

**Syllabus for Four-Year Under Graduate
Program (FYUP) under NEP 2020**

**Department of Economics
School of Humanities and Social Sciences
H.N.B. Garhwal University
Srinagar (Garhwal)**

Approved through

**For Four-Year Undergraduate Programme:
B.A (Economics) Honours / Honours with
Research**

For 2025-26 and onwards batches

**HNB Garhwal University (A Central University)
Srinagar Garhwal, Uttarakhand**

U.G. Programme structure
(Four Year Under Graduate Program)
Department of Economics
School of Humanities and Social Sciences
H.N.B. Garhwal University, Srinagar Garhwal

First Year (NHEQF Level-4.5)

Course Category	Semester-I				Semester-II		
	Subject/Title	No. of Paper	Credits		Subject/Title	No. of Paper	Credits
Discipline Specific Core (DSC)	Principles of Micro Economics-I	1	4		Principles of Micro Economics-II	1	4
	DSC-II (Subject-II)	1	4		DSC-II (Subject-II)	1	4
MD/ ID	Introduction to Business Economics	1	4		Market Structure and Competition	1	4
SEC	SEC-MD–Mental Health & Wellbeing Or SEC-MD–Basics of Social Work	1	3		SEC-MD–Disaster Management	1	3
SEC/AEC	SEC-AMSC	1	3		AEC–Communication Skill (English, Hindi & Sanskrit)	1	3
VAC	Life Skills & Personality Development	1	2		Understanding and Connecting with Environment	1	2
Total		6	20			6	20

Second Year (NHEQF Level-5)

Course Category	Semester-III				Semester-IV		
	Subject/Title	No. of Paper	Credits		Subject/Title	No. of Paper	Credits
Major-I (One Subject) Major	(Principles of Macro Economics-I)	1	5		(Principles of Macro Economics-II)	1	5
Minor-I (One Subject)	(Macro Economics-I)	1	4		(Macro-Economics-II)	1	4
Major DSEC	(Basic Statistics & Survey Methods)	1	3		(Data Analysis in Economics)	1	3
MD/ID	(Managerial Economics)	1	4		(Business Environment)	1	4
AEC (Language Based Courses)	Indian, Modern, Regional Language-I	1	2		Indian, Modern, Regional Language-II	1	2
VAC/ AEC	IKS	1	2		Culture, Tradition and Moral Values	1	2
Total		6	20			6	20

Detailed syllabus of the third and fourth year will be updated soon

Semester-I

DSC: Principles of Micro Economics-I

Course Credits	(04) Four
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Define and explain the basic concepts, definitions, and terms of microeconomics.• CO2: Explain the theories of demand, supply, elasticity, consumer behaviour, production, and firms.• CO3: Apply the theories of consumer behaviour, demand, supply, elasticity, production, and firms to real-world situations.• CO4: Analyse cost and revenue situations, market conditions, and equilibrium outcomes under different economic situations.

1. Introduction

a. Problem of scarcity and choice: scarcity, choice and opportunity cost; Micro and Macro Economics: Concept, scope, and nature; Static and Dynamic Economics; Production Possibility Frontier.

b. Demand and supply: law of demand and its exceptions, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium; Consumer Surplus and Producer Surplus.

c. Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity; Income and Cross Elasticity.

2. Consumer Theory

Concept of utility, Diamond-water paradox, Law of Diminishing Marginal Utility and equi-marginal utility; Indifference Curve: Consumer Equilibrium, Price Effect; Derivation of the demand curve from indifference curve.

3. Production, Costs and Revenue analysis

a. Production: Concept and factors of production; Production function; Law of variable proportions; Return to scale; Producer equilibrium.

b. Costs: costs in the short run and long run, revenue and profit maximizations, minimizing losses, short run industry supply curve, economies and diseconomies of scale, long run adjustments.

4. Perfect Competition

a. Assumptions: theory of a firm under perfect competition, demand and revenue; Equilibrium of the firm in the short run and long run; Long run industry supply curve: increasing, decreasing and constant cost industries.

b. Welfare: allocative efficiency under perfect competition.

Teaching Learning Process: Lectures and tutorials

Suggested Readings:

Ahuja H.L. (2016) *Advanced Economic Theory: Microeconomic Analysis*, 20th Edition, S. Chand and Company Ltd. New Delhi

Case, Karl E., Ray C. Fair and Sharon E. Oster (2013) *Principles of Economics*, (11th Edition), Prentice Hall of India, New Delhi

Koutsoyiannis, A. (1990) *Modern Microeconomics*, Macmillan Press Ltd., London

Layard, P.R.G. and A. W. Walters (1978) *Microeconomic Theory*, McGraw Hill, New York

Lipsey, R.G. and K.A. Chrystal (2004) *Principles of Economics*, (9th Edition), Oxford University Press, New Delhi

Perloff, Jeffrey M. (2001) *Micro Economics*, Addison Wesley Longman Pvt. Ltd., New Delhi

Sen, A. (1999) *Microeconomics Theory and Applications*, Oxford University Press, New Delhi

Stigler, G. (1996) *Theory of Price*, (4th Edition), Prentice Hall of India, New Delhi

Varian, H. (2000) *Microeconomic Analysis*, W. W. Norton, New York

MD/ ID

MD/ID- Introduction to Business Economics (4 Credits)

Course Credits	(04) Four
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Define and explain the basic terms and concepts used in business economics.• CO2: Explain how demand, supply, and utility influence consumer behaviour.• CO3: Apply economic laws and analytical tools to solve real-world business problems.• CO4: Analyse cost, production, and revenue data to support business decision-making.

Unit I: Nature and Scope of Business Economics: Central problems of an Economy; Definition, nature, and scope of economics; Concept and importance of Business Economics, Difference between Micro and Macroeconomics; Utility Analysis- types, measurement and laws.

Unit II: Demand Analysis: Concepts and types of demand; Determinants of demand, law of demand, exceptions to law of demand; Concept & measurement of elasticity of demand, Indifference Curve- meaning, properties, budget line and Consumer's Equilibrium.

Unit III: Supply & Equilibrium Analysis: Concepts of supply; Law of supply, Concept elasticity of supply, Consumer Surplus, Market equilibrium.

Unit IV: Production, Cost & Revenue: Production function—short run and long run; law of variable proportions; returns to scale; Isoquants- meaning, properties, Iso-cost line and Producer's Equilibrium; Cost concepts—fixed, variable, average, marginal; short-run and long-run cost curves, Concepts of revenue- total, marginal, average.

References:

1. Samuelson, P. A., & Nordhaus, W. D. (2010). *Economics* (19th ed.). McGraw-Hill Education.
2. Koutsoyiannis, A. (1985). *Modern microeconomics* (2nd ed.). Macmillan/ELBS.
3. Ahuja, H. L. (2022). *Modern Microeconomics: Theory and Applications* (21st ed.). S. Chand Publishing.
4. Dwivedi, D. N. (2021). *Managerial Economics* (8th ed.). Vikas Publishing House.
5. Salvatore, D. (2020). *Managerial Economics in a Global Economy* (9th ed.). Oxford University Press.
6. Mankiw, N. G. (2021). *Principles of Microeconomics* (9th ed.). Cengage Learning.

Semester-II

DSC: Principles of Micro Economics-II

Course Credits	(04) Four
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Define and describe key concepts related to market forms, market failure, factor pricing, and international trade.• CO2: Explain the functioning of different market forms, causes of market failure, factor-price determination, and theories of international trade.• CO3: Apply theories of markets, externalities, market failure, factor pricing, and international trade to economic situations.• CO4: Analyse the outcomes of different market structures and pricing strategies in terms of efficiency and social costs.

1. Imperfect Competition: Concept and forms of imperfect competition

a. Monopoly

Short run and long run price and output determination of a monopoly firm; concept of a supply curve under monopoly; comparison of perfect competition and monopoly, social cost of monopoly, price discrimination; remedies for monopoly: Antitrust laws, natural monopoly.

b. Monopolistic and Oligopoly

Monopolistic competition: assumptions, short run & long run price and output determination under monopolistic competition, economic efficiency and resource allocation; oligopoly: assumptions, oligopoly models- Kinked Demand Curve, price Leadership and Cartels, game theory, contestable markets, role of government.

2. Consumer and Producer Theory

a. Consumer and Producer Theory in Action: Externalities, marginal cost pricing, internalising externalities, imperfect information: adverse selection, moral hazard, social choice, government inefficiency.

b. Markets and Market Failure: Market adjustment to changes in demand, efficiency of perfect competition; sources of market failure: imperfect markets, public goods, externalities, imperfect information; evaluating the market mechanism.

3. Factor pricing

Ricardian theory of Rent: Scarcity and Differential Rent; Wages: Marshal-Hicks Wage determination theory; Keynes Liquidity preference theory; Profits- Schumpeter and Knights theory.

4. International Trade

Absolute advantage, comparative advantage, terms of trade, sources of comparative advantage, trade barriers, free trade/ protectionism.

Teaching Learning Process: Lectures and tutorials

Suggested Readings:

1. Ahuja H.L. (2016) *Advanced Economic Theory: Microeconomic Analysis*, 20th Edition, S. Chand and Company Ltd. New Delhi
2. Case, Karl E., Ray C. Fair and Sharon E. Oster (2013) *Principles of Economics*, (11th Edition), Prentice Hall of India, New Delhi
3. Koutsoyiannis, A. (1990) *Modern Microeconomics*, Macmillan Press Ltd., London

4. Layard, P.R.G. and A. W. Walters (1978) *Microeconomic Theory*, McGraw Hill, New York
5. Lipsey, R.G. and K.A. Chrystal (2004) *Principles of Economics*, (9th Edition), Oxford University Press, New Delhi
6. Perloff, Jeffrey M. (2001) *Micro Economics*, Addison Wesley Longman Pvt. Ltd., New Delhi
7. Sen, A. (1999) *Microeconomics Theory and Applications*, Oxford University Press, New Delhi
8. Stigler, G. (1996) *Theory of Price*, (4th Edition), Prentice Hall of India, New Delhi
9. Varian, H. (2000) *Microeconomic Analysis*, W. W. Norton, New York

MD/ID: Market Structure & Competition

Course Credits	(04) Four
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Define and classify different types of markets, including perfect and imperfect competition.• CO2: Explain the features and functioning of different market structures such as monopoly and oligopoly.• CO3: Apply equilibrium conditions to examine firm behaviour under perfect and imperfect competition.• CO4: Analyse how different market forms affect pricing, output, and efficiency in the economy.

Unit I: Introduction: Meaning, features and types of market; Difference between perfect and imperfect market, Conditions for market equilibrium.

Unit II: Perfect Competition: Meaning and features, Pure competition vs Perfect Competition, advantages and disadvantages of perfect competition, short run and long run equilibrium under fixed cost condition, Shut-down point.

Unit III: Imperfect Competition I: Monopoly- Meaning and features, Price Discrimination- types, degrees, and conditions; Concept of pure Monopoly; Equilibrium conditions under Monopoly Competition, Remedies for Monopoly – Anti-trust laws; Natural Monopoly, bilateral Monopoly, Monopsony- meaning and concept.

Unit IV: Imperfect Competition II: Monopolistic Competition- Meaning and features; Short run and long run equilibrium conditions under Monopolistic Competition, Concept of excess capacity; Oligopoly market- meaning, features and types; concept of duopoly; Duopsony- meaning and concept.

References:

1. Salvatore, D. (2020). *Managerial Economics in a Global Economy* (9th ed.). Oxford University Press.
2. Mankiw, N. G. (2021). *Principles of Microeconomics* (9th ed.). Cengage Learning.
3. Ahuja, H. L. (2022). *Modern Microeconomics: Theory and Applications* (21st ed.). S. Chand Publishing.
4. Koutsoyiannis, A. (1985). *Modern microeconomics* (2nd ed.). Macmillan/ELBS.
5. Dwivedi, D. N. (2021). *Managerial Economics* (8th ed.). Vikas Publishing House.
6. Samuelson, P. A., & Nordhaus, W. D. (2010). *Economics* (19th ed.). McGraw-Hill Education.

Second Year (NHEQF Level-5)

Course Category	Semester-III				Semester-IV		
	Subject/Title	No. of Paper	Credits		Subject/Title	No. of Paper	Credits
Major-I (One Subject) Major	(Principles of Macro Economics-I)	1	5		(Principles of Macro Economics-II)	1	5
Minor-I (One Subject)	(Macro Economics-I)	1	4		(Macro-Economics-II)	1	4
Major DSEC	(Basic Statistics & Survey Methods)	1	3		(Data Analysis in Economics)	1	3
MD/ID	(Managerial Economics)	1	4		(Business Environment)	1	4
AEC (Language Based Courses)	Indian, Modern, Regional Language-I	1	2		Indian, Modern, Regional Language-II	1	2
VAC/ AEC	IKS	1	2		Culture, Tradition and Moral Values	1	2
Total		6	20			6	20

Semester-III

Major-I: Principles of Macro Economics-I

Course Credits	(05) Five
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Define and explain basic macroeconomic concepts, including national income, GDP, consumption, investment, and money.• CO2: Explain the consumption function, multiplier, accelerator, national income determination, fiscal policy, and monetary theories of Fisher, Cambridge, and Friedman.• CO3: Apply macroeconomic theories to examine government policies, income determination, and the role of money and banking in the economy.• CO4: Analyse macroeconomic issues such as GDP fluctuations, fiscal and monetary policy effectiveness, and the impact of consumption and investment on economic growth.

1. **Introduction:** Concept and significance of macroeconomics; Macroeconomic issues in an economy. Concepts of GDP and National Income; measurement of national income and related aggregates; nominal and real income; limitations of the GDP concept. Determination of GDP Actual and potential GDP.
2. **Consumption and Investment Function:** Aggregate expenditure; consumption function; investment function, determinants of investment; equilibrium GDP; autonomous expenditure; Concept of multiplier and accelerator.
3. **Money in a Modern Economy:** Concept of money in a modern economy; functions of money; monetary aggregates; demand for money; quantity theory of Money-Fisher, Cambridge and Friedman theory; money supply and credit creation.
4. **Monetary and Fiscal Policy:** Meaning, objectives and instruments of monetary policy; Meaning, objectives and instruments of fiscal policy; Fiscal policy and Monetary policy in developing and developed countries.

Teaching Learning Process: Lectures and tutorials

Suggested Readings:

1. Mankiw, N. G. (2022). *Macroeconomics* (11th ed.). Worth Publishers/Macmillan Learning.
2. Dornbusch, R., Fischer, S., & Startz, R. (2018). *Macroeconomics* (13th ed.). McGraw-Hill Education.
3. Blanchard, O. (2021). *Macroeconomics* (8th ed.). Pearson.
4. Froyen, R. T. (2013). *Macroeconomics: Theories and Policies* (10th ed.). Pearson.
5. Ahuja, H. L. (2023). *Macroeconomics: Theory and Policy*. S. Chand Publishing.
6. Jhingan, M. L. (2022). *Macroeconomic Theory*. Vrinda Publications.

7. Shapiro, E. (2013). *Macroeconomic Analysis*. Galgotia Publications.
8. Gupta, S. B. (2020). *Monetary Economics: Institutions, Theory and Policy*. S. Chand Publishing.
9. Vaish, M. C. (2010). *Macroeconomic Theory*. Vikas Publishing House.
10. Sikdar, S. (2020). *Principles of Macroeconomics*. Oxford University Press.

Minor-I: Macro Economics-I

Course Credits	(04) Four
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Define and explain basic macroeconomic concepts, including GDP, national income, consumption, investment, and money supply.• CO2: Explain the consumption function, multiplier, accelerator, national income determination, fiscal policy, quantity theory, and liquidity preference theory.• CO3: Apply macroeconomic theories to examine income determination, government fiscal actions, and monetary policy interventions.• CO4: Analyse macroeconomic issues such as limitations of GDP, fluctuations in economic activity, and effectiveness of fiscal and monetary policies.

1. **Introduction:** Concept and significance of macroeconomics; Macroeconomic issues in an economy. Concepts of GDP and National Income; measurement of national income and related aggregates; nominal and real income; limitations of the GDP concept. Actual GDP and potential GDP.
2. **Consumption Function:** Aggregate expenditure; consumption function; investment function; equilibrium GDP; autonomous expenditure; Concept of multiplier and accelerator.
3. **Money in a Modern Economy:** Concept of money in a modern economy; functions of money; monetary aggregates; demand for money; quantity theory of Money; liquidity preference and rate of interest; money supply and credit creation.
4. **Monetary and Fiscal policy:** Monetary Policy: Objectives and instruments. Fiscal Policy- Objectives and instruments; impact of changes in government expenditure and taxes.

Teaching Learning Process: Lectures and tutorials

Suggested Readings:

1. Mankiw, N. G. (2022). *Macroeconomics* (11th ed.). Worth Publishers/Macmillan Learning.
2. Dornbusch, R., Fischer, S., & Startz, R. (2018). *Macroeconomics* (13th ed.). McGraw-Hill Education.
3. Blanchard, O. (2021). *Macroeconomics* (8th ed.). Pearson.
4. Froyen, R. T. (2013). *Macroeconomics: Theories and Policies* (10th ed.). Pearson.
5. Ahuja, H. L. (2023). *Macroeconomics: Theory and Policy*. S. Chand Publishing.
6. Jhingan, M. L. (2022). *Macroeconomic Theory*. Vrinda Publications.
7. Shapiro, E. (2013). *Macroeconomic Analysis*. Galgotia Publications.
8. Gupta, S. B. (2020). *Monetary Economics: Institutions, Theory and Policy*. S. Chand Publishing.
9. Vaish, M. C. (2010). *Macroeconomic Theory*. Vikas Publishing House.

Major DSEC: Basic Statistics & Survey Methods

Course Credits	(03) Three
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Define and describe basic concepts of data collection, sampling methods, survey research, and measurement techniques.• CO2: Explain the principles of survey design, qualitative and quantitative research methods, scaling techniques, and sampling distributions.• CO3: Apply questionnaire design, sampling methods, and data collection tools in real-world and survey-based research.• CO4: Analyse data quality issues, including sampling and non-sampling errors, non-response, and interpretation of statistical measures such as mean, median, and mode.

Unit-1 Data Collection and Sampling methods Survey Research: Steps involved in conducting survey research; Types of survey research; Data collection Methods and sources of data: primary and secondary data; Census and sampling-based surveys; Sampling Methods: Random and Non-Random sampling methods.

Unit-2 Survey tools and techniques Questionnaires and Schedules: Meaning and merits; Types of questions: Structured and unstructured; Questionnaire design and testing; preparing questionnaire for online surveys; pilot study Qualitative research methods: Direct: Observation, Focus group, Delphi method, Depth interviews, Content analysis; Indirect: Projective techniques, Sociometry. Non-response in sample surveys; Participatory research Participatory Rural Appraisal (PRA)

Unit-3: Attitude measurement and Scaling techniques Measurement scales; Scaling techniques: Comparative and Non-comparative Scales

Unit-4: Sampling basic concepts: Parameter, Statistic, Estimator and estimate; Sampling and Non-sampling errors; Sampling distribution and sample error; Univariate frequency distributions- Measures of central tendency: mean, median and mode.

Teaching Learning Process: Lectures and tutorials

Suggested Readings:

1. Creswell, J. W. (1994). Research design: Qualitative and quantitative approaches. Thousand Oaks, CA: Sage.
2. Fowler, J., Floyd J. (1995). Improving survey questions: Design and evaluation. (Vol. 38). Thousand Oaks, CA: Sage Publications.
3. Salant, P., & Dillman, D. A. (1994). How to conduct your own survey. New York: John Wiley and Sons.
4. Tourangeau, R. (1999). Interdisciplinary survey methods research.

5. Herrmann, S. Schechter, N. Schwarz, J. M. Tanur, & R. Tourangeau (Eds.), *Cognition and Survey Research*. New York: John Wiley and Sons.
6. Williams, D.G. and Johnson, N.A. (1996). *Essentials in Qualitative Research: A Notebook for the Field*. Hamilton, Canada: Mc Master University.
7. Yin, R.K. (1984). *Case Study Research: Design and Methods*. Beverly Hills, CA, USA.: Sage Publications.
8. Moser, C. A. and G. Kalton 1973. *Survey Methods in Social Investigation*. The English Language Book Society: London
9. de Vaus, D.A. 1986. *Surveys in Social Research*. George Allen and Unwin: London
10. Young, P. V. 1988. *Scientific Social Surveys and Research*. New Delhi: Prentice Hall.

MD/ID: Managerial Economics

Course Credits	(04) Four
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Define core concepts and tools of managerial economics.• CO2: Explain the application of marginal analysis and optimization in business decision-making.• CO3: Apply forecasting, break-even, and pricing models in practical business situations.• CO4: Analyse business decision-making under different constraints and risks.

Unit-1: Introduction to Managerial Economics: Definition, scope, and uses of managerial economics; decision-making process; objectives of the firm and the role of economics in managerial decisions.

Unit-2: Demand Forecasting and Elasticity: Types of demand; techniques of demand forecasting; meaning and types of elasticity; practical applications in pricing and marketing.

Unit-3: Cost and Production Decisions: Cost concepts and classifications; cost-output relationships; production functions; break-even and profit planning; economies of scale and learning curve.

Unit-4: Risk, Uncertainty, and Strategic Behaviour: Decision-making under uncertainty; expected utility; game theory basics; pricing strategies under competition; risk assessment and mitigation.

Teaching Learning Process: Lectures and tutorials

Suggested Readings:

1. Keat, P. G., & Young, P. K. Y. (2013). *Managerial Economics: Economic Tools for Today's Decision Makers* (7th ed.). Pearson.
2. Hirschey, M. (2009). *Managerial Economics* (12th ed.). Cengage Learning.
3. Salvatore, D. (2015). *Managerial Economics in a Global Economy* (8th ed.). Oxford University Press.
4. Truett, L. J., & Truett, D. B. (2012). *Managerial Economics: Analysis, Problems, Cases* (9th ed.). Wiley.

Semester-IV

Major: Principles of Macro Economics-II

Course Credits	(05) Five
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Define and explain basic concepts of macroeconomic models, including the IS-LM framework, aggregate demand and supply, inflation, and balance of payments.• CO2: Explain IS-LM analysis, the AD-AS framework, the inflation-unemployment relationship (Phillips Curve), and exchange-rate determination.• CO3: Apply macroeconomic theories to examine price-level determination, policy impacts on output, inflation-control measures, and exchange-rate mechanisms.• CO4: Analyse macroeconomic issues such as inflationary pressures, unemployment trends, stagflation, and external-sector imbalances including balance of payments and exchange-rate fluctuations.

1. **Income and Employment Determination:** Basic assumptions of Classical and Keynesian Economics, Say's Law of Market, wage-price stability, Effective Demand; IS-LM analysis.
2. **GDP and Price Level in Short Run and Long Run:** Aggregate demand and aggregate supply; multiplier Analysis with AD curve and changes in price levels; aggregate supply in the SR and LR.
3. **Inflation and Unemployment:** Concept of inflation; types, causes, and effects of inflation; Inflationary gap; relationship between inflation and unemployment: Phillips Curve in short run and long run, Stagflation.
4. **Balance of Payments and Exchange Rate:** Balance of Trade; Balance of payments: current account and capital account; market for foreign exchange; determination of exchange rate; Fixed and flexible exchange rate system, Indian Currency convertibility, Exchange control.

Teaching Learning Process: Lectures and tutorials

Suggested Readings:

1. Mankiw, N. G. (2022). *Macroeconomics* (11th ed.). Worth Publishers/Macmillan Learning.
2. Dornbusch, R., Fischer, S., & Startz, R. (2018). *Macroeconomics* (13th ed.). McGraw-Hill Education.
3. Blanchard, O. (2021). *Macroeconomics* (8th ed.). Pearson.
4. Froyen, R. T. (2013). *Macroeconomics: Theories and Policies* (10th ed.). Pearson.
5. Ahuja, H. L. (2023). *Macroeconomics: Theory and Policy*. S. Chand Publishing.
6. Jhingan, M. L. (2022). *Macroeconomic Theory*. Vrinda Publications.
7. Shapiro, E. (2013). *Macroeconomic Analysis*. Galgotia Publications.
8. Gupta, S. B. (2020). *Monetary Economics: Institutions, Theory and Policy*. S. Chand Publishing.

9. Vaish, M. C. (2010). *Macroeconomic Theory*. Vikas Publishing House.
10. Sikdar, S. (2020). *Principles of Macroeconomics*. Oxford University Press.

Minor: Macro Economics-II

Course Credits	(04) Four
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Define and explain basic concepts of macroeconomic analysis, including the IS-LM framework, aggregate demand and supply, inflation, and balance of payments.• CO2: Explain the IS-LM model, AD-AS framework, multiplier analysis, Phillips Curve, and exchange-rate determination.• CO3: Apply macroeconomic theories to analyse output and price determination, inflation control, unemployment trends, and foreign-exchange mechanisms.• CO4: Analyse macroeconomic issues such as price-level fluctuations, inflationary gaps, stagflation, and external-sector imbalances including balance of payments and exchange-rate systems.

1. **IS-LM Analysis:** Derivations of the IS and LM functions; IS-LM and aggregate demand; shifts in the AD curve.
2. **GDP and Price Level in Short Run and Long Run:** Aggregate demand and aggregate supply model; multiplier Analysis with AD curve and changes in price levels.
3. **Inflation and Unemployment:** Concept of inflation; types, causes, and effects of inflation; Inflationary gap; relationship between inflation and unemployment: Phillips Curve in short run and long run, Stagflation.
4. **Balance of Payments and Exchange Rate:** Balance of Trade; Balance of payments: current account and capital account; market for foreign exchange; determination of exchange rate; Fixed and flexible exchange rate system, Indian Currency convertibility, Exchange control.

Teaching Learning Process: Lectures and tutorials

Suggested Readings:

1. Mankiw, N. G. (2022). *Macroeconomics* (11th ed.). Worth Publishers/Macmillan Learning.
2. Dornbusch, R., Fischer, S., & Startz, R. (2018). *Macroeconomics* (13th ed.). McGraw-Hill Education.
3. Blanchard, O. (2021). *Macroeconomics* (8th ed.). Pearson.
4. Froyen, R. T. (2013). *Macroeconomics: Theories and Policies* (10th ed.). Pearson.
5. Ahuja, H. L. (2023). *Macroeconomics: Theory and Policy*. S. Chand Publishing.
6. Jhingan, M. L. (2022). *Macroeconomic Theory*. Vrinda Publications.
7. Shapiro, E. (2013). *Macroeconomic Analysis*. Galgotia Publications.
8. Gupta, S. B. (2020). *Monetary Economics: Institutions, Theory and Policy*. S. Chand Publishing.
9. Vaish, M. C. (2010). *Macroeconomic Theory*. Vikas Publishing House.
10. Sikdar, S. (2020). *Principles of Macroeconomics*. Oxford University Press.

Major DSEC: Data Analysis in Economics

Course Credits	(03) Three
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Define and describe basic concepts of statistical methods, including data presentation, classification, tabulation, dispersion, and skewness.• CO2: Explain correlation, bivariate distributions, probability distributions (Binomial, Poisson, Normal), and statistical inference.• CO3: Apply statistical techniques to analyse data, compute correlation coefficients, and use probability distributions and hypothesis-testing methods.• CO4: Analyse statistical problems involving variability, relationships between variables, and decision-making using hypothesis testing, including Type I and Type II errors.

Unit-1: Presentation, Classification and Tabulation of data; Graphical presentation of data; Measures of dispersion and skewness.

Unit-2: Bivariate frequency distribution Covariance, Karl Pearson's coefficient of Correlation, Rank correlation.

Unit 3: Distribution: Binomial, Poisson, Normal distributions- Meaning, characteristics and importance.

Unit-4: Statistical Inference and Hypothesis testing: Statistical Inference- Point estimation, Confidence interval for known and unknown variance, Selection of proper test statistic; Hypothesis testing: Formulation, One and two tailed test, Type I and Type II errors.

Teaching Learning Process: Lectures and tutorials

Suggested Readings:

1. Elhance, D. N. and V. Elhance, 1988, Fundamentals of Statistics, Kitab Mahal, Allahabad. Nagar, A. L. and R. K. Dass, 1983, Basic Statistics, Oxford University Press, Delhi.
2. Mansfield, E., 1991, Statistics for Business and Economics: Methods and Applications, W.W. Norton and Co.
3. Yule, G U. and M. G Kendall, 1991, An Introduction to the Theory of Statistics, Universal Books, Delhi.
4. M.R. Spiegel, 2003, Theory and Problems of Probability and Statistics (Schaum Series).
5. Gupta, S.P. 2004. Statistical methods, S. Chand & Sons publications
6. Nagar, A. L. and Das, R. K., 1989, Basic Statistics: Oxford University Press, Delhi.
7. Newbold, P., 1991, Statistics for Business and Economics (Third Edition): Prentice Hall, New Jersey.

8. Keller, G, and B. Warrack, 1991, Essentials of Business Statistics, Wordsworth Publishing Co., California.
9. Kothari, C.R. (1985) Research Methodology: Methods and Techniques, Wiley Eastern, New Delhi.
10. Levin, R.I. and D.S. Rubin. (1999) Statistics for Management, Prentice-Hall of India, New Delhi.
11. Mustafi, C.K. (1981) Statistical Methods in Managerial Decisions, Macmillan, New Delhi.
12. Plane, D.R. and E.B. Oppermann. (1986) Business and Economic Statistics, Business Publications, Inc: Plano.
13. Zikmund, William G. (1988) Business Research Methods, The Dryden Press, New York.

MD/ID: Business Environment

Course Credits	(04) Four
Course Learning outcomes	<p>The Course will help the learner to:</p> <ul style="list-style-type: none">• CO1: Identify various components of the business environment.• CO2: Describe the role of macroeconomic and institutional factors in business decision-making.• CO3: Apply economic indicators to interpret business scenarios.• CO4: Analyse business responses to policy changes and international trends.

Unit I: Economic Environment: Indicators of economic development—GDP, inflation, unemployment, interest rates; business cycles and implications for firms.

Unit II: Political, Legal, and Institutional Environment: Political institutions; constitutional provisions affecting business; regulatory environment—licensing, taxation, labour laws.

Unit III: Policy Environment: Liberalization, privatization, globalization (LPG); role of economic reforms; sectoral policy frameworks.

Unit IV: Global and Technological Environment: Impact of globalization, WTO, and regional trade blocs; foreign investment; digital economy; challenges and opportunities for Indian businesses.

Teaching Learning Process: Lectures and tutorials

Suggested Readings:

1. Cherunilam, F. (2020). *Business Environment: Text and Cases* (26th ed.). Himalaya Publishing House.
2. Aswathappa, K. (2019). *Essentials of Business Environment* (15th ed.). Himalaya Publishing House.
3. Economic Survey of India. (Annual). *Government of India, Ministry of Finance*.
4. World Bank. (2020). *Doing Business 2020: Comparing Business Regulation in 190 Economies*. The World Bank Group.