FACULTY OF ECONOMICS AND BUSINESS

**Syllabus of Economics
for**

**Bachelor of Commerce (Pass and Hons.)
Semester-I & II**

(Under Credit Based Continuous Evaluation Grading System)

(12+3 System of Education)

Session: 2023-2024

The Heritage Institution
Kanya Maha Vidyalaya, Jalandhar
(Autonomous)

Semester I									
Course Code	**Course Name**	**Course Type**	**Hours Per Week**	**Credits L-T-P**	**Marks**				**Examination time (in Hours)**
					Total	**Th./D**	**P**	**CA**	
BCRL-1176	Business Statistics	C	4	4-0-0	100	80	_	20	3

C- Compulsory

Semester II									
Course Code	**Course Name**	**Course Type**	**Hours Per Week**	**Credits L-T-P**	**Marks**				**Examination time (in Hours)**
					Total	**Th./D**	**P**	**CA**	
BCRL-2175	Business Economics	C	4	4-0-0	100	80	_	20	3

C- Compulsory

Bachelor of Commerce (Pass and Hons.)
Semester – I
Session 2023-2024
Course Code: BCRL–1176
Course Title: Business Statistics

Course outcomes:

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

CO1: learn the basic statistical analysis techniques by using central tendency.

CO2: analyze the data by using dispersion and learn the relationship between variables and prediction using correlation and regression..

CO3: compare magnitudes of related variables to each other and over a period of time and also to have knowledge about index numbers.

CO4: understand the some basic techniques of time series analysis in analyzing economics problems and introductory applications of probability.

Semester – I
Session 2023-2024
Course Code: BCRL–1176
Course Title: Business Statistics

Time: 3 Hours   **L-T-P (Credits): 4-0-0**
                                                                               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
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 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.

<div align="center">

Bachelor of Commerce (Pass and Hons.)
Semester – II
Session 2023-2024
Course Code: BCRL–2175
Course Title: Business Economics

</div>

Course outcomes:

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

CO1: have an in-depth understanding of the preliminary concepts about consumer behaviour.

CO2: learn about the various concepts of cost and revenue, and the production function.

CO3: learn about various market structures and its role in price determination.

CO4: understand the concept of national income and methods of its estimation and learn about the consumption function.

Bachelor of Commerce (Pass and Hons.)
Semester – II
Session 2023-2024
Course Code: BCRL–2175
Course Title: Business Economics

Time: 3 Hours   **L-T-P (Credits): 4-0-0**
                                                                              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
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.
2. Maheswari & Varshney, Managerial Economics, S. Chand & Co., New Delhi.
3. Koutsoyiannis A., Modern Micro Economics, 2nd edition, MacMillan House, New Delhi.
4. Ahuja, H. L. (2009), Modern Micro Economics, Sultan Chand and Co., New Delhi.
Note: The latest edition of the books is recommended.

FACULTY OF ECONOMICS AND BUSINESS

Syllabus of Economics

for

**Bachelor of Business Administration
Semester–I & II**

**(Under Credit Based Continuous Evaluation Grading System)
(12+3 System of Education)
Session: 2023-2024**

The Heritage Institution
Kanya Maha Vidyalaya, Jalandhar
(Autonomous)

Kanya Maha Vidyalaya, Jalandhar (Autonomous)
SCHEME AND CURRICULAM OF EXAMINATION OF
Bachelor of Business Administration Semester – I
Session 2023-2024

Semester I									
Course Code	**Course Name**	**Course Type**	**Hours Per Week**	**Credits L-T-P**	**Marks**				**Examination time (in Hours)**
					Total	**Th./D**	**P**	**CA**	
BBRL-1175	Managerial Economics-I	C	4	4-0-0	100	80	_	20	3

C- Compulsory

Semester II									
Course Code	**Course Name**	**Course Type**	**Hours Per Week**	**Credits L-T-P**	**Marks**				**Examination time (in Hours)**
					Total	**Th./D**	**P**	**CA**	
BBRL-2175	Managerial Economics-II	C	4	4-0-0	100	80	_	20	3

C- Compulsory

Bachelor of Business Administration Semester – I
Session 2023-2024
Course Code: BBRL-1175
Managerial Economics- I

Course outcomes:

After passing this course, students will be able to:

CO1: describe and apply the methods of analyzing consumer behavior through demand, elasticity of demand and utility.

CO2: will have in-depth knowledge of indifference curve analysis and concept of supply.

CO3: learn about the various concepts of production function, cost and revenue.

CO4: learn about various market structures

Bachelor of Business Administration Semester – I
Session 2023-2024
Course Code: BBRL-1175
Managerial Economics- I

Time: 3 Hours

L-T-P (Credits): 4-0-0
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

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..

Bachelor of Business Administration (Semester – II)
Session 2023-2024
Course Code: BBRL-2175
Managerial Economics- II

Course outcomes:

After passing this course, students will be able to:

CO1: understand the basic concepts of macroeconomics, national income accounting and methods of measuring national income.

CO2: understand the consumption behaviour of an economy and factor affecting consumption decisions.

CO3: understand different theories of investment, money and concept of multiplier.

CO4: learn different theories of trade cycles and will understand the problem of inflation, its causes, effects and solutions in an economy.

Bachelor of Business Administration (Semester – II)
Session 2023-2024
Course Code: BBRL-2175
Managerial Economics- II

Time: 3 Hours

L-T-P (Credits): 4-0-0
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.

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.
3. Koutsoyiannis A., Modern Micro Economics, 2nd edition, MacMillan House, New Delhi.
4. Ahuja, H. L. (2009), Modern Micro Economics, , Sultan Chand and Co., New Delhi.

Note: The latest edition of the books is recommended.

FACULTY OF ECONOMICS AND BUSINESS

Syllabus of Economics

for

**Bachelor of Business Administration
Semester–III**

(Under Continuous Evaluation System)

**(12+3 System of Education)
Session: 2022-2025**

The Heritage Institution
Kanya Maha Vidyalaya, Jalandhar
(Autonomous)

Semester III							
Course Code	**Course Name**	**Course Type**	**Marks**				**Examination time (in Hours)**
			Total	**Ext.**		**CA**	
				L	**P**		
BBRL-3173	Statistics For Business	C	50	40	-	10	3

C- Compulsory

Course outcomes:

After passing this course students will be able to:

CO1: understand the techniques of presentation, analysis of data, and basics of matrices and its determinants.

CO2: analyze the data using techniques of central tendency and dispersion.

CO3: learn the relationship between variables and prediction using correlation and regression and also understand the concept of time series in analyzing economics problems.

CO4: compare magnitudes of related variables to each other and over a period of time, and concepts of probability.

Bachelor of Business Administration Semester – III
Session 2022-2025
Course Code: BBRL-3173
Course Title: Statistics for Business

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-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.
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 Pearson's product moment and Spearmen's rank correlation method, least squares technique, properties of correlation and regression coefficients. Time Series Analysis: Meaning and its components-trend, seasonal, cyclical and irregular fluctuations; Measurement of trend analysis using moving average and least square method.

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.
3. Chiang A.C., *Fundamental Methods of Mathematical Economics*, McGraw Hill, Kogakusha.
4. Croxton, F.E., Cowden, D.J. and Klien, S., *Applied General Statistics*, Prentice Hall of India Pvt. Ltd.

Note: The latest edition of the books is recommended.

FACULTY OF ECONOMICS AND BUSINESS

SYLLABUS

OF

ECONOMICS

For

Bachelor of Commerce (Honours) Semester-I & II
(Under Credit Based Continuous Evaluation Grading System
System)
(12+3 System of Education)

Session: 2023-2024

The Heritage Institution

Kanya Maha Vidyalaya, Jalandhar

(Autonomous)

Kanya Maha Vidyalaya, Jalandhar (Autonomous)
SCHEME AND CURRICULAM OF EXAMINATION OF
Bachelor of Commerce (Honours) Semester-I & II
Credit Based Continuous Evaluation Grading System
Session 2023-2024

Semester I									
Course Code	**Course Name**	**Course Type**	**Hours Per Week**	**Credits L-T-P**	**Marks**				**Examination time (in Hours)**
					Total	**Th./D**	**P**	**CA**	
BCOL-1174	Microeconomics	C	4	4-0-0	100	80	_	20	3
BCOL-1173	Descriptive Statistics for Business	C	4	4-0-0	100	80	_	20	3

C-Compulsory

Semester II									
Course Code	**Course Name**	**Course Type**	**Hours Per Week**	**Credits L-T-P**	**Marks**				**Examination time (in Hours)**
					Total	**Th/D**	**P**	**CA**	
BCOL-2174	Macroeconomics	C	4	4-0-0	100	80	_	20	3
BCOL-2176	Inferential Statistics for Business	C	4	4-0-0	100	80	_	20	3

C-Compulsory

Bachelor of Commerce (Honours)
Semester-I
Session 2023-2024
Course Code: BCOL-1174
Microeconomics

Course outcomes:

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

CO1: have an in-depth understanding of the preliminary concepts about consumer behaviour.

CO2: learn about the various concepts of production function, cost and revenue approach.

CO3: learn about various market structures and the role of perfect competition and monopoly in price determination.

CO4: learn about price and output determination of monopolistic competition and oligopoly market, and understand the managerial theories and its objectives.

Bachelor of Commerce (Honours)
Semester-I
Session 2023-2024
Course Code: BCOL-1174
Course Title: Microeconomics

Time: 3 Hours

L-T-P (Credits): 4-0-0
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, New Delhi.
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.

Course outcomes:

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 of data.

CO3: analyze the data by using techniques like central tendency and dispersion.

CO4: comprehend the shapes of the curves and relationship between the variables and their prediction.

Bachelor of Commerce (Honours)
Semester-I
Session 2023-2024
Course Code: BCOL-1173
Course Title: Descriptive Statistics for Business

Time: 3 Hours

L-T-P (Credits): 4-0-0
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, Empirical Rule and z score. 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.
3. Render, B. and Stair, R. M. Jr., *Quantitative Analysis for Management*, 7th Edition, Prentice–Hall of India, New Delhi.
4. Gupta C B, Gupta V(1995), *An Introduction to Statistical Methods*, 23rd Edition, Vikas Publications

Note: The latest edition of the books is recommended.

Bachelor of Commerce (HONOURS)
Semester-II
Session 2023-2024
Course Code: BCOL-2174
Course Title: Macroeconomics

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 and also about circular flow of income.

CO2: understand the assumptions and equilibrium conditions of classical and Keynesian models and also to have knowledge about consumption, investment functions and about multiplier

CO3: learn Concept of demand for and supply of money, **i**nflation.

CO4: understand the basics of working of monetary and fiscal policies in general and in India and elements of balance of payment.

Bachelor of Commerce (HONOURS)
Semester-II
Session 2023-2024
Course Code: BCOL-2174
Course Title: Macroeconomics

Time: 3 Hours

L-T-P (Credits): 4-0-0
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.
3. Shapiro, E. (2001), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.
4. Deepashree, *Macro Economics*, ANE Books Pvt. Ltd. New Delhi.
5. Mankiw, N. Gregory, Macroeconomics, Macmillan Worth Publishers New York, Hampshire,U.K

Note: The latest edition of the books is recommended.

Course Title: Inferential Statistics for Business

Course outcomes:

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

CO1: understand the concept of hypothesis testing and learn the applications of parametric and non-parametric tests for single mean

CO2: learn the applications of parametric and non-parametric tests for difference of means.

CO3: learn the tests and confidence interval for proportions and tests for difference of variance

CO4: understand thoroughly the applications of chi-square and its underlying assumptions.

Bachelor of Commerce (HONOURS)
Semester-II
Session 2023-2024
Course Code: BCOL-2176
Course Title: Inferential Statistics for Business

Time: 3 Hours

L-T-P (Credits): 4-0-0
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. SPSS Software

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.

FACULTY OF ECONOMICS AND BUSINESS

SYLLABUS
OF
ECONOMICS
For
Master of Commerce SEMESTER-I

(Under Credit Based Continuous Evaluation Grading System)

Session: 2023-2024

The Heritage Institution
Kanya Maha Vidyalaya, Jalandhar
(Autonomous)

Semester-I									
Course Code	**Course Title**	**Course Type**	**Hours Per Week**	**Credits L-T-P**	**Marks**				**Examination time (in Hours)**
					Total	**Th**	**P**	**CA**	
MCML-1171	Managerial Economics	C	4	4-0-0	100	80	-	20	3

C- Compulsory

Master of Commerce
Semester-I
Session 2023-2024
Course Code: MCML-1171
Course Title: Managerial Economics

Course outcomes:

After passing this course, students will be able to:

CO1: Understand the concepts of managerial economics and, theory and elasticity of demand.

CO2: Understand in-depth knowledge of theories of consumer behaviour and production function.

CO3: Understand the theories of cost and market structure

CO4: Understand the concept of national income, consumption function and Inflation.

Master of Commerce (Semester-I)
Session 2023-2024
Course Code: MCML-1171
Course Title: Managerial Economics

Time: 3 Hours

L-T-P (Credits): 4-0-0
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
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. Ahuja, H. L. (2009), Modern Micro Economics , Sultan Chand and Co.
2. Koutsyannis A. *(1977)*, '*Modern Microeconomics', 2nd Edition,* Macmillan Press, London.
3. Mithani, D.M*(2009),'Managerial Economics',5th Edition* Himalaya Publishing House, New Delhi.
4. Adhikari, M., *Economic Analysis for Business Decision.*
Note: The latest edition of the books is recommended.

FACULTY OF SCIENCES

SYLLABUS

OF

ECONOMICS

For

Bachelor of Science (Home Science) (Semester: III & IV)
(Under Continuous Evaluation System)
(12+3 System of Education)

Session: 2022–25

The Heritage Institution
Kanya Maha Vidyalaya, Jalandhar
(Autonomous)

Semester III							
Course Code	**Course Name**	**Course Type**	**Marks**				**Examination time (in Hours)**
			Total	**Ext.**		**CA**	
				L	**P**		
BHSL-3172	Basic Concepts of Economics	C	50	40	-	10	3

C- compulsory

Semester IV							
Course Code	**Course Name**	**Course Type**	**Marks**				**Examination time (in Hours)**
			Total	**Ext.**		**CA**	
				L	**P**		
BHSL-4172	Consumer Economics	C	50	40	-	10	3

C- compulsory

Bachelor of Science (Home Science)
Semester-III
Session 2022-2025
Course Code: BHSL-3172
Basic Concepts of Economics

Course outcomes:

After passing this course students will be able to:

CO1: To understand the basic concepts of economics and consumer economics.

CO2: To understand basic structure of markets in the economy.

CO3: To understand the need, significance and sources of credit facilities.

CO4: To understand the basic concepts of banking & different saving schemes, Insurance and will learn to file income tax return.

Bachelor of Science (Home Science)
Semester-III
Session 2022-2025
Course Code: BHSL-3172
Course Title: 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.

<div align="center">

Bachelor of Science (Home Science)
Semester-IV
Session 2022-2025
Course Code: BHSL-4172
Course Title: Consumer Economics

</div>

Course outcomes:

After studying this course, students will be able:

CO1: to understand the need and process of consumer protection and consumer legislation in India.

CO2: to understand the consumer rights and responsibilities and to aware the students about fraud and business malpractices.

CO3: to make students aware about grading, standardisation and packaging, branding, labeling.

CO4: to understand the concept of advertisement and functions of entrepreneur and salesman.

Bachelor of Science (Home Science)
Semester-IV
Session 2022-2025
Course Code: BHSL-4172
Course Title: Consumer 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

Consumer education and Protection - Need for consumer education, Process for consumer protection.
Consumer legislation in India with special reference to consumer protection Act, 1986 and 2019
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.

Faculty of Sciences

Syllabus of Economics

for

B.Sc. (Hons.)Mathematics (Semester: I)

(Under Credit Based Continuous Evaluation Grading System)
(12+3 System of Education)

Session: 2023-2024

Kanya Maha Vidyalaya, Jalandhar
(Autonomous)
The Heritage Institution

Kanya Maha Vidyalaya, Jalandhar (Autonomous)
SCHEME AND CURRICULAM OF EXAMINATION OF
Bachelor of Science (Honours) Mathematics
Semester–I

Session 2023-2024

Semester I									
Course Code	Course Name	Course Type	Hours Per Week	Credits L-T-P	Marks				Examination time (in Hours)
					Total	Th./D	P	CA	
BOML-1175	Microeconomics-I	C	4	4-0-0	100	80	_	20	3

C- Compulsory

Bachelor of Science (Honours) Mathematics
Semester–I
Session 2023-2024
Course Code: BOML-1175
Microeconomics-I

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

CO1: describe and apply the methods of analyzing consumer behavior through demand, supply and elasticity.

CO2: have an in-depth understanding of consumer behavior.

CO3: analyze and demonstrate knowledge of the basic theories and laws in economics such as laws of production.

CO4: learn about the various cost and revenue curves, and production function.

Bachelor of Science (Honours) Mathematics
Semester–I
Session 2023-2024
Course Code: BOML-1175
Course Title: Microeconomics-I

Time: 3 Hours   **L-T-P (Credits): 4-0-0**
                                                                               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.

Suggested Readings:
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.

FACULTY OF VOCATIONAL STUDIES

SYLLABUS

OF

ECONOMICS

For

Bachelor of Vocation (Retail Management) (Semester: II)

(Under Credit Based Continuous Evaluation Grading System)

Session: 2023-2024

Kanya Maha Vidyalaya, Jalandhar (Autonomous)
The Heritage Institution

Course Code	Course Title	Course Type	Hours per week	Credits L-T-P	Marks				Examination Time (In Hours)
					Total	Ext.		CA	
						L	P		
BVRL-2325	Managerial Economics	C	4	2-0-0	50	40	-	10	3

BACHELOR OF VOCATION (RETAIL MANAGEMENT)
(SEMESTER -II)
SESSION 2023-2024
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 and apply economic principles to management decisions.

CO2: have an in-depth understanding of the preliminary concepts about consumer behavior.

CO3: learn about the various cost curves and the production function.

CO4: learn about various market structures and the role of government in the economy.

BACHELOR OF VOCATION (RETAIL MANAGEMENT) (SEMESTER -II)
SESSION 2023-2024
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 Economy, role of Govt. in Different Economic Systems and Policies.

Suggested Readings:

1. Mehta,P.L.(2013), *Managerial Economics*, S. Chand & 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.

FACULTY OF VOCATIONAL STUDIES

SYLLABUS

OF

ECONOMICS

For

Master of Vocation (Retail Management)
(Semester I)
(Under Credit Based Continuous Evaluation Grading System)

Session: 2023-2024

Kanya Maha Vidyalaya, Jalandhar
(Autonomous)
The Heritage Institution

Kanya Maha Vidyalaya, Jalandhar (Autonomous)
SCHEME AND CURRICULAM OF EXAMINATION OF
MASTER OF VOCATION (RETAIL MANAGEMENT)
(SEMESTER -I)
Session: 2023-2024

Course Code	Course Title	Course Type	Hours per week	Credits L-T-P	Marks				Examination Time (In Hours)
					Total	Ext.		CA	
						L	P		
MVRL-1324	Economics of Retail	C	4	4-0-0	100	80	-	20	3

MASTER OF VOCATION (RETAIL MANAGEMENT) (SEMESTER -I)
Session: 2023-2024
Course Code: MVRL-1324
Course Title: Economics of Retail

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

CO1: Appreciate the role of markets and institutions in facilitating development of retail industry.
CO2: have an in-depth understanding of the preliminary concepts about consumer behavior and the consumption function.
CO3: learn about various market structures.
CO4: learn the various profit policies, government policies in the economy.

MASTER OF VOCATION (RETAIL MANAGEMENT) (SEMESTER -I)
Session: 2023-2024
Course Code: MVRL-1324
Course Title: Economics of Retail

Examination Time: 3 Hours   **Max. Marks: 100**
4 Hours per Week   **Theory Marks: 80**
L-T-P   **CA: 20**
4-0-0

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 & Sons Company, 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.

FACULTY OF ECONOMICS & BUSINESS

SYLLABUS

For

CERTIFICATE COURSE

in

DATA ANALYSIS USING STATISTICAL SOFTWARE

(Under Credit Based Continuous Evaluation Grading System)

Session: 2023–24

The Heritage Institution
Kanya Maha Vidyalaya, Jalandhar
(Autonomous)

Kanya Maha Vidyalaya, Jalandhar (Autonomous)

SCHEME AND CURRICULAM OF EXAMINATION OF CERTIFICATE COURSE

Session: 2023-2024

Course Code: CDAM-1171

Certificate Course in Data Analysis using Statistical Software

Course Code	Course Title	Course Type	Marks			Examination time (in Hours)
				Ext.		
			Total	Th	P	
CDAM-1171	**Data Analysis using Statistical Software**	C	100	20	80	2

Duration: 30 Contact Hours

Credits: 02

Marks: (Theory: 20, Practical: 80)

Eligibility: Candidate must have passed 10+2 or equivalent examination.

Mode of Delivery: Class Room Teaching and Practical training in SPSS software.

CERTIFICATE COURSE IN DATA ANALYSIS USING STATISTICAL SOFTWARE

Session: 2023-2024

Course Code: CDAM-1171

Course outcomes:

After the Completion of course, the students will be able

CO1: To manage and analyze the data using SPSS software.

CO2: To choose appropriate statistical techniques and interpret the results.

CERTIFICATE COURSE IN DATA ANALYSIS USING STATISTICAL SOFTWARE

Session: 2023-2024

Course Code: CDAM-1171

Duration: 30 Contact Hours   **Theory: 20**
                                                                 Practical: 80

COURSE CONTENTS:

Types of variables: Categorical Variables and Continuous Variables.

Types of Scale of Measurement: Choosing appropriate scale of measurement.

Introduction to main features of Statistical Software

Data Management in SPSS-Creating data files and entering data, Import file.

Preliminary analysis- Descriptive Statistics and Diagrammatic representation using

Statistical Software

Correlation and Regression analysis using Statistical Software