DEPARTMENTOFBUSINESSADMINISTRATION

Session: 2021 - 2024

Choice Based Credit System (CBCS)
Course: BBA in Business Analytics
Full Syllabus

Preamble

The Bachelor of Business Administration (BBA) in Business Analytics is a three-year degree Program comprises including Summer Internship Program and Soft Skills Labs. These courses are spread over six semesters. The students are also holistically taught and trained through the concept of Integrated Learning Programme, involving class room sessions, Group Discussions, Mock tests, Interviews designed and executed by Academicians and Industry experts.Domain knowledge and soft skills are rigorously included in the learning sessions comprises of courses related to Economics, Entrepreneurship, Communication, Statistics, Psychology, Operation research, Law as general subjects to learn. An aspirant can acquire knowledge in connection with business issues and can equip themselves to solve business problems. The course can also prepare them better for efficient and effective decisions.The course is aimed to create better leader for future.

Program Objectives

Broader objective of Bachelor of Business Administration Programme are

1. Students will be able to assess the role and value of several functional areas of an organization for enhancing efficiency.
2. Students will be able to connect different concepts of marketing, human resource, finance & other domains in business which will help them to identification & implementation of any challenges in business.
3. Students will be able to handle different tools of decision making and problem solving methods in the context of commercial organization.
4. Students will be able to enhance their soft skills and communication skills to face the challenges in the VUCA world.
5. Students will be able to understand the concept of coordination and cooperation to build an effective team which will help to assimilate the essence of team dynamics.
6. Students will gain in-depth knowledge about changing business environment across different industries by integrating the inter-disciplinary functions.
7. Students will be industry ready by using different techniques of problem solving approach of various organizational situations.
8. Students will be able to accept the business challenges ethically and will follow the best path that will serve to a greater interest of the business and the society.

Program Outcomes:

Name of the Program Outcome	Program Outcome	Competencies	Performance Indicator
PO1: Assessment of Choices	Students will develop the capability to assess alternate managerial choices and come up with optimal solutions.	1.1. Demonstrate competencies in Business Construction Model & Decision- Making Model	1.1.1. Ability to take up analytical approach for problem solving,
			1.1.2. Ability to take into consideration minute details and factors that influences a business.
		1.2. Demonstrate competencies in evaluation of each of the alternatives	1.2.1 Ability to weigh the pros and cons of each of the alternatives or options available to a functional area of a business.
PO2: Identification of the Nature of a Problem Area	Students will be able to apply their conceptual understanding of marketing, finance and human resources in the real world.	2.1. Demonstrate an ability to identify an area that requires problem solving.	2.1.1. Ability to contribute towards problem solving methods.
			2.1.2. Understanding a problem or issues belong to which of the specialized areas- Finance, HR or marketing.
		2.2 Demonstrate an ability to assess the business environment and understand their impact on the business.	2.2.1. To be able to identify the different factors that influence the business.
PO3: Decision Making Skills	Students will develop decision making skills with the help of analytical and	3.1. To be able to demonstrate the different aspects that can get influenced by the decision taken within the business.	3.1.1. Capability of implementation of a decision after proper assessment.

	critical thinking ability.		3.1.2. Follow up the changes that are occurring due to the implementation (situation analysis methods can be of use)
		3.2. To be able to demonstrate the optimal solution or close to an optimal solution to a given managerial problem.	3.2.1 Reaching to a solution and evaluating it after observing the changes (Case study method can be implemented)
PO4: Communication Skills	Communication skills will be enhanced in Synchronization with the functioning of the business analytics algorithms.	4.1. To Demonstrate the ability to make effective business communication.	4.1.1. Ability to choose appropriate words when making verbal communication,
			4.1.2. To be able to select proper language and words when making written communication.
		4.2. To Demonstrate the ability to pursue stakeholders and enhancing the convincing skills.	4.2.1. Ability to present oneself groomed properly and uses formal gestures with appropriate body language.
PO5: Team Work	Students will develop the capability of functioning efficiently within the teams.	5.1. To understand Group Formation and Group Cohesiveness	5.1.1. Ability to understand the objective of the group and deciding a common goal.
		5.2. To be able to demonstrate the importance of adjustment and the importance of concentrating other group members' opinion.	5.2.1. The ability to apply the behavioral science when functioning within the group.
PO6: Integration of Functions	Students will be able to integrate functional areas of management for planning, implementation and control of business decisions.	6.1. Demonstration of the ability to identify gaps in a business strategy, and to be able to close these gaps.	6.1.1. Continuation of Professional development and observation skills,
			6.1.2. Using rational approach towards an issue.

		6.2 Demonstrate the identification of changing trends in a business and operation of the functional areas accordingly.	6.2.1. Ability to study the changes in preferences of customers and
			6.2.2. Study in the changes in political & technological environment.
PO7: Deployable Skill set	Students will develop deployable skills parallel to the chosen functional/ specialized area.	7.1. Demonstrating the ability to identify the nature of a problem appearing during the course of business.	7.1.1. Acknowledgement of the existence of a problem.
			7.1.2. Deciding the overall nature of the problem and its minor details.
		7.2. Demonstrating the ability to apply the learned skill set as when required.	7.2.1. Ability to implement the required knowhow as when necessity arises.
PO8: Moral Sensitivity	Students will develop the capability to demonstrate increased level of sensitivity towards areas that require ethical and moral addressing during the course of business.	8.1. To Demonstrate the ability to identify that there is a moral dilemma.	8.1.1. The ability to identify the confusion or the dilemma that is in existence.
		8.2. Demonstration of the ability to solve the moral dilemma.	8.2.1. Ability to select the best path that will serve to a bigger interest of the stakeholders and the society.

CC	Core Course
GE	General Elective
AECC	Ability Enhancement Compulsory Course
SEC	Skill Enhancement Course
DSE	Discipline Specific Elective
IVAMNCC	Industry Value Added Mandatory Non Credit Course

Subject Type	Semester I	Semester II	Semester III	Semester IV	Semester V	Semester VI	Total - 140
CC	C1, C2	C3, C4	C5, C6,C7	C8,C9,C10	C11,C12	C13,C14	
DSE					DSE1, DSE2	DSE3, DSE4	
GE	GE1	GE2	GE3	GE4			
AECC	AECC 1	AECC 2					
SEC			SEC 1	SEC 2			
	4 (20)	4 (20)	5(26)	5(26)	4 (24)	4 (24)	

SEM - 1

Sl.	Subject Type	Code	Subject Name	Credits			Total Credits
				L	T	P	
1.	CC1	BBA(BA)101	Principles of Management	5	1	0	6
2.	CC2	BBA(BA)102	Business Economics	5	1	0	6
3.	GE1		**Anyone from GE Basket**	5	1		6
4.	AECC1	BBA(BA)104	Business Communication	2	0	0	2
5.	IVAMNCC 1	BBA(GS)101	General Studies & Current Affairs - I	2	0	0	0
6.	IVAMNCC 2	BBA(GS)181	Competitive Aptitude Training-I	2	0	0	0
7.	IVAMNCC 3	IVA (BBA) 181	Project-I	0	0	2	0
8.	IVAMNCC 4	IVA (BBA) 182	Fundamentals of Computer	2	0	0	0
9.	IVAMNCC 5	IVA (BBA) 183	Fundamentals of Business Analytics	2	0	0	0
10.	IVAMNCC 6	IVA (BBA) 184	Fundamentals of Entrepreneurship	2	0	0	0
			TotalCredit				20

SEM -2

Sl.	Subject Type	Code	SubjectName	Credits			Total Credits
				L	T	P	
1.	CC3	BBA(BA)201 BBA(BA) 291	Inferential Statistics and Applications Inferential Statistics and Applications-Practical	4	0	2	6
2.	CC4	BBA(BA)202	Organisational Behaviour	5	1	0	6
3.	GE2		**Anyone from GE Basket**	5	1	0	6
4.	AECC2	BBA(BA)204	Environment & Sustainable Development	2	0	0	2
5	IVAMNCC 7	BBA(GS)201	General Studies & Current Affairs - II	2	0	0	0
6	IVAMNCC 8	BBA(GS)281	Competitive Aptitude Training-II	2	0	0	0
7	IVAMNCC 9	IVA (BBA) 281	Project II	0	0	2	0
			Total Credit				20

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SEM – 3

Sl.	SubjectType	Code	SubjectName	Credits			TotalCredits
				L	T	P	
1.	CC5	BBA(BA)301 BBA(BA) 391	Business Research Methods Business Research Methods-Practical	4	0	2	6
2.	CC6	BBA(BA)302	Financial Accounting & Management	5	1	0	6
3.	CC7	BBA(BA)303	Marketing Management & Metrics	5	1	0	6
4.	GE3		**Anyone from GE Basket**	5	1	0	6
5.	SEC1	BBA(BA)305	Personality Development & Presentation Skills	0	0	2	2
8	IVAMNCC 10	BBA(GS)301	General Studies & Current Affairs - II	2	0	0	0
9	IVAMNCC 11	BBA(GS)381	Competitive Aptitude Training-II	2	0	0	0
10	IVAMNCC 12	IVA (BBA) 381	Project III	0	0	2	0
			Total Credit				26

SEM -4

Sl.	Subject Type	Code	Subject Name	Credits			Total Credits
				L	T	P	
1.	CC8	BBA(BA)401	Predictive Analytics	5	1	0	6
2.	CC9	BBA(BA)402	Supply Chain Management	5	1	0	6
3.	CC10	BBA(BA)403	Customer Relationship Management	5	1	0	6
4.	GE4		**Any one from GE Basket**	5	0	1	6
5.	SEC2	BBA(BA)405	Data Analysis Using R	2	0	0	2
8	IVAMNCC 13	BBA(GS)401	General Studies & Current Affairs - IV	2	0	0	0
9	IVAMNCC 14	BBA(GS)481	Competitive Aptitude Training-IV	2	0	0	0
10	IVAMNCC 15	IVA (BBA) 481	Project IV	0	0	2	0
Total Credit							26

SEM -5 (**Proposed**)

Sl.	Subject Type	Code	SubjectName	Credits			Total Credits
				L	T	P	
1.	CC11	BBABA)501	Big Data Analytics	5	1	0	6
2.	CC12	BBA(BA)502	Design Thinking & Decision Making	5	1	0	6
3.	DSE1*	BBA(BA) 503	**DSE1 – A/B**	5	1	0	6
4.	DSE2*	BBA(BA) 504	**DSE2 – A/B**	5	1	0	6
8	IVAMNCC 16	BBA(GS)501	General Studies & Current Affairs - V	2	0	0	0
9	IVAMNCC 17	BBA(GS)581	Competitive Aptitude Training-V	2	0	0	0
10	IVAMNCC 18	IVA (BBA) 581	Project V	0	0	2	0
Total Credit							24

SEM – 6 (**Proposed**)

Sl.	Subject Type	Code	Subject Name	Credits			Total Credits
				L	T	P	
1.	CC13	BBA(BA)601	Strategic Management	5	1	0	6
2.	CC14	BBA(BA)602	Project and Dissertation	5	1	0	6
3.	DSE3*	BBA(BA)603	**DSE3 – A/B**	5	1	0	6
4.	DSE4*	BBA(BA) 604	**DSE4 – A/B**	5	1	0	6

8	IVAMNCC 19	BBA(GS)601	General Studies & Current Affairs - VI	2	0	0	0
9	IVAMNCC 20	BBA(GS)681	Competitive Aptitude Training-VI	2	0	0	0
TotalCredit							24

**List of Discipline specific elective course (DSE): (Proposed)

DSE#	DSE1	DSE2	DSE3	DSE4
A	Introduction to Cloud Computing	Financial & Risk Analytics	HR Analytics	Marketing Analytics
B	Introduction to IOT	Econometrics	Legal Analytics	Logistics & Supply Chain Analytics

DETAILED SYLLABUS

Course code	BBA 101					
Course title	Principles of Management					
Scheme and Credits	L	T	P	S	Credits	Semester-
	5	1	0		6	I
Pre-requisite (if any)	Basic knowledge of Management					

Course Objectives:

1. To enable the students to study the evolution of Management,
2. To study the functions and principles of management.
3. To learn the application of the principles in an organization.
4. To enable the effective and barriers communication in the organization

Course Outcome:

1. Students will be able to understand the fundamental concept of Management and its importance in the practical world
2. Students will be able to identify, define and solve Management related problems
3. Students will understand the contemporary issues and will get some wider exposure with respect to the global perspective

4. Ensuring overall development of students

Course Content:

Modules	Topic	Text Book as per Syllabus	CO
Management : Science and Theory, Management : Process	Definition of Management : Its Nature & Purpose , Managing : Science or Art , The Evolution of Management Thought The Functions of Management, Managerial Functions at Different Organizational Levels, Managerial Skills The Managerial Roles Approach – Interpersonal Roles, Informational Roles , Decisional Roles	1. Essentials of Management An International and Leadership Perspective : Harold Koontz and Heinz Weihrich , Edition-ninth, McGraw Hill 2. V.S.P Rao&Hari Krishna : Management-Text &Cases,Excel Books 3. Ramaswami T; Principles of Mgmt., Himalaya Publishing Chandan, JS : Management – Concepts and Strategies, Vikas Publishing 4. Robbins, SP : Management, Prentice Hal	CO1

Essentials of Planning and Management by Objectives, Strategies, Decision Making	Concept, Types of Plans, Steps in Planning , Objectives – The nature of objectives, how to set objectives, The Strategic Planning Process, The Portfolio Matrix: A Tool For Allocating Resources, The Importance and Limitations of Rational Decision Making , Development of Alternatives and Limiting Factor, Evaluation of Alternatives , Selecting an Alternative	. Essentials of Management An International and Leadership Perspective : Harold Koontz and Heinz Weihrich , Edition-ninth, McGraw Hill 2. V.S.P Rao&Hari Krishna : Management-Text &Cases,Excel Books 3. Ramaswami T; Principles of Mgmt., Himalaya Publishing Chandan, JS : Management – Concepts and Strategies, Vikas Publishing 4. Robbins, SP : Management, Prentice Hal	CO2
The Nature of Organizing and Reengineering, Line/ Staff Authority and Decentralization	Formal and Informal Organization Organizational Division : The Department, Organizational Level and Span of Management, Brief concept of Reengineering Line/ Staff Concepts And Functional Authority , Concept of Centralization and Decentralization	1. Essentials of Management An International and Leadership Perspective : Harold Koontz and Heinz Weihrich , Edition- ninth, McGraw Hill 2. V.S.P Rao&Hari Krishna : Management-Text &Cases,Excel Books 3. Ramaswami T; Principles of Mgmt., Himalaya Publishing Chandan, JS : Management – Concepts and Strategies, Vikas Publishing	CO3

		4. Robbins, SP : Management, Prentice Hal	
Motivation, Leadership,The System and Process of Controlling,Managing Change	An Early Behavioural Model: Mc.Gregor's Theory X and Y, Maslow's Hierarchy of Needs Theory , Herzberg's Motivation-Hygiene Theory, The Expectancy Theory of Motivation – The Vroom Theory and Practice,Defining Leadership, Approaches – Trait Approaches to Leadership, Situation or Contingency Approaches to Leadership – Fedler's Contingency Approach to Leadership, Transactional and Transformational Leadership The Basic Control Process, Benchmarking, Control as a Feedback System, Real Time Information and Control Feed-forward and Preventive Control, The Balanced Scorecard, Concept of Gantt Chart, PERT Techniques for Initiating Change, Resistance to Change, Lewin's Change Management Model	1. Essentials of Management An International and Leadership Perspective : Harold Koontz and Heinz Weihrich , Edition- ninth, McGraw Hill 2. V.S.P Rao&Hari Krishna : Management-Text &Cases,Excel Books 3. Ramaswami T; Principles of Mgmt., Himalaya Publishing Chandan, JS : Management – Concepts and Strategies, Vikas Publishing 4. Robbins, SP : Management, Prentice Hal	CO4

Recommended Books:
Text:
Essentials of Management An International and Leadership Perspective : Harold Koontz and Heinz Weihrich , Edition- ninth, Mc Graw Hill
Reference:
1. V.S.P Rao & Hari Krishna : Management-Text & Cases,Excel Books
2. Ramaswami T; Principles of Mgmt., Himalaya Publishing Chandan, JS : Management – Concepts and Strategies, Vikas Publishing
3. Robbins, SP : Management, Prentice Hal

CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
COBBA101.1			2		**2**	**3**		**3**
COBBA101.2			3		2	2		3
COBBA101.3			2		3	2		3
COBBA101.4			2		3	2		3

3= Strong   2=Average   1=Weak (Kindly mention the Number only)

PO & PI Mapping:

PO 3 : Students will develop decision making skills with the help of analytical and critical thinking ability.	
Competency	**Indicators**
3.1 To be able to demonstrate the different aspects of managerial principles.	3.1.1 Identify the tasks required to complete the aspects of a management activity, and the resources required to complete the tasks.
	3.1.2 Follow up the changes that are occurring due to the implementation (situation analysis)

PO 5 :Students will develop the capability of functioning efficiently within the teams.	
Competency	**Indicators**
5.1 To Understand Group Formation and Group Cohesiveness, leadership and to be able to demonstrate system and process controlling.	5.1.1 Ability to understand the objective of the group and deciding a common goal.
	5.1.2 Utilize the ability of motivation,

leadership, system and process controlling.	

PO6 :: Students will be able to integrate functional areas of management for planning, implementation and control of business decisions.

Competency	Indicators
6.1 Demonstrate the identification of changing trends in a business and operation of the functional areas accordingly.	6.1.1 Describe Professional development and observation skills.
	6.1.2Using rational approach towards an issue.

PO 8: Students will develop the capability to demonstrate increased level of sensitivity towards areas that require ethical and moral addressing during the course of business.

Competency	Indicators
8.1 To Demonstrate the ability to identify that there is a moral dilemma.	8.1.1. The ability to identify the confusion or the dilemma that is in existence
8.2 Demonstration of the ability to solve the moral dilemma.	8.2.1. Ability to select the best path that will serve to a bigger interest of the stakeholders and the society

Submitted by : Prof.Suchana Roy and Prof. (Dr.) Saikat Chakrabarty

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(Name)   (Signature& Date)

Received by :

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(HOD)   (Signature& Date)

Course code	BBA(BA) 102					
Course title	**Business Economics**					
Scheme and Credits	**L**	**T**	**P**	**S**	**Credits**	Semester-
	5	1	0		**6**	I
Pre-requisite (if any)	Basic knowledge of mathematical function, differentiation					

Course Objectives:

1. To enable the students to understand fundamental concepts, terms and terminologies involved in micro economics

2. Through the incorporation of case lets/case studies, familiarize the students with real economic scenarios.

3. To make students understand the different types of markets and its equilibrium level of price and quantity determination process.

Course Outcome:
CO 1: Students would be able to understand the fundamental problems of a business economics and it's solutions techniques. They also able to understand the driving force behind the market price changes of commodity and its elasticity of demand.

CO 2: Students would be able to understand the economies and diseconomies of scale in production and the different types of costs associated with the production process.

CO 3: Students would be able to understand the different types of markets and its equilibrium level of price and quantity determination process under perfect competition and monopoly market.

CO 4: Students would be able to understand the Monopolistic Competition and Oligopoly market and its equilibrium level of price and quantity determination

Course content:

Modules	Topic	Text Book as per Syllabus	CO
Introduction of Business Economics and Demand Analysis	What is Business Economics? Basic problems of an economy. Demand function, Law of demand, Slope of the demand curve, Concept and measurement of elasticity of demand, Price, income and cross elasticities, Average revenue, marginal revenue, and elasticity of demand, Determinants of elasticity of elasticity and numerical. Indifference curve analysis.	Advanced Economic Theory: Microeconomic Analysis by Dr H. L. Ahuja, S. Chand Publication	CO1
Production and Cost	Concepts and definitions, Law of variable proportions, Iso-quants and its features, Economic regions and optimum factor combination; Expansion path; Returns of scale; International and external economies and diseconomies. Short-run and long-run cost curves, traditional and modern approaches.	Advanced Economic Theory: Microeconomic Analysis by Dr H. L. Ahuja, S. Chand Publication	CO2
Market Structures I: Perfect competition and monopoly market	Perfect Competition : Profit maximization and equilibrium of firm and industry, Short-run and long run supply curves; Price and output determination. Practical applications. Monopoly: Determination of Price under monopoly; Equillibrium of a firm, Comparison between perfect competition and monopoly; Multi-plant monopoly; Price discrimination. Practical applications.	Advanced Economic Theory: Microeconomic Analysis by Dr H. L. Ahuja, S. Chand Publication	CO3
Market Structures II: Monopolistic competition market and Oligopoly market	Monopolistic Competition: Meaning and characteristics; Price and output determination under monopolistic competition, Product differentiations; Selling costs; Comparison with perfect competition; Excess capacity under monopolistic competition. Oligopoly: Characteristics, indeterminate pricing and output; Classical models of oligopoly; Price leadership; Collusive oligopoly; Kinked demand curve.	Advanced Economic Theory: Microeconomic Analysis by Dr H. L. Ahuja, S. Chand Publication	CO4

Recommended Books:

Text Book:

1. Advanced Economic Theory: Microeconomic Analysis by Dr H. L. Ahuja, S. Chand Publication

References:

1. M. L. Jhingan (7th Edn): Microeconomic Theory

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
BBA(BA)102.1	3	2	3				1	
BBA(BA)102.2	2	3	3				2	
BBA(BA)102.3	2	3	2				2	
BBA(BA)102.4	2	3	2				2	

3= Strong   2=Average   1= Weak (Kindly mention the Number only)

PO & PI Mapping:

PO1: Assessment of Choices Students will develop the capability to assess alternate managerial choices and come up with optimal solutions.	
Competency	**Indicators**
1.1 Demonstrate competencies in Business Construction Model & Decision- Making Model 1.2 Demonstrate competencies in evaluation of each of the alternatives	1.1.1. Ability to take up analytical approach for problem solving, 1.1.2. ability to take into consideration minute details and factors that influences a business. 1.2.1 Ability to weigh the pros and cons of each of the alternatives or options available to a functional area of a business.
PO 2 : Identification of the Nature of a Problem Area Students will be able to apply their conceptual understanding of marketing, finance and human resources in the real world.	
Competency	**Indicators**
2.1. Demonstrate an ability to identify an area that requires problem solving. 2.2 Demonstrate an ability to assess the business environment and understand their impact on the business.	2.1.1 Ability to evaluate problem statement and contribute towards problem solving methods, 2.1.2 understanding a problem or issue belong to demand analysis. 2.2.1 To be able to identify the different types of demand elasticity which influence the decision-making process.

PO 3 : **Decision Making Skills**
Students will develop decision making skills with the help of analytical and critical thinking ability.

Competency	Indicators
3.1 To be able to demonstrate the different aspects that can get influenced by the decision taken within the business. 3.2 To be able to demonstrate the optimal solution or close to an optimal solution to a given managerial problem.	3.1.1 Capability of identify the different types of costs and production, 3.1.2 Follow up the changes of market structures and its applications 3.2.1 Reaching to a solution and evaluating it after observing the changes

PO7: Deployable Skill set:
Students will develop deployable skills parallel to the chosen functional/specialized area.

Competency	Indicators
7.1 Demonstrating the ability to identify the nature of a problem appearing during the course of business. 7.2 Demonstrating the ability to apply the learned skill set as when required.	7.1.1Acknowledgementofthe existence of a problem, 7.1.2 Deciding the overall nature of the problem and its minor details. 7.2.1. Ability to implement the required know how as when necessity arises.

Submitted by : Prof.(Dr) Rabin Mazumder

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                    (Name)   (Signature & Date)

Received by :   NA

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                    (HOD)   (Signature & Date)

Course code	GE3B03					
Course title	**Basic Mathematics & Statistics**					
Scheme and Credits	**L**	**T**	**P**	**S**	**Credits**	Semester-
	5	1	0		**6**	1st
Pre-requisite (if any)	None					

Course Objectives:

1. To provide a strong foundation of mathematics that would make application of managerial skills effective and efficient.
2. To equip students with a basic knowledge of mathematics with emphasis on management applications.
3. Successfully relate theoretical concepts to a real-world problem in a written report.
4. Be able to restate an investigative question in terms of a statistical model or algorithm

Course Outcome:

CO 1: Ability to understand and apply basic concept of basic algebra, functions & Set theory
CO 2: Ability to understand basic concept of combinatorics, matrix algebra, calculus and solve simple problems.
CO 3: Ability to understand the idea of Descriptive statistics
CO 4: Ability to solve and understand simple central tendency & dispersion problems

Modules	Topic	Text Book as per Syllabus	CO
Module 1	Number System Basic algebra; Set theory, Functions	**BBA Mathematics Vol 1** - Pal & Das, U.N.Dhur & Sons Pvt. Ltd	CO1
Module 2	Permutations Combination Determinant & Matrices Limit & Continuity (Definition & concept only) First order differentiation	**BBA Mathematics Vol 1** - Pal & Das, U.N.Dhur & Sons Pvt. Ltd	CO2
Module 3	Concept of business statistics Data collection Data arrangement Frequency distribution Data Representation	**Managerial Statistics** – Roychowdhury & Bhattacharya U.N.Dhur & Sons Pvt. Ltd.	CO3
Module 4	Concept of central tendency Mean, median, mode Concept of dispersion Measures of dispersion	**Managerial Statistics –** ychowdhury & Bhattacharya U.N.Dhur & Sons Pvt. Ltd.	CO4

Recommended Books:

> **Text Book:**
> **1. BBA Mathematics Vol 1** - Pal & Das, U.N.Dhur & Sons Pvt. Ltd
> **2. Managerial Statistics** – Roychowdhury & Bhattacharya U.N.Dhur & Sons Pvt. Ltd.

> **References:**
> **1. Mathematics, XI –** S.N.Dey, Chaya Prakashani
> **2. Statistical Methods, Vol I & II** – N.G.Das, Tata McGraw Hill

CO-PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
COBBA(BA)103.1		3	3					
COBBA(BA)103.2		3	3					
COBBA(BA)103.3		3	3					
COBBA(BA)103.4		3	3					

PO & PI Mapping:

PO2: Identification of the Nature of a Problem Area.	
Competency	**Indicators**
2.1 Demonstrate an ability to identify an area that requires problem solving.	2.1.1 Ability to capture concept of mathematical operations & its application to solve business problems 2.1.2 Identifying statistical importance in business analysis

PO3: Decision Making Skills	
Competency	**Indicators**
3.1 To be able to demonstrate the different aspects that can get influenced by the decision taken within the business.	3.1.1 Ability to identify optimal method to tackle & solve problems. 3.1.2 Ability to use statistical methods in basic data analysis

Submitted by : Prof. Sreeparna Guha

_____   _____
(Name)   (Signature & Date)

Received by :

_____   _____
(HOD)   (Signature & Date)

Course code	BBA(BA)104					
Course title	**Business Communication**					
Scheme and Credits	L	T	P	S	Credits	Semester-
	1	1	0.		**2**	I
Pre-requisite (if any)	Basic knowledge of Communication					

Course Objectives:

1. Students will learn to apply business communication theory to solve workplace communication issues.
2. Students will learn to demonstrate the communication skills required in the workplace.
3. Students will learn to manage resources effectively and efficiently in a professional context.
4. Students will learn to impart the correct practices of the strategies of effective business interactions.

Course Outcomes	
1	Students will learn to distinguish among various levels of organizational communication and communication barriers while developing an understanding of Communication as a process in an organization.
2	Students will learn to stimulate their Critical thinking by designing and developing clean and lucid interpersonal skills.
3	Students will learn to understand and apply basic principles of critical thinking, problem solving, and technical proficiency in the development of exposition and argument.
4	Students will gain information-seeking skills and strategies necessary for sustaining in professional/ corporate workplace

Course content:

Modules	Topic	Text Book as per Syllabus	CO
The Concept of Business Communication	Role of Communication, Defining Communication, Classification of Communication, Purpose of Communication, Process of Communication, Elements of Communication, Major Difficulties of Communication, Common problems in Two-way communication, Barriers to Communication, Conditions for Successful Communication, Characteristics of Successful Communication, Universal Elements in Communication	The Art and Science of Business Communication: Skills, Concepts, Cases, and Application Fourth Edition by PD Chaturvedi Mukesh Chaturvedi PEARSON	CO1
Communication in Business Environment	Importance of Communication in Management, Some important Functions of Managing, Managing and Communicating, Need for Communication in management, Corporate Communication, The Manager, Human needs, Communications structure for Managers	The Art and Science of Business Communication: Skills, Concepts, Cases, and Application Fourth Edition by PD Chaturvedi Mukesh Chaturvedi PEARSON	CO2
Communication for Employment and Effective Marketing	Applying for Jobs, Writing a CV, The relationship between a Resume and an Application Letter, The Resume of a Recent Graduate, Guidelines for preparing a good CV, Drafting an Application Letter, Interviews, Participating in a Group Discussion Objectives of Marketing Communication,	The Art and Science of Business Communication: Skills, Concepts, Cases, and Application Fourth Edition by PD Chaturvedi Mukesh Chaturvedi	CO3

	Tools of Marketing Communication, Some new Tools of Marketing Communication, Consumer, Industrial and Trade Marketing Communication, Brand, Institutional and Corporate Marketing Communication, Marketing Communication Continuum, Integrated Marketing Communications	PEARSON	
Communication in the Age of Digital Marketing, Theatre Technique for Effective Communication and Personality Development,	The Age of Internet Communication Tools, What does Social Media mean, Characteristics, Classification of Social Media, Nature and Scope of Six Types of Social Media, Choosing the Most Suitable Social Media, Revisiting the Communication Theory What is the Theatre, What is a Play, Objectives, Pedagogy, Areas Covered, Case Study What is a presentation, Preparing a presentation, Delivering the presentation, Case Study	The Art and Science of Business Communication: Skills, Concepts, Cases, and Application Fourth Edition by PD Chaturvedi Mukesh Chaturvedi PEARSON	CO4

Recommended Books:
Textbooks

Sl. No.	
1	**The Art and Science of Business Communication: Skills, Concepts, Cases, and Application Fourth Edition by PD Chaturvedi Mukesh Chaturvedi PEARSON**
2	**Business Communication: Concepts, Cases and Applications by PD Chaturvedi Mukesh Chaturvedi PEARSON**

References:

Sl. No.	
1	Effective Business Communication by Asha Kaul
2	Business Communication by Meenakshi Raman and Prakash Singh

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
BBA(BA)104.1			3	3			2	3
BBA(BA)104.2			3	3			2	2
BBA(BA)104.3			3	3			3	2
BBA(BA)104.4			3	3			3	3

3= Strong   2=Average   1=Weak   (Kindly mention the Number only)

PO & PI Mapping:

PO 4 :Communication skills will be enhanced in Synchronization with the functioning of the business analytics algorithms.	
Competency	**Indicators**
4.1 To Demonstrate the ability to make effective business communication. 4.2 To Demonstrate the ability to pursue stakeholders and enhancing the convincing skills.	4.1.1. Utilize appropriate words when making verbal communication, 4.1.2. Analyze select proper language and words when making written communication. 4.1.3 Ability to present oneself groomed properly and uses formal gestures with appropriate body language

PO 8: Students will develop the capability to demonstrate increased level of sensitivity towards areas that require ethical and moral addressing during the course of business.	
Competency	**Indicators**
8.1 To demonstrate the ability to perform different aspects of communication in context of values.	8.1.1. The ability to identify the confusion or the dilemma that is in existence 8.2.1. Ability to select the best path that will serve to a bigger interest of the stakeholders and the society

PO 3 :Students will develop decision making skills with the help of analytical and critical thinking ability.	
Competency	**Indicators**
3.1 To be able to demonstrate the different aspects that can get influenced by the decision taken within the business.	3.1.1 Capability of implementation of a decision after proper assessment
3.2 To be able to demonstrate the optimal solution or close to an optimal solution to a given managerial problem	3.2.1 Reaching to a solution and evaluating it after observing the changes (Case study method can be implemented)

PO 7: Students will develop deployable skills parallel to the chosen functional/ specialized area	
Competency	**Indicators**
7.1 Demonstrating the ability to identify the nature of a problem appearing during the course of business.	7.1.1 Acknowledgement of the existence of a problem

7.2 Demonstrating the ability to apply the learned skill set as when required	7.1.2. Ability to implement the required knowhow as when necessity arises.

Submitted by :   Professor Suchana Roy

                     (Name)   (Signature & Date)

Received by :

_____   _____

               (HOD)   (Signature& Date)

Course code						
Course title	**Fundamentals of Business Analytics**					
Scheme and Credits	**L**	**T**	**P**	**S**	**Credits**	Semester-
	1	0	1	0	**0**	1st
Pre-requisite (if any)	Basic knowledge of using excel					

Course Objectives:

1. To enable the students to understand the types of analytics and measurement scales of data

2. To enable students to understand and use basic functions of excel like SUM, MAX, MIN, AVERAGE

3. To enable students to understand the use of sort and filter, pivot tables and conditional statements in excel

4. To enable students to create effective presentations in MS PowerPoint

Course Outcome:

CO 1: Students will be able to describe the types of analytics and measurement scales of data.

CO 2: Students will be able to recall and apply basic functions of excel to calculate SUM, MAX, MIN and AVERAGE

CO 3: Students will be able to use sort and filter, pivot tables and charts and apply conditional statements to solve problems in excel

CO 4: Students will be able to use and create effective presentations using features available in MS PowerPoint

Course content:

Modules	Topic	Text Book as per Syllabus	CO
Module 1: Introduction	Definition, Types of Analysis: Descriptive, Predictive, Prescriptive, Business Analytics Process, Types of Data-Primary and	Greg Harvey, Excel 2019 All-in-one for	CO1

to Business Analytics	Secondary, Ordinal, nominal, Interval, ratio	Dummies, Microsoft	
Module 2: Basic Functions in Excel	Create Table, Cell merging, Formatting Table, Cell Addressing-Relative & Absolute Reference, Sum, Average, Count, Max, Min	Greg Harvey, Excel 2019 All-in-one for Dummies, Microsoft	CO2
Module 3: Basic Functions in Excel	Pivot table & Pivot chart, Excel Dashboards, Sorting, Filtering, Conditional Statements (IF, Nested IF, SUMIF, COUNTIF)	Greg Harvey, Excel 2019 All-in-one for Dummies, Microsoft	CO3
Module 4: MS-PowerPoint	Getting Started with PowerPoint, Working with Presentation Views, Inserting Text, SmartArt, pictures, charts, tables etc., Using Slide Show view, enhancing a Presentation, Finalizing a Presentation	Greg Harvey, Excel 2019 All-in-one for Dummies, Microsoft	CO4

Recommended Books:
   Text Book:
   1. Greg Harvey, Excel 2019 All-in-one for Dummies, Microsoft

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
	2		2	2			3	
	2		3	3			2	
	2		3	3			2	
	2		2	3			3	

3= Strong   2=Average   1=Weak (Kindly mention the Number only)

PO & PI Mapping:

PO 1 : Students will develop the capability to assess alternate managerial choices and come up with optimal solutions.	
Competency	**Indicators**
1.1 Demonstrate competencies in Business Construction Model & Decision-Making Model	1.1.1. Ability to take up analytical approach for problem solving, 1.1.2. ability to take into consideration minute details and factors that influences a business.
1.2 Demonstrate competencies in	1.2.1 Ability to weigh the pros and cons of each

evaluation of each of the alternatives	of the alternatives or options available to a functional area of a business.
PO 3 : Students will develop decision making skills with the help of analytical and critical thinking ability	
Competency	**Indicators**
3.1 To be able to demonstrate the different aspects that can get influenced by the decision taken within the business	3.1.1 Capability of implementation of a decision after proper assessment 3.1.2 Follow up the changes that are occurring due to the implementation (situation analysis methods can be of use)
3.2 To be able to demonstrate the optimal solution or close to an optimal solution to a given managerial problems	3.2.1 Reaching to a solution and evaluating it after observing the changes (Case study method can be implemented)
PO 4 : Communication skills will be enhanced in Synchronization with the functioning of the business analytics algorithms.	
Competency	**Indicators**
4.1 To Demonstrate the ability to make effective business communication.	4.1.1. Ability to choose appropriate words when making verbal communication, 4.1.2. To be able to select proper language and words when making written communication.
4.2 To Demonstrate the ability to pursue stakeholders and enhancing the convincing skills.	4.2.1. Ability to present oneself groomed properly and uses formal gestures with appropriate body language.
PO 7 : Students will develop deployable skills parallel to the chosen functional/specialized area.	
Competency	**Indicators**
7.1 Demonstrating the ability to identify the nature of a problem appearing during the course of business.	7.1.1 Acknowledgement of the existence of a problem 7.1.2 deciding the overall nature of the problem and its minor details.
7.2 Demonstrating the ability to apply the learned skill set as when required.	7.2.1. Ability to implement the required know how as when necessity arises.

Submitted by : Prof. Lavanya Deepika Tigga

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                    (Name)   (Signature& Date)

Received by :

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                    (HOD)   (Signature& Date)

Course code	BBA(BA) - 201					
Course title	Inferential Statistics and Applications					
Scheme and Credits	L	T	P	S	Credits	Semester-
	4	0	2	0	6	2nd
Pre-requisite (if any)						

Sl.	Topic/Module	Hour
1.	Module 1: Probability: Introduction, Random experiment, Important terminology, Classical definition of probability, Axioms, Conditional probability, Independent events, Random variables, Joint distribution.	5L
2.	Module 2: Distributions: Binomial, Poisson, Normal distribution.	10L
3.	Module 3: Sampling theory: Meaning, Sampling Error, Sampling Types.	5L
4.	Module 4 : Estimation : Introduction to Estimator, Estimation, Point and Interval Estimation.	10L
5.	Module 5: Test of Significance: Theory, Terminologies, Large sample tests, Small sample tests, F distribution, Test for correlation co-efficient, ANOVA.	10L

Suggested Readings:

1. J K Sharma: Business Statistics, fifth edition, Vikas Publishing house.

2. Alexander Holmes: Introductory Business Statistics by OpenStax, XanEdu Publishing Inc.

3. N G Das, Statistical Methods (Combined edition volume 1 & 2), McGraw Hill Education.

4. Ken Black: Business Statistics: For Contemporary Decision Making, Wiley.

5. Yashavant Kanetkar: Let Us Python, BPB.

Gowrishankar S, Veena A: Introduction to Python Programming, CRC Press / BSP Books

Course Objective:

1. The objective is to familiarize students with the basic elements of statistical methods in estimation of population parameters.
2. This paper also benefits students to familiarise themselves with various methods of hypothesis testing and their properties, along with applications in business.
3. They can learn to solve ample practical examples to illustrate the principles and methods using programming language.

Sl	Course Outcome	Mapped modules
1	Remembering	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10.
2	Understanding the course	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10.
3	Applying the general problem	M1, M2, M3, M4, M5, M9, M10.
4	Analyse the problems	M1, M2, M3, M4, M5, M9, M10.
5	Evaluate the problems after analysing	M1, M2, M3, M4, M5, M9, M10.
6	Create using the evaluation process	M9, M10.

Module Number	Content	Total Hours	%age of questions	Bloom's Level (if applicable)	Remarks (If any)
M 1	Probability	5L		L1, L2, L3, L4, L5	
M 2	Distributions	10L		L1, L2, L3, L4, L5	
M 3	Sampling theory	5L		L1, L2, L3, L4, L5	
M 4	Estimation	5L		L1, L2, L3, L4, L5	
M 5	Test of Significance	10L		L1, L2, L3, L4, L5	
M 6	Application:	1P		L1, L2,	
	Introduction				

M 7	Data types and Control structures	1P		L1, L2,	
M 8	Data types and Control structures	2P		L1, L2,	
M 9	Applications using Python/R	3P		L1, L2, L3, L4, L5, L6	
M 10	Introduction to Hypothesis Testing using Python/R	3P		L1, L2, L3, L4, L5, L6	
		60	100		

Submitted by :

_____   _____
              (Name)   (Signature& Date)

Received by :

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              (HOD)   (Signature& Date)

Course code	BBA(BA) - 202					
Course title	Organizational Behaviour					
Scheme and Credits	L	T	P	S	Credits	Semester-
	5	1		0	6	2nd
Pre-requisite (if any)						

Sl.	Topic/Module	Hour
1.	Module 1: Introduction: Concept of organizational behavior – Learning Objectives, Nature, Role, importance, Emerging Challenges, Evolution.	8
2.	Module 2: Personality: Learning Objectives, Nature, Theories, Shaping of Personalities.	8
3.	Module 3: Perception and Attribution: Meaning, Definitions, Influencing factors, Perceptual process.	6
4.	Module 4: Learning: Definition, Process, Cognitive theory of learning.	6
5.	Module 5: Attitudes: Definition, Objective, Nature, Components-ABC model, Formation, Function, Challenging attitudes.	6
6.	Module 6: Group Dynamics: Definition, Objective, Types, Introduction to Group Development and Structuring.	6
7.	Module 7: Power and Political behaviour: Definition, Power Dynamics, Sources, Power tactics, Essence of politics, Types of political activities.	6
8	Module 8: Conflicts: Definition, Objective, Nature, Nature of conflicts, Process, levels.	6
9	Module 9: Communication: Definition, Objective, Types of Interpersonal Communication, Influencing factors, Barriers.	6
10	Module 10: International Organizational Behaviour:	2

Suggested Readings:
1. K. Aswathappa: Organizational behaviour, Text, Cases and Games, HimalayaPublishing House.
2. Stephen P. Robbins: Organizational Behaviour, Eighteen Edition, Pearson.
3. Stephen P. Robbins: Essentials of Organizational Behavior, Fourteenth Edition, Pearson.
4. Fred Luthans: Organizational behavior: A modern behavioral approach to management, McGraw-Hill.
5. Afsaneh Nahavandi: Organizational Behavior, First Edition, SAGE Publications.

Course Objective:

1. The objective is to familiarize students with the basic elements of statistical methods in estimation of population parameters.
2. This paper also benefits students to familiarise themselves with various methods of hypothesis testing and their properties, along with applications in business.
3. They can learn to solve ample practical examples to illustrate the principles and methods using programming language.

Sl	Course Outcome	Mapped modules
1	Remembering	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10.
2	Understanding the course	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10.
3	Applying the general problem	M2, M3, M4, M5, M6, M7, M8, M9
4	Analyse the problems	M2, M3, M4, M5, M6, M7, M8, M9
5	Evaluate the problems after analysing	M2, M3, M4, M5, M6, M7, M8, M9
6	Create using the evaluation process	

Module Number	Content	Total Hours	%age of questions	Bloom's Level (if applicable)	Remarks (If any)
M 1	Introduction	8	8	L1, L2, L4, L5	
M 2	Personality	8	10	L1, L2, L3, L4, L5	
M 3	Perception and attribution	6	10	L1, L2, L3, L4, L5	
M 4	Learning	6	15	L1, L2, L3, L4, L5	
M 5	Attitudes	6	10	L1, L2, L3, L4, L5	
M 6	Group Dynamics	6	10	L1, L2, L3, L4, L5	

M 7	Power and Political behaviour	6	10	L1, L2, L3, L4, L5	
M 8	Conflicts	6	15	L1, L2, L3, L4, L5	
M 9	Communication	6	10	L1, L2, L3, L4, L5	
M 10	International Organizational Behaviour	2	2	L1, L2, L6	
		60	100		

Submitted by :

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                        (Name)   (Signature& Date)

Received by :

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                        (HOD)   (Signature& Date)

Course code	**BBA(BA) 204**					
Course title	Environment & Sustainable Development					
Scheme and Credits	**L**	**T**	**P**	**S**	**Credits**	Semester-
	2	0	0	0	**2**	2nd
Pre-requisite (if any)						

Sl.	Topic/Module	Hour
1.	Module 1: Introduction: Multidisciplinary nature, Scope and importance; the need for environmental education. Concept of sustainability and sustainable development.	3

2.	Module 2: Ecosystems: Definition, Structure: food chains, food webs and function of ecosystem: Energy flow, nutrient cycle and ecological succession. Ecological Interactions, Biodiversity and Conservation – Levels, India as a mega-biodiversity nation, Threats to biodiversity, Ecosystem and biodiversity services	3
3.	Module 3: Environmental Pollution: Types:- Air pollution, Water pollution, Land pollution, Noise pollution; pollutants, Effects of pollution, Control and Remedial measures.	4
4.	Module 4: Environmental Protection: Report of the Club of Rome: Sustainable Development, Different Renewable Energy Sources- Wind Power, Water Power, Bio Fuel/Solid Bio Mass, Geothermal Energy, Nuclear Power, Environmental Movements- Chipko movement; Narmada Bachao movement; Tehri Dam conflict.	5
5.	Module 5: Environmental Policies and Legislations: Environmental Regulations Different Acts, Environmental Ethics Environmental Impact Assessment (EIA), EIA – Methods and Tools, Appraisal and Clearance for Industry, Evaluation System.	5

Suggested Readings:

1. G.N. Pandey: Environmental Management, Vikas Publishing House Pvt. Ltd.
2. Cunningham: Environmental Science, TMH.
3. R. Rajagopalan: Environmental Studies, Oxford.
4. R. Joshi & Munish Kapila: Environment Management, Kalyani Publishers.
5. C.S. Rao: Environmental Pollution Control Engineering, New Age InternationalPublication.

Course Objective:

1. To inculcate the knowledge base on ecosystem and types of environmental pollutions.
2. Promote understanding of efforts that can be made at the Industry and Government level to improve the environment, the economy and the quality of life.
3. To build basic understanding on sustainable development with a vision to balance our economic, environmental and social needs, allowing opulence for now and future generations.

Sl	Course Outcome	Mapped modules
1	Remembering	M1, M2, M3, M4, M5

2	Understanding the course	M1, M2, M3, M4, M5
3	Applying the general problem	M5
4	Analyse the problems	M3, M4
5	Evaluate the problems after analysing	M4, M5.
6	Create using the evaluation process	M1

Module Number	Content	Total Hours	%age of questions	Bloom's Level (if applicable)	Remarks (If any)
M1	Introduction.	3	10	L1, L2, L6.	
M2	Ecosystems.	3	25	L1, L2.	
M3	Environmental Pollution.	4	25	L1, L2, L4.	
M4	Environmental Protection.	5	20	L1, L2, L4.	
M5	Environmental Policies and Legislations.	5	20	L1,L2, L3, L5.	
		20	100		

Submitted by :

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(Name)   (Signature& Date)

Received by :

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(HOD)   (Signature& Date)

Course code	BBA(BA) 301					
Course title	Business Research Methods					
Scheme and Credits	**L**	**T**	**P**	**S**	**Credits**	Semester-
	4	0	2	0	**6**	3rd
Pre-requisite (if any)	**Descriptive statistics & probability**					

l.	Topic/Module	Hour
1.	Module 1: Meaning, scope and significance of social research: Types of Research: (a) Pure and Applied, (b) Exploratory, Descriptive, (c) Experimental; Steps in Social Research & types Conceptualization and Formulation of Hypothesis.	10
2.	Module 2: Literature Review: Concept, necessity, research gap, reference, and plagiarism. Scientific Study of Social Phenomena: (a) The Scientific Method, Logic in Social Science, (b) Objectivity and Subjectivity in Social Science, (c) Positivism and Empiricism. Methods of research: (a) Quantitative and Qualitative(Characteristics and Differences Sources of Data : Primary & Secondary.	10
3.	Module 3: Techniques of Data Collection: (a) Survey, (b) Observation, (c) Questionnaire & Scheduled, (d) Interview, (e) Case Study.	5
4.	Module 4 : Sampling: Design: Types, Advantages and Limitations.	5
5.	Module 5: Classification & presentation of Data: (a) Coding, Tables, Graphs, (b) Measures of Central Tendency & Dispersion.	5

6.	Module 6: Hypothesis Testing: Definition, Concepts, Types of hypothesis, Test Statistics, Critical Value, Decision Rule, Procedure, Hypothesis testing for mean, proportion etc.	10
7.	Module 7: Introduction to Data Analysis Techniques: Introductory concepts to Univariate, Bi-variate and Multi-variate techniques.	10
8.	Module 8:Data Ethics: Concept, business benefits, Principles, Ethical use of algorithms.	5

Suggested Readings:

1. S N Murthy and U Bhojanna: Business Research Methods, Excel Books.
2. D.R. Cooper and P.S. Schindler: Business Research Methods, Tata McGraw –Hill
3. Kothari, C.R.: Research Methodology – Methods and Techniques, New Age International Ltd.
4. U. Sekharan and R Bougie: Research Methods for Business: John Wiley and Sons 5. J. K .Das: Business Mathematics and Statistics: Academic Publishers
5. P Mishra: Business Research Methods, Oxford University Press.

Course code	BBA(BA) 391					
Course title	Business Research Methods-Practical					
Scheme and Credits	L	T	P	S	Credits	Semester-
	4	0	2	0	6	3rd
Pre-requisite (if any)	Descriptive statistics & probability					

Sl.	Topic/Module	Hour
1.	Module 1: Introduction : Classification & presentation of Data , Frequency distribution, Sampling distributions, Central tendency, variance,	10
2.	Module 2: Data types and Control structures: Operators (unary, arithmetic, etc.) -- Data types, variables, expressions, and statements -- Assignment statements -- Strings and string operations -- Control Structures: loops and decision.	10

3.	Module 3: Introduction to Hypothesis Testing using Python/R: Large sample tests, Small sample tests, F distribution, Test for correlation coefficient, ANOVA, Introduction to Data Analysis Techniques.	20

Suggested Readings:

1. Dr Sharma Pooja: Programming in Python, BPB.
2. Arora, Malik: R Programming For Beginners, Bookcentre
3. Vries Andrie De, R Programming for Dummies, Wiley india Pvt. Ltd
4. Yashavant Kanetkar: Let Us Python, BPB

Course Objective:

1. This course will help students to understand the basic nature and purpose of Research and its advantages to business.
2. Students will be familiar with the different research designs, data collection process, tools, data cleaning and analysis techniques.
3. They will able to get an introductory view about how to write reports.

Sl	Course Outcome	Mapped modules
1	Remembering	M1, M2, M3, M4, M5, M6, M7, M8
2	Understanding the course	M1, M2, M3, M4, M5, M6, M7, M8
3	Applying the general problem	M4, M5, M6
4	Analyse the problems	M4, M5, M6, M7
5	Evaluate the problems after analysing	M4, M5, M6, M7
6	Create using the evaluation process	

Module Number	Content	Total Hours	%age of questions	Bloom's Level (if applicable)	Remarks (If any)
M 1	Meaning, scope and significance of social research:	6	25	L1, L2	
M 2	Scientific Study of Social Phenomena	6	15	L1, L2	
M 3	Techniques of Data Collection	4	25	L1, L2	
M 4	Sampling	4	25	L1, L2, L3	

M 5	Classification & Presentation of Data	4	10	L1, L2, L3	
M 6	Hypothesis Testing	8		L1, L2, L3, L4	
M 7	Introduction to Data Analysis Techniques	8		L1, L2, L3, L4	
M 8	Use of any open-source programming language for Classification & presentation of	10 P		L1, L2	
	Data, Hypothesis Testing, Introduction to Data Analysis Techniques.				
		60	100		

Submitted by :

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                    (Name)   (Signature& Date)

Received by :

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                    (HOD)   (Signature& Date)

Course code	BBA(BA) 302					
Course title	Financial Accounting and Management					
Scheme and Credits	L	T	P	S	Credits	Semester-
	5	1	0		6	3rd
Pre-requisite (if any)						

Sl.	Topic/Module	Hour
1.	Module 1 Introduction to Financial Accounting: Meaning and Scope of Accounting; the users of financial accounting information and their needs; Accounting Principles: Accounting Concepts and Conventions, GAAP; Accounting Transactions: Accounting Equation, Journal, Rules of debit and credit, Ledger, Trial Balance, Cash Book. Accounting Standards: Introduction, Objectives of Accounting Standards, Advantages of Accounting Standards, Accounting Standards in India and IFRS	10
2.	Module 2 Final Accounts: Introduction, Meaning, Objectives and Characteristics of Final Accounts; Final Statements of Sole Proprietorship without adjustment, Adjustments in Preparation of Final Statements.	15
3.	Module 3 Partnership Accounts: Meaning and Features, Partnership Deed and Contents; Admission, Retirement, and Death of a Partner.	15
	Dissolution of Partnership including Garner Vs. Murray rule	
4.	Module 4 Company accounts: Issue of shares (application, allotment, first call, final call), Calls in arrear & forfeiture of shares.	10

5.	Module 5 Depreciation and Provisions: Concept of depreciation; Causes of depreciation; depletion, amortization; Depreciation accounting; Methods of recording depreciation; Straight line and diminishing balance method, Provisions and Reserves: Preparation of provision for doubtful debt account, provision for discount on Debtors account and provision for Discount on Creditors account.	5
6.	Module 6 Bank Reconciliation Statement: Introduction, Meaning of Bank Reconciliation Statement, Importance of Bank Reconciliation Statement, Reasons for Difference, Procedure for Reconciliation; Rectification of errors.	5

Suggested Readings:

1. Ashoke Banerjee: Financial Accounting, Excel Books

2. Basu & Das : Financial Accounting, Rabindra Library 3. Ramchandran Kakani: Financial Accounting for Managers, TMH

4. P. C. Tulsian: Financial Accounting, Pearson.

5. M. Hanif, A. Mukherjee: Financial Accounting, TMH.

6. Dr. S. N. Maheshwari, Sharad K. Maheshwari: Financial Accounting for BBA, Vikas Publishing House Pvt. Ltd.

CO	Course Outcome	Mapped modules
1	Concepts of Financial Accounting	Module 1
2	Application of Accounting	Module 2, 3,4
3	Analyse the concepts of depreciation and reserves	Module 5
4	Evaluation and Rectification of Error	Module 6

Submitted by :

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(Name)   (Signature& Date)

Received by :

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(HOD)   (Signature& Date)

Course code	BBA(BA) 303					
Course title	Marketing Management & Metrics					
Scheme and Credits	L	T	P	S	Credits	Semester-
	5	1	0		6	3rd
Pre-requisite (if any)						

Sl.	Topic/Module	Hour
1.	Module 1: Introduction to Marketing –Definition, Scope, Marketing Concepts- Traditional and Modern; Selling vs. Marketing; Functions and Evaluation of Marketing. Marketing Environment, Macro and Micro Environment, SWOT Analysis, Marketing Mix, Marketing Information System. Consumer Behavior- Meaning, Determinants- Cultural, Social, Personal, Psychological Industrial Buying Behavior-Meaning, Characteristics; Differences Between Consumer Buying and Industrial Buying Behavior	10
2.	Module 2: Market Segmentation Targeting & Positioning (STP) - Meaning, Benefits of Market Segmentation, Basis of Segmentation; Target Market; Introduction to segmentation techniques. Branding- Definition, Importance, Branding Strategy; Packaging	6
3.	Module 3: Concepts of Products, Product Mix, Product Line, Product Width, Depth; Product Life Cycle Meaning and Stages, Strategies Involved in PLC Stages, New Product Development- Steps	6
4.	Module 4: Pricing- Meaning, Importance of Price in the Marketing Mix, Objectives and Methods of Pricing, Factors Affecting Price of a Product/Service, Discounts and Rebates, Introduction to pricing models using Excel.	6
5.	Module 5: Introduction to distribution channels, Introduction to Integrated Marketing Communications.	8
6.	Module 6: Introduction to marketing modelling techniques : RFM, CLV, PPC, Marketing Mix allocation etc.	10

7.	Module 7: Introduction to Marketing Metrics: Types, Application, Computation etc.	8
8.	Module 8: Module 8: Other forms of Marketing and Future of Marketing.	6

Suggested Readings:

1. Kotlar Philip and Armstrong Gary: Principles of Marketing, Pearson.

2. Arun Kumar: Marketing Management, Vikas Publishing House.

3. Saxena, Rajan: Marketing Management, TMH.

4. Gandhi, J.C.: Marketing, TMH.

5. Wayne L. Winston: Marketing Analytics, Willey.

6. Farris: Marketing Metrics, Pearson.

Sl	Course Outcome	Mapped modules
1	Remembering	M1, M2, M3, M4, M5, M6, M7, M8
2	Understanding the course	M1, M2, M3, M4, M5, M6, M7, M8
3	Applying the general problem	M6, M7
4	Analyse the problems	M1, M2, M6, M7
5	Evaluate the problems after analysing	M1, M2, M6, M7
6	Create using the evaluation process	M6, M7

Module Number	Content	Total Hours	%age of questions	Bloom's Level (if applicable)	Remarks (If any)
M 1	Introduction	10	15	L1, L2, L4, L5	
M 2	Market Segmentation Targeting & Positioning	6	15	L1, L2, L4, L5	
M 3	Concepts of Product	6	15	L1, L2	
M 4	Pricing	6	15	L1, L2	
M 5	Introduction to distribution channels and IMC	8	15	L1, L2	
M 6	Introduction to marketing modelling techniques	10	15	L1, L2, L3, L4, L5, L6	
M 7	Introduction to Marketing Metrics	8	5	L1, L2, L3, L4, L5, L6	

M 8	Other forms of Marketing and Future of Marketing.	6	5	L1, L2	
		60	100		

Submitted by :

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(Name)   (Signature& Date)

Received by :

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(HOD)   (Signature& Date)

Course code	BBA(BA) 305				
Course title	Personality Development& Presentation Skills				
Scheme and Credits	**L**	**T**	**P**	**S**	**Credits**	Semester-
	2	0	0		**2**	3rd
Pre-requisite (if any)					

Sl.	Topic/Module	Hour
1.	Module 1: Introduction: • Meaning and Definition of Personality. • Factors affecting Personality Development: Biological, Home Environment and Parents, School Environment and Teachers, Peer Group, Sibling Relationships and Mass Media, Cultural Factors, Spiritual Factors, Public Relations	10
2.	Module 2: Personality Traits. • Meaning and Definition: Personality Traits. • Developing Positive Personality Traits: Attitude: Factors that determine Attitude, Benefits of Positive Attitude and Consequences of negative attitude, steps to build positive attitude. • Personality habits	10

3.	Module 3: Pillars of personality development: Introspection, SelfAssessment, Self Appraisal, Self Development:, Self Introduction, Defining Success, Concept of Failure, Self Esteem: Sigmund Freud ID, EGO and SUPER EGO Concepts.	10
4.	Module 4 : Personality Formation Structure: Mind mapping, Competency mapping, Strategies of gaining power and influence. Enhancing personality through effective communication. Intentional Communication. Intentional Listening, Effective Speech.	10

Suggested Readings:

1. Stephen Covey: Seven Habits of Highly Effective People,Simon & Schuster.

2. Shiv Khera: You Can Win – A Step-by-Step Tool for Top Achievers, Bloomsbury India.

3. Three Basic Managerial Skills for All – Hall Of India Pvt Ltd New Delhi.

4. Wehtlel David A and Kin S Kemerron: Developing Managerial Skills – Pearson Education New Delhi.

5. Rajendra Pal and J. S. Korlhalli: Essentials of Business Communication - Sultan Chand & Sons, New Delhi.

6. Nirmal Singh : Business Communication (Principles, Methods and Techniques) - Deep & Deep Publications Pvt. Ltd., New Delhi.

Course Objective:

1. This course aims to groom the students' personality and prove themselves as good human-being of the Society.

2. This course consists of individual or in-group class presentations pertaining to the applications of concepts, theories or issues in human development which will make them industry-ready.

Sl	Course Outcome	Mapped modules
1	Remembering	M1, M2, M3, M4
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M1, M2, M3, M4
4	Analyse the problems	
5	Evaluate the problems after analysing	

6	Create using the evaluation process	

Module Number	Content	Total Hours	%age of questions	Bloom's Level (if applicable)	Remarks (If any)
M 1	Introduction	5	25	L1, L2,L3	
M 2	Personality Traits	5	25	L1, L2,L3	
M 3	Pillars of personality development	5	25	L1, L2,L3	
M 4	Personality Formation Structure	5	25	L1, L2,L3	
		60	100		

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                (Name)   (Signature& Date)

Received by :

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                (HOD)   (Signature& Date)

Course code	BBA(BA) 401					
Course title	Predictive Analytics					
Scheme and Credits	L	T	P	S	Credits	Semester-
	5	0	1		6	4th
Pre-requisite (if any)						

Sl.	Topic/Module	Hour
1.	Module 1: Introduction to Analytics: Overview, Definition, Need, Analytics in decision making, Game changer and innovator, Power of analytics, Predictive Analytics.	5
2.	Module 2: Types and techniques of Predictive Analytics, Application of Predictive Analytics in Manufacturing, Health, Telecommunication, Supply Chain, Information Technology etc. Digital Analytics.	5
3.	Module 3: Simple Linear Regression (SLR): Introduction, Overview, Importance, Types, SLR: Model Building, OLS Estimation, Model interpretation, validation.	8
4.	Module 4: Multiple Linear Regression: Multiple Linear Regression, Estimation of Regression Parameters, Model Diagnostics, Introduction to Dummy, Derived & Interaction Variables, Multicollinearity, Model Deployment, Demo using software.	8
5.	Module 5: Logistic Regression: Discrete choice models, Logistic Regression, Logistic Model Interpretation, Logistic Model Diagnostics, Logistic Model Deployment, Demo using software.	8
6.	Module 6: Introduction to Decision Trees: Overview, Application, Terminologies, Model validation, Introduction to Chi-Square Automatic Interaction Detectors (CHAID), Classification and Regression Tree (CART).	10

7.	Module 7: Introduction to Unstructured data analysis and other classifiers: Sentiment Analysis, Naïve Bayes algorithm.	8
8.	Module 8: Introduction to Forecasting and Time series Analysis: Forecasting, Time Series Analysis, Additive & Multiplicative models, Forecasting Accuracy, Moving average models, Exponential smoothing techniques.	8

Suggested Readings:

1. Eric Siegel: Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die, Wiley.

2. Bari: Predictive Analytics for Dummies, Wiley.

3. Dr. Anasse Bari, Mohamed Chaouchi: Predictive Analytics for Dummies , John Wiley & Sons.

4. Namakum R N Prasad (Author), Seema Acharya (Author): Fundamentals of Business Analytics, Wiley.

5. Alvaro Fuentes: Hands-On Predictive Analytics with Python: Master the complete predictive analytics process, from problem definition to model deployment, Ingram short title.
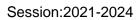
Stephen Sorger. Marketing Analytics - Strategic Models and Metrics, Amazon Digital Services

Course Objective:

1. This course will build ability among students to understand and apply specific statistical and predictive analysis methods applicable to real life scenario.

2. Students will develop familiarity with popular tools and techniques used in industry for predictive analytics.

They will learn how to evaluate the appropriateness and validity of models and how to interpret and report the results for a management audience.

Sl	Course Outcome	Mapped modules
1	Remembering	M1, M2, M3, M4, M5, M6, M7, M8
2	Understanding the course	M1, M2, M3, M4, M5, M6, M7, M8
3	Applying the general problem	M3, M4, M5, M6, M7, M8
4	Analyse the problems	M3, M4, M5, M6, M7, M8
5	Evaluate the problems after analysing	M3, M4, M5, M6, M7, M8
6	Create using the evaluation process	

Module Number	Content	Total Hours	%age of questions	Bloom's Level (if applicable)	Remarks (If any)
M 1	Introduction to Analytics	5	5	L1, L2	
M 2	Types and techniques of Predictive Analytics	5	5	L1, L2	
M 3	Simple Linear Regression (SLR)	8	15	L1, L2, L3, L4, L5	
M 4	Multiple Linear Regression	8	15	L1, L2, L3, L4, L5	
M 5	Logistic Regression	8	15	L1, L2, L3, L4, L5	
M 6	Introduction to Decision Trees	10	15	L1, L2, L3, L4, L5	
M 7	Introduction to Unstructured data analysis and other classifiers	8	15	L1, L2, L3, L4, L5	
M 8	Introduction to Forecasting and Time series Analysis	8	15	L1, L2, L3, L4, L5	
		60	100		

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Course code	BBA(BA) 402					
Course title	Supply Chain Management					
Scheme and Credits	**L**	**T**	**P**	**S**	**Credits**	Semester-
	5	0	1		**6**	4th
Pre-requisite (if any)						

Sl.	Topic/Module	Hour
1.	Module 1: Concept of logistics: Introduction, Objective, Types, Concept of Logistic Management, Evolution, Role of logistics in economy, Difference between logistics and supply chain, Logistics and Supply Chain Management, Logistic mix, Logistics and competitive advantage.	10
2.	Module 2: Integrated logistics: Introduction, Objective, Concept of Integrated Logistics, Information flow, Inventory flow, Inventory Ownership, Measurement system, Barriers, Logistics Performance Cycle, Procurement Performance Cycle.	10
3.	Module 3: Introduction to Supply Chain: Introduction, Objective, Concept, Defining Value Chain, Organisation Level Activities, Industry level, Value Reference Model, Functions, Contributions, Creating Value, Leveraging Value Chain Partners.	10
4.	Module 4: Framework for Supply Chain Management, Supply Chain Effectiveness, Supply Chain Relationship, Building long-Term Relationship with Vendors.	8
5.	Module 5: Sourcing strategy: Manufacturing management, Make or buy decision, Capacity management, Materials Management, Choice of sources, Procurement planning.	6
6.	Module 6: Demand Forecasting: Introduction, Objective, Concept and impact of Demand Forecasting, Forecasting Process and Techniques.	8
7.	Module 7: Supply Chain Management from Indian Perspective.	2
8.	Module 8: Introduction to Supply Chain Analytics: Introduction to Tools and Techniques (Inventory Management Decisions-Multi-item,	6

Deterministic Constraint Models & probabilistic Models, AHP Applications, optimization for SCM support etc.).	

Suggested Readings:

1. Sunil Chopra: Supply Chain Management, Pearson Prentice Hall.
2. Sunil Chopra, Peter Meindl, D.V. Kalra: Supply Chain Management, Pearson.
3. Michael Hugos: Essentials of Supply Chain Management, Wiley.
4. Richard B, Ravi Shankar, F. Robert Jacobs: Operations and Supply Chain Management, McGraw Hill Education.
5. James Stevens: Supply Chain Management: Strategy, Operation & Planning for Logistics Management, Createspace Independent Pub.
6. Ashley McDonough: Operations and Supply Chain Management Essentials You Always Wanted to Know, Vibrant Publishers.

Course Objective:

4. This course will demonstrate primary differences between logistics and supply chain management.
5. Students will be familiar with the concepts, framework, managing components of supply chain management.
6. Student will build an introductory understanding about tools and techniques useful in implementing supply chain management.
7. A preliminary level of understanding will be formulated among students regarding supply chain analytics.

Sl	Course Outcome	Mapped modules
1	Remembering	M1, M2, M3, M4, M5, M6, M7, M8
2	Understanding the course	M1, M2, M3, M4, M5, M6, M7, M8
3	Applying the general problem	M4, M6
4	Analyse the problems	M4, M5, M6
5	Evaluate the problems after analysing	M4, M5, M6
6	Create using the evaluation process	M7, M8

Module Number	Content	Total Hours	%age of questions	Bloom's Level (if applicable)	Remarks (If any)

M 1	Concept of logistics	10	5	L1, L2	
M 2	Integrated logistics	10	5	L1, L2	
M 3	Introduction to Supply Chain	10	15	L1, L2,	
M 4	Supply Chain Effectiveness	8	15	L1, L2, L3, L4 , L5	
M 5	Sourcing strategy	6	15	L1, L2, L4, L5	
M 6	Demand Forecasting	8	15	L1, L2, L3, L4, L5	
M 7	Supply Chain Management from Indian Perspective	2	15	L1, L2, L6	
M 8	Introduction to Supply Chain Analytics	6	15	L1, L2, L6	
		60	100		

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Course code	BBA(BA) 403
Course title	Customer Relationship Management

Scheme and Credits	L	T	P	S	Credits	Semester-
	5	0	1		**6**	4th
Pre-requisite (if any)						

Sl.	Topic/Module	Hour
1.	Module 1: Introduction to CRM: Definition, Components, Models, Contexts.	6
2.	Module 2: Understanding Relationship: Relationship, loyalty, Relationship quality, Customer lifetime value, Customer Satisfaction.	8
3.	Module 3: Managing Customer Lifecycle: Customer acquisition, customer retention, Introduction to Customer Life-time Value, calculation.	8
4.	Module 4: Types of CRM: Types, Difference, Subcomponents of each type.	8
5.	Module 5: Strategic CRM: Customer Portfolio Management, Delivering customer-experienced value, CRM metrics.	8
6.	Module 6: Operational CRM: Introduction to Sales Force Automation, Marketing Automation, Service Automation, CRM metrics.	8
7.	Module 7: Analytical CRM: Customer-related databases, Development and managing customer-related databases, CRM metrics.	8
8.	Module 8: Realizing Benefits of CRM and Looking in to future: Implementing CRM, Social CRM, Collaborative CRM, e-CRM.	6

Suggested Readings:

1. Francis Buttle: Customer Relationship Management: Concepts and Tools, Routledge.
2. Francis & Stan Maklan Buttle: Customer Relationship Management : Concepts and Technologies, T&F India
3. Jagdish N Sheth, Parvatiyar Atul, et al. Customer Relationship Management: Emerging Concepts, Tools and Applications, McGraw Hill Education.
4. Dr. Ruchi Jain and Dr. Ruchika Jeswal: CRM Customer Relationship Management: a conceptual approach, Galgotia Publishing Company.
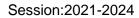
5. Lars Helgeson: CRM for Dummies, Wiley.
6. Payne : Strategic Customer Management: Integrating Relationship Marketing and CRM, Cambridge University Press.

Course Objective:

8. This course will demonstrate the concepts, terms, Types benefits of CRM, how CRM creates value for organizations and customers.
9. Student will build an introductory understanding about tools and techniques useful in implementing customer relationship management along with how to evaluate the successfulness.
10. A preliminary level of understanding will be formulated among students how the domain of analytics intersects with customer relationship management domain.

Sl	Course Outcome	Mapped modules
1	Remembering	M1, M2, M3, M4, M5, M6, M7, M8
2	Understanding the course	M1, M2, M3, M4, M5, M6, M7, M8
3	Applying the general problem	M5, M6, M7
4	Analyse the problems	M5, M6, M7
5	Evaluate the problems after analysing	M5, M6, M7
6	Create using the evaluation process	

Module Number	Content	Total Hours	%age of questions	Bloom's Level (if applicable)	Remarks (If any)
M 1	Introduction to CRM	6	5	L1, L2	
M 2	Understanding Relationship	8	5	L1, L2	
M 3	Managing Customer Lifecycle	8	15	L1, L2,	
M 4	Types of CRM	8	15	L1, L2	
M 5	Strategic CRM	8	15	L1, L2,L3,L4, L5	
M 6	Operational CRM	8	15	L1, L2, L3,L4, L5	
M 7	Analytical CRM	8	15	L1, L2,L3, L4, L5	
M 8	Realizing Benefits of CRM and Looking in to future.	6	15	L1, L2	

		60	100		

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Course code	BBA(BA) 405					
Course title	Data Analysis Lab using R					
Scheme and Credits	**L**	**T**	**P**	**S**	**Credits**	Semester-
		0	2		**2**	4th
Pre-requisite (if any)	Basic knowledge of data & descriptive statistics					

Sl.	Topic/Module	Hour
1.	Module 1: What is R? Basic Operations in R.	5
2.	Module 2: Data Types & Data Structures in R. Subsetting in R	5
3.	Module 3: Data Import & Export.	5
4.	Module 4: Introduction to R Packages.	5
5.	Module 5: Control Structures & User Defined Functions.	10
6.	Module 6: Introduction to Statistical Analysis & Data Mining.	10

Suggested Readings:

7. Dr. Mark Gardener: Beginning R: The Statistical Programming Language, Wiley.

8. Jeeva Jose: Beginners Guide for Data Analysis using R Programming, Khanna Publishing.

9. Sandip Rakshit: Statistics with R Programming, McGraw Hill Education.

10. Sandip Rakshit: R Programming for Beginners, McGraw Hill Education.

11. Andrie de Vries , Joris Meys: R Programming for Dummies, Wiley.

Jared P. Lander: R for Everyone: Advanced Analytics and Graphics, Pearson Education

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