FACULTY OF ECONOMICS AND BUSINESS

Syllabus

of

Economics as a subject in interdisciplinary Programs

(Under Continuous Evaluation System)
(12+3 System of Education)

Session: 2021-22

The Heritage Institution
Kanya Maha Vidyalaya, Jalandhar
(Autonomous)

Session 2021-22

S. NO.	PROGRAMS	COURSE TITLE	COURSE CODE
1.	Bachelor of Commerce (Pass and Hons.) Semester –I	Business Statistics	BCRL-1176
2.	Bachelor of Commerce (Pass and Hons.) Semester –II	Business Economics	BCRL-2175
3.	Bachelor of Business Administration Semester – I	Managerial Economics-I	BBRL-1175
4.	Bachelor of Business Administration Semester – II	Managerial Economics-II	BBRL-2175
5.	Bachelor of Business Administration Semester – III	Statistics for Business	BBRL-3173
6.	Bachelor of Commerce (Honours) Semester-I	Microeconomics	BCOL-1174
7.	Bachelor of Commerce (Honours) Semester-I	Descriptive Statistics for Business	BCOL-1173
8.	Bachelor of Commerce (Honours) Semester-II	Macroeconomics	BCOL-2174
9.	Bachelor of Commerce (Honours) Semester-II	Inferential Statistics for Business	BCOL-2173
10.	Bachelor of Commerce (Financial Services) Semester-I	Quantitative Techniques for Business-I	BCFL-1455
11.	Bachelor of Commerce (Financial Services) Semester-II	Quantitative Techniques for Business-II	BCFL-2453
12.	Master of Commerce SEMESTER-I	Managerial Economics	MCML-1171
13.	B.Sc. Home Science Semester-III	Basic Concepts of Economics	BHSL-3172
14.	B.Sc. Home Science Semester-VI	Consumer Economics	BHSL-4172
15.	B.Sc. (Hons.) Mathematics	Microeconomics-I	BOML-1175

	Semester–I		
16.	**Bachelor Of Vocation (Retail Management) Semester -II**	**Managerial Economics**	**BVRL-2325**
17.	**Master Of Vocation (Retail Management) Semester -I**	**Economics of Retail**	**MVRL-1324**
18.	**B.Sc. (Hons.) Agriculture Semester-VI**	**Farm Management, Production And Resource Economics**	**BACM- 6018**

Course Outcomes:

After the successful completion of this course, students will be able to-

CO1: learn the basic statistical analysis techniques and their applications in commerce.

CO2: understand the some basic techniques of time series analysis and introductory applications of probability.

Bachelor of Commerce (Pass & Hons.) Semester – I
Session 2021-22
Course Code: BCRL–1176
Business Statistics

Time: 3 Hours **Max. Marks: 50**
Theory: 40
CA: 10

Note: Instructions for the Paper–Setter:

Two questions, each carrying 8 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I

Definition, Meaning, Functions, Scope and Limitations of Statistics.
Measures of Central Tendency: Types of averages–Arithmetic Mean (Simple and Weighted), Median and Mode.

Unit-II

Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation and Coefficient of Variation.
Simple Correlation and Regression: Meaning, Types, Karl Pearsons& Rank Correlation (Excluding grouped data), Probable Error and Standard Error.

Unit-III

Index Numbers: Meaning and Importance, Methods of construction of Index Numbers: Weighted and Unweighted; Simple Aggregative Method, Simple Average of Price Relative Method, Weighted Index Method: Laspeyre's Method, Pasche's Method and Fisher's. Testing for Ideal method including Time and Factor Reversal tests. Splicing.

Unit-IV

Time Series Analysis: Components, Estimation of Trends (Graphical method, Semi Average Method, Moving Averages Method and Method of Least Squares for linear path).
Probability: Conceptual Meaning and Definition of Probability, Theorems of Probability– Addition and Multiplication theorem of Probability and Concept of Conditional Probability (Simple Applications)

Suggested Readings:

1. Chandan, J.S.(1998) *Statistics for Business and Economics*, Ist Edition, Vikas Publishing House Pvt. Ltd.
2. Gupta,S.C.(2018) *Fundamentals of Statistics,* Himalayan Publishing House, Delhi.
3. Gupta ,S. P. (2011)*Statistical Methods,*S. Chand Publications, New Delhi.
4. Siegel, Andrew F.(2011) *Practical Business Statistics* , International Edition, McGraw Hill Irwin.
   Note: The latest edition of the books is recommended..

Course Outcomes:

After the successful completion of this course, students will be able to –

CO1: students will be able to have an in-depth understanding of the preliminary concepts about consumer behavior, costs and revenue curves, production behavior and market structure.
CO2: understand the concept of national   income and methods of its estimation.

Bachelor of Commerce (Pass and Hons.) Semester – II
Session 2021-22
Course Code: BCRL–2175
Business Economics

Time: 3 Hours   Max. Marks: 50
                                                                                      Theory: 40
                                                                                            CA: 10

Note: Instructions for the Paper–Setter:
Two questions, each carrying 8 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I
Theory of Demand: Meaning of demand and its types, law of demand, price elasticity of demand and its measurement.
Consumer's Behaviour: Utility approach: Brief outline of law of diminishing marginal utility and law of equi–marginal utility.
Indifference Curve Approach: Meaning, properties, price, income and substitution effect, Revealed preference approach.

Unit-II
Theory of Production: Law of variable proportions and law of returns to scale, traditional and modern theory of costs (short run and long run).
Revenue: Average revenue, marginal revenue and total revenue, relationship between average revenue and marginal revenue and elasticity of demand.

Unit-III
Perfect Competition: Meaning, features, price and output determination of firm and industry.
Monopoly: Meaning, features, price and output determination and price discrimination.
Monopolistic Competition: Meaning, features, price and output determination.

Unit-IV
National Income: Definition and Importance of National Income, Gross and Net Domestic Product, Personal Income and Disposable Income; Measurement of National Income: Income, Output and Expenditure Method, Problems in measurement of National Income particularly in underdeveloped countries.
Consumption: Meaning, determinants (subjective and objective) and importance, Keynes' Psychological law of consumption.

Suggested Readings:
1.Dwivedi,D.N.(2009) *Managerial Economics*, 7th Edition, Vikas Publication.
Note: The latest edition of the books is recommended.

Course Outcomes:

After passing this course, students will be able to:

CO: After passing this course, students will be able to have an in-depth understanding of the preliminary concepts about consumer behavior, costs and revenue curves, production behavior and market structure.

Bachelor of Business Administration Semester – I
Session 2021-22
Course Code: BBRL-1175
Managerial Economics- I

Time: 3 Hours   **M. Marks: 50**
                                                                      Theory: 40
                                                                      CA: 10

Note: Instructions for the Paper–Setter:
Two questions, each carrying 8 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit – I
Theory of Demand: Meaning of demand and its types, Law of demand; Price Elasticity of demand: degrees and its measurement.
Consumer's Behaviour: Utility approach (Brief outline of law of diminishing marginal utility and law of equi-marginal utility).

Unit – II
Indifference Curve Approach: Consumer equilibrium, Income, Price and Substitution effect. Revealed Preference Approach.
Theory of Supply: Concept and law of supply, factors affecting supply.

Unit – III
Theory of Production: Law of variable proportions, total, average and marginal physical product, Law of Returns to scale, Economies and diseconomies of scale.
Theory of Cost: Short and Long period costs, Concept of total cost, Marginal and Average cost, Theory of Cost in Short-run and Long-run.
Concept of revenue: Total Revenue, Average Revenue, Relationship between Average and Marginal Revenue and Price Elasticity of Demand.

Unit – IV
Pricing Under Various Market Conditions: Perfect Competition - Equilibrium of Firm and Industry under Perfect Competition; Monopoly - Price determination under Monopoly; Monopolistic Competition - Price and Output determination under Monopolistic Competition.

Suggested Readings:
1. Ahuja, H.L.(2018),'*Advanced Economics Theory: Micro Economics analysis'*, S. Chand Publishing.
2. Dwivedi, D.N. (2018), '*Microeconomics: Theory and Applications'*, Pearson Education, New Delhi.
3. Koutsoyiannis, A.(2015),'*Modern Microeconomics',* Macmillan Press, London.
4. Sen, A. (2007), '*Microeconomics:Theory and Applications'*, Oxford University Press, New Delhi.

  Note: The latest edition of the books is recommended..

Course Outcomes:

After passing this course, students will be able to:

CO1:   understand the Consumption and investment behaviour of an economy and factor affecting consumption and investment decisions.

CO2:   understand the basics of national income accounting and theoretical details of classical and Keynes model of employment.

CO3: understand the problem of inflation, its causes, effects and solutions in an economy.

Time: 3 Hours   **M. Marks: 50**
Theory: 40
CA: 10

Note: Instructions for the Paper–Setter:

Two questions, each carrying 8 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I

Macroeconomics: Meaning, nature and scope. Basic concepts: Stock and flow variables, static, comparative static and dynamic analysis.
National Income: Concept and Importance of National Income, Gross and Net National Product, Gross and Net Domestic Product, Personal Income and Disposable Income.
Measurement of National Income: Income, Output and Expenditure Method, Problems in Measurement of National Income.

Unit-II

Consumption Function: Meaning and Nature, Determinants and Measures to raise Propensity to Consume, Keynes Psychological Law of Consumption- Meaning, Properties and Implications.

Unit-III

Investment: Classical Theory of Investment, Keynesian Theory of Investment, Accelerator Theory of Investment.
Keynesian Economics: Theory of Money, Saving and Investment Function.
Multiplier: Static and Dynamic Analysis; Balanced Budget Multiplier, Employment Multiplier.

Unit-IV

Business Cycle: Keynes's Theory of Trade Cycle, Kaldor's Theory of Trade Cycle, Hicks' Theory of Trade Cycle, Samuelson's Theory of Trade Cycle
Inflation: Meaning, Types, Theories, Causes, effects and Context.

Suggested Readings:

1. Dwivedi D.N.(2018), *Macroeconomics: Theory and Policy*, Tata McGraw-Hill.
2. Jhingan M. L.(2014), *Macroeconomic Theory*, Varinda Publications Delhi.

Note: The latest edition of the books is recommended.

Course Outcomes:

After passing this course students will be able to:

CO1: understand the techniques of presentation, analysis of data, basics of time series data and probability.

CO2: understand basics of matrices and determinants.

Time: 3 Hours   **M. Marks: 50**
                                                                                                              Theory: 40
                                                                                                              CA: 10

Note: Instructions for the Paper–Setter:

Two questions, each carrying 8 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-1

Matrix Algebra: Types of matrices, basic operations of matrices, determinant of a matrix and its properties, rank and inverse of a matrix, solution of simultaneous linear equations – Cramer's rule and matrix inversion method, application of matrices.
Introduction and Methods of Presentation of Statistical Information, Collection and Presentation of Data. Frequency distributions. Concept of sampling and sampling Designs.

UNIT-II

Measures of Central Tendency: Mean, Median, Mode. Measures of dispersion: Range, quartile deviation, Average deviation and Standard deviation.

UNIT-III

Simple Correlation and Regression Analysis: Assumptions, Karl Pearsons product moment and Spearmen's rank correlation method, least squares technique, properties of correlation and regression coefficients. Time Series Analysis: Trend analysis using moving average and regression analysis, seasonal, cyclic and regular fluctuations.

UNIT-IV

Index number construction of unweighted and weighted index numbers, quantity Index.
Elementary Probability Theory: Deterministic and non–deterministic experiments, different types of events, a priori and empirical definition of probability, Conditional probability, laws of addition and multiplication of probability, Properties of binomial, Poisson and normal distributions.

Suggested Readings:
1. Gupta, S.C.(2018), *Fundamentals of Statistic*s, Himalaya Publishing House, 7th Edition, Delhi.
2. Gupta, S.P. (2014), *Statistical Methods*, Sultan Chand& Sons, 43rd Edition , Delhi.

Note: The latest edition of the books is recommended..

Course Outcomes:

Upon successful completion of this course, students will be able to:

CO1: students will be able to have an in-depth understanding of the preliminary concepts about consumer behavior, costs and revenue curves, production behavior and market structure.
CO2: have some idea of managerial objectives.

Bachelor of Commerce (Honours) Semester-I
Session 2021-22
Course Code: BCOL-1174
Microeconomics

Time: 3 Hours   Max. Marks: 100
                                                                                      Theory: 80
                                                                                      CA: 20

Note: Instructions for the Paper–Setter:
Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I
Introduction to Economics: Nature and Scope of Economics, Micro and Macro Economics. Definition, Nature and Scope of Business Economics. Demand and Supply Analysis: Meaning of Demand, Types of Demand.
Law of Demand: Demand Schedule and Demand Curve, Shift in Demand Curve, Exceptions to the Law of Demand. **Supply:** Determinants of Supply, Supply Function, Law of Supply, Supply Schedule and Supply Curve. Market Equilibrium: Excess Supply, Excess Demand, Price Adjustment Mechanism, Changes in Equilibrium.
Elasticity of Demand: Concept, Price, Income and Cross Elasticity, Measurement of Price Elasticity of Demand, Relationship Between Average Revenue, Marginal Revenue and Elasticity of Demand, Determinants of Elasticity of Demand, Importance of Elasticity of Demand.

Unit-II
Consumer Preferences and Choice: Utility Analysis: Brief Outline of Law of Diminishing Marginal Utility and Law of Equi- Marginal Utility. Indifference Curve Analysis: Assumption, Properties, Special Types of Indifference Curves, Consumer Equilibrium, Price, Income and Substitution Effects.
Production Function: Concept of Production Function, Short-run Laws of Production, Long-term Laws of Production: Isoquants, Producer's Equilibrium. Expansion Path, Returns to Factor and Returns to scale, Optimal Combination of Inputs, Economies and Diseconomies of Scale.
Theory of Costs: Types of Costs, Short Run and Long Run, Traditional and Modern Approaches.

Unit-III
Market Structure and The Firm's Objectives: Market Structure and Degree of Competition, Market Structure and Pricing Decisions: the Firm and The Industry, Objectives of Business Firms. **Perfect Competition:** Characteristics, Price determination under perfect competition, Equilibrium of Firm and Industry in the Short-run and Long-run.
Monopoly: Characteristics, Equilibrium of the Monopoly Firm in Short run and Long run;
Price Discrimination and Its Types, Price and Output Determination under Discriminating Monopoly.

Unit-IV
Monopolistic Competition: Meaning and Characteristics, Price and Output Determination Under Monopolistic Competition in Short-run and Long-run, Selling costs: Equilibrium of Firm with Respect to Selling Cost, Comparison with Perfect Competition. Brief introduction to Concept of Excess Capacity.
Oligopoly:Meaning and Characteristics, Kinked Demand curve.
Managerial Theories: Profit maximization and Sales Maximization.

Suggested Readings:
1. Dwivedi, D.N.(2018)*" Microeconomics -Theory and Applications",* Pearson Education Pvt. Ltd.
2. Ahuja, H.L.(2014)" *Advanced Economic Theory"*, S. Chand, publications,NewDelhi.
3. Koutsoyiannis A (2015)"*Modern Micro Economics",* 2nd edition, MacMillan House, New Delhi.
4.Stonier &Hague,A,(2003)"*Text book of Economics Theory*", 9th ed., ELBS, London.
Note: The latest edition of the books is recommended.

Bachelor of Commerce (Honours) Semester-I
Session 2021-22
Course Code: BCOL-1173
Descriptive Statistics for Business

Course outcome:

Upon successful completion of this course, students will be able to:

CO1: understand the concept of data & variables and its applications.

CO2: learn the techniques of presentation and analysis of data.

CO 3: comprehend the measures of distribution and relationship.

Bachelor of Commerce (Honours) Semester-I
Session 2021-22
Course Code: BCOL-1173
Descriptive Statistics for Business

Time: 3 Hours   Max. Marks: 100
                                                                    Theory: 80
                                                                    CA: 20

Note: Instructions for the Paper–Setter:
Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I
Data and Statistics: Types of Data: Cross-Sectional, Time Series Data, Panel Data, Pool Data, Sources of Data, Applications in Economic and Business
Some Basic Statistical Ideas: Description and Inference, The Population and the Sample, Variables and Cases, Types of Variables: Numerical and Categorical Variables, Discrete and Continuous Numerical Variables, Sampling Error and Bias.

Unit-II
Describing Data: Tables and Graphs (Theory and Practical through Excel)
Single Variable: Frequency Distributions- Ordinary Frequency Distributions, Relative Frequency Distributions, Cumulative Frequency Distributions; Graphs: Bar Charts and Pie Charts, Histograms and Ogives
Relationships: Categorical Explanatory Variables, Frequency Polygons, Frequency Distributions Graphs. Continuous Explanatory Variables: Frequency Distributions, Relative Frequency and Percent Frequency Distributions, Scatter diagrams, Data Presentation Errors.

Unit-III
Describing Data: Summary Statistics (Theory and Practical through Excel).
Measures of a Single Numeric Variable: Measures of Central Tendency: Arithmetic Mean, Weighted Mean, Geometric Mean, Percentiles and Quartiles, Median, Mode. Measures of Variation: Range and Inter-quartile Range, Mean Deviation, Variance, Standard Deviation and Coefficient of Variation.

Unit-IV

Measures of a Relationship: Measures of Distribution: Shape, Relative Location with Skewness and Kurtosis. Detecting Outliers and Empirical Rule. 'z' scores. Covariance and Correlation, Simple Regression Analysis (Grouped and Ungrouped data). Chebychev'sTheorem.

Suggested Readings:
1. Gupta S. P. (2011), *Statistical Methods,* S. Chand Publications, New Delhi.
2. Leekley R.M. (2010), Applied Statistics for Business and Economics, CRC Press, Taylor & Francis Group 6000 Broken Sound Parkway NW, Suite 300.

Note: The latest edition of the books is recommended.

Course Outcomes:

Upon successful completion of this course, students will be able to:

CO1: learn the concepts and measurement of National Income and methods of measuring National Income.

CO2: learn Concept of demand for and supply of money.

CO3: learn concept of Inflation and measures to control inflation.

Time: 3 Hours   **Max. Marks: 100**
Theory: 80
CA: 20

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I

Macroeconomics – scope and basic concepts.
National Income Accounting - Concepts and measurement of GDP, GNP, NNP, NI and DPI, Methods of measuring National Income, Problems in measuring National Income ,Circular flow of income - Two sector, three sector and four model. Real and Nominal GDP–Implicit deflator.

Unit-II

Aggregate Demand and Aggregate Supply: Classical and Keynesian approach to AD-AS approach, Determination of aggregate demand, Shifts in aggregate demand, Aggregate supply in the short and long run. Economy in the short run IS–LM framework.
Theory of Macro Economic Equilibrium: Simple Keynesian Model, Consumption, saving and Investment functions, Investment and Government expenditure multipliers

Unit-III

Money: Concept of demand for and supply of money, Quantity theory of money and Keynesian theory of demand for money, Measures of money supply – High powered money – Money multiplier.
Inflation: Concept of Inflation – Demand-pull and cost-push theories of inflation –Measures to control inflation.

Unit-IV

Monetary policy: Role of monetary policy, Instruments of monetary policy, Latest monetary policy of RBI.
Fiscal policy: Role of fiscal policy, Instruments of fiscal policy Latest fiscal policy of RBI.
Balance of payment: Meaning, its types and Structure, Balance of payment and Balance of trade, Factor responsible for disequilibrium in BOP, Methods to correct BOP.

Suggested Readings:

1. Dwivedi ,D.N. (2018) *Macroeconomics: Theory and Policy*, Tata McGraw-Hill.

2. Jhingan, M. L. (2014) *Macroeconomic Theory*, Varinda Publications ,Delhi.

Note: The latest edition of the books is recommended..

Course Outcomes:

After the successful completion of this course, students will be able to –

CO1: understand the concept of hypothesis testing and its significance

CO2: learn the applications of parametric and non-parametric tests

Time: 3 Hrs   **Max. Marks: 100**
                                                                                    Theory: 80
                                                                                    CA: 20

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I

Population-Sample, Central Limit Theorem and Confidence Interval

Confidence Intervals for One Population Mean:

- Estimating a Population Mean Confidence Intervals for One Population Mean When σ Is Known
- Confidence Intervals for One Population Mean When σ Is Unknown

Hypothesis Tests for One Population Mean

- The Nature of Hypothesis Testing
- Critical-Value Approach to Hypothesis Testing
- P-Value Approach to Hypothesis Testing
- Hypothesis Tests for One Population Mean When σ Is Known
- Hypothesis Tests for One Population Mean When σ Is Unknown
- The Wilcoxon Signed-Rank Test
- Type II Error Probabilities; Power

Unit-II

Inferences for Two Population Means:

The Sampling Distribution of the Difference between Two Sample Means for Independent Samples:

- Inferences for Two Population Means, Using Independent Samples: Standard Deviations Assumed Equal
- Inferences for Two Population Means, Using Independent Samples: Standard Deviations Not Assumed Equal
- The Mann–Whitney Test
- Inferences for Two Population Means, Using Paired Samples
- The Paired Wilcoxon Test

Unit-III

Inferences for Population Standard Deviations:

- Inferences for One Population Standard Deviation
- Inferences for Two Population Standard Deviations, Using Independent Samples

Inferences for Population Proportions:

- Confidence Intervals for One Population Proportion
- Hypothesis Tests for One Population Proportion
1. Inferences for Two Population Proportions

Unit-IV

Chi-Square Procedures

- The Chi-Square Distribution
- Chi-Square Goodness-of-Fit Test
- Contingency Tables; Association
- Chi-Square Independence Test
- Chi-Square Homogeneity Test

Software

1.   Jamovi http://cdar.gndu.ac.in/downloadOSSoftware.aspx
2.   Gretl   http://cdar.gndu.ac.in/downloadOSSoftware.aspx

Suggessted Books:
1. Sahu P. K., Pal, S. R., & Das, A. K. (2015). Estimation and inferential statistics .Springer, India.
2. Lowry R. (2014). Concepts and applications of inferential statistics. Available at
    http://vassarstats.net/textbook/
3. Bernstein R., & Bernstein, S. (1999). Schaum's outline of elements of statistics II: Inferential
Statistics, McGraw Hill Professional.

Note: The latest edition of the books is recommended.

Course Outcomes:

After passing this course students will be able to:

CO1: learn the basic statistical analysis techniques and their applications in business.

CO2: understand the some basic techniques of time series analysis

Bachelor of Commerce (Financial Services) Semester-I
Session 2021-22
Course Code: BCFL-1455
Quantitative Techniques for Business-I

Time: 3 Hours   M. Marks: 50
                                                                   Theory: 40
                                                                   CA: 10

Note: Instructions for the Paper–Setter:

Two questions, each carrying 8 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I

Measures of Central Tendency: - Mean, Median, Mode, Geometric Mean and Harmonic Mean

Unit-II

Measures of Dispersion: - Range, Quartile Deviation, Mean Deviation and Standard Deviation; Skewness and Kurtosis

Unit-III

Index Numbers: - Meaning and importance, Methods of Construction of Index Numbers: weighted and unweighted, fixed base and chain base index numbers ; Time Series Analysis:- Trend cycles, seasonal and irregular components, estimation of trend(Graphical Method, Semi Average method, method of moving averages and method of least square)(fitting straight lines only)

Unit-IV

Simple and Compound Interest, Discounting and factoring techniques

Suggested Readings:
1. Gupta S. P. (2011), '*Statistical Methods',* S. Chand Publications, New Delhi.
2. Chandan, J.S.(1998), '*Statistics for Business and Economics*', Ist Edition, Vikas Publishing House Pvt. Ltd.

Note: The latest edition of the books is recommended.

Course Outcomes:

CO1: To learn the basic methods of analysing relationship and interpolation. of data identify the population of interest, parameter, sample and statistics from a study

CO2: to learn basics of sampling, probability and theoretical distribution identify whether a probability sampling method or a non probability sampling method.

Bachelor of Commerce (Financial Services) (Semester-II)
Session 2021-22
Course Code: BCFL-2453
Quantitative Techniques for Business-II

Time: 3 Hours   M. Marks: 50
                                                                                                      Theory: 40
                                                                                                      CA: 10

Note: Instructions for the Paper–Setter:
Two questions, each carrying 8 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I
Correlation Analysis: Simple Correlation between two variables (grouped and ungrouped data), Rank Correlation, Concurrent Correlation, Partial and multiple Correlation.

Unit-II
Simple Regression Analysis:- Grouped and Ungrouped data. Interpolation and Extrapolation with equal and unequal class intervals (Binomial, Newton's and Lagrange's formula)

Unit-III
Probability Theory: Addition and Multiplication theorems, Probability Distribution, Binomial, Poisson and normal (Fitting of these distributions).

Unit-IV
Sampling: Various Concepts- Population, Sampling Units, Complete enumeration sample survey, Features of a good sample, Sampling Techniques.

Suggested Readings:
1. Gupta, SC(2018), *Fundamentals of Statistic*, Himalaya Publishing House, 7th Edition, Delhi
2. Gupta, SP (2014), *Statistical Methods*, Sultan Chand& Sons, 43rd Edition , Delhi
Note: The latest edition of the books is recommended.

Master of Commerce SEMESTER-I
Session 2021-22
Course Code: MCML-1171
Managerial Economics

Course Outcomes:

After passing this course, students will be able to:

CO1: learn the effective use of micro and macroeconomic tools and concepts in managerial decision making.

CO2: have in-depth knowledge of theories of consumer behavior, cost and market   structure, production decisions.

CO3: learn preliminary concepts of macroeconomics.

Master of Commerce SEMESTER-I
Session 2021-22
Course Code: MCML-1171
Managerial Economics

Max. Marks: 100
Theory: 80

Time: 3 hours
CA: 20

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I

Managerial Economics: Meaning, Nature, Scope and Concepts.

Law of Demand: Meaning, Determinants, Exceptions, Kinds of Demand, Change in Demand and Importance of Law of Demand.

Elasticity of Demand: Meaning, Types and Degrees of Elasticity of Demand, Methods of measuring Price Elasticity of Demand, Factors Determining Elasticity of Demand, Importance.

Unit-II

Marginal Analysis: Law of Diminishing Marginal Utility, Law of Equi-marginal Utility

Indifference Curve Analysis: Meaning, Assumptions, Properties, Consumer Equilibrium, Importance.

Production Function: Meaning, Law of Variable Proportion and Law of Returns to Scale Economies and Diseconomies of Scale.

Unit-III

Theories of Costs: Types of Costs, Traditional Theory: Long Run & Short Run, Modern Theory: Long Run & Short Run.

Managerial Theories: Profit maximization and Sales Maximization.

Market Structure: Meaning, Assumptions and Equilibrium of Perfect Competition, Monopoly, Monopolistic Competition.

Oligopoly: Sweezy Model.

Unit-IV

National Income: Conceptual Framework, Measures of National Income, Methods of Measurement of national income and Limitations/problems in measurement of national income, importance of measurement of national income

Consumption Function: Meaning, and Nature, Determinants and Measures to Raise Propensity to Consume, Keynes Psychological Law of Consumption – Meaning, Properties and Implications.

Inflation: Meaning, Types, Theories of Inflation, effects and control of Inflation.

Suggested Readings:

1**.** Adhikari, M., '*Economic Analysis for Business Decisions'*.

2. Ahuja, H. L. (2009), 'Modern Micro Economics', , Sultan Chand and Co.

3. Dr. Kumar, Raj &Prof. Gupta, Kuldeep, *'Managerial Economics'*.

4. Koutsyannis A. *(1977),* '*Modern Microeconomics', 2nd Edition,* Macmillan Press, London.

5. Mithani, D.M*(2009),'Managerial Economics',5th Edition* Himalaya Publishing House, New Delhi.

Note: The latest edition of the books is recommended..

Course Outcomes:

After passing this course students will be able to:

CO1: To understand some basic economic concepts

CO2: To understand the basic concepts of banking & different saving schemes

CO3: To give guidance regarding credit facilities.

.**CO4:** To understand basic structure of markets in the economy.

B.Sc. Home Science (Semester-III)
Session 2021-22
Course Code: BHSL-3172
Basic Concepts of Economics

Time: 3 Hours   **Max Marks: 50**
                                                          Theory: 40
                                                          CA: 10

Note: Instructions for the Paper–Setter:
Two questions, each carrying 8 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I
Basic Economic concept: Goods, wealth, economic and non economic activities, utility, Value and price, Basic concepts in consumer economics.
Human wants and needs, Difference between desire, want, and need, hierarchy of need, characteristics of needs, classification of wants, forces influencing wants.

UNIT-II
Production & Consumption: definition, features, significance laws and their importance. Basic Knowledge of market: definition, features and types of market, E- marketing.

UNIT-III
Consumer Credit: Definition and significance of credit, Need and basis of credit, Sources of consumer credit, Legal credit instruments , Points to be considered while borrowing, Merits & demerits of credit.
UNIT-IV
Brief Knowledge of banking, insurance schemes, saving & investment.
Banking: Types of account, how to open an account, How to deposit and withdraw money by cheque & cash; Internet banking
Insurance: General and life insurance policies terms and conditions & advantages. Savings-Bank saving scheme, Post Office Saving Schemes, Shares & debentures (only introduction)
Taxation: Types of Taxes & how to calculate income tax & file income tax return.

Recommended Books:
1) Kaur, S., Lekhi, R.K. and Singh, J. (), "Consumer Economics" Kalyani Publisher.
2) Gupta, B.D. (1973), "Consumption Pattern in India", Tata Mcgraw Hill.
3) Fitzsimmons, C. (1961), "Consumer Buying for better living", John willey & sons Inc.
4) Sehiffman, L. G. (1990), "Consumer Behavior", 4th Edition, Prentice hall Publications.
Note: The latest edition of the books is recommended.

Bachelor of Science (Home Science) (Sem.-IV)
Session 2021-22
Course Code: BHSL-4172
Consumer Economics

Course Outcomes:

After studying this course, students will be able:

CO1: To train the students about their rights and responsibilities as consumer

CO2: To aware the students about consumer protection right.

CO3: To impart knowledge about consumer buying, grading and standardization, advertising media role and effect.

Bachelor of Science (Home Science): Semester-IV
Session 2021-22
Course Code: BHSL-4172
Consumer Economics

Time: 3 Hours   **M. Marks: 50**
                                                                                     Theory: 40
                                                                                     CA: 10

Note: Instructions for the Paper–Setter:
Two questions, each carrying 8 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

Consumer education and Protection - Need for consumer education, Process for consumer protection.
Consumer legislation in India with special reference to consumer protection Act 1986.
Consumerism - scope, utility and measures for strengthening consumer movement.

UNIT-II

Consumer rights and guidance for wise purchase - Consumer rights & responsibilities.
Fraud and business malpractices.

UNIT-III

Grading, standardization and packaging, Definition and advantages, difference between grading and standardization.
Labelling - types and Labelling as guide to buying.
Branding and its advantages. Packaging-its functions, advantages and problems with packaging.

UNIT-IV

Advertisement: Objectives, Reasons, advantages and mode of advertising.
Entrepreneur and salesmanship: Meaning, Function & Qualities of an entrepreneur, Meaning, advantage and Qualities of an efficient salesman.

Recommended Books:
1) Kaur, S., Lekhi, R.K. and Singh, J. (), "Consumer Economics" Kalyani Publishers.
2) Gupta, B.D. (1973), "Consumption Pattern in India", Tata Mcgraw Hill.
3) Fitzsimmons, C. (1961), "Consumer Buying for better living", John willey & sons Inc.
4) Sehiffman, L. G. (1990), "Consumer Behavior", 4th Edition, Prentice hall Publications.
Note: The latest edition of the books is recommended.

Bachelor of Science (Honours) Mathematics
Semester–I
Session 2021-22
Course Code: BOML-1175
Microeconomics-I

Course Outcomes:
After passing this course students will be able to:

CO: After passing this course, students will be able to have an in-depth understanding of the preliminary concepts about consumer behavior, costs and revenue curves, production behavior and market structure.

Bachelor of Science (Honours) Mathematics
Semester–I
Session 2021-22
Course Code: BOML-1175
Microeconomics-I

Time: 3 Hours

Max. Marks: 100
Theory:80
CA:20

Note: Instructions for the Paper–Setter:
Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit I
Basic problems of an economy. Demand and Supply functions – an introductory view of price formation, Role of time element in price formation.
Price, income and cross elasticities of demand, Measurement of price elasticity of demand, Elasticity of substitution and the relationship between price elasticity, income elasticity and elasticity of substitution; Elasticity of supply.
Unit II
Theories of demand: The classical utility approach, Indifference curves approach, Revealed Preference approach, consumer's surplus.
Unit III
Theory of production: Production function, isoquants, returns to a factor and returns to scale and their compatibility, Elasticity of substitution, Economies of scale.
Unit IV
Cobb–Douglas production function, Production function of a multi-product firm.
Theories of Costs: Short and long period costs, Traditional and Modern theories of costs, Derivation of cost function from production function.
Revenue analysis: Revenue curves and their mutual relationship.

Recommended Books:
1. Ahuja, H. L. (2009), Modern Micro Economics, Sultan Chand and Co.

2. Koutsyannis, A. *(1977)*, *Modern Microeconomics,* 2nd Edition*,* Macmillan Press, London.
Note: The latest edition of the books is recommended.

BACHELOR OF VOCATION (RETAIL MANAGEMENT) (SEMESTER -II)
SESSION 2021-2022
Managerial Economics
COURSE CODE: BVRL-2325
JOB ROLE: RETAIL TEAM LEADER- RAS/Q0105 (NSQF LEVEL-5)

After successful completion of this course, students will be able to:

CO1: Understand the basic concepts of managerial economics.
CO2: Apply economic principles to management decisions.
CO3: Understand the basic concepts of demand, supply and equilibrium and their determinants.

BACHELOR OF VOCATION (RETAIL MANAGEMENT) (SEMESTER -II)
SESSION 2021-2022
Managerial Economics
COURSE CODE: BVRL-2325
JOB ROLE: RETAIL TEAM LEADER- RAS/Q0105 (NSQF level-5)

Time: 3 Hours	**Max. Marks: 50**
4 Hours/week	**Theory Marks: 40**
L-T-P	**CA: 10**
2-0-0	

Note: Instructions for the Paper–Setter:
Two questions, each carrying 8 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I

Introduction to Managerial Economics: Introduction, Concept, Scope, Significance of Managerial Economics.
Distinction Between Economics and Managerial Economics, Role of Managerial Economics &Major Economic Problems & Tools of Managerial Economics, Functions of Managerial Economist.

Unit-II

Demand and Supply: Introduction, Concept of Demand, Law of Demand, Change in Demand & Quantity Demanded, Concept of Supply, Law of Supply, Demand & Supply Equilibrium.
Elasticity of Demand and Supply: Price Elasticity of Demand, Measurement, Factors Influencing Price Elasticity of Demand. Income Elasticity of Demand, Cross Elasticity of Demand. Elasticity of Supply, Factors Determining Elasticity of Supply.

Unit-III

Production & Cost function: Production Function, Short run Production, Long run Production, Producer's Equilibrium, Types of Production Function. Concept of Cost, Type of Cost in Long run and Short run.

Unit-IV

Market Dynamic: Elements of Competition, Perfect Competition, Monopoly & Price Discrimination, Imperfect Competition &Duopoly.
Role of Government in an Economy: Introduction, Requirement of Government Intervention in an Eonomy, role of Govt. in Different Economic Systems and Policies.

Recommended Books:

1. Mehta,P.L.(2013) *Managerial Economics*, S. Chand and Sons Company Ltd., New Delhi.

2. Ahuja,H.L. (2018)*Advanced Economic Analysis,* S. Chand & Co. Ltd, New Delhi.

Note: The latest edition of the books is recommended.

MASTER OF VOCATION (RETAIL MANAGEMENT) (SEMESTER -I)
Session: 2021-22
Course Code: MVRL-1324
ECONOMICS OF RETAIL

After successful completion of this course, students will be able to:

CO1: Identify the factors that affect demand and supply.
CO2: Appreciate the role of markets and institutions in facilitating development of retail industry.
CO3: Apply the knowledge and skills acquired to study the main forces sustaining and limiting economic development.
CO4: Understand how economics affect the business strategy of retail industry.
CO5: Understand the contribution of retail industry in today's economy.

Examination Time: 3 Hours
Max. Marks: 100
Theory Marks: 80
CA: 20

Note: Instructions for the Paper–Setter:
Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I
Retail Economics: Benefits to the Economy, Retailing Environment: The Legal environment, The Economic environment, The Technological environment, The Global environment. The Competitive Environment. Types of Competition: Analyzing Competition. Retail economics in India, Contribution of retail industry in today's economy. Contribution of FDI in Retailing

Unit-II
Theory of Demand: Meaning of demand and its types, law of demand, price elasticity of demand and its measurement. Concept of supply, law of supply, demand & supply equilibrium.
Consumer Behaviour: Utility approach: Brief outline of law of diminishing marginal utility and law of Equi-marginal utility.
Consumption: Meaning, determinants (subjective and objective) and importance, Keynes Psychological Law of Consumption.

Unit-III
Perfect Competition: Meaning, features, price and output determination of firm and industry under perfect competition.
Monopoly: Meaning, features, price and output determination under monopoly.
Monopolistic Competition: Meaning, features, price and output determination under monopolistic competition.

Unit-IV
Pricing and Output Decisions: Methods of pricing, differential pricing, Government intervention and pricing. Profit: Meaning and nature, Profit policies, Profit planning and forecasting, Cost-Volume - Profit analysis, Investment analysis.

SUGGESTED READINGS:

1. Mehta,P.L.(2013) *Managerial Economics*, S. Chand and Sons Company Ltd., New Delhi.

2. Ahuja,H.L. (2018)*Advanced Economic Analysis,* S. Chand & Co. Ltd, New Delhi.

Note: The latest edition of the books is recommended..

Course Outcomes:

After passing this course student will be able to:
CO1: understand the basic and advanced farm management practices and production functions.
CO2: prepare of farm records and accounts.
CO3: identify risks and uncertainty in agricultural production.

B.Sc. (Hons.) Agriculture (Semester-VI)
(Session: 2021-22)
Course Code: BACM- 6018
Farm Management, Production and Resource Economics
(THEORY)

Time: 3 Hrs.   Max. Marks: 50
Theory: 25
Practical: 15
C.A: 10

Instructions for the Paper Setter

Two questions, each carrying 5 marks, from each of Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit – I

Meaning and concept of farm management, objectives and relationship with other sciences. Meaning and definition of farms, its types and characteristics, factor determining types and size of farms. Principles of farm management: concept of production function and its type, use of production function in decision-making on a farm, factor-product, factor-factor and product-product relationship, law of equi-marginal/or principles of opportunity cost and law of comparative advantage.

Unit – II

Meaning and concept of cost, types of costs and their interrelationship, importance of cost in managing farm business and estimation of gross farm income, net farm income, family labour income and farm business income. Farm business analysis: meaning and concept of farm income and profitability, technical and economic efficiency measures in crop and livestock enterprises. Importance of farm records and accounts in managing a farm, various types of farm records needed to maintain on farm, farm inventory, balance sheet, profit and loss accounts.

Unit – III

Meaning and importance of farm planning and budgeting, partial and complete budgeting, steps in farm planning and budgeting-linear programming, appraisal of farm resources, selection of crops and livestock's enterprises. Concept of risk and uncertainty occurs in agriculture production, nature and sources of risks and its management strategies, Crop/livestock/machinery insurance – weather based crop insurance, features, determinants of compensation.

Unit – IV

Concepts of resource economics, differences between NRE and agricultural economics, unique properties of natural resources. Positive and negative externalities in agriculture, Inefficiency and welfare loss, solutions, Important issues in economics and management of common property resources of land, water, pasture and forest resources etc.

Recommended Books:

1. Reddy,S. and Subba Devi Bhava (2012)*Agricultural Economics*, Oxford & IBH Publishing Co. Pvt. Ltd.
2. Dhondyal ,S .P. (2014)*Production economics and farm management* ,Aman Publishing House, New Delhi.
3. Subba Reddy S., Raghu Ram, Neelakanta P., Sastry T .V. and Bhavani Devi (2011)*Agricultural Economics*, Oxford and IBH Publishing Co. Private Limited, New Delhi.
4. Heady Earl O and Herald R. Farm *Management Economics*,Prentice Hall, New Delhi.

SUGGESTED WEBSITES
Web sites: http://www.agrimoon.com/
 http://www.agriinfo.in/ eagri.org
http://www.agriglance.com/
http://agritech.tnau.ac.in/
Note: The latest edition of the books is recommended.