit– I (7 Hrs)

**Introduction :** Nature and Scope of Economics, Methods of Economic Analysis – Inductive and Deductive, Static and Dynamic Analysis, Choice as an Economic Problem.

### Unit– II (8Hrs.)

**Demand:** Law of Demand, Elasticity of Demand and its Measurement, Concept of Equilibrium, Consumer's Surplus.

**Utility:** Cardinal Utility (Law of Diminishing Marginal Utility and Law of Equi-Marginal Utility)

### Unit -III (8Hrs.)

**Consumer's Behavior:** Ordinal Utility (Indifference Curve) Approaches, Normal, Inferior and Giffen goods, Consumer's Equilibrium, Price, Income and Substitution effect. (Hicks and Slutsky), Derivation of Demand Curve from PCC.

**Different Theory of Costs and Revenue:** Different Concepts of Cost and Revenue Curves and their Interrelationship.

## Unit-IV (7 Hrs.)

**Theory of Production:** Production Function, Iso-Quant Curve, Expansion Path, Optimum Factor Combination, Law of Variable Proportion sand Law of Returns to Scale.

**REQUIREDREADINGS:**


- Ahuja ,H.L.: *Principles of Economics*, S. Chand and Company, New Delhi.Salvator, Dominick: *Micro Economics- Theory and Application*, Oxford UniversityPress.2008.
- Nathuramka, L.N.: *Vyashti Arthshastra*, R.B.D Publication., Jaipur.Koutsoyiannis,A:*Modern Microeconomics*,Macmillan,L ondon1990
- RobertS.PindyckandDanielL. Rubinfeld:*Microeconomics*,PearsonEducationInc.,News Delhi
- HalR. Varian:*MicroeconomicAnalysis*,W.W. Norton&CompanyInc.,NewYork.

# B.Sc. Semester-I

## Paper–II Indian Economy -I(2) (BSEC 102)

**Duration: 3 hrs.**
**Max. Marks: 35 (For Science)**

### Course Objective

This course exposes students to some of the key ideas and concepts in the areas of growth and structural change, poverty, education, health, gender, industry, services, natural resources characteristics of Indian agriculture and Infrastructure development in India

### Course Learning Outcomes

Students will develop a critical understanding of the contemporary issues in the Indian economy. Students will thus be better prepared to face the professional world and can use this knowledge base in a variety of jobs, including in the corporate, civil service, and NGO sectors.

**Unit–I (7 Hrs.)**

**Introduction:** Characteristics and main features of Indian Economy, Natural Resources: Land, Water, Minerals, Forest, and Power Resources, Population: Size and Growth of Population, Sex Composition, Labor Force, Occupational Distribution and Population Policy, Human Resources Development Indicators (i.e. literacy, health, nutrition etc.)

**Unit–II ( 8Hrs.)**

**Agriculture:** Importance, Nature and Role of Agriculture in Indian Economy, Finance and Marketing (Financial Institutions and Co-operative Society), New Agricultural Strategy and Modernization of Agriculture, Agriculture Policy in India, Second Green Revolution.

**Unit–III (7 Hrs.)**

**Infrastructure:** Infrastructure development in India- Physical Infrastructure (Power, Transport, Communication, and Irrigation) and Social Infrastructure (Health and Education), New Public Distribution System.

**Unit–IV ( 8Hrs.)**

**Financial Inclusion Schemes in India**: Objectives and Goals of Financial Inclusion for Women Empowerment, GST and Demonetization. Problems of Poverty and Unemployment in India.

**REQUIREDREADINGS:**


- Dutt and Sundram: *Indian Economy*, S.Chand(LatestEd)(Hindi andEnglish).
- A.N. Agrawal: *Indian Economy*, New Age International Publication (P) Limited, (LatestEd) (HindiandEnglish).
- Laxmi Narayan Nathuramka: *Bhartiya Arthvyavastha*, R.B.D.Publication,Jaipur.(LatestEd).
- Mishra AndPuri: *Indian Economy*, Himalaya Publishing House (Latest Ed) (Hindi andEnglish).
- EconomicSurvey (Latest), GOI.,Bulletins, RBI.

## B.Sc. Semester-II

## Paper–I Micro Economics -II(2)(BSEC201)

**Duration: 3 hrs.**
**Max. Marks: 35 (For Science)**

### Course Objective

This is a sequel of Microeconomics–I covered in the first semester. The objective of the course is to introduce the students to different forms of market, their imperfections and market failures, input demand, factor incomes and knowledge of welfare economics.

### Course Learning Outcomes

This course helps the students to understand different forms of market imperfections and market failures observed in real life situations. The students learn about the environment where the standard market mechanism fails to generate the desirable outcomes. They develop a sense of how the production is distributed among the different factors of production and the demand for inputs.

**Unit–I (8 Hrs.)**

**Market Structure:** Types of Market, Equilibrium of a Firm under Perfect Competition, Monopoly, Price Discrimination, Measure of Monopoly Power, Monopolistic Competition and Oligopoly: Meaning and Characteristics.

**Unit– II( 7Hrs.)**

**Factor Pricing:** Marginal Productivity Theory of Distribution- Modern Theory of Wage, Wages and Collective Bargaining, Wage Differentials; Rent –Ricardian and Modern theory.

**Unit– III (7Hrs)**

**Profits**- Innovation, Risk and Uncertainty Theory. **Interest**- Classical and Keynesian Theories.

**Unit–IV( 8Hrs.)**

**Welfare Economics:** Problems in Measuring Welfare, Classical Welfare Economics, Pareto's Criteria (Production, Consumption and Distribution)

**REQUIREDREADINGS:**


- Ahuja,H.L.: *Principles of Economics*, S. Chand and Company, New Delhi.Salvator, Dominick: *Micro Economics- Theory and Application*, Oxford UniversityPress.2008.
- Nathuramka ,L.N. : *VyashtiArthshastra*, R.B.D Publication., Jaipur.Koutsoyiannis,A.(1990),*ModernMicroeconomics*,MacmillanLondon.
- Robert S. Pindyck and Daniel L. Rubinfeld: *Microeconomics*, Pearson Education Inc.,NewDelhi.
- HalR.Varian:*MicroeconomicAnalysis*,W.W.Norton &CompanyInc.,NewYork.

# B.Sc. Semester-II

## Paper–II Indian Economy-II(2) ( BSEC202)

**Duration: 3 hrs.**
**Max. Marks: 35 (For Science)**

### Course Objective

This course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post-independence period. The course will help to understand International financial institutions, industrial reforms and different problems of the Indian economy.

### Course Learning Outcomes

This course will help students understand the key issues related to the Indian economy and Some preliminary concepts of international trade are also covered in this. It will broaden the horizons and enable the issues of the Indian economy to analyze current economic policy thus improving their chances of getting employed, and be more effective, in positions of responsibility and decision-making. The course also serves as the base for further study of sector-specific policy discussion.

### Unit–I(8Hrs.)

**Industry**: Role, Strategy & Challenges in India, Industrial Policy- Pre and Post Reform Period. MSME(Definition, Problems), Industries- Problems and Measures for their Development, Industrial Finance- Role of Financial Institutions, Commercial Banks and Mudra Yojna.

### Unit–II (8Hrs.)

**Public Sector**: Public Sector Industries, Public Sector Reforms, Disinvestment in Public Sector Undertakings, New Economic Policy.

**Indian Foreign Trade:** Volume, Structure and Direction, New Foreign Trade Policy of India, FDI and FII, Planning in India: Objectives, Strategy and Overall evaluation.

### Unit–III(7Hrs.)

NITI Aayog, Recent Government Policy (Skill India, Make in India, Start Up India, Digital India and Cashless Society, impact of G-20 summit on Indian Economy )
Problem of Inflation & Income Inequality in India, Rural Development Programs and Policy,

### Unit–IV(7Hrs.)

Globalization and strategies for MNCs, WTO-Issues and it's impact on Indian Economy, India's Balance of Payment-Position in recent years, Covid-19- Socio-Economic impact on Indian Economy(Agriculture , Industries, Banking , Health and education) and Self reliant India. Main issues of current Budget.

**REQUIRED READINGS:**

- DuttandSundram:*IndianEconomy*,S.Chand(Latest Ed)(HindiandEnglish).
- A.N.Agrawal:*IndianEconomy*,NewAgeInternationalPub.(P)Limited,(LatestEd)( Hindi andEnglish).
- Laxmi NarayanNathuramka:*BhartiyaArthshastra*,R.B.D.Publication,Jaipur(LatestEd).Mishra A Puri:*Indian Economy*, Himalaya Publishing House (LatestEd)
- (HindiandEnglish).
- EconomicSurvey (Latest),GOI.Monthly Bulletins,RBI.

**Economics Practical I (BSEC151)**
**Economics Practical II (BSEC 251)**

Credits: 02 Internal Examination- 20M
Contact Hours: 4Hr/Week External Examination- 30M

**Case studies:**

Discussion on case study -related to issues of Indian economy and micro economics Issues.

**Socio- Economic Survey and Field Work**:

Field visits to identify Local/Regional economic issues/problems.

**Report Writing:**

Make observations including data collection, analyze the data and prepare a brief report on chosen topic.

# B.Sc. Semester-III

## Paper–I Macro Economics-I(2)(BSEC301)

**Duration: 3 hrs.**
**Max. Marks: 35 (For Science)**

### Course Objective

This course introduces students to the basic concepts in Macroeconomics. Macroeconomics deals with the aggregate economy. In this course the students are introduced to the definition, measurement of the macroeconomic variables like GDP, consumption, savings, and investment. The course also discusses different approaches of money and consumption function.

### Course Learning Outcomes

This course is useful for understanding various real economic issues and evaluating policy outcomes.

**Unit–I(8Hrs)**

**Introduction to Macro Economics:** Meaning, Scope, Importance and Limitations, Basic Concepts (Constant and variables, Dependent and Independent Variable, Stock and Flow, Ex-ante and Ex- post variable) Difference between Macro and Micro Economics, National Income: Concepts relating to National Product/National Income, Measurement of National Income, National Income and Economic Welfare.

**Unit–II (7Hrs)**

**Circular flow of Income:** Injection and Leakages. **Money:** Definitions, Functions, Nature and Importance. Quantity Theory of Money: Transaction, Cash- Balance and Keynesian Approach

**Unit–III (7Hrs)**

Complete Classical Model of Employment, Income and Output, Say's Law of Market, Keynesian Model of Employment, Income and Output (without IS – LM curves), Aggregate Demand and Aggregate Supply, Equality between Saving and Investment.

**Unit–IV (8Hrs)**

**Consumption Function:** Simple Keynesian Consumption Function, Relative Theory of Consumption, Life Cycle Theory of Consumption, Permanent Income Theory of Consumption. Factors affecting Consumption.

**REQUIREDREADINGS:**


- ErrolD'Souza,*Macroeconomics*,PearsonEducation.
- Richard,T.Froyen, *MacroEconomics: TheoriesandPolicies*, Pearson education.
- P.Edgemond,*Macreconomics*,PHI,NewDelhi.
- GregoryMankiw,*Macroeconomics*,CBSPublishers,NewDelhi.RobertJ. Gorden, *Macroeconomics*, HarperCollins.
- Ahuja ,H.L.: *Principles of Economics*, S. Chand and Company, New Delhi..NathuramkaL.N. :*SamashtiArthshastra*, R.B.D.Publisher, Jaipur.

# B.Sc. Semester-III

## Paper–II(Opt.a)Introduction to Statistics and Mathematics for Economics-I(2)(BSEC302A)

**Duration: 3 hrs.**

**Max. Marks: 35 (For Science)**

### Course Objective

The course teaches students the basics of statistics and Mathematics. It focuses on various measures of dispersion and correlation.

### Course Learning Outcomes

The student should understand the c Aoncept of different variables and be familiar with some commonly used discrete and continuous distributions of variables. They will be an important learning outcome of the course will be the capacity to analyze statistics in everyday life.

**Unit– I(7Hrs.)**

Meaning, Uses and Limitations of Statistics, Collection of Statistics Data- Census and Sample Investigation, Classification and Presentation of Data- Statistics, Tables, Graphs, Frequency Distribution, Diagrams.

**Unit– II(8Hrs.)**

**Measures of Central Tendency:** Definition and characteristics of Central Tendency, Arithmetic Mean, Median, Mode

**Unit–III(8 Hrs.)**

**Measures of Dispersion:** Range, Quartile Deviation, Mean Deviation, Standard Deviation and Co-efficient of Variation. **Simple Correlation:** Karl Pearson's Correlation Co-efficient and Spearman's rank Correlation.

**Unit–IV(7Hrs,)**

Simultaneous and Quadratic Equations, Arithmetic and Geometric Progressions, Logarithms, Concepts of Function.

**REQUIREDREADINGS:**


- S.P.Gupta:*Statistical Methods*,SultanChand &Sons,New Delhi.
- KailashNathNagar: *SankhyikiKeMool Tatva*(Hindi)Meenakshi Prakashan,Meerut.
- A.L.Nagar& R.K.Das: *Basic Statistics*,OxfordUniversity;Press,New Delhi.
- D.R.Agarwal:*QuantitativeMethods*,VrindaPublication
- R. G. D. Allen: *Mathematical Analysis for Economics*, MacMillan, London.LaxmiNarainNathuramka:*ArthshastraMemGanitKePrayog*(Hindi),RBDPublication,Jaipur.
- B.C.MehtaandG.M.K.Madnani:*MathematicsforEconomists*,SultanChand&Sons,NewDelhi.
- Balvant Kandoi: *Mathematics for Business and Economics with Application, Volume -II*& Himalaya PublishingHouse, I.

# B.Sc. Semester-III

## Paper–II(Opt.b) History of Economic Thought-I(2) (( BSEC 302B)

**Duration:3hrs.**
**Max.Marks:35(For Science)**

### Course Objective

This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the mechanisms that linked economic development in India to the compulsions of colonial rule.

### Course Learning Outcomes

The course exposes the students to understanding the intricacies of India's economic, political and social developments both in the past and present times. It develops analytical skills, and will be useful in a variety of careers in academics, research, journalism, private sector and government.

**Unit-I (8Hrs.)**

Mercantilism, Physiocrats, Quesnay's Table, Economic Concept of Surplus, Classical School-Adam Smith, the invisible Hand Doctrine, Wealth Of Nation, Laissez Faire, Profit and Wages.

**Unit-II(7Hrs,)**

Modern Revival of Adam Smith. Malthus's Theory of Population and Theory of Under-Competition

**Unit-III(8Hrs.)**

Ricardo- Principles of Political Economy and Taxation, Distribution Theory-Differentiated Rent Critics of the Classical School- Sismondi and National School, Restatement of the Classical Position.

**Unit-IV(7Hrs)**

Senior and the Four Postulates, J. S. Mill- Four Prepositions and Capital Demand and Supply Bi- furcation Wage Fund.

**REQUIREDREADINGS:**


- T.N.Hajela,*Historyof Economic Thought*,Publisher: ANE Books.
- Blaug, M 1997, *Economic Theory in retrospect*, Cambridge University Press,Cambridge
- PantandSeth,*ArthikVicharonKaItihas*,LaxmiNarayanAgrawal,Agra.Dasgupta A.K.L (1985) *Epochs of Economic Theory*, Oxford UniversityPress,NewDelhi.
- EkelundandHebert:*AHistoryofEconomicTheoryandMethod*(1990)McGrawHillPublication Co.New York.
- Ghosh and Ghosh: *Concise History of Economic Thought*, Himalaya Publication.GillRichard:(1972*) Evolutionof ModernEconomics*,Prentice HallofIndia.
- HuntE.K:(1990) *HistoryofEconomic Thought*, Wordsworth PublishingCompany

# B.Sc. Semester-IV

## Paper–I Macro Economics-II(2)(BSEC401)

**Duration: 3 hrs.**

**Max. Marks: 35 (For Science)**

### Course Objective

This is a sequel to Macroeconomics I. It analyses the theory of money demand and money supply in greater detail and it describes the various theories of the trade cycle. It also introduces students to the concept of inflation, its relationship with unemployment, and some basic concepts in an open economy.

### Course Learning Outcomes

This course provides students with an analytical framework to understand the basic functioning of the macro economics. It also allows them to critically examine and comment on the effectiveness of various policies.

**Unit –I (6Hrs)**

Concept of Multiplier (Investment, Complex, Govt, Expenditure, Tax, Transfer Payment, Balanced Budget and Foreign Trade) and Accelerator. Money Supply and (High Powered Money) its determinants.

**Unit –II (7Hrs)**

Value of Money and its Measurement with Index Numbers, Inflation (Cost Push and Demand Pull), Causes of Inflation, Stagflation, Philips Curve, Level of Prices and the Value of Money

**Unit -III (9Hrs)**

Liquidity Preference Theory of Interest, Monetary Policy, Theory of Trade Cycle, Hicks and Samuelson's Theory of Trade Cycle, Causes and Remedial Measures.

**Unit -lV(8Hrs)**

Functions of Central Bank with special reference to India, Function of Commercial Banks and Multiple Credit Creation.

**REQUIREDREADINGS:**


- ErrolD'Souza,*Macroeconomics*,PearsonEducation.
- Richard,T.Froyen,*Macro Economics:Theoriesand Policies*,PearsonEducation.
- P.Edgemond,*Macreconomics*,PHI,NewDelhi.
- GregoryMankiw,*Macroeconomics*,CBSPublishers,NewDelhi.RobertJ. Gorden, *Macroeconomics*, HarperCollins.
- Ahuja ,H.L.: *Principles of Economics*, S. Chand and Company, New Delhi.Nathuramka,L.N. :*SamashtiArthshastra*, R.B.D.Publisher, Jaipur.

# B.Sc. Semester-IV

## Paper–II(Opt.b)History of Economic Thought-I(2) (BSEC402B)

**Duration: 3 hrs.**
**Max. Marks: 35 (For Science)**

### Course Objective

This course analyses key aspects of socialist thoughts also analyses the various thoughts of Twentieth Century Economist.

### Course Learning Outcomes

The course exposes the students to understanding the intricacies of economic, political and social developments in the present times. It develops analytical skills, and will be useful in a variety of careers in academics, research, journalism, private sector and government.

**Unit–I (7Hrs)**

Evaluation of Socialist Thought- Utopian, Socialism, Saint Simon, Robert Owen, Louis Blanc, Fourier, and Proudhon, Scientific Socialist

**Unit–II (7Hrs)**

Karl Marx- Efforts at Scientific Socialism, Organic Composition of Capital, Break down of Capitalism. Revival of Karl Marx in Economics, The German Historical School and the Development of Marginalism.

**Unit-III (9Hrs)**

The Neo Classical School, Marshall. Twentieth Century Economic Thought- Main features (Only the rise of Keynesianism, the rise of the Mathematical Economics, Dynamics, and Econometrics)

**Unit-IV (7Hrs)**

Critical Evaluation of the Development of Economic Thought, Indian Economic Thought- Kautilya and Gandhi.

**REQUIREDREADINGS:**


- T.N.Hajela,*Historyof EconomicThought*,Publisher: ANEBooks.
- Blaug, M 1997, *Economic Theory in retrospect*, Cambridge University Press,Cambridge
- PantandSeth,*ArthikVicharonKaItihas*,LaxmiNarayanAgrawal,Agra.DasguptaA.K.L1985) *EpochsofEconomicTheory*,OxfordUnivPress,NewDelhi.Ekelund and Hebert: *A History of Economic Theory and Method* (1990) McGrawHillPublCo.NewYork.
- Ghoshand Ghosh;*Concise Historyof EconomicThought*,Himalaya.
- GillRichard:(1972)*EvolutionofModernEconomics*,PrenticeHallofIndia.
- HuntE.K:(:1990) *HistoryofEconomicThought*, WordsworthPublishingCompany

# B.Sc. Semester-IV

## Paper–II(Opt.a) Introduction to Statistics and Mathematics for Economics –II(2)(BSEC 402A)

**Duration: 3 hrs.**

**Max. Marks: 35 (For Science)**

### Course Objective

This is a sequel to Introduction to Statistics and Mathematics for Economics -1.It focuses on various measures of regression, time series, and index number. It also analyses interpolation, linear programming and application of Integral Calculus in Economics.

### Course Learning Outcomes

The student should understand the concept of different tools of statistics and mathematics. They will learn important outcome of the course This will inherent the capacity to analyze problems of everyday life.

**Unit –I (7Hrs)**

Linear Regressions Analysis (Simple two variables), Index Numbers: Cost of Living Index Number, Fisher's Ideal Index Numbers.

**Unit -II (7 Hrs)**

**Analysis of Time series:** Components and Trends by Moving Average Method and Least Square Method, Determination of Seasonal Variation.

**Interpolation**– Newton's and Binomial Method,

**Unit -III (8Hrs)**

Linear Programming Formulation and Graphical Solution, Determinants and Matrix, Solution of Simultaneous Equation by Cramer's Rule. Simple Differentiation, Partial Differentiation of Function involving two Independent Variable and their Applications in Economics

**Unit -IV (8Hrs)**

Maxima and Minima with and without Constraints, Integration - One Variable Case, Definite Integrals, Application of Integral Calculus in Economics

**REQUIREDREADINGS:**


- S.P.Gupta*:Statistical Methods*,SultanChand &Sons,New Delhi.
- KailashNathNagar: *Sankhyiki KeMoolTatva*(Hindi) MeenakshiPrakashan,Meerut.
- A.L.Nagar&R.K. Das:*BasicStatistics*,OxfordUniversity;Press,New Delhi.
- D.R.Agarwal:*QuantitativeMethods*,VrindaPublication
- R. G. D. Allen: *Mathematical Analysis for Economics*, MacMillan, London.LaxmiNarainNathuramka:*ArthshastraMemGanitKePrayog*(Hindi),RBDPublication,Jaipur.
- B.C.MehtaandG.M.K.Madnani*MathematicsforEconomics*,SultanChand&Sons,NewDelh i..
- Balvant Kandoi: *Mathematics for Business and Economics with application, Volume — I&II*, Himalaya Publishing House

# **Economics Practical III (2)**(BSEC351)
# **Economics Practical IV(2)** (BSEC451)

Credits: 02 Internal Examination- 20M

Contact Hours: 4Hr/Week External Examination- 30M

**Case Study:**
Recent Trends in National Income (past 5 years).
Employment-inflation trade-off; Trade Cycles

**Graphical Representation/Field work:**

IS-LM Model, its effectiveness in monetary and fiscal policy of the nation.
Linear Programming through Graphical Method; Maxima, Minima and Point of Inflexion.
Choose any particular topic for survey and form questionnaire to be filled by people around you.

**Report writing:**

Early empirical studies of the consumption function which was based on analysis of short periods of time series data {*Keynesian Consumption Function}*.
Comparison of Classical Schools of Economic Thought and Modern Thoughts in Economics.

# B.Sc. Semester-V

## Paper-I International Trade and Development Economics(2) (BSEC501)

**Duration: 3 hrs.**
**Max. Marks: 35 (For Science)**

### Course Objective

The purpose of this course is to introduce the basics of international trade and Development economics. It examines the effects of international economic policies on domestic and world welfare along with various growth and development models. Although the course is based on abstract theoretical models, students will also be exposed to real-world examples and case studies.

### Course Learning Outcomes

The outcome of this course is to introduce students to the main theoretical and empirical concepts in international trade and economic sources of development. The students should be able to demonstrate their understanding of the economic concepts of trade theory and development models. In some models, the student will be required to deal with simple algebraic problems that will help them to better understand these concepts, use diagrammatic analysis to demonstrate and compare the economic welfare effects of free trade and protection, demonstrate their understanding of the usefulness and problems related to topics in international trade, and development economics.

**Unit-I (8Hrs)**

Features of International Trade, Gains from Trade, Trade Theories – Adam Smith, Ricardo, Haberler, Mill and H- O Theory (Elementary Treatment).

**Unit-II (7Hrs)**

Free Trade and Protection, Foreign Exchange Market and Exchange Rate, Balance of Trade and Balance of Payment – Definition and Structure

**Unit-III (8Hrs)**

**WTO–** Scope and Impact**, Economic Growth and Development** – Factors Affecting Economic Growth, Development and Underdevelopment, Measures of Development

**Unit-IV (7Hrs)**

Lewis Theory of Unlimited Supply of Labour, Balanced vs. Unbalanced Growth Model, Harrod – Domar & Solow's Model.

**REQUIREDREADINGS:**


- D.Salvatore:*InternationalEconomics*,JohnWileyand Sons.
- K.C.RanaandK.N.Verma:*InternationalEconomics*.(Hindi/Englishedition)VishalPublishing Company, Delhi.
- B. O. Soderston& G. Reed: *International Economics*, Palgrave Macmillan.MichaelP.Todaro, *EconomicDevelopment*, Pearson Education.
- P.Thirwal,*Growth andDevelopment*,Macmillan.
- DebrajRaj,*DevelopmentEconomics*,OxfordUniversityPress.
- S.K.MishraandV.K.Puri,*EconomicsofDevelopmentandPlanning– TheoryandPractice*,Himalaya Publishing House.

# B.Sc. Semester-V

## Paper–II (Opt.a) Application of Mathematics in Economics -I(2) (BSEC502A)

**Duration: 3 hrs.**
**Max. Marks: 35 (For Science)**

### Course Objective

The objective of this course is to transmit the body of basic mathematics that enables the students to study the economic theory specifically for the courses of microeconomic theory and macroeconomic theory set out in this syllabus.

### Course Learning Outcomes

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

**Unit-I (8 Hrs)**

**Differential Calculus and Integral Calculus**: Applications in Economics, Maxima and Minima, Convexity and Concavity. Matrix and Determinants, Solution of Simultaneous Equations,

**Unit-II (7Hrs)**

**Theory of Consumer Behaviour:** Nature of a Utility Function, Properties of an Indifference Curve, Maximization of Utility, Demand Functions- Ordinary and Compensated.

**Unit -lll (8Hrs)**

Price and Income Elasticity, Elasticity Relations in Demand Analysis, Slutsky Equation in two Commodity Case, Elasticity Form and Important Results, Income and Leisure- Derivation of Labor Supply Function and its Properties.

**Unit-IV(7Hrs.)**

**Theory of Firm**: Production Function- Properties of a Well Behaved and Homogeneous Production Functions- Cobb-Douglas and CES Production Functions, Product Curves, Output Elasticity of Factor Input, Properties of an Isoquant, Elasticity of Substitution of a Homogeneous Production Function.

**REQUIREDREADINGS:**


- J.M.HendersonandR.L.Quandt:*MicroEconomicTheory:*AMathematicalApproach,McGraw-Hill. London.
- RGDAllen,*MathematicalEconomics,*McMillan
- Alpha C Chiang: *Fundamental Methods of Mathematical Economics*, McGraw-Hill,Kagakusha, Tokyo.
- S.SharmaandA.Arora,*MathematicalEconomics*,RituPublication,Jaipur

# B.Sc. Semester-V

## Paper–II (Opt.b) Environmental Economics-I(2) (BSEC502B)

**Duration: 3 hrs.**

**Max. Marks: 35 (For Science)**

### Course Objective

While studying Environmental Economics, The student shall be able, To study the Meaning, definition, nature, scope, and importance of environmental Economics and natural resources, awareness about the Causes of Environmental Pollution, Sources and effects of Pollution – Types of Pollution, environmental problems related to Economics.

This course introduces students to the concepts, methods and policy options in managing the environment using tools of economic analysis. Since several environmental problems are caused by economic activity (for instance, carbon emissions, overharvesting of renewable resources and air and water pollution as a by-product of industrial activity). The impact of economic growth on the environment is also addressed under the rubric of sustainable development.

### Course Learning Outcomes

The outcome of the course is to enable the students to demonstrate their understanding of the economic concepts of environmental policy, use diagrammatic analysis to demonstrate and compare the economic welfare effects of various environmental policy options, and demonstrate their understanding of the usefulness and problems related to environmental valuation

**Unit-I (7Hrs)**

**Environmental Economics:** Meaning, Nature, Scope and Significance, Economic Development and Environment, The Environment Kuznets Curve.

**Unit-ll (7Hrs)**

**Common Property Resource:** their Depletion and Coase Theorem. Ecosystems – Loss of Biodiversity, Sustainable Development and Green GDP - Concepts and Measurement.

**Unit-III (8Hrs)**

**Environmental Problems of Industrial Development:** Water Pollution, Air Pollution, Noise Pollution, Depletion of Ozone Layer- Carbon Credit, Pigovian Fees.

**Unit-IV (8Hrs)**

**Environmental Problems of Agricultural Development:** Salinity, Water Logging, Desertification of land, Excess Use of Water, Fertilizers and Pesticides, Farm Implements Cropping Pattern; Natural Farming; Forest Depletion: Causes and Impact.

**REQUIREDREADINGS:**


- Bhattacharya R.N. (Ed) (2001), *Environmental Economics: An Indian Perspective*,OxfordUniversity Press, NewDelhi.
- Charles D. Kolstad, *Environmental Economics*, Oxford University Press, 2011.U.Shankar(Ed)(2001),*EnvironmentalEconomics*,Oxford UniversityPress,NewDelhi.Baumal, W. J. & W. E. (1997), *Theory of Environmental Policy*, Prentice Hall,Englewood-Cliffs.
- Dorfman, R. & N. Dorfman (Eds.) (1977), *Economics of the Environment*, W.W.Norton,New York.
- Nijkamp,P.(Ed.) (1976),*EnvironmentalEconomics, Vol.I&II*,MartinusNijhoft,Leiden
- Karpagam,M.(1993),*EnvironmentalEconomics*, SterlingPublishers,NewDelhi.

# B.Sc. Semester-V

## Paper –II (Opt. - c) Economy of Rajasthan -I(2)( BSEC502C)

**Duration: 3 hrs.**

**Max. Marks: 35 (For Science)**

### Course Objective

This course exposes students to some of the key ideas and concepts in the areas of growth and structural change, population growth, education, health, gender, industry, services, natural resources and characteristics of Rajasthan agriculture.

### Course Learning Outcomes

Students will develop a critical understanding of the contemporary issues in the rajasthan economy. Students will thus be better prepared to face the professional world and can use this knowledge base in a variety of jobs, including in the corporate, civil service, and NGO sectors.

**Unit –I (7 Hrs)**

**Position of Rajasthan in Indian Economy**: Population, Area, Agriculture, Industry and Infrastructure. Population: Size and Growth, District Wise Distribution of Rural and Urban Population, Demographic Features, Occupational Structure and Human Resources Development (Literacy, Health and Nutrition Indicators).

**Unit –II (7 Hrs)**

**Natural Resources Endowments**: Land, Water, Livestock and Wild Life, Minerals and Mineral Policy of the State. State Domestic Product: Trends and Composition.

**Unit –III (8Hrs)**

**Agriculture**: Land Reforms, Land Utilization, Cropping Pattern, Production and Productivity, Agriculture Finance, Marketing and Insurance. Importance of Livestock and Animal Husbandry, Dairy Development Programmes, Famines and Droughts in Rajasthan.

**Unit-IV (8 Hrs)**

**Infrastructure development in Rajasthan** - Physical Infrastructure (Power, Transport, Communication and Irrigation), Social Infrastructure (Health and Education) and Urbanization.

**REQUIREDREADINGS:**

- Economic Review, Directorate of Economics and Statistics, Dept. of Planning, Rajasthan, Jaipur. (Hindi and English)
- Statistical Abstract, Directorate of Economics and Statistics, Dept. of Planning, Rajasthan, Jaipur.
- Lakshminarayan Nathuramka- *Economy of Rajasthan* ( Hindi and English ), RBD, Jaipur.

# B.Sc. Semester-VI

## Paper-I Public Finance(2)(BSEC601)

**Duration: 3 hrs.**

**Max. Marks: 35 (For Science)**

### Course Objective

This course is a non-technical overview of government finances with special reference to India. The course does not require any prior knowledge of economics. It will look into the efficiency and equity aspects of the taxation of the center, states, and local governments and the issues of fiscal federalism and decentralization in India. The course will be useful for students aiming towards careers in the government sector, policy analysis, business, and journalism.

### Course Learning Outcomes

Through this course, the students will develop a critical understanding of the main concepts in public finance, an analytical grasp of government taxes: direct and indirect taxes, and familiarize students with the main issues in government expenditure, use diagrammatic analysis to demonstrate and compare the economic welfare effects of various government policy options and demonstrate their understanding of the usefulness and problems related to government revenues and expenditures.

**Unit-I (7 Hrs.)**

**Introduction:** Nature and Scope of Public Finance, Role of Government in the Economy. Basic Budget and its concepts, Optimal Budgeting, Public goods and Private goods.

**Unit-II (8 Hrs.)**

**Public Revenue:** Canons of Taxation. Incidence, Impact and Shifting of Taxation. Direct and Indirect Taxation. Tax elasticity, Tax buoyancy and Laffer curve.

**Unit-III (8 Hrs)**

**Public Expenditure:** Canons of Public Expenditure, Classification and Effect on Production and on Distribution. Public Debt – Meaning, Objectives, Burden and Theories of Public Debt.

**Unit-lV (7Hrs)**

**Fiscal Policy:** Meaning, Objectives and Anti-inflationary Policy. Role of Finance Commission (14th and 15th Finance Commission)

**REQUIRED READINGS:**


- R.A.MusgraveandP.B.Musgrave,*PublicFinanceinTheory&Practice*,McGrawHillPublication.
- S.Ganguli, *PublicFinance*, The WorldPress Pvt.Ltd.
- H.L.Bhatia,*Public Finance*,Vikas Publishing HousePvt. Ltd.
- JohnCallisand PhilipJones, *PublicFinance andPublicChoice*, Oxford UniversityPress.

# B.Sc. Semester-VI

## Paper–II (Opt.a) Application of Mathematics in Economics-II(2) (BSEC602A)

**Duration: 3 hrs.**

**Max. Marks: 35 (For Science)**

### Course Objective

This is a sequel to Application of Mathematics in Economics-I. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook**.**

### Course Learning Outcomes

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

**Unit-I (8 Hrs)**

**Optimization Behavior of a Firm**: Constrained Cost Minimization, Constrained Output Maximization and Profit Maximization; Input Demand Functions- Properties and Derivation of Producer's First Order Difference Equation-Cobweb Model.

**Unit-II (8 Hrs)**

**Cost Functions**: Properties and Derivation of Short Run and Long Run Cost functions; Consumer's and Producer's Surplus.

Linear Programming: Graphical and Simplex Method (Maximization Problem Only)

**Unit-III (7 Hrs)**

**Input-Output Analysis**: Concepts of Static, Dynamic, Closed and Open Input – Output Models, Hawkins-Simon Conditions of Viability, Determination of Gross Output, and Value Added in Open Input –Output Model.

**Unit-IV (7Hrs)**

**Theory of Games**: Two-Person Constant Sum Games, Zero-Sum Game, Maximin and Minimax, Dominant Strategies and Saddle Point Solution

**REQUIREDREADINGS:**


- J.M.HendersonandR.L.Quandt:*MicroEconomicTheory:AMathematicalApproach*,McGraw-Hill.London.
- RGDAllen,*MathematicalEconomics*,McMillan.
- Alpha C Chiang: *Fundamental Methods of Mathematical Economics*, McGraw-Hill,Kagakusha, Tokyo.

S.Sharmaand A.Arora, *MathematicalEconomics*, RituPublication,Jaipur.

# B.Sc. Semester-VI

# Paper – II (Opt. b) Environmental Economics-II(2)(BSEC602B)

**Duration: 3 hrs.**

**Max. Marks: 35 (For Science)**

## Course Objectives

This course examines different approaches to adjusting behaviour through economic institutions such as markets and incentives as well as through regulation, etc. It also addresses the economic implications of environmental policies through practical applications of methods for valuation of environmental goods and services and quantification of environmental damages. To learn the Environmental Law, Constitutional aspects of Environmental Law, and Statutory control of Environmental Pollution. Environmental problems and issues from the Indian and international context (especially global warming) are used to illustrate the concepts and methods presented in the course.

## Course Outcomes

After completing the course, the student will be able to describe the causes of environmental pollution and Sources and effects of Pollution. Understand the environmental law constitutional aspects of environmental law statutory control of environmental pollution. Define the environmental policy and constitutional aspects of Environmental Law Awareness about the social issues.

### Unit-I (7Hrs)

**Role of Various Sectors in Environment Protection**: Role of Public / Government, Private, Co-operative Sectors and NGOs in Environment Protection. Market Failure.

### Unit-II (7 Hrs)

**Environmental Policy in India**: Environment Protection Laws in India, Central pollution Control Board, State Pollution Control Boards, Local Bodies and Environment Protection.

### Unit-III (8Hrs)

**Global Environmental Issues:** WTO and Environment, Trade and Environment- Climate Change, Natural Resource Accounting.

### Unit-IV (8 Hrs)

**International Attempts to Protect the Environment:** Movements, Laws, and Agreements (UN Efforts to protect the Environment, Stockholm, Rio, Johansberg, Agenda-21, OECD Environmental Committee Report, Kyoto and Paris Climatic Convention).

**REQUIRED READINGS:**


- Bhattacharya R.N. (Ed) (2001), *Environmental Economics: An Indian Perspective*,OxfordUniversity Press, NewDelhi.
- Charles D. Kolstad, *Environmental Economics*, Oxford University Press, 2011.U.Shankar(Ed)(2001),*EnvironmentalEconomics*,Oxford UniversityPress,NewDelhi.Baumal, W. J. & W. E. (1997), *Theory of Environmental Policy*, Prentice Hall,Englewood-Cliffs.
- Dorfman, R. & N. Dorfman (Eds.) (1977), *Economics of the Environment*, W W. Norton,NewYork.
- Nijkamp,P.(Ed.) (1976),*EnvironmentalEconomics, Vol.I&II*,MartinusNijhoft,LeidenKarpagam,M.(1993),*EnvironmentalEconomics*, SterlingPublishers,NewDelhi.

# B.Sc. Semester-VI

# Paper –II (Opt. - c) Economy of Rajasthan -II (2)(BSEC602C)

**Duration: 3 hrs.**

**Max. Marks: 35 (For Science)**

### Course Objective

This course exposes students to some of the key ideas and concepts in the areas of growth of agricultural and industrial development, the Tourism sector, the service sector, various problems and the current budget of Rajasthan.

### Course Learning Outcomes

Students will develop a critical understanding of the contemporary issues in the Rajasthan economy. Students will thus be better prepared to face the professional world and can use this knowledge base in a variety of jobs, including in the corporate, civil service, and NGO sectors.

**Unit –I (7Hrs)**

Industrial Development of the State (Agricultural and Mineral Based Industries, Small Scale and Cottage Industries, Export Based Units, Rajasthan Handicrafts), Growth Centers and Development of Industrial areas. Enterprises in Rajasthan.

**Unit –II (7Hrs)**

Role of Different Corporations in Industrial Development (RIICO, RFC & RAJSICO), Industrial Finance, Service Sector: Education, Health, Tourism Development in Rajasthan.

**Unit-III (8 Hrs)**

Economic Planning and Development in Rajasthan. Constraints in The Economic Development of Rajasthan. Special Area Development Programmes in Rajasthan.

**Unit –IV (8Hrs.)**

Woman Empowerment and Child Development. Problems of Poverty and Unemployment in Rajasthan. Panchayat Raj and Rural Development in Rajasthan. Budgetary Trends in Rajasthan. Centre State Financial Relations. , COVID-19 - Socio-economic Impact on Rajasthan Economy. Current Budget of Rajasthan.

**REQUIREDREADINGS:**


- Economic Review, Directorate of Economics and Statistics, Dept. of Planning, Rajasthan, Jaipur. (Hindi and English)
- Statistical Abstract, Directorate of Economics and Statistics, Dept. of Planning, Rajasthan, Jaipur.
- Lakshminarayan Nathuramka- *Economy of Rajasthan* ( Hindi and English ), RBD, Jaipur.

**Economics Practical V(BSEC551)**
**Economics Practical VI (BSEC651)**

Credits: 02 Internal Examination- 20M

Contact Hours: 4Hr/Week External Examination- 30M

## Case Study:

A detailed learning on Strategic Budgeting.

International Trade and Exchange Rates- how parallel they go?

## Graphical Representation:

Demand Analysis- Price and Income Elasticity
Consumer and Producer Surplus

## Report Writing:

Global Environmental issues- National and International attempt to protect Environment.

Considering all the aspects (Population, occupation, industry, etc.), State the position of Rajasthan Economy in Indian Economy.