GAYATRI VIDYA PARISHAD

College for Degree and P.G. Courses (Autonomous)

(Affiliated to Andhra University and Approved by A.I.C.T.E)

(Reaccredited by NAAC)

MBA-Business Analytics Syllabus

(Under CBCS Pattern)

(With effect from 2024 – 2026 Admitted Batch)

Department of **MBA-Business Analytics**

Gayatri Valley, Rushikonda, Visakhapatnam – 45.

Phone: 0891 – 2955084 / 85, Web: www.gvpcdpgc.edu.in

ICET Code: GVPP, E-mail: hodmbaba@gvpcdpgc.edu.in

VISION OF THE INSTITUTION

Creating Human Excellence for a Better Society

MISSION OF THE INSTITUTION

Unfold in to a world – class organization with strong academic and research base, producing responsible citizens to cater to the changing needs of the society.

QUALITY POLICY OF THE INSTITUTION

Attaining Global Standards through

- ***Academic Excellence***
- ***Discipline***
- ***Social Interface***

VISION OF THE DEPARTMENT

Provide Value Based Management Education to Nurture Global Business Leaders.

MISSION OF THE DEPARTMENT

Transform into a premier management institution in the pursuit of global knowledge and pragmatic orientation for grooming leadership, entrepreneurial talent and corporate acumen to nurture socially responsible business leaders.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

1. To impart general level of competence in management and to orient the students to acquire creative, innovative and entrepreneurial potential.
2. To equip the students with requisite knowledge, skills, right attitude and orientation towards continuous learning and to develop them as efficient managers.
3. To prepare them to adapt to a rapidly changing environment by applying their conceptual knowledge and become socially responsible and value driven citizens committed to sustainable development.
4. To equip the students of this program with quantitative and qualitative skills to identify, analyze, design and create business opportunities in a globally dynamic environment.

PROGRAM OUTCOMES (POs)

1. Apply knowledge of management theories and practices to solve business problems.
2. Foster analytical and critical thinking abilities for data based decision making.
3. Ability to develop value based leadership ability.
4. Ability to understand, analyze and communicate global, economic, legal and ethical aspects of business.
5. Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.
6. Ability to continuously learn and adapt to the dynamics of business and society.
7. Acquire entrepreneurial skills to establish and manage enterprises.

GAYATRI VIDYA PARISHAD COLLEGE FOR DEGREE AND P G COURSES (A)
RUSHIKONDA, VISAKHAPATNAM - 530045
DEPARTMENT OF MANAGEMENT STUDIES
PROGRAM: MBA - BUSINESS ANALYTICS

Program Structure
For the students admitted into
Master of Business Administration – Business Analytics
(With Effect from Admitted Batch 2024-25)

MBA -BA- I SEMESTER

COURSE CODE	I SEMESTER COURSES	L	T	P	C
MBABA1001	Management Process and Organizational Behaviour	4	0	0	4
MBABA1002	Managerial Economics	4	0	0	4
MBABA1003	Fundamentals of Python	3	0	0	3
MBABA1003A	Fundamentals of Python Lab	0	0	2	1
MBABA1004	Accounting for Managers	4	0	0	4
MBABA1005	Quantitative Techniques for Managers	4	0	0	4
MBABA1006	Managerial Communication Skills	4	0	0	4
MBABA1007	Fundamentals of Business Analytics and R-Programming	3	0	0	3
MBABA1007A	Fundamentals of Business Analytics and R-Programming-LAB	0	0	2	1
MBABA1008	MS-Adv Excel	2	0	0	2
MBABA1009	Contemporary Relevant issues Project	0	0	0	2
Sub Total					**32**

MBA -BA- II SEMESTER

COURSE CODE	II SEMESTER COURSES	L	T	P	C
MBABA2001	Financial Management	4	1	0	4
MBABA2002	Marketing Management	4	0	0	4
MBABA2003	Human Resource Management	4	0	0	4
MBABA2004	Business Environment and Law	4	0	0	4
MBABA2005	Econometrics Research Methods (using SPSS)	3	0	0	3
MBABA2005A	Econometrics Research Methods (using SPSS) -LAB	0	0	2	1
MBABA2006	Advanced Python Programming	3	0	0	3
MBABA2006A	Advanced Python Programming-LAB	0	0	2	1
MBABA2007	DBMS (SQL)	3	0	0	3
MBABA2007A	DBMS (SQL)-LAB	0	0	2	1
MBABA2008	Project (on Python / SQL)	0	0	0	2
Sub Total					**30**

MBA -BA- III SEMESTER

COURSE CODE	III SEMESTER COURSES	L	T	P	C
MBABA3001	Operations Research	4	0	0	4
MBABA3002	Business Analytics Mining and Modeling using R	3	0	0	3
MBABA3002A	Business Analytics Mining and Modeling using R-LAB	0	0	2	1
MBABA3003	Artificial Intelligence and Machine Learning	3	0	0	3
MBABA3003A	Artificial Intelligence and Machine Learning-LAB	0	0	2	1
MBABA3004	HR Analytics	3	0	0	3
MBABA3004A	HR Analytics-LAB	0	0	2	1
MBABA3005	Finance Analytics	3	0	0	3
MBABA3005A	Finance Analytics-LAB	0	0	2	1
MBABA3006	Marketing Analytics	3	0	0	3
MBABA3006A	Marketing Analytics-LAB	0	0	2	1
Any one from					
MBABA3007	Supply Chain Analytics	3	0	0	3
MBABA3007A	Supply Chain Analytics-LAB	0	0	2	1
MBABA3008	Social and Web Analytics	3	0	0	3
MBABA3008A	Social and Web Analytics-LAB	0	0	2	1
Sub Total					**28**

MBA -BA- IV SEMESTER

COURSE CODE	IV SEMESTER COURSES	L	T	P	C
MBABA4001	Data Visualization (Tableau and Power BI)-MOOCs	2	0	0	2
MBABA4002	Project Management-MOOCs	2	0	0	2
MBABA4003	Entrepreneurship Development	4	0	0	4
MBABA4004	Business Policy & Strategic Management	4	0	0	4
MBABA4007	Corporate Internship Report / Project Work (3 months)				6
MBABA4007A	Viva-Voce on Corporate Internship / Project Work				4
Other options					
MBABA4005	Design Thinking	4	0	0	4
MBABA4006	Big Data Analytics	3	0	0	3
MBABA4006A	Big Data Analytics-LAB	0	0	2	1
Sub Total					**22**

Value added course: French/Soft Skills /Human values and Ethics / Yoga

Total Credits: 112

	I year		II year	
	I semester	**II semester**	**III semester**	**IV semester**
Credits	32	30	28	22
Total	62		50	
Grand Total	112			

Profile of MBA Department:

Gayatri Vidya Parishad introduced MBA program in the year 1995 with the lofty aim of producing competent management professionals to meet the requirements of the corporate world. Since day one, the Department has been constantly striving to achieve excellence in the field of management education by focusing on qualitative teaching. The Department has been successful in adopting innovative methods of imparting management education and preparing the students to meet the challenges of industry.

The Department has been very fortunate in having the expertise of several senior academicians and intellectuals who have been instrumental in shaping the institution to its present status with their vision and teaching.

Research work done by faculty of any Post Graduate course contributes significantly to the department and to the college as well. The progress of the MBA department in this direction is very significant. There are Nine Doctorates and about Three M.Phil holders among the faculty. Two faculty members have submitted their thesis and awaiting reports. Six faculties have qualified UGC-NET. The entire younger faculty has registered for Ph.D. The Department has been recognized as a Research Center by Andhra and Rayalaseema Universities. There are three on-going Major Research Projects, 5 Minor Research Projects, 1 Career Award for Young Researcher and an Women Entrepreneurship Development Cell and an Industry Institute Partnership Cell, all approved and funded by UGC / AICTE. There is constant encouragement to the faculty and students to participate in to National and International Seminars and various academic development programs. The placement cell coordinates placement activities. The faculty undertakes consultancy assignments to the industry in HR and Marketing areas.

Seats Sanctioned:

MBA- 60+60+60 =180

MBA- Business Analytics = 60

Gayatri Vidya Parishad College for Degree & PG Courses(A) introduced MBA Business Analytics Programme in the year 2022 with the objective to create good leaders who create an impact in the world with logic and values. It’s a program where the art of leadership meets the science of data. Here, students are not just trained to understand business concepts; they are equipped to transform those concepts using analytical tools and techniques.

The department is located in the 8.7-acre lush green Rushikonda campus with well-ventilated spacious class rooms, well equipped laboratories, library, play fields, canteen, vehicle parking , gym, staff rooms, waiting halls, auditorium, seminar halls, etc.

This program empowers students to become the architects of this data-driven future and is a journey of transformation, where every data point becomes a stepping stone towards innovation and success.

Eligibility for Admission:

1. A graduate with not less than 50% of marks in their respective discipline (excluding languages) and recognized by Andhra Pradesh or Indian Universities Act. (Except BFA and BOL).
2. Rank secured in AP State wide Integrated Common Entrance Test (ICET)
3. The total intake of students in MBA program is limited to 60 as per AICTE norms.

GAYATRI VIDYA PARISHAD COLLEGE FOR DEGREE AND PG COURSES (A)

Rushikonda, Visakhapatnam - 45

Rules and Regulations to be followed by the students within the campus

1. All the students are required to follow the college timings scrupulously.(8.40 a.m to 5.00 p.m)

2. They should attend to the college in the prescribed uniform.

3. They should carry the identity card during their stay in the campus and it should be produced on demand.

4. They should attend all the classes without fail

5. A minimum of 75% attendance is mandatory to be eligible to appear for Semester End Exams. Otherwise they are not eligible for promotion to the next semester.

6. If for any reason, any student wants to leave the campus before the scheduled completion of the class hours he/she should obtain written permission from the concerned class teacher/HOD.

7. The students have to take both the Unit Tests. The unit text marks are added to final result.

8. Any acts of indiscipline are to be reported to the disciplinary committee. The decision of the chairman of the disciplinary committee is final.

9. If any student is found to indulge in acts of ragging the same will be viewed very seriously.

10. All the complaints about ragging will be inquired by the Ragging Prevention Committee. The decision of the chairman of the above committee is final.

11. All the students are hereby informed that punishment for ragging includes **expulsion from the college and imprisonment as per Ragging Prevention Act**.

12. Use of Mobile phones / Cell phones is strictly prohibited in the college premises. Violation of the above rule will result seizure of the instrument.

GAYATRI VIDYA PARISHAD COLLEGE FOR DEGREE AND PG COURSES (AUTONOMOUS)

Regulations and Syllabus of

MASTER OF BUSINESS ADMINISTRATION (MBA) – Business Analytics

DEGREE EXAMINATION

(Syllabus w.e.f. 2024-26 admitted batch)

(FULL-TIME)

(2024-25 Academic Year)

Regulations and Syllabus of MBA

Admission into MBA-Business Analytics (FT) program will be made on the basis of ranks obtained in the Admission Test (I-CET).

The eligibility criteria will be as per the latest guidelines specified by APSCHE.

The mode of instruction will be based on the prescribed syllabus.

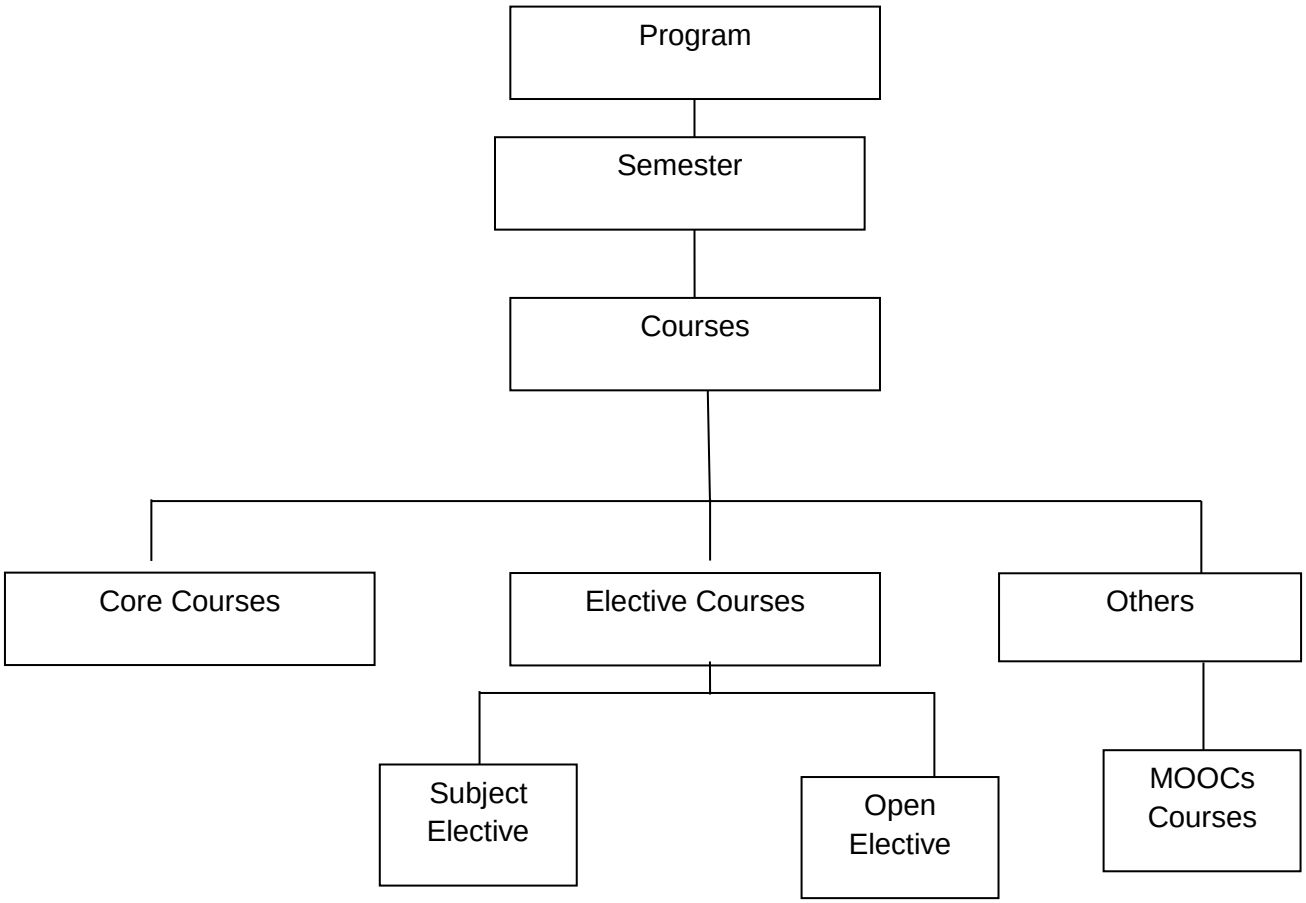
Detailed Syllabus is given below.

Structure of the program:

The program comprises of 4 semesters and adopts the Choice Based Credit System (CBCS) and grading system.

Choice Based Credit System (CBCS): The CBCS provides choice for students to select from the prescribed courses. (Core, elective and interdisciplinary courses). This system helps the students to obtain a degree by accumulating the required number of credits prescribed for that degree. The number of credits earned by the student reflects the knowledge or skills acquired by him/her.

Program structure under Choice Based Credit System (CBCS):



Course: A Course is a component of program, which is in new system subjects will be referred to as course. Each course having syllabus, has learning objective and learning outcome. The curriculum comprises of core courses and elective courses.

Core courses: these are the foundation courses of management education. They are compulsory for all the students. Core courses are of two types. They are generic core and subject core.

Semester I: Seven Generic Core courses in Semester I provide foundation to management discipline.

Semester II: Seven Generic Core courses in Semester II provide holistic introduction to more specific functions in management.

Semester III: Student will choose any eight courses out of ten proposed courses.

Semester IV: Student will choose any four courses out of Six proposed courses out of them two can be done through MOOCs platforms and student will carry out internship followed by Viva Voce examination.

Elective courses: it is a course which can be chosen from a pool of courses.

Subject elective: a discipline centric elective is called subject elective. Subjective elective courses in semester III and IV are focused on a specialization (Business Analytics). Course will be selected form a pool of courses given in the list. In SEM III Students should choose seven courses from 10 courses and in IV SEM should select 2 courses out of 4 given.

Open elective: A course chosen generally from an unrelated discipline, with an intention to seek cross functional exposure is called an open elective. **Others:** Others include viva-voce examinations and projects.

Pattern or Scheme of examinations: Unless otherwise specified the examination in each course will be for 100 marks. Out of this semester end examination carries 60 marks and 40 marks for continuous assessment. There will be two internal examinations each of which carries 20 marks (average of the two will be taken into consideration). Class attendance, participation in group discussion, presentations, quiz, etc carries 10 marks and assignments, carries 10 marks. Unless otherwise specified the semester end examination is of three hours duration.

Eligibility criteria to appear for semester end examination:

1) Candidates shall put in attendance at the College for not less than 75% of the total number of working days.

2) Shortage of attendance may be condoned on the recommendation of the Principal of the College in case a candidate represents the institution efficiently at games/ sports and other officially organized extracurricular activities, it will be deemed that he/she has attended the college on the day he/she is absent for that purpose.

Examinations: The College shall prepare examination schedule. The candidate unless he/she is otherwise not eligible shall be required to take at the end of each semester, an examination as detailed in the schedule of examination.

Evaluation: Unless otherwise prescribed the semester-end examination in each course shall be of three hours duration and carry 60 marks. Of the remaining 40 marks, 20 marks will be allotted to two mid semester examinations (average of two mid semester examinations is taken) and 10 marks for continuous evaluation. These 40 marks will be subject to internal evaluation. In the case of courses having practical examination (open elective), semester-end examination carries 20 marks and practical examination carries 30 marks respectively. In case of courses having theory examination only, students should secure a minimum 40% in the semester-end examination and also an aggregate of 40% marks to be eligible to be declared to have passed the examination. In courses having practical component, students should get a minimum of 40% in theory examination and 50% in practical examination and 50% of aggregate to pass.

The semester-end examination answer scripts of all the courses shall be coded and subjected to double valuation. If the variation between first and second valuations is more than 20% such cases will be dealt with as per the rules and regulations of the College concerning semester-end examinations.

Corporate internship and Project Work (90 days): The purpose of the internship and project work is primarily to demonstrate the application of knowledge and skills required for the program by studying and analyzing a selected problem in the work situation in a systematic manner and suggesting solution to the management.

It is desirable that the sponsoring organization has to identify the area of project work for their participants at the beginning of the training program itself. Each student is required to study the problem under the guidance of a faculty member of the department. The student should do their

project work in IV Semester. There shall be a Viva-Voce examination at the end of fourth semester to assess the performance during the project.

Viva-Voce:

A candidate has to appear for two Viva voce during the two years of MBA – Business Analytics program.

(i) At the end of second semester the student should submit a report on contemporary issues with social and business relevance for 50 marks (Group report for 25 marks + group presentation 10 marks + individual viva 15 marks). Evaluation will be done on the basis of viva-voice performance.

(ii) In fourth semester the student should submit a report (dissertation) on the internship and project undertaken for a period of 12 weeks. Evaluation will be on the basis of Viva-Voce performance for 200 marks (100 Marks for the report & 100 marks for viva-voce).

(iii) Notwithstanding anything contained in the above regulations in the case of project report/dissertation and Viva-Voce, a candidate shall obtain not less than 50% of marks to be declared to have passed in the examination.

Grading: A candidate shall be declared to have passed the examination if he obtains a minimum of 4.0 SGPA in each semester. All other candidates shall be deemed to have failed in the examination. Candidates who have completed the course in each semester and have put in the necessary attendance and progress certificate will be permitted to continue the next semester courses irrespective of whether they have appeared or not at the previous examination(s). However for getting promoted to the next semester the candidate should necessarily have applied for the semester-end examinations if he/she is not otherwise ineligible. Such candidates may be permitted to appear for the examination of earlier semester along with the subsequent semester examinations.

Distinction: Those who obtain CGPA 7.0 or more. I class: Those who obtain 6.0 CGPA or more but less than 7.0. II class: Those who obtain CGPA 5.0 or more but less than 60. Pass: Those who obtain CGPA4.0 or more.

Only those candidates who appear and pass the examination in all papers of the four semesters in the case of M.B.A. (Full-time) Degree examination, at first appearance are eligible to be placed in the first class with distinction. However, no candidate who has not passed all the papers relating to any semester at the first appearance shall be eligible for the award of any medals or prizes by the College and to receive certificates of rank obtained by them in the examination.

Short Visits: The candidate shall make one short visits to different local industrial establishments, corporate offices in the neighboring towns/cities in each semester of the program. The total number of visits to be made by each candidate is four out of which three are compulsory.

Paper Setting: The Chairman, Board of Studies will prepare and recommend the list of paper setters and examiners to value the answer scripts for each semester. All those who have completed a minimum of three years of regularized experience in teaching M.B.A.- Business Analytics Courses shall be appointed as examiners for this purpose.

Question paper setting for all the subjects of all the semesters shall be entrusted to external examiners approved by the Board of Studies. The question papers shall be set on "unit system pattern"

Improvement Provision: Candidates declared to have passed Master Degree Course in Business Administration under semester system obtaining third or second class may reappear for the same examination to improve their class as per the rules and regulations of the college in force then.

Minimum number of hours per course per week is four. In case of open elective courses minimum number of hours per course per week is two.

I SEMESTER

MBABA1001: MANAGEMENT PROCESS AND ORGANISATIONAL BEHAVIOUR

Course Objectives :

1. To develop decision making skills.
2. To provide an understanding of various organizational structures and control techniques
3. To help the students understand the dynamics of human behaviour and their impact on organisational performance.
4. To inculcate leadership abilities and understand the application of different leadership styles.
5. To enable the students in understanding the significance of motivation and its dynamism

Unit-I:

Management: Concept, Evolution of Management thought -Contributions of F.W.Taylor, Henry Fayol, Max Weber, Bernard, Elton Mayo. Management Functions, Roles and Skills of Managers. Styles of Management - Japanese Vs American

Unit-II:

Planning: Nature and Purpose, Steps in Planning, Types of Plans, Setting objectives, Management By Objectives (MBO), Decision Making - Process and Techniques.

Unit-III:

Organizing: Nature and Purpose, Formal and Informal Organizations, Types of Organization Structures, Line and Staff, Delegation, Centralization Vs Decentralization, Span of Control, Elements of Staffing. Controlling - Control Process, Controlling Techniques.

Unit-IV:

Dynamics of Individual Behavior: Personality: Concept, Trait Theory, Psychoanalytical Theory, Big Five Personality Theory, Determinants of Personality. Perception: Concept and Process; Values and Attitudes, Attitude Formation; Learning: Concept, Theories.

Unit-V:

Motivation: Concept, Theories – Maslow's Need Hierarchy theory, Herzberg's Two Factor Theory, McClelland's Theory, Alderfer's ERG Theory, McGregor's - Theory X and Theory Y, Motivational applications; Leadership: Concept, Leadership styles –Likerts Managerial Styles, Managerial Grid. Theories of Leadership - Trait, Contingency

Case study is compulsory

Outcomes

1. Students would be competent to deliver the basic managerial functions

2. Students would be able to acquire managerial decision making skills and ability to plan and implement.

3. Student would be able to design appropriate organizational structures for smooth running of organisation**.**

4. Students would develop interpersonal competencies by understanding the dynamics of individual behaviour.

5. Students would acquire motivational abilities and leadership skills.

References :

1. James A.F.Stoner, R. Edward Freeman &DanirlR.Gilbirt Jr. Management, PHI India.

2. Heinz Weihrich& Harold Koontz, Essentials of Management, Tata-McGraw Hill Intl.

3. L M Prasad, Principles and Practices of Management, Sultan Publications.

4. Stephen Robbins and Mary Coulter, Management, Prentice Hall of India.

5. UdaiPareek, Organizational Behaviour, Oxford University Press.

6. P.Subba Rao, Management and Organizational behavior, Himalaya Publishing House.

MBABA1002: MANAGERIAL ECONOMICS

Course Objectives :

1. To impart the basic conceptual framework under which a market economy is carried out and how it is related to the day-to-day business activities.
2. To make the learner aware of Demand and Supply.
3. To create awareness on the applications of changes in price and its effect, different components of production and cost for obtaining maximization of production, revenue and profit, and minimization of cost.
4. To make the learner understand about different markets.
5. To make the learner aware of the macroeconomic indicators such as inflation, economic policy and trade cycles against which the learner make decisions at firm and industry level.

Unit-I:

Introduction to Economics: Economic and Non-Economic Activities, Definitions of Economics, Concept of Utility, Law of Diminishing Marginal Utility, Managerial Economics: Definition, Nature & Scope of Managerial Economics; Functions of Managerial Economist, Decision Making and Forward Planning.

Unit-II:

Theories of Demand and Supply: Demand Analysis: Meaning and Determinants of demand, law of demand and exceptions to the law; Elasticity of Demand: Price; Income, Cross and Promotional elasticity of demand. Methods of Measurement of elasticity; Forecasting of Demand: Meaning, Purpose, Significance and Methods, Features of a Good Forecasting Method. Supply Analysis: Meaning and Determinants of Supply, Law of Supply and Elasticity Concepts. Equilibrium Price, Market Price, Normal Price and other concepts. Changes in Price.

Unit-III:

Production and Cost Analysis: Theory of Production: Meaning and Factors of Production, Production function with one variable Input (Law of Variable Proportion), with two variable inputs (Law of Returns to Scale) Theory of Cost: Different cost concepts and Different relations between Cost and output in short run and long run. Managerial uses of Revenue and Cost concepts (Break-Even Point).

Unit-IV:

Market Analysis: Classification of Markets (Location, Time & Competition based Markets); Equilibrium Price and Output determination in perfect market, Monopoly, Oligopoly and Monopolistic markets.

Unit-V:

Macro Concepts for Business Decisions: National Income: concept & Various Methods of Measurements – Inflation: types and causes of inflation Measurement of inflation, Philips curve and Steps to Control inflation; Business Cycles: Causes and Measures to control Business Cycles.

Case Study is Compulsory (Only from Elasticity of demand, Demand forecasting, Break-Even Point, Cost Minimization and Profit Maximization)

Outcomes

1. Student will be able to understand the applications of managerial economics and discuss optimization and utility including consumer behaviour.
2. Student will able to analyse the demand and supply conditions and assess the position of a company and interpret trend analysis and its relevance in decision-making.
3. Students are able to understand factors of production, short-run and long-run cost functions and establish the linkage between production function and cost function.
4. Enables the student to take equilibrium product and price decisions under different market situations and also enables to apply discriminating price mechanism for goods and services as and when needed.
5. Enable the learner to react to international price changes for the good or service and act accordingly in different environmental factors. Fluctuations in the trends of global trade with the knowledge on Wholesale Price Index (WPI), Consumer Price Index (CPI), and Index of Industrial Production (IIP) the students develop the decision skills.

References :

1. Dwivedi.D.N Managerial Economics, Vikas Publishing House.
2. Koutsyannis.A – Modern Micro Economics, Macmillan Publishers.
3. Suma Damodaran : Managerial Economics, Oxford University Press
4. Mithani.D.M: Principles of Economics, Himalaya Publishing House.
5. Mehata.P.: Managerial Economics, Text and Cases, S.Chand & Co.
6. Trivedi.M.L: Managerial Economics, Theory and Applications,

   Tata Mcgraw Hill Publishing Co.

MBABA1003: FUNDAMENTALS OF PYTHON

Course Objectives :

1. To enable students to understand data types and operators.
2. The students learn overview of Data Collections and Language Component.
3. To know about python language basics and data structures like lists, tuples, sets and dictionaries.
4. To familiarize the concepts of Functions.
5. The students get acquainted with working of files and directories.

Unit-I:

INTRODUCTION - Introduction to Computer Systems – Computer Hardware – Computer Software – Programming Languages – Algorithmic Problem Solving – Building Blocks of a Program – Fundamentals of Python Programming – Syntax and Styles: Data types – Literals – Variable – Operators and Expressions.

Unit-II:

DATA COLLECTIONS AND LANGUAGE COMPONENT - Control Flow: If, While, For, Break, Continue, Pass Statements – Entry Controlled Loop – Exit Controlled Loop – Counter Controlled Loop – Condition Controlled Loop – Nested Loops – Sequences- Sample Programs.

Unit-III:

LISTS AND DICTIONARIES- Lists – Tuples: Need of Tuple - Sequence Unpacking - Methods. Dictionaries: Making a Dictionary – Basic Operations – Dictionary Operations – Sets – Iterators and Generators.

Unit-IV:

FUNCTIONS - Functions: Introduction – Defining Functions – Calling Functions – Passing Arguments – Keyword Arguments – Default Arguments – Required Arguments – Variable –length Arguments – Return Statement – Nesting of Passing Arguments – Anonymous Functions – Recursive Function – Scope of Local and Global Variable – Sample Programs – Modules.

Unit-V:

FILES AND DIRECTORIES - Files and Directory Access: Files and Streams – Opening a File – Reading/Writing Operations on a File – Other File Operations – Iterating through Files – Splitting Words – Serialization and De-serialization.

Outcomes

1. Students would become competent with data types and operators.
2. Students will have an overview on Data Collections and Language Component.
3. Students will design data structures like lists, tuples, sets and dictionaries.
4. Students are able to manage usage of functions.
5. Students are capable of handling files and its operations.

References :

1. Ch.Satyanarayana, M Radhika Mani, B N Jagadesh, "Python Programming", Universities Press (India) Private Ltd 2018.

2. Kenneth A. Lambert, B.L. Juneja, M. Arunachalam, G. Balakrishnan, "Problem Solving and Python Programming", Cengage Learning India Pvt. Ltd.

3. Allen B. Downey, "Think Python: How to Think like a Computer Scientist", II edition, Updated for Python 3, Shroff/O'Reilly Publishers, 2016 (http://greenteapress.com/wp/thinkpython/)

4. Robert Sedgewick, Kevin Wayne, Robert Dondero, ―Introduction to Programming in Python: An Inter-disciplinary Approach, Pearson India Education Services Pvt. Ltd., 2016.

5. Timothy A. Budd, ―Exploring Python‖, Mc-Graw Hill Education (India) Private Ltd., 2015.

6. Kenneth A. Lambert, ―Fundamentals of Python: First Programs‖, CENGAGE Learning, 2012.

MBABA1003A: FUNDAMENTALS OF PYTHON LAB

S.No	Name of the Program
1	Write a program to demonstrate data types in python.
2	Write a python program to perform arithmetic, logical and comparison operations.
3	Write a python program to find the maximum of given 2 numbers by accepting two numbers from user.
4	Write a python program to calculate the average of subjects and display the grade.
5	Write a python program that prompts the input from user and reverse its digits
6	Write a python program to find the sum of natural numbers up to n.
7	Write a python program to print all prime numbers in an interval
8	Write a program to create, append and remove lists
9	Write a program to demonstrate working with set
10	Write a python program to demonstrate iterators using iter().
11	Write a python program to find factorial within a range.
12	Write a program on file handling methods in python.

MBABA1004: ACCOUNTING FOR MANAGERS

Course Objectives :

1. To acquaint with accounting concepts, process and preparation of final accounts.
2. To get insight into different types of costs for Managerial Decision making.
3. To provide knowledge on different types of Budgets and Budgetary Control.
4. TO make the student understand Cost Analysis.
5. TO make the student understand Budgeting.

Unit-I:

Accounting for Management –Nature and Scope – Management Process and Accounting – Financial Accounting Vs Cost Accounting Vs Management Accounting – Role of Accountant in Modern Organization.

Unit-II:

Financial Accounting- Concepts and Conventions – Double Entry System – Preparation of Journal, Ledger and Trial Balance – Preparation of Final Accounts: Trading, Profit and Loss Account and Balance Sheet.(with adjustments). Cash flow statement and funds flow statement (theory only).

Unit-III:

Elements of Cost–Cost Sheet Preparation – Absorption Vs Marginal Costing –Cost –Volume – Profit Analysis – Cost Behaviour – Breakeven Analysis – Contribution Approach –Profit Planning.

Unit-IV:

Cost Analysis for Decision making – Decision Making Process – Decision Situations- Sales Volume Decisions – Pricing and Special Order Pricing – Make or Buy Decisions – Product Decisions- Addition, Deletion and Alteration of Product Mix – Plant Shutdown Decision.

Unit-V:

Budgeting – Types of Budgets – Financial Vs Operational Budgets – Short Term Vs Long Term Budgets –Sales Budgets – Purchase Budgets- Expenditure Budgets for Material, Labour and Overheads(Theory only) – Construction and Preparation of Cash Budget- Flexible Budget – Master Budget (Theory only) – Management Control and Budgeting – Performance Budgeting and Zero Based Budgeting.

Case study is compulsory

Outcomes

1. Students will gain knowledge on different branches of accounting and the role of accountant in the organisation.
2. Students are able to prepare final accounts.
3. Students can prepare statement of cost and can take managerial decisions.
4. Students can conduct cost analysis for decision making.
5. Students can prepare various types of budgets required by the organizations.

References :

1. I.M. Pandey, Management Accounting, Vikas Publishing House.
2. S.P.Jain & K.L.Narang, Accounting for Managerial Decisions, Kalyani Publishers.
3. Horngren, C.T., Introduction of Management Accounting,, Prentice Hall of India.
4. Khan and Jain, Management Accounting, Tata Mc Graw Hil.
5. Gupta and Sharma, Management Accounting, Kalyani Publishers, S.N. Maheswari, Accouting for Managers, vikas publications.

MBABA1005: QUANTITATIVE TECHNIQUES FOR MANAGERS

Course Objectives :

1. To use matrix methods for solving simultaneous linear equations useful for various managerial applications.
2. To apply classical techniques of differentiation and integration for business problems.
3. To understand the cause and effect relationship between different variables useful for business decision making.
4. To apply combinatorial methods and probability theory in inferential problems.
5. To explain large sample test for difference of proportions.

Unit-I:

Functions-linear, quadratic and logarithmic. Permutations and combinations. Matrices-Operations and simultaneous equations-Cramer's rule and inverse of a matrices. Differentiation (UV, U/V, Maxima and Minima) of simple functions (Trigonometric functions are excluded)

Unit-II:

Measures of Central Tendency, Measures of Dispersion, Correlation and regression analysis,

Unit-III:

Concept of probability, Probability rules, joint and marginal probability, Baye's theorem (Statements and their applications only) Probability distributions- Binomial, Poisson and Normal distributions. (Properties and their applications)

Unit-IV:

Sampling and sampling distributions, standard error of mean and proportion, Estimation- Point and interval estimation, Concepts of Testing of hypothesis, Large sample test for single proportion and single mean, small sample test for single mean.

Unit-V:

Large sample test for difference of proportions, difference of means, small sample test for difference of means, Chi-square test of goodness of fit and independence of attributes.

Course Outcomes

1. Knowledge of mathematical tools like calculus, matrix methods, permutations and combinations enable future managers with skills required for effective decision making.

2. Students can identify important variables in decision making and forecasting.

3. Student can understand the concepts involved in chance or random phenomena.

4. Get trained in using the methods of statistical inference in managerial contexts.

5. To explain large sample test for difference of proportions.

References :

1. J.K.Sharma, Business Mathematics (Theory & Applications) , Ane Books India, New Delhi.

2. K.Sivayya & K.Satya Rao, Business Mathematics, Technical publishers.

3. J.K.Sharma, Business Statistics, Pearson Publications, New Delhi.

4. S.P.Gupta, Statistical Methods, S.Chand and Company, New Delhi.

5. Levin and Rubin, Statistics for Management, Printece Hall of India.

6. Anand Sharma, Quantitative Techniques for Decision Making, Himalaya Publishing House,

MBABA1006: MANAGERIAL COMMUNICATION SKILLS

Course Objectives :

1. To help the students understand the principles of business communication for effective documentation and presentation
2. To make the students aware of the importance of communication models
3. To develop awareness on the role of various communication methods
4. To enable the students understand the importance of technology related to communication for addressing the business audience
5. To acquire and demonstrate effective report drafting and presentation skills.

Unit-I:

Role of Communication in Business- Objective of Communication- The Process of Human Communication & Media of Communication-Written Communication-Oral Communication-Silence- Developing Listening Skills- Improving Non–verbal Communication skills- Business Etiquette and its Cross Cultural Effects.

Unit-II:

Managing Organization Communication: formal and Informal Communication-Models for Inter Personal Communication – Johari Window and Transactional Analysis- Mastering the art of Conducting and giving Interviews. Group Discussion

Unit-III:

Managing Interpersonal Communication-Role of Perception, and motivation in Inter Personal Communication- Communication Styles - Barriers of Communication- Emotional intelligence in managerial communication

Unit-IV:

: Business Presentation Skills- significance of Business Correspondence- Essentials of Effective Business Correspondence- Business Letter and Forms- Presentation skills- Conducting Departmental Meetings-Use of Technology aided Business Communication Telephone Communication,Visual Communication, Audio Visual Communication, E-mail Messages- Tele and video conferencing.

Unit-V:

Report Writing : Meaning and Significance- Structure of Reports- Negative, Persuasive and Special Reporting; Informal Report- Proposals ;Formal Reports- Organization of Press Report-Media Management.

(Case Study is compulsory)

Outcomes

1. Students will be able to understand various managerial communication channels and networks.
2. Students will be able to acquire the capability to understand the impact of intra and interpersonal factors on communication.
3. Students will acquire effective verbal and non-verbal communication skills
4. Students will learn presentation skills for business correspondence
5. Students will acquire and demonstrate effective report drafting and presentation skills.

References :

1. C.S.Rayudu, Business Communication, HPH
2. Krizan, Merrier, Logan and Williams, Effective Business Communications, Cengage, New Delhi.
3. Penrose, Business Communication for Managers, Cengage, New Delhi.
4. Urmila Rai & S.M. Rai, Business Communication, Himalya Publishers,
5. Meenalshi Raman—Business Communication Oxford University Press.
6. K Bhardwaj, Professional Communication, IK Int Pub House, New Delhi.

MBABA1007: Fundamentals of Business Analytics and R programming

Course Objectives :

1. To understand Business Analytics and its importance
2. To know the domains of Business Analytics.
3. To be acquainted with the basics of R programming
4. To understand the functions in R
5. To understand Data visualization

Unit-I:

Introduction to Business Analytics – What is Business Analytics, Examples of Applications, Scope of Business Analytics, Data for Business Analytics, Models in Business Analytics, Business Analytics Process, Business Analytics Vs Data Science , Benefits of Business Analytics, Importance of Business Analytics , Skills required for Business Analyst

Unit-II:

Domains of Business Analytics - Marketing analytics, Financial Analytics, HR Analytics , Health Care Analytics, Supply Chain Analytics and analytics for government and non-profit organizations, Sports analytics and Web analytics.

Unit-III:

Basics of R programming - Installing R, Installing R Studio ,Installing R Packages – Assigning Values, Creating Vectors, Sequences, Data Types - Data Frames, Vectors - Vectors: Numeric, Characters, and Logical, Factors, Lists, Matrices ; Functions – sort, order , max, which.max, rank, Vector Arithmetics, Subsetting with logicals ,which, match , %in% , Descriptive Analytics – mean, mode, median, quantiles, range, standard deviation – Importance of Descriptive Analytics.

Unit-IV:

: Conditional Expressions, Defining functions, for loop, tidyverse – Manipulating dataframes – Adding a column with mutate, Subsetting with filter ,Selecting columns with select , The pipe %>%, Summarizing data,Pull, group_by, Sorting data frames, Nested sorting, top n, Importing data.

Unit-V:

Introduction to Data Visualization – What is Data Visualization? Data Visualization – Importance and Benefits – Data Visualization in practice - Basic plots – plot, hist, boxplot, image, scatter plot, ggplot2 – Basics of Regression.

Outcomes

1. Students would understand the importance of Business Analytics in today's context.
2. Students would understand the domains of business analytics
3. Students would be able to apply Basic R programming in Business Analytics
4. Students would use functions in R and understand their importance
5. Students would understand the importance of Data Visualization and implement Data Visualization using R programming

References :

1. Business Analytics – The Science of Data-Driven Decision Making – Mr. U. Dinesh Kumar – Wiley Publishers.
2. Business Analytics Using R - A Practical Approach - Dr. Umesh R. Hodeghatta and Umesha Nayak
3. Introduction to Data Science – Rafael A. Irizarry
4. Essentials of business analytics

Cochran, Anderson, Williams and others, Cengage learning publication.

5. Business Analytics for Managers – Gert H.N. Laursen and Jesper Thorlund – Wiley Publishers.

MBABA1007A: Fundamentals of Business Analytics and R programming Lab

Programs for Lab

1) Write a program to install R package
2) Write a program to learn implementing expressions in R
3) Write a program to print sum of first n numbers by inputting the value of n
4) Write a R program to implement Data Frames
5) Write a R program to implement Lists
6) Write a R program to implement Matrices
7) Write a R program to implement Vectors
8) Write a R program for sorting
9) Write a R program for ordering
10) Write a R program to find the maximum of a series
11) Write an R program to find rank for a series
12) Write an R program for Vector Arithmetic
13) Write an R program to subset with logicals
14) Write an R program to demonstrate the use of "which"
15) Write an R program to demonstrate the use of "max"
16) Write an R program to demonstrate the use of "%in%"
17) Write an R program to implement Descriptive Analytics
18) Write an R program to implement Conditional Expressions
19) Write an R program to demonstrate the use of for loop
20) Write an R program to add a column with mutate
21) Write an R program to demonstrate the use of filter
22) Write an R program to select columns using select command
23) Write an R program to demonstrate the use of pipe %>%

24) Write an R program to summarize data

25) Write an R program to pull data

26) Write an R program to implement the usage of group_by

27) Write an R program for sorting data frames

28) Write an R program for Nested Sorting

29) Write an R program for selecting the top n

30) Write an R program to import Data

31) Write an R program to demonstrate the usage of plot

32) Write an R program to demonstrate the usage of hist

33) Write an R program to demonstrate the usage of boxplot

34) Write an R program to demonstrate the usage of image

35) Write an R program to demonstrate the usage of scatterplot

36) Write an R program to demonstrate the usage of ggplot2

37)) Write an R program to implement Regression.

MBABA1008 - ADVANCED MS- EXCEL

Course Objectives :

1. To introduce the fundamental features and uses of MS Excel for managing and analyzing data effectively.
2. To develop students' skills in working with multiple worksheets, charts, and pivot tables for comprehensive data presentation.
3. To enhance students' knowledge of Excel formulas and functions, with a focus on advanced functions like VLOOKUP, HLOOKUP, and conditional formulas.
4. To provide an understanding of advanced data management techniques, such as data validation, macros, and object linking.
5. To equip students with statistical analysis tools within Excel for conducting hypothesis testing, ANOVA, and Chi-Square tests.

Unit-I:

Introduction. Uses and Applications of MS-Excel. Menu bar, Navigating tasks and entering basic data into Excel: Formatting Dates and Time. Spell check, Undo and Redo buttons, creating and modifying tables. Sorting and filtering tables. Creating basic Excel formulas. Moving and copying data: Cut, copy & paste, Fill handle, Autofill, Flash fill, Smart Tags. Basic Excel Formatting.

Unit-II:

Organizing and working with Multiple worksheets. Viewing Worksheets: Showing formulas and references, tracing precedents and dependents, Grouping rows and columns, Cell comments, Headers and footers, Introduction to basic charts: Creating and defining a chart, Positioning, rotating and resizing charts. WordArt in charts, Editing charts in Excel, Changing Types, Formatting a data series, Multiple series charts, and Sparkline charts. Pivot Tables.

Unit-III:

Formulas & Functions: Typing formulas and functions, Cell references and reference formulas, Autosum, The functions Library, Average, date and time functions. Advanced Functions: Viewing available Excel functions, Basic “IF” conditional formulas, Nesting “IF” statements, Concatenate and “IF” functions with concatenate, ISBLANK function, COUNTBLANK Function, Look Up functions (Vlook up, Hlookup, Match and Index), What-if analysis, Text to Columns.

Unit-IV:

Data Views, Layouts and Rules: Transposing Data, Validations for length and drop-down list, Custom Views. Introduction to Macros: Developer Tools, Saving Macros, Absolute vs. Relative Macros, Recording Macros, Creating Macro buttons. Additional tools in advanced Excel: Embedding and linking, Editing and

embedding objects, Editing a linked object, Linking as an icon, and Protecting worksheets.

Unit-V:

Statistical Analysis in Excel: Descriptive Statistics, Hypothesis Testing, Analysis of Variance (ANOVA), Chi-Square test for independence.

(Case Study is compulsory)

Outcomes

1. Students will be able to navigate and use Excel's basic functions, including creating formulas, modifying tables, and managing data entry with ease.
2. Students will gain proficiency in working with multiple worksheets, creating charts, and employing pivot tables for dynamic reporting and data visualization.
3. Students will demonstrate the ability to use advanced Excel functions, such as IF statements, lookup functions, and What-If analysis, to solve complex problems.
4. Students will master the use of macros for automating repetitive tasks, ensuring efficient data management and increased productivity.
5. Students will be capable of applying statistical tools in Excel for data analysis, including performing descriptive statistics and conducting hypothesis tests like ANOVA and Chi-Square tests.

MBABA1009 - Project on Contemporary Relevant Issues

Credits : 2

Total Marks : 50
(Project Report –25 Marks, Group presentation –10 Marks and Individual Viva –15 Marks)

Course Objectives:

1. To enable students to identify and analyze socially relevant issues in society and their implications.
2. To foster critical thinking, problem-solving, and creativity through interdisciplinary research and project-based learning.
3. To develop students' ability to propose innovative and practical solutions to real-world problems of the society.
4. To enhance collaboration, communication, and presentation skills through teamwork.
5. To cultivate a sense of social responsibility and an awareness of the impact of their contributions on society.

The Contemporary Project is an integral part of MBA – Business Analytics curriculum, designed to immerse students in real-world societal challenges and inspire them to become change-makers. In this project, students identify pressing issues such as climate change, mental health, gender inequality, digital privacy, or any other relevant topic. Through rigorous research and collaboration, they analyze the causes and consequences of the issue and propose actionable solutions.

This experiential learning initiative encourages students to apply theoretical knowledge to practical contexts, integrating insights from multiple disciplines. Guided by faculty mentors, students engage with stakeholders, collect and analyze data, and develop solutions that are innovative, feasible, and impactful.

The project not only hones critical thinking, creativity, and research skills but also emphasizes teamwork, leadership, and communication. By presenting their findings and recommendations to an audience of peers, faculty, and external stakeholders, students gain invaluable experience in public speaking and advocacy.

Ultimately, the Contemporary Project equips students with the knowledge, skills, and mindset to address the complexities of modern society and contribute meaningfully to creating a sustainable and equitable future.

Course Outcomes:

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

1. Analyze and articulate key societal challenges and their underlying causes using appropriate research methodologies.
2. Design and implement innovative projects that address specific contemporary issues in society.
3. Propose innovative and practical solutions to real-world problems of the society.
4. Demonstrate effective communication and teamwork skills by collaborating with peers, mentors, and stakeholders.
5. Exhibit a heightened sense of civic awareness and responsibility through active engagement with societal challenges.

MBA -BA- II SEMESTER

COURSE CODE	II SEMESTER COURSES	L	T	P	C
MBABA2001	Financial Management	4	1	0	4
MBABA2002	Marketing Management	4	0	0	4
MBABA2003	Human Resource Management	4	0	0	4
MBABA2004	Business Environment and Law	4	0	0	4
MBABA2005	Econometric Research Methods using SPSS	3	0	0	3
MBABA2005A	Econometric Research Methods using SPSS -LAB	0	0	2	1
MBABA2006	Advanced Python Programming	3	0	0	3
MBABA2006A	Advanced Python Programming-LAB	0	0	2	1
MBABA2007	DBMS (SQL)	3	0	0	3
MBABA2007A	DBMS (SQL)-LAB	0	0	2	1
MBABA2008	Project (on Python / SQL)	0	0	0	2
Sub Total					**30**

MBABA2001: FINANCIAL MANAGEMENT

Course Objectives :

1. To enable the students to understand the various tools of financial analysis.

2. To acquire knowledge on financing, investment and dividend decisions.

3. To gain an understanding on working capital management.

4. To manage short-term funds of the firm.

5. To frame dividend policy to a firm.

Unit-I:

Nature, Scope and Objectives of Financial Management-Profit Maximization Vs Wealth Maximization. Finance Functions – Financial Planning and Forecasting - Role of Financial Manager. Financial statement analysis and interpretation – Types of Analysis – Objectives, Tools of Analysis- Comparative and common size statements, Ratio Analysis: Objectives, Uses and Limitations. Classification of Ratios - Liquidity, Profitability, Financial and Turnover Ratios. (Theory and problems).

Unit-II:

Financing Decision: Leverages – EPS-EBIT Analysis –Cost of Capital – Weighted Average Cost of Capital. Capital Structure, Factors Affecting Capital Structure, Theories of Capital Structure. (Theory and problems).

Unit-III:

Investment Decision: Nature and Significance of Investment Decision- Estimation of Cash Flows – Capital Budgeting Process – Techniques of Investment Appraisal: Pay Back Period; Accounting Rate of Return, Time Value of Money- Discounted Cash Flow Techniques –Net Present Value, Profitability Index and Internal Rate of Return. (Theory and problems).

Unit-IV:

Working Capital Decision: Meaning – Classification and Significance of Working Capital – Components of Working Capital – Estimation of working capital requirement-Cash Management Models – Cash Budgeting – Accounts Receivables – Credit Policies – Inventory Management. . (Theory and problems).

Unit-V:

Dividend Decision: Meaning and Significance – Theories of Dividend – Determinants of Dividend – Dividend policy – Bonus Shares – Stock Splits. . (Theory and problems).

Case Study is Compulsory

Outcomes

1. Students would become competent in analyzing the financial performance of an organization.
2. Students would be able to determine optimal capital structure to an organization.
3. Students would be able to appraise long-term investment decisions of the organization.
4. Students would be able to manage short-term funds of the firm.
5. Students would be capable of framing dividend policy to a firm.

References :

1. Pandey IM, Financial Management, Oxford University Press.
2. Prasanna Chandra, Financial Management, Tata McGraw Hill.
3. Khan & Jain, Financial Management, Tata McGraw Hill.
4. James C.Van Horne, Financial Management & Policy, Prentice Hall of India.
5. Sharma R.K & Gupta Shashi, Financial Management, Kalyani Publishers.
6. Madan Mohan, G.Syamalarao, Sheela, Financial Management, Himalaya Publishing House.

MBABA2002: MARKETING MANAGEMENT

Course Objectives :

1. To develop an understanding on segmentation, targeting of markets and positioning of products and services based on scientific marketing research.
2. To introduce the students to a range of concepts relating to product and brand management at regional, national and global perspective.
3. To impart knowledge about pricing and placing strategies.
4. To make the students understand all the promotional mix elements as well as integrated marketing communication process.
5. To give an orientation towards ethical Marketing Practices.

Unit-I:

Introduction to Marketing Management: Definition, Importance and Scope of Marketing; Core Concepts of Marketing; Company Orientations towards Marketing; Marketing Process; Selling Vs Marketing; Elements of Marketing Mix; Competitive Analysis and Strategies; Marketing Information System: Need, Importance and Structure.

Unit-II:

Segmentation, Targeting and Positioning (STP): Basis for Segmentation, STP process, Levels of Segmentation, Patterns of Targeting and Positioning strategies. Consumer behavior: Importance, Factors affecting Consumer Behavior, Consumer Decision Making Process; Marketing Research Process.

Unit-III:

Product strategies: Goods Vs Services, Product Levels, Product Hierarchy, Product Classification-, Consumer Goods, Industrial Goods, Product Mix Decisions, Product Line Decisions, New Product Development process, Product Life Cycle strategies. Branding: Definition, Types and Branding process; Components of Labeling, Packaging types and Process.

Unit-IV:

Pricing and Placing Strategies: Meaning, Objectives, Process, Methods, and Strategies. Placing Strategies, Distribution channel: Importance, Functions, Levels of Channels, Types of Intermediaries and their role.

Unit-V:

Promotional Strategies: Integrated Marketing Communication (IMC) Process, Elements of Promotional Mix- Advertising, Publicity, Sales Promotion, Personal Selling, and social media marketing and Direct Marketing; Emerging Trends in Marketing, Ethics in Marketing, Introduction to Digital Marketing.

Case study is compulsory

Course Outcomes

1. Student can assess the level of competition in the specific industry
2. Students will be able to segment, target and position the products/ services by conducting consumer behaviour studies.
3. Students will develop the ability to design marketing mix strategies for any product or services.
4. Student will design optimum promotional mix elements to promote a product / service.
5. Student will be oriented towards ethical Marketing Practices.

References :

1. Philip Kotler, Marketing Management, Pearson Education.

2. W.J. Stanton, Michael J. Etzel & Bruce J. Walker, Fundamentals of Marketing, McGraw Hill International.

3. Ramaswamy V.S. & Namakumari S, Marketing Management: Global Perspective – Indian Context, Macmillan.

4. Tapan K Panda, Marketing Management, Excel Books.

5. S.A.Sherlekar, R.Krishnamoorthy, K.S.Bose & K.V.V.Murali Someswara Rao, Marketing Management, Himalaya Publishing House.

MBABA2003: HUMAN RESOURCE MANAGEMENT

Course Objectives :

1. To gain knowledge, skill that is required by today's HR professionals and to enable students to effectively contribute to dynamic organisations.
2. To understand the significance of human resource planning and the process of recruitment and selection.
3. To comprehend the processes of Human Resource Development and performance management system.
4. To enable the students to understand the components of compensation and bases for wage fixation.
5. To acquaint the student with grievance redressal mechanism and dispute settlement machinery for maintaining harmonious industrial relations.

Unit-I:

Introduction and significance of HRM, Scope, Functions of HRM, changing environment of HRM and challenges.

Unit-II:

Human Resource Planning, Objectives, Factors influencing Human Resource Planning, HR Planning Process, Job Analysis, Recruitment, Process and Sources of Recruitment; Selection, Process of selection and Techniques, Errors in selection ,Retention of employees

Unit-III:

Human Resource Development: Training Vs Development, Need, Process of Training, Methods of Training, Training Evaluation, Development techniques, need for development, Career Planning, Performance Appraisal System, Methods of Appraisal, and Common errors.

Unit-IV:

Compensation Management, Concepts and Components of wages - Factors influencing Wage fixation, Job evaluation – Methods of payment, Incentives and Fringe benefits.

Unit-V:

Managing Industrial Relations – Components of IR - Trade Unions, Functions of Trade Union – Employee Participation – Importance and Schemes, Collective Bargaining – Grievance Redressal, Industrial Dispute – Settlement machinery.

Case Study is compulsory

Outcomes

1. Student will be able to understand the functions in the current scenario

2. Student is able to comprehend the HR challenges in the dynamic business environment

3. Student would be competent to deliver the HR functions for smooth running of business activity.

4. Student is able to understand different components of compensation structure along with benefits.

5.Student will be able to initiate and implement appropriate mechanisms to maintain industrial peace.

References :

1. P.Subba Rao, Human Resource Management Himalaya, Mumbai.

2. Aswathappa.K.Human Resources and Personnel Management, Tata MC Graw Hill.

3. Monappa.A & Saiyadain. M. Personnel Management, Tata McGraw Hill

4. Gary Dessler, Human Resources Management. Pearson publication

5. C.B.Mammoria, Personnel Management.

MBABA 2004 : BUSINESS ENVIRONMENT AND LAWS

COURSE OBJECTIVES:

1. To enable students to understand business environment through environmental scanning and analysis.
2. To develop an understanding on various economic policies and Acts governing business activities.
3. To equip the students with a managerial perspectives of international business and trade blocks that affect foreign trade.
4. To provide an overview on important laws, bearing on the conduct of business in India.

Unit-1: Business Environment: Concept and Significance – Environmental scanning-Internal and External factors (Socio-Cultural, Political, legal, Technological, Ecological, Global) Influencing Business. Emerging trends in Business Environment.

Unit-2: Indian Economic Environment –NITI AAYOG, Industrial Policy Resolutions –New Industrial Policy 1991, Competition Act 2002. . Monetary policy, fiscal policy and FEMA. Industrialization in India: Role of Public Sector in India. Privatization; Public Private Partnership; MSMEs – Role, Challenges.

Unit-3: International Business: Rationale for International Business, Drivers of Globalization. Regional integration-Trade blocks, WTO-Genesis and functions. International Market Entry Strategy, role of MNCs in economic development. Balance of Payments: Components of BOP, Disequilibrium in BOP, Methods of correction.

Unit-4: Indian Contract Act – 1872 Elements of valid contract: Offer and Acceptance, Consideration Capacity to contract, Free consent, Coercion, undue influence, Misrepresentation, fraud, Legality of the object - classification of contract-performance of contract - Discharge of contract – breach of contract, Information Technology Act 2000

Unit-5:. Companies Act, 2013: Company meaning & characteristics and kinds, Registration & Incorporation - Memorandum of Association, Doctrine of Ultravires. Articles of Association-Prospectus – Shares - Directors: appointment, removal, power & duties, Meetings - Winding up.

Course Outcomes:

1. Students are able to assess the impact of various internal and external environmental factors influencing business decisions.
2. Students can appraise the impact of various Indian economic policies on business.
3. Students can perceive the role of trade blocks, WTO and MNCs and also equipped with the mechanism of balance of payments.
4. The student will be able to understand creation of valid contracts to handle disputes/legal challenges pertaining to organization in conduct of business. The students also understand the

legal challenges of transactions done through the electronic and other means of electronic communication

5. The students will be able to comply the provisions of Companies Act for the smooth running of company.

REFERENCES

1. Ashwathappa (2011) Essentials of Business Environment. Bombay: Himalaya Publishing House

2. Francis Cherunilam (2007) Business Environment. Bombay: Himalaya Publishing House, Bombay

3. Agarwal, Raj (2002) Business Environment, New Delhi: Excel Books

4. Mathew M.J. (2003), Business Environment: A study of socio cultural, economic and legal environment in business, Jaipur RBSA Publishers

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MBABA2005: ECONOMETRIC RESEARCH METHODS (USING SPSS)

Course Objectives:

1. To familiarize students with the basic concepts of econometrics and various kinds of data and Scales.
2. To analyze and estimate the theoretical and practical aspects of simple and multivariate regression.
3. To enable the students to examine tests of significance of estimates.
4. To enable students to examine multi-collinearity, auto correlation and heteroscedasticity.
5. To estimate and interpret the time series models.

UNIT-I: **INTRODUCTION TO ECONOMETRIC RESEARCH**

Data-Cross-Sectional data, Time Series data and Panel Data, types of research, . Research process, , motivation for research, Defining the research problem, formulating the hypothesis , research designs-formal and informal, Methodology of Econometrics research. Introduction to SPSS, Measurement and Scaling- nominal, ordinal, interval and ratio scales, Guttmann, Likert and Differential scales.

UNIT II: **TWO-VARIABLE REGRESSION MODEL**

Method of Ordinary Least Squares- Assumptions underlying the method of least squares- - Gauss Markov Theorem-Coefficient of determination - R^2 and adjusted R^2 -Hypothesis Testing-Testing the overall significance of the regression model- Functional forms of regression models: log-log, log-lin and lin-log models- Dummy variable-Dummy variable trap- Piecewise linear regression.

UNIT-IIII: **PROBLEMS OF OLS**

Multicollinearity- Nature, consequences, detection, and remedial measures-Autocorrelation-Nature, consequences, detection, and remedial measures- Heteroscedasticity-Nature, consequences, detection and remedial measures.

UNIT-IV: **MULTIVARIATE AND BINARY CHOICE MODELS**

Analysis of Variance (ANOVA). Factor analysis, Discriminant analysis, Logit Model - Probit Model and Tobit Models.

UNIT-V: TIME SERIES AND RESEACRH REPORT

Introduction to Time Series, Process Generating Time Series, Tests for Non-Stationarity-Introduction to Panel data, Panel Data-Test for Stationarity, Process of writing Research Report.

Course Outcomes:

1. Understand the basic concepts of econometrics, Interpretation of the descriptive statistics and correlation
2. Apply and Estimate the simple and multiple regression models to know the relations among economic variables which have a direct impact on world economic scenario.
3. Diagnose multi-collinearity, auto correlation and heteroscedasticity to select correct and better econometric models.
4. Decision about the statistical significance of individual explanatory variable and also overall models.
5. Understanding the estimation and interpretation of the univariate time series models.

Reference Books:

1. Damodar Gujarati – "Basic Econometrics"., McGraw - Hill, 2007.
2. Joseph F. Hair Jr, William C. Black, Barry J. Babin & Rolph E Anderson – Multivariate Data Analysis -7 th Edition Pearson
3. Koutsoyiannis A. – "Theory of Econometrics".
4. William.H. Greene – "Econometric Analysis".

MBABA 2006 : ADVANCED PYTHON PROGRAMMING

Course Objectives :

1. To understand the significance of juypter notebook.
2. To acquire knowledge on Object Oriented Programming.
3. To understand concepts of numpy.
4. To gain knowledge on pandas..
5. Expose students to application of datamatplotlib.

Unit-I:

Introduction: Introduction to python, ,juypter notebook, python functions, python types & sequences, python more on strings, Reading and Writing CSV files.

Unit-II:

Object Oriented Programming OOP in Python: Classes, self-variable, Methods, Constructor Method, Inheritance, Overriding Methods, and Data hiding**.**

Unit-III:

Introduction to Numpy: Creating array, array indexing, array slicing, array shaping, reshape, iterating, join, split, search, sort, and filter.

Unit-IV:

Introduction to Pandas: Pandas series, data frames, read CSV files using pandas, analysing data, cleaning data, working on empty cells, handling wrong format, wrong data, removing duplicates, and pandas plotting.

Unit-V:

Datamatplotlib: Introduction, pyplot, plotting, Markers, Line, Labels, Grid, Subplot, Scatter, Bars, Histogram, Pie chart.

Outcomes:

1. Students will be familiarized with the basics of Python language.
2. Students will understand object-oriented programming.

3. Students will gain knowledge on Python numpy.

4. Students will have an understanding about pandas.

5. Students will develop knowledge on datamatplotlib.

References :

Text Books:

1.Python Programming: A Modern Approach, VamsiKurama, Pearson.

2. Learning Python, Mark Lutz, Orielly.

Reference Books:

1. Introduction to Python, Kenneth A. Lambert, Cengage.

2. NPTEL Videos.

MBABA2006A: ADVANCED PYTHON PROGRAMMING LAB

Write a program to

1. Read and display employee information by using calss and object.
2. Read student data, then display data using constructors.
3. Demonstrate method overriding.
4. Demonstrate constructor overriding.
5. Single inheritance
6. Multi-level inheritance
7. Multiple Inheritance
8. Create a NumPy object by using the function
9. Check dimensions of an array in numpy
10. Access elements from 2-D arrays using indexing
11. Slicing OF 2-D Arrays
12. Reshaping OF Arrays
13. Create Labels in Pandas Using Index Arguments
14. Create a DataFrame from two Series
15. Read CSV Files in Pandas.

MBABA 2007: Data Base Management System (SQL/)

Course Objectives :

1. To gain expertise in Database Systems and Data Models.

2. To understand and implement Relational Model and Normalization.

3. To have knowledge on Entity Relationship Model and acquaint with Basic SQL.

4. To understand and implement SQL.

5. To understand and implement PL/SQL.

Unit-I:

Overview of Database Systems: Introduction: Database system, Characteristics (Database Vs File System), Database Users, Advantages of Database systems, Database applications.

Data Models: Introduction; types of data models, Concepts of Schema, Instance and data independence; Three tier schema architecture for data independence; Database system structure, environment, Centralized and Client Server architecture for the database.

Unit-II:

Relational Model: Introduction to relational model, Codd's rules, concepts of domain, attribute, tuple, relation, constraints (Domain, Key constraints, integrity constraints) and their importance , concept of keys (super key, candidate key, primary key, surrogate key, foreign key) , relational Algebra & relational calculus.

Normalization: Purpose of Normalization or schema refinement, concept of functional dependency, normal forms based on functional dependency(1NF, 2NF and 3 NF), Boyce-codd normal form(BCNF)

Unit-III:

Entity Relationship Model: Introduction, Representation of entities, attributes, entity set, relationship, relationship set, constraints, sub classes, super class, inheritance, specialization, generalization using ER Diagrams,

BASIC SQL: Database schema, data types, DDL operations (create, alter, drop, rename), DML operations (insert, delete, update), basic SQL querying (select and project) using where clause, arithmetic & logical operations, aggregation, grouping, ordering.

Unit-IV:

SQL: Nested queries/ sub queries, implementation of different types of joins, SQL functions(Date, Numeric, String, Conversion functions), Creating tables with relationship, implementation of key and integrity constraints, views, relational set operations , Transaction Control Language: commit, Rollback, Savepoint , DCL :Grant, Revoke

Unit-V:

PL/SQL: Introduction , Structure , Control Structures , Cursors , Procedure , Function , Packages , Exception Handling ,Triggers.

Transaction processing Concepts : Transaction State, Implementation of Atomicity and Durability, Concurrent Executions, Serializability, Recoverability, Implementation of Isolation, Testing for Serializability, Failure Classification, Storage, Recovery and Atomicity, Recovery algorithm.

Course Outcomes:

1. Students will develop ability to gain expertise in Database Systems and Data Models.

2. Students will develop ability to understand and implement Relational Model and Normalization.

3. Students will develop ability to have knowledge on Entity Relationship Model and acquaint with Basic SQL.

4. Students will develop ability to understand and implement SQL.

5. Students will develop ability to understand and implement PL/SQL

MBABA 2008: Project (on Python / SQL)

Credits :2

Total Marks : 50

(Project Report – 30 Marks, Project Viva – 20 Marks)

Course Objectives:

1. To provide students with hands-on experience in programming languages and tools such as R, Python, and SQL for data analysis and problem-solving.
2. To develop proficiency in designing and implementing computational solutions for real-world challenges.
3. To enhance students' understanding of data manipulation, visualization, and database management.
4. To foster the application of programming skills to interdisciplinary domains and industry-relevant problems.
5. To Communicate technical findings effectively through reports, visualizations, and presentations.

The Technical Project is a core component of the curriculum, aimed at equipping students with advanced programming and data management skills. Students are required to work on projects involving R, Python, and SQL, focusing on solving real-world problems in domains such as data science, machine learning, web development, or database management.

Through this project, students learn to analyze complex datasets, write efficient code, and manage databases to derive meaningful insights. They explore advanced libraries and frameworks, leveraging their functionalities to build innovative solutions. Faculty mentors guide students in planning, executing, and presenting their projects, ensuring that they meet academic and industry standards.

This project promotes a blend of technical expertise and creativity, encouraging students to tackle challenges independently and collaboratively. By the end of the project, students are well-prepared to handle industry-specific programming tasks, making them competitive candidates for technical roles in their chosen fields.

Course Outcomes:

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

1. Demonstrate proficiency in using R, Python, and SQL for data processing, analysis, and visualization.
2. Design and implement solutions for real-world challenges.
3. Learn tools for data manipulation, visualization, and database management.
4. Apply programming skills to interdisciplinary domains and industry-relevant problems.
5. Communicate technical findings effectively through reports, visualizations, and presentations.

MBA -BA- III SEMESTER

COURSE CODE	III SEMESTER COURSES	L	T	P	C
MBABA3001	Operations Research	4	0	0	4
MBABA3002	Business Analytics Mining and Modeling using R	3	0	0	3
MBABA3002A	Business Analytics Mining and Modeling using R-LAB	0	0	2	1
MBABA3003	Artificial Intelligence and Machine Learning	3	0	0	3
MBABA3003A	Artificial Intelligence and Machine Learning-LAB	0	0	2	1
MBABA3004	HR Analytics	3	0	0	3
MBABA3004A	HR Analytics-LAB	0	0	2	1
MBABA3005	Finance Analytics	3	0	0	3
MBABA3005A	Finance Analytics-LAB	0	0	2	1
MBABA3006	Marketing Analytics	3	0	0	3
MBABA3006A	Marketing Analytics-LAB	0	0	2	1
Any one from					
MBABA3007	Supply Chain Analytics	3	0	0	3
MBABA3007A	Supply Chain Analytics-LAB	0	0	2	1
MBABA3008	Social and Web Analytics	3	0	0	3
MBABA3008A	Social and Web Analytics-LAB	0	0	2	1
Sub Total					**28**

MBABA3001: OPERATIONS RESEARCH

Course Objectives :

1. To formulate and solve linear programming problem and its variants (Transportation problems, Assignment problems)**.**
2. To formulate and solve multistage recursive decision making problems.
3. To determine optimal strategies in competitive situations.
4. To determine optimum scheduling of activities of a project with limited resources.
5. To schedule activities of a project with limited resources.

Unit-I:

Importance and Scope of Operations Research, Linear Programming – Graphical Method, Simplex Method, concept of artificial variables. Dual of a Linear Programming Problem and its applications.

Unit-II:

Transportation Problem, Assignment Problem, Theory of queues – M/M/I model, Replacement problems (without change in money value).

Unit-III:

Dynamic Programming – Applications of Dynamic Programming (Capital Budgeting, Production Planning, Solving Linear Programming Problem). Integer Programming – Branch and Bound method (Inventory model).

Unit-IV:

Game Theory – Two Person Zero Sum Games, Pure Strategies, Mixed Strategies, Dominance Principle. Graphical, Algebraic Method and Linear Programming Approach of solving two-person zero sum games. Simulation – Simulation Inventory and Waiting Lines.

Unit-V:

Project Management – Network Analysis-PERT and CPM, Crash Time and Crash Cost Trade Off, Resource Levelling and Resource Allocation.

Course Outcomes

1. Students will be able to formulate and solve linear programming problems used in managerial contexts.
2. Students will be able to solve problems involved in logistic situations.
3. Students will be able to formulate and solve multistage decision making problems
4. Students will be able to to solve games of strategies.
5. Students will be able to schedule activities of a project with limited resources.

References :

1. Kanti Swaroop, Manmohan & P.K.Gupta, Operations Research, Sultan Chand andSons, New Delhi.
2. S.D.Sharma, Operations Research, Kedarnath Sahai and Company.
3. V.K.Kapoor, Operations Research for Management, Sultan Chand and Sons, New Delhi.
4. Pannerselvam, Operations Research, Printece Hall of India, New Delhi.
5. Richard Bronson & Govindasami Naadimuthu, Schaum's outline of Theory and Problems in Operations Research, Tata McGraw Hill publishers.
6. H.A.Taha, Introduction to Operations Research, Pearson publishers.

MBABA3002: **BUSINESS ANALYTICS - MINING AND MODELING USING R**

Objectives:

1.To understand Business Analytics – Mining and Modeling.

1. To be acquainted with Probability and Exploratory Techniques in R.
2. To understand and implement Linear Regression in R
3. To understand and implement Logistic Regression in R
4. To understand and implement concepts in the latest development areas of Business Analytics.

UNIT I – BUSINESS ANALYICS MINING AND MODELING INTRODUCTION- Importance of Business Analytics in present scenario– Application in Industry – Data Mining – Need and Importance – Application of Data Mining in Industry - Modeling – Need and Importance – Application of Data Modeling in Industry – Business Analytics and Ethical Decision Making- Solving global, economic and legal problems with Analytics.

UNIT – II - PROBABLITY AND EXPLORATORY TECHNIQUES: –Probability – Binomial, Normal and Poisson – Implementation in R , Exploratory Techniques using R – Bar plots, Histograms and Scatter plots and their Applications.

Unit – III - LINEAR REGRESSION– Understanding of Linear Regression, Practical Examples, Estimation in R, Examples of Standard Linear Regression in R – Modeling using Linear Regression in R.

Unit – IV – LOGISTIC REGRESSION- Understanding of Logistic Regression, Practical Examples, Estimation in R , Examples of Standard Logistic Regression in R – Modeling using Logistic Regression in R.

Unit – V – BUSINESS ANALYTICS APPLICATIONS - Naïve Bayesian Analysis, Discriminant Analysis, Decision Trees , Neural Networks , Big Data – Types, Characteristics and Advantages, Latest Development Areas of Business Analytics , Implementation of Analytics for Value Based Leadership

Course outcomes.

1. Students would gain an understanding on Business Analytics - Mining and Modeling.
2. Students would learn to implement Probability, Exploratory and Data Visualization in R
3. Students would learn to implement Linear Regression in R
4. Students would learn to Implement Logistic Regression in R
5. Students would Understand and be acquainted with the latest development areas of Business Analytics

REFERENCES

1) DATA MINING FOR BUSINESS ANALYTICS - Concepts, Techniques, and Applications in R(2018)

Galit Shmueli Peter C. Bruce Inbal Yahav Nitin R. Patel Kenneth C. Lichtendahl, Jr.

2) Data Mining and Business Analytics with R(2013) by Johannes Ledolter

3) Business Analytics – D Bag first published 2017 by Routledge

MBABA3002A: **BUSINESS ANALYTICS - MINING AND MODELING USING R LAB**

S. No.	Experiment (Exercise)
I.	Implementing given Custom Functions, operations on Arrays, Lists, Matrices & Data frames
II.	Graphing plots (Bars, Histograms & Scatter plots) using given data.
III.	Analyse the results by solving the given problems using probability distributions
IV.	Perform statistical tests on the given data
V.	Plot and analyze the distributions of the given data
VI.	Modeling given data on 'Çars' using Linear Regression
VII.	Modeling given data 'Air quality' using Linear Regression
VIII.	Modeling given data on Motor Vehicles dataset using Logistic Regression
IX.	Modeling given data on College Admissions dataset using Logistic Regression
X.	Modeling given data using Naïve Bayesian Classifiers
XI.	Modeling given data using Discriminant Analysis
XII.	Modeling given data using Decision Trees
XIII.	Modeling given data using Neural Networks

MBABA3003: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Objectives:

1. To understand Artificial Intelligence
2. To understand Machine Learning
3. To understand Supervised and Unsupervised Machine Learning
4. To understand other types of learning like Analytical Learning and Reinforcement Learning.
5. To understand Ethics in AI and future of AI and Machine Learning.

UNIT I: INTRODUCTION TO ARTIFICIAL INTELLIGENCE

Introduction to AI – What is Artificial Intelligence – Impact and Examples of AI – Applications of AI – Cognitive Computing

UNIT II: INTRODUCTION TO MACHINE LEARNING

Human Learning - Types of Human Learning, Machine Learning - Types of Machine Learning, Applications, Tools, Issues, Techniques and Training – Deep Learning – Neural Networks – Key Fields of Application in AI and Machine Learning – Natural Language Processing.

UNIT III: SUPERVISED AND UNSUPERVISED MACHINE LEARNING

Supervised Versus Unsupervised Machine Learning – Supervised Learning – Regression – Linear Regression – Regression with Multiple Input Variables **–** Classification Model, Classification Learning Steps, , Classification Algorithms. Logistic Regression -Unsupervised Machine Learning – Clustering

UNIT IV: OTHER TYPES OF LEARNING

Analytical Learning, Reinforcement Learning**,** Neural Networks, Decision Trees

UNIT V: ETHICS IN AI AND FUTURE OF AI AND MACHINE LEARNING

Defining AI Ethics - Exploring Today's AI Concerns – Exploring AI and Ethics – AI Ethics, Regulations and Governance – Future with Artificial Intelligence and Machine Learning

COURSE OUTCOMES:

1. Artificial Intelligence - Importance and Applications would be understood.
2. Machine Learning - Importance and Applications would be understood.
3. Can implement Supervised and Unsupervised Machine Learning
4. Can understand other types of learning like Analytical Learning and Reinforcement Learning.
5. Ethics in AI and future of AI and Machine Learning would be understood.

RECOMMENDED COURSES FOR THIS SUBJECT ON COURSERA

1) INTRODUCTION TO ARTIFICIAL INTELLIGENCE(AI) – IBM (COURSERA – www.coursera.org)
2) MACHINE LEARNING SPECIALIZATION – STANFORD UNIVERSITY (COURSERA – www.coursera.org)

There are three sub-courses under this course

(A) **Supervised Machine Learning: Regression and Classification**

(B) **Unsupervised Learning, Recommenders, Reinforcement Learning**

(C) **Advanced Learning Algorithms**

REFERENCES:

1. Kevin Night and Elaine Rich, Nair B., "Artificial Intelligence (SIE)", Mc Graw Hill2008

2. Dan W. Patterson, "Introduction to AI and ES", Pearson Education, 2007

3. Deepak Khemani, A First Course in Artificial Intelligence, McGraw Hill Education (India), 2013.

4.Saikat Dutt, Subramanian Chandramouli and Amit Kumar Das, Machine Learning, Pearson Education, 2019

5.Anuradha Srinivasaraghavan, Vincy Elizabeth Joseph, Machine Learning, Wiley, 2019

6.Thom Mitchell, Machine Learning, McGraw Hill Education, 2017

7.Oliver Theobald, Machine Learning for Absolute Beginners, 2017

8. Ethem Alpaydin, Introduction to Machine Learning, 3rd edition, 2014.

MBABA 3003A: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING LAB

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (LAB)	
Exercise No.	**Title of the Exercise**
1	The probability that it is Friday and that a student is absent is 3 %. Since there are 5 school days in a week, the probability that it is Friday is 20 %. What is the probability that a student is absent given that today is Friday? Apply Baye's rule in python to get the result.
2	AND & OR Gate with Perceptron using Python
3	NAND & NOR Gate with Perceptron using Python
4	Types of Threshold functions in Neural Networks
5	OCR Recognition in Neural Network
6	Data Visualization and Analysis using Python for Iris Dataset1
7	DECESION TREE
8	LINEAR REGRESSION
9	LOGISTIC REGRESSION

MBABA3004: HUMAN RESOURCE ANALYTICS

OBJECTIVES:

1. To develop the ability of the learners to define and implement HR metrics that are aligned with the overall business strategy.
2. To know the different types of HR metrics and understand their respective impact and application.
3. To understand the impact and use of HR metrics and their connection with HR analytics.
4. To understand common workforce issues and resolve them using people analytics.
5. To understand HR Analytics Workforce Diversity and Development.

UNIT I: INTRODUCTION TO HR ANALYTICS : HR analytics - People Analytics : Definition- context - stages of maturity - Human Capital in the Value Chain : impact on business. HR Analytics vs HR Metrics – HR metrics and KPIs.

UNIT II: HR ANLYTICS I: RECRUITMENT : Recruitment Metrics : Fill-up ratio - Time to hire - Cost per hire - Early turnover - Employee referral hires - Agency hires - Lateral hires - Fulfillment ratio- Quality of hire Recruitment to HR cost - Recruitment analysis.

UNIT III: HR ANALYTICS - TRAINING AND DEVELOPMENT: Training & Development Metrics : Percentage of employee trained- Internally and externally trained - Training hours and cost per employee - ROI -Optimising the ROI of HR Programs -Training and Development analysis.

UNIT IV: HR ANALYTICS EMPLOYEE ENGAGEMENT AND CAREER PROGRESSION : Employee Engagement Metrics :Talent Retention - Retention index - Voluntary and involuntary turnover- Turnover by department , grades, performance, and service tenure - Internal hired index - Engagement Survey Analysis. Career Progression Metrics : Promotion index - Rotation index - Career path index - Level wise succession readiness index.

UNIT V: HR ANALYTICS IV: WORKFORCE DIVERSITY AND DEVELOPMENT : Workforce Diversity and Development Metrics : Employees per manager - Workforce age profiling - Workforce service profiling - Churnover index - Workforce diversity index - Gender mix - Differently abled index- Revenue per employee - Operating cost per employee - PBT per employee - HR cost per employee- HR budget variance - Compensation to HR cost.

COURSE OUTCOMES:

1. The learners will be conversant about HR metrics and ready to apply at work settings.
2. The learners will be able to understand Recruitment Metrics in HR.
3. The learners will be able to understand Training and Development Metrics in HR.
4. The learner will be able to understand HR Analytics Employee Engagement Metrics.
5. The learner will be able to understand HR Analytics Workforce Diversity and Development.

REFERENCES:

1. JacFitzenz , The New HR Analytics, AMACOM , 2010.
2. Edwards M. R., & Edwards K, Predictive HR Analytics: Mastering the HR Metric. London: Kogan Page.2016.
3. Human Resources kit for Dummies – 3 rd edition – Max Messmer, 2003
4. Dipak Kumar Bhattacharyya, HR Analytics ,Understanding Theories and Applications, SAGE Publications India ,2017.
5. Sesil, J. C. , Applying advanced analytics to HR management decisions: Methods for selection, developing incentives, and improving collaboration. Upper Saddle River, New Jersey: Pearson Education,2014.
6. Pease, G., & Beresford, B, Developing Human Capital: Using Analytics to Plan and Optimize Your Learning and Development Investments. Wiley ,2014.
7. Phillips, J., & Phillips, P.P, Making Human Capital Analytics Work: Measuring the ROI of Human Capital Processes and OUTCOME. McGraw-Hill,2014.
8. HR Scorecard and Metrices, HBR, 2001.

MBABA3004A: HUMAN RESOURCE ANALYTICS LAB

HUMAN RESOURCE ANALYTICS LAB PROGRAMS

Program – 1

How do you predict performance from Selection Data using Multiple Linear Regression ?

Program-2

How do you predict turnover from selection data by using Logistic Regression?

Program-3

Investigate the influence of gender and BAME on shortlisting and offers made

Program-4

Consider the dataset - Supermarket Checkout Training.sav and analyze if there was an impact because of training.

Program-5

Perform Reliability and factor testing with group-level engagement data

The nine question items are as follows:

- I feel a sense of pride with my organization.
- I would recommend this employer to a friend.
- I am really engaged.
- I can manage my workload.
- My work does not interfere with my home life.
- I have good work–life balance.
- My organization is socially responsible.
- My organization makes sure that no one gets hurt in the workplace.
- My organization is ethical.

These items are answered on a scale of 1 to 5 where 1= strongly disagree and 5 = strongly agree.

Program – 6

Use the independent samples t-test to determine differences in engagement levels in London and Not-London groups

Program- 7

Use multiple regression to predict factors affecting team-level engagement.

Program-8

Perform chi-square test and test of there is diversity in gender across different job grades.

Program - 9

Compare ethnicity and gender across two functions (Sales and Professional Service) in an organization using the independent samples t-test.

Program- 10

Use multiple linear regression to model and predict ethnic diversity variation across teams.

MBABA3005: FINANCIAL ANALYTICS

OBJECTIVES:

1. To understand the fundamentals of Financial Analytics.
2. To comprehend about Corporate Finance Analysis.
3. To understand Financial Market Analysis
4. To understand Technical Analysis
5. To have an understanding of Portfolio Analysis.

UNIT I: INTRODUCTION TO FINANCIAL ANALYTICS:

Definition, Relevance and scope of Financial Analytics, Components of Financial Analytics, Features of Financial Analytics recent trends in financial analytics. **Financial Data**: Nature of data in finance and sources of financial data, cleaning and pre-processing data, building model using accounting and financial data.

UNIT II: CORPORATE FINANCE ANALYSIS

Basic corporate financial predictive modelling: Project cash flow analysis- cost of capital using sensitivity analysis, Indifference point and Financial Break-even modelling, Capital Budgeting Model - Payback, NPV, IRR, and MIRR.

UNIT III: FINANCIAL MARKET ANALYSIS

Estimation and prediction of risk and return (bond investment and stock investment) – data importing from web portal and data cleansing. Time series-examining nature of data, EWMOA, Value at Risk, ARMA, ARCH and GARCH.

UNIT IV: TECHNICAL ANALYSIS

Prediction using chart and fundamentals – RSI, ROC, MACD, moving average and candle charts, simulating trading strategies. Prediction of share prices using machine learning. Concept of Artificial Nural Networks (ANN).

UNIT V: PORTFOLIO ANALYSIS

Portfolio Analysis – capital asset pricing model, Sharpe ratio, Markowitz's mean variance optimization model. Option pricing models- Binomial model for options, Black Scholes model and Option implied volatility.

OUTCOMES:

1.Students would be able to understand the fundamentals of Financial Analytics.

2.Students will be able to comprehend Corporate Finance Analysis.

3.Students will be able to understand Financial Market Analysis

4.Students will be able to understand Technical Analysis

5.Students will have an understanding of Portfolio Analysis.

REFERENCES:

1. Financial analytics with R by Mark J. Bennett, Dirk L. Hugen, Cambridge university press.
2. Haskell Financial Data Modeling and Predictive Analytics Paperback – Import, 25 Oct 2013 by Pavel Ryzhov.
3. Quantitative Financial Analytics: The Path To Investment Profits Paperback – Import, 11 Sep 2017 by Edward E Williams (Author), John A Dobelman.
4. Python for Finance - Paperback – Import, 30 Jun 2017 by Yuxing Yan (Author).
5. Mastering Python for Finance Paperback – Import, 29 Apr 2015 by James Ma Weiming.

MBABA3005A - FINANCIAL ANALYTICS LAB

FINANCIAL ANALYTICS	
LAB Programs	
1	Estimation of Cash Flows with and without Scrap Value
2	Financial Break-Even modelling
3	Computation of the Value of firm and Weighted Average Cost of Capital (WACC)
4	Sensitive Analysis to exhibit the change in value of the firm for various WACC
5	Computation of Payback Period Net Present Value, and Internal Rate of Return
6	Computation of Modified Internal Rate of Return
7	Estimation of Risk and Return of a Company's Share price
8	Portfolio Analysis

MBABA3006: MARKETING ANALYTICS

Course Objectives:

[1] To equip the students with necessary knowledge and skills to perform marketing analytics.

[2] To enhance the decision-making skills of the students by practicing data driven decision making.

[3] To make the students to perform retail analytics and digital marketing analytics.

[4] To perform retail analytics for better retail performance of the products.

[5] To perform digital marketing analytics to evaluate the performance of various digital marketing tools.

Unit-I: Introduction to Marketing Analytics: Meaning, Significance – Marketing Research Process, Types of Marketing Research - Applications of Business Analytics in Marketing: Descriptive Analytics, Diagnostic Analytics, Predictive Analytics, Prescriptive Analytics, Cognitive Analytics.

Unit-II: Sales Forecasting - Quantitative Methods – Linear Regression, Multiple Regression Applications. New Product Decisions – Pricing Decisions.

Unit-III: Market Segmentation – Applications of Cluster Analysis – Calculating Customer Lifetime Value – Customer Analysis: Customer Needs & Wants, Customer Tastes & Preferences – Applications of Principle Component Analysis.

Unit-IV: Retail Analytics: Retail Floor Performance, Retail Sales People Performance, Category Performance, Sales Promotion Performance.

Unit-V: Digital Marketing Analytics: Google Analytics, Web traffic – SEO and SEM performance – SMM Performance – Pay Per Click Advertising / Online Advertising.

Course Outcomes:

[1] Students are able to understand various types of marketing analytics for decision making.

[2] Students are able to perform quantitative sales forecasting, decision analysis for new products and its pricing.

[3] Students can perform market segmentation, calculation of customer lifetime value and customer analysis.

[4] Students can perform retail analytics for better retail performance of the products.

[5] Students can perform digital marketing analytics to evaluate the performance of various digital marketing tools.

Suggested Readings:

[1] Wanya L Winston, “Marketing Analytics”, Wiley Publishers, 2018.

[2] Mike Grigsby, “Marketing Analytics”, Kogan Page, 2020.

MBABA3006A: MARKETING ANALYTICS LAB

MARKETING ANALYTICS (LAB)		
INDEX		
Exercise No.	**Title of the Exercise**	
1	**ANALYZING SALES AT TRUECOLORS HARDWARE**	
2	**CLUSTER ANALYSIS**	
3	**PAY PER CLICK**	

MBABA3007: SUPPLY CHAIN ANALYTICS

COURSE OBJECTIVES:

1.To provide foundational knowledge associated with the supply chain analytics

2.To describe the various tools and techniques for implementation of analytics based on the supply chain drivers such as location, logistics and inventory

3.To describe the various techniques for analytics based on the Multi Attribute Decision Making (MADM) and risk

4.To provide the applications of analytics in supply chain

5.To carry out Simulation and DOE

UNIT I:
INTRODUCTION

Introduction – Overview on Supply Chain, Analytics and Supply Chain Analytics – Dashboards with relevant KPIs for Supply Chain – Optimization – Classification of optimization problems –

Optimization for Analytics – Operations Research Techniques for Analytics

UNIT II: LOCATION AND LAYOUT

Plant/Warehousing Decisions – Location Methods – Location Models – Network Models – Layout Methods – Line Balancing: KPIs (Cycle time, Idle time) – Inventory Management

UNIT III: TOTAL QUALITY MANAGEMENT

Introduction – Statistical Quality Control (SQC) – Statistical Process Control (SPC) – Pareto Analysis – Histogram – Scatter Diagram – Control Charts – Process Capability Analysis: KPIs (Cp and Cpk)

UNIT IV: PLANNING & MULTI ATTRIBUTE DECISION MAKING

Capacity Planning – Measurement of Capacity: KPIs (Efficiency and Utilization) – Aggregate Production Planning (APP): Model, Techniques – Multi Attribute Decision Making (MADM) –

Analytic Hierarchy Process

UNIT V: SIMULATION & DOE

Introduction to simulation – Type: Discrete and Continuous simulation – Simulation models – Steps in Simulation study – Simulation for Analytics – Experimental Designs (Taguchi, RSD, Mixture Design)

COURSE OUTCOMES:

At the end of the course, the students will be able to:

1 : Explain the fundamental concepts of Supply Chain

2 : Understand on the Location and Layout .

3 : Understand on the implementation of Total Quality Management.

4 Make decisions on Planning and multi attributes.

5 : Carry out Simulation and DOE

REFERENCE BOOKS:

1. Gerad Feigin, Supply Chain planning and analytics – The right product in the right place at the right time, Business Expert Press, 2011

2. Peter Bolstorff, Robert G. Rosenbaum, Supply Chain Excellence: A Handbook for Dramatic Improvement Using the SCOR Model, AMACOM Div American Mgmt Assn, 2007

3. Robert Penn Burrows, Lora Cecere, Gregory P. Hackett, The Market-Driven Supply Chain: A Revolutionary Model for Sales and Operations Planning in the New On-Demand Economy, AMACOM Div American Mgmt Assn, 2011

4. James R. Evans., Business Analytics – Methods, Models and Decisions, Pearson Publications, 1st Edition, 2012.

5. G.V.Shenoy,U.K.Srivastava,S.C.Sharma, Operations Research for Management, New Age International,Revised 2nd Ed, 2005.

MBABA3008 - SOCIAL AND WEB ANALYTICS

COURSE OBJECTIVES:

1. To understand how big data principles implemented in Social media & Web
2. To understand the data processing for Social media &Web analytics
3. To understand Data Structures
4. TO understand Web Metrics
5. TO understand Social Media Analytics

UNIT I SOCIAL MEDIA

Introduction, History of Social media- Basics of Social Media and Business Models- Basics of Web Search Engines and Digital Advertising. Web & social media (websites, web apps , mobile apps & social media) .

UNIT II WEB ANALYTICS

Web analytics- Web analytics 2.0 framework (clickstream, multiple outcomes analysis, experimentation and testing, voice of customer, competitive intelligence, Insights) - Experimental methods in web data analytics - Air France Internet Marketing Case Study - Econometric modeling of search engine ads

UNIT III DATA STRUCTURE

Data (Structured data, unstructured data, metadata, Big Data and Linked Data) -Lab testing and

experiment design (selecting participants, within-subjects or between subjects study, counterbalancing, independent and dependent variable; A/B testing, multivariate testing, controlled experiments)

UNIT IV WEB METRICS

Web metrics and web analytics - PULSE metrics (Page views, Uptime, Latency, Seven-day active users) on business and technical issues; -HEART metrics (Happiness, Engagement, Adoption, Retention, and Task success) on user behaviour issues; -On-site web analytics, off-site web analytics, the goal-signal-metric process

UNIT V SOCIAL MEDIA ANALYTICS

Social media analytics - Social media analytics (what and why) - Social media KPIs (reach and engagement) - Performing social media analytics (business goal, KPIs, data gathering, analysis, measure and feedback) Data analysis language and tools Cases and examples - User experience measurement cases - Web analytics cases Group work and hands on practice - Usability study planning and testing; and data analysis using software tools (Google Analytics, Google Sites, R and Deducer)

COURSE OUTCOMES

1.The learner will be able to understand Social Media.

2.The learner will be able to understand Web Analytics

3.The learner will be able to understand Data Structures.

4.The learner will be able to understand Web Metrics.

5.The learner will be able to understand Social Media Analytics.

REFERENCE BOOKS:

1. AvinashKaushik, Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity, John Wiley & Sons; Pap/Cdr edition (27 Oct 2009)
2. Tom Tullis, Bill Albert, Measuring the User Experience: Collecting, Analyzing, and Presenting Usability Metrics, Morgan Kaufmann; 1 edition (28 April 2008) .
3. Jim Sterne, Social Media Metrics: How to Measure and Optimize Your Marketing Investment, John Wiley & Sons (16 April 2010)
4. Brian Clifton, Advanced Web Metrics with Google Analytics, John Wiley & Sons; 3rd Edition edition (30 Mar 2012)

MBA -BA- IV SEMESTER

COURSE CODE	IV SEMESTER COURSES	L	T	P	C
MBABA4001	Data Visualization (Tableau / Powerbi) - MOOCs	2	0	0	2
MBABA4002	Project Management - MOOCs	4	0	0	4
MBABA4003	Entrepreneurship Development	4	0	0	4
MBABA3004	Business Policy & Strategic Management	4	0	0	4
MBABA4007	Corporate Internship Report / Project Work (3 months)				6
MBABA4007A	Viva-Voce on Corporate Internship / Project Work				4
Other options					
MBABA4005	Design Thinking	4	0	0	4
MBABA4006	Big Data Analytics	3	0	0	3
MBABA4006A	Big Data Analytics-LAB	0	0	2	1
	Sub Total				**22**

MBABA 4001: DATA VISUALIZATION (Tableau / PowerBi) (MOOCS)

Course Objectives:

1. Describe the importance of data visualization for business intelligence and decision-making
2. Identify purposes and uses of data visualization for the organization
3. Analyze effective design practices for data visualization
4. Compare and contrast performance measurement data using effective data visuals
5. Use data visuals to convey distribution and relationships and construct effective data visuals to solve workplace problems

UNIT I: INTRODUCTION

The purpose of visualization –Data visualization between science and journalism- The concept of Data Design- Structure and Technical Requirement-Basic R-Installation- Graphic Concepts in R – Basic packages and Functions used for Data visualization

UNIT II: DATA VISUALIZATION FOR CATEGORICAL DATA

Bar Chart-Bar chart for multiple response questions-two response-Pie Charts-pie chart panel-spie chart-- Radial Diagrams- radial polygon--Chart Tables- Gantt chart-heat map- bump chart-mosaic plot-ballon plot- Tree map

UNIT III: DATA VISUALIZATION THROUGH DISTRIBUTIONS

Histograms and Box Plots-Histogram Overlay-Box plots for groups-Pyramids- Pyramids with multiple colours-aggregated pyramids– simple Lorenz curve-Quintile-Decile-

UNIT IV: DATA VISUALIZATION THROUGH TIME SERIES

Short time series-Areas underneath beneath and between time series-presentation of daily-weekly and monthly values-Special cases in times series

UNIT V: DATA VISUALIZATION THROUGH SCATTER PLOTS AND MAPS

Introduction to scatter plots-Scatter plot variant 1,2,3,4,5-Special cases in scatter plots-Introduction to maps-Points, Diagrams and symbols in maps-Choropleth maps- Special cases in maps.

Course Outcomes:

Upon successful completion of the course, students will be able to

1. Ability to visualize the raw data for business intelligence and decision-making
2. Ability to apply different visualizing techniques the data for effective business decision-making
3. Analyze effective design practices for data visualization
4. Compare and contrast performance measurement data using effective data visuals
5. Use data visuals to convey distribution and relationships and construct effective data visuals to solve workplace problems

Text Book(s)

1. Data Visualization with R, Thomas Rahlf, Springer Publication, 2017, ISBN 978-3-319-49750-1
2. R for Data science, Dan Toomy, Packt Publishing Ltd. 2014, ISBN 978-1-78439-086-0

Reference Books

1. The Art of R Programming, Norman Matloff, 2009
2. Introductory Statistics with R, Peter Dalgaard, Springer Science+Business Media, LLC , ISBN: 978-0-387-79053-4

MBABA 4002: PROJECT MANAGEMENT (MOOCS)

Course Objectives:

1. To enable the student to conduct preliminary screening of project.
2. To gain knowledge on conducting the studies of market, technical and operational feasibility of the Project.
3. To analyse the financial viability of the project.
4. To provide insight into implementation and abandonment of project.
5. To implement, evaluate and control projects.

Unit-I:

Basics of Project Management –Concept– Project environment – Types of Projects – Project Life Cycle – Project proposals – Monitoring Project Progress – Project Appraisal and Project Selection – Causes of delay in Project Commissioning– Remedies to avoid overruns. : – Sources of New project ideas, Preliminary screening of projects.

Unit-II:

Market Feasibility -Market Survey – Categories of Market Survey – Steps involved in conducting Market Survey – Demand Forecasting Techniques.

Unit-III:

Technical Feasibility: Production Technology, Materials and Inputs, Plant Capacity, Site Selection, Plant Layout, Site Preparation, Project Organization and Responsibilities. : Legal Aspects of Project Management – Legalities – Basic Legal provisions. Development of Programme Evaluation & Review Technique (PERT) – Critical Path –Method (CPM)

Unit-IV:

Financial Analysis – Capital Expenditure – Criteria and Investment strategies – Capital Investment Appraisal Techniques (Non DCF and DCF) – Risk analysis – Cost and Financial Feasibility – Cost of Project and Means of Financing — Estimation of Cash flows – Estimation of Capital costs and Operating costs; Revenue estimation – Income – Determinants

Unit-V:

Project Management –Project Implementation and review - Forms of Project Organization – Project planning – Project Control – Human aspects of Project Management – Prerequisites for successful Project Implementation – Project Review – Performance Evaluation –.

Out Comes

1. Students will be able to understand basics of project management lifecycle and the embodied concepts.
2. Student will be able to conduct market feasibility study of a project.
3. Students can understand tools and techniques in order to achieve project success
4. Students can apply financial and technical concepts for project analysis
5. Student will be able to implement, evaluate and control projects.

References :

1. 1.Gido: Effective Project Management, 2e, Thomson, 2007.
2. Prasanna Chandra, “Projects, Planning, Analysis, Selection, Financing, Implementation and Review”, TataMcGraw Hill Company Pvt. Ltd., New Delhi 1998.
3. Damodaran, “Corporate Finance”, Johy Wiley Publications.
4. Erhardt & Brigham, “Principles of Corporate Finance”, Thomson, 2006.
5. Singh M.K, “Project Evaluation and Management”.

MBABA 4003: ENTREPRENEURSHIP DEVELOPMENT

Course Objectives :

1. Creating awareness among the students about the significance of entrepreneurship and its social relevance.
2. Imparting knowledge to the students on institutional support available to start a business venture.
3. To study about the importance of woman entrepreneurs and the support provided to them by the governmental and non-governmental agencies.
4. To acquaint the students with the process of project management.
5. To understand the significance of entrepreneurial training in the development of new and existing entrepreneurs.

Unit-I:

Entrepreneurship: Importance and Role of Entrepreneurship in Economic Development, Characteristics of Entrepreneurship and Qualities of an Entrepreneur, Theories of Entrepreneurship, Stimulants of Entrepreneurship and Barriers to Entrepreneurship, Entrepreneurial Ethics and Social Responsibility. Social Entrepreneurship- NGOs

Unit-II:

Institutional support: Role of Government, Role of Financial Institutions, Role of Commercial Banks, Role of Development Financial Institutions such as IDBI, ICICI, NABARD, SIDBI & SFC, Role of other supporting institutions such as SIDO, NIESBUD, DIC, Entrepreneurship Development Institute, MSMEs.

Unit-III:

Women Entrepreneurship: Role & Importance, Profile of successful Indian and global women Entrepreneurs, Problems of Women Entrepreneurs, Role of government and Non-Government Organizations in promoting Women Entrepreneurship in India. Role of Bharthiya Mahila Bank.

Unit-IV:

Project Management: Concept of Project and classification of Project, Identification, Project Formulation, Project Report, Project Design, Project Appraisal, Profitability Appraisal, Project Planning, Social cost benefit analysis, Financial analysis and Project financing, Venture Capital.

Unit-V:

Training: Designing Appropriate Training Programmes to Inculcate Entrepreneurial Spirit, Significance of Entrepreneurial Training, Training for New and Existing Entrepreneurs, Feedback and Performance of Trainees.

Outcomes

1. The student would be adept at starting and evaluating a new business venture, with a special emphasis on women entrepreneurship.
2. Student gains knowledge about the sources and accessibility to financial and non-financial institutions
3. Students can understand environmental factors for development of the Women entrepreneurship.
4. Student will be able to prepare project feasibility report, acquire skills on project management.
5. Students can understand the need and design training programs for various entrepreneurial background aspirants.

References :

1. Vasant Desai, Dynamics of Entrepreneurship Development, Himalaya Publishers.
2. Mathew, J. Manimala, Entrepreneurship Theory at the Crossroads, Wiley India.
3. Tabarrok, Entrepreneurial Economics, Oxford University Press.
4. C.V.Bakshi, Entrepreneurship Development, Excel Publications.
5. Balaraj Singh, Entrepreneurship Development, Wisdom Publications.

MBABA4004: BUSINESS POLICY & STRATEGIC MANAGEMENT

Course Objectives :

1. To understand the significance of strategic management and the role of a strategist.
2. To drive the need for statement of mission and objectives
3. Impart different techniques of analysing the factors in the environment to arrive at SWOT of the organization.
4. To acquaint the student with the process of strategy formulation
5. To comprehend the factors to be considered in the implementation of a business strategy and adoption of relevant policies.

Unit-I:

Concept of Business Policy- Evolution, Significance, and Objectives–Introduction to strategic management- Process of Strategic Management -strategic decision making – Approaches to strategic management – Role of strategist.

Unit-II:

Corporate Vision, Mission & Objectives - Characteristics of a Mission Statement, levels of objectives, process of setting objectives. Environmental analysis – need for environmental analysis, techniques of environmental forecasting. Factors in the External environment, internal environment, industry environment. Methods of environmental analysis- ETOP, SAP, SWOT, Functional Area resource deployment Matrix, Porter's Five- force model, value chain analysis.

Unit-III:

Strategic formulation: Types of Strategies – expansion, stability, retrenchment strategies. Variants of grand strategies, - Michael Porter Generic Strategies, mergers, acquisitions, joint ventures. Choice of a strategy, factors affecting strategic choice, Models for evaluating strategic alternatives- BCG Matrix, GE Nine Cell Matrix, Directional Policy Matrix, Product- market evolution matrix.

Unit-IV:

Strategic Implementation: Process of strategic implementation, relevance of Mc Kinsey's 7 S framework, CSFs (Critical Success Factors) & KRAs (Key Result Areas). Issues in implementation-Resource allocation, Strategy and structure, creating supportive culture, nurturing leadership. Evolving policies in functional areas.

Unit-V:

Strategy Evaluation: Significance of strategy evaluation, Process of evaluation, criteria

for evaluation, characteristics of effective evaluation systems. Review and Control – strategic control Vs Operational Control, Types of strategic control, Techniques of strategic control, Balance Score Card , Business Process Re-engineering, Business Excellence.

Case Study compulsory (may be from any of the units)

Course Out Comes

1.Student, in the role of a strategist, can define vision, mission and objectives that drive an organisation.

2.Student can conduct an analysis of the external and internal environment of business to get awareness on future state of affairs..

3.Able to formulate appropriate strategies using different models.

4.Student can ensure proper implementation of strategies and policies.

5.Student can design and adopt relevant control techniques and evaluate the effectiveness of the strategy.

References :

1. Glueck, William F.,Jauch,R. Lawrence- Business Policy and Strategic Management , Frank Bros. & Co 7th Edn.

2. Azhar Kazmi, Business Policy and Strategic Management- Tata McGraw-Hill, New Delhi.3rd Edn.

3. Charles W.L.Hill and Gareth R.Jones, Strategic Management: An Integrated Approach, Wiley India, New Delhi

4. Mathur U.C. Strategic Management, Macmillan.

5. Michael E Porter, Competitive Advantage, Simon & Schuster, 2004.

6. Hax A.C and Majluf, N.S. Strategic Management, Englewood Cliffs, New Jersey, PHI.

7. P .Subba Rao Business Policy and Strategic Management - Himalaya Publishing House, 2009

MBABA4005: DESIGN THINKING

Course Objectives:

1. To get exposed to the basic concepts Design Thinking of Stanford Model
2. To appreciate the basic concepts of Empathy and the process of sensitization.
3. To develop an understanding of the basic concepts of ideation techniques
4. To familiarize with the basic concepts of prototyping and testing.
5. To acquire and apply the current knowledge from learning about (knowledge) vs. learning to become (skills and mindsets)

UNIT I: INTRODUCTION TO DESIGN THINKING

Open-mindedness; Developing Design Thinking Mindset; Principles of Design Thinking; Primer on Design Thinking; SWOC Analysis for Self-Awareness

UNIT II: EMPATHY & DEFINE

Definition & Components of Empathy; Interrelatedness of Components; Steps in Empathy process Assessment tools; Roots of Empathy (Case studies); Decision making process; Research Components; Hypothesis (Interview, team formation & benefits) Defining Problem Statement, Application of "**How might we Statements"**

UNIT III: IDEATION TECHNIQUES

Innovation and Creativity: Ideation Techniques -Role-play; Brainstorming; Pooling Ideas-Idea Clustering; Prioritizing ideas; Analyzing; Synthesizing and integrating the ideas. Mind-mapping the experiences, Flaring & Focus; Introduction to "Yes but" – "Yes and" Impact of Visuals; Exploring resources, Timeline, Creative Business Legends: CEOs of Alibaba, Facebook, Apple, Microsoft, Space-X etc.

UNIT IV: PROTOTYPING- BUSINESS MODELLING

Innovation & Competitive uniqueness; Evaluation of ideas - Pros Cons; Criteria for idea Ranking; Building artifacts; Real time evaluation; Bringing idea to the life; Use of Visual Clippings; Involve the tester in prototype; initial insight; Market Testing

UNIT V: REFLECTIVE THINKING

Do it Now- Reflect- Do it Better; DT is a team sport; develop a coach-like stance; Altruistic Approach.

Presentation of

1. My Business Idea (Big Picture- Vision- Mission (Connecting Dots)
2. Business Model Presentation
3. Assessment
4. Dissertation/Record

Course Outcomes: Upon Successful completion of the course, students will be able

1. To understand the basic concepts of Design Thinking and develop Self Awareness
2. To empathize, get sensitized and identify the problems.
3. To encourage wild ideas. Defer judgement. Build on ideas of others
4. To enable translation of an innovative idea into a prototype.
5. To understand, implement, and apply the Design Thinking Principles in Personal & Professional Life.

Text Book:

1. Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation, Tim Brown, Harper Business, 2009
2. The Design of Business: Why Design Thinking is the Next Competitive Advantage, Roger L. Martin, Harvard Business Review Press; Third Edition, 2009
3. "Design Thinking-A Practical Approach" proprietary material-2018, Stanford Tool Kit.

References:

1. Fourth Eye" by Pradeep Khandwala
2. "Action Research" by Eileen Ferrance, "Themes in Education" Northeast and Islands Regional Educational Laboratory Brown University
3. "Introduction to Life Skills Education"- NCERT Training Package
4. "Make space" - How to Set the Stage for Creative Collaboration" Scott Doorley and Scott Without, d. School Hasso Plattner Institute of Design at Stanford.

MBABA4006: BIG DATA ANALYTICS

Course Objectives:

1. To learn data mining and big data basics
2. To learn the big data in technology perspective
3. To learn Hadoop framework for data analytics
4. Applying MapReduce paradigm to solve problems
5. To interpret the potential applications in big data scenario.

UNIT I: INTRODUCTION TO DATA MINING AND BIG DATA

Introduction to Data mining, KDD process, Data Mining Techniques: Mining Frequent patterns, Association rule, Cluster analysis, Classification and Regression. Introduction to Big Data – What is Big Data? Explosion in Quantity of Data, Big Data Characteristics, Types of Data, Common Big data Customer Scenarios, BIG DATA vs. HADOOP, A Holistic View of a Big Data System, Limitations of Existing Data Analytics Architecture.

UNIT II: DATA ANALYTICS LIFE CYCLE

Introduction to Big data Business Analytics - State of the practice in analytics role of data scientists- Key roles for successful analytic project - Main phases of life cycle - Developing core deliverables for stakeholders.

UNIT III: INTRODUCTION TO HADOOP

Why DFS? What is Hadoop? Hadoop Distribution, Hadoop Key Characteristics, RDBMS vs. Hadoop, Hadoop 2.x Cluster Architecture, Hadoop Architecture, Hadoop Storage: HDFS, Common Hadoop Shell commands, Anatomy of File Write and Read., Name Node, Secondary Name Node, and Data Node, Hadoop 2.0 New Features – Name Node High Availability, HDFS Federation, MRv2, YARN, Running MRv1 in YARN Hadoop Distributed File System.

UNIT IV: PROGRAMMING FOR DATA ANALYTICS

Map Reduce program in Java – Map Reduce API – Programming Examples- Combiner Functions Streams and Files - Streams – Text Input and Output – Reading and Writing Binary Data.

UNIT V: DATA SCIENCE AND APPLICATIONS

Data Loading Techniques & Data Analysis, Text Analytics for Large unstructured information, Analytic Stack, Big Data Applications - Fraud detection in Stock markets, Sentiment Analysis

Course Outcomes:

Upon successful completion of the course, students will be able to

1. Apply data mining algorithms for classification and clustering.
2. Understand Big data framework.
3. To understand the map reduce way of solving analytic problems.
4. Illustrate the problem and its solution.

5. Analyze big data applications.

Text Book(s)

1. Jiawei Han Micheline Kamber Jian Pei, Data Mining: Concepts and Techniques, Third
2. Edition, Elsevier, Morgan Kaufmann, 2011.
3. Tom White, “Hadoop: The Definitive Guide”, 3rd Edition, O’reilly, 2012.
4. Alberto Cordoba, “Understanding the Predictive Analytics Lifecycle”, Wiley, 2014
5. Eric Siegel, Thomas H. Davenport, “Predictive Analytics: The Power to Predict Who Will
6. Click, Buy, Lie, or Die”, Wiley, 2013.

Reference Books

1. Chuck Lam , Hadoop in Action, Manning, Second Edition ,2016.
2. Mark Gardener, Beginning R: The Statistical Programming Language, Wiley, 2013.
3. Jiawei Han and Micheline Kamber, Data Mining, Second Edition, Elsevier, 2007. ISBN: 81-312-0535-5

MBABA 4006: BIG DATA ANALYTICS – PROGRAMS FOR LAB.

1.Introduction to Big Data

Understanding the fundamentals of big data.

2. Data Mining and Warehousing

Techniques for data extraction and storage, ensuring data integrity and accessibility.

3. Predictive Analytics

Using historical data to predict future business trends and decision-making.

4. Business Intelligence (BI) Tools

Mastering BI tools like Tableau, Power BI, or Qlik for interactive dashboards and insights.

5. Machine Learning for Business

Application of supervised and unsupervised learning to solve business problems.

6. Data Visualization and Storytelling

Presenting complex data in a simple, engaging, and actionable format.

7. Big Data Technologies (Hadoop & Spark)

Exploring distributed computing frameworks and their applications in handling massive datasets.

8. Advanced SQL and NoSQL Databases

Working with both structured and unstructured data storage systems.

9. Cloud Computing for Big Data

Utilizing cloud platforms like AWS, Azure, or Google Cloud for scalable analytics.

10. Real-Time Analytics and Streaming Data

Analyzing data in motion using tools like Kafka, Flink, and Storm.

11. Marketing Analytics

Leveraging data to optimize marketing campaigns, segment customers, and increase ROI.

12. Financial Analytics

Analyzing financial data for investment strategies, risk management, and fraud detection.

13. Supply Chain Analytics

Improving logistics, inventory management, and demand forecasting using data.

14. Healthcare Analytics

Optimizing patient care, resource allocation, and operational efficiency in healthcare systems.

15. Social Media and Sentiment Analysis

Deriving insights from social platforms and customer feedback for brand management.

16. Ethics in Big Data Analytics

Understanding the ethical considerations and compliance issues related to data usage.

17. IoT Analytics

Analyzing data from connected devices to derive actionable insights.

18. Text and Natural Language Processing (NLP)

Analyzing textual data and building language-based models for business applications.

19. Blockchain and Big Data Integration

Exploring the interplay between blockchain technology and big data analytics.

20. Capstone Project in Big Data

Applying the learned skills to solve a real-world problem, often in collaboration with an industry partner.

MBABA4007 - Corporate Internship Report / Project Work (3 months)

Credits : 10

Total Marks : 200

(Project Report – 100 Marks, Project Viva – 100 Marks)

Corporate Internship: A Gateway to Industry Experience

Course Overview: The Corporate Internship program is designed to bridge the gap between academic learning and industry practices. This mandatory three-month internship aims to provide students with hands-on experience in a real-world corporate environment, enabling them to apply theoretical knowledge to practical scenarios. By immersing themselves in professional settings, students gain a comprehensive understanding of business operations, organizational culture, and the dynamics of the workplace.

Course Objectives:

1. **Practical Application:** To enable students to apply academic knowledge to solve real-world business challenges.
2. **Skill Development:** To enhance technical, managerial, and interpersonal skills through active participation in corporate projects.
3. **Professional Exposure:** To familiarize students with organizational structures, work ethics, and professional communication.
4. **Industry Insight:** To provide insights into industry trends, challenges, and expectations, preparing students for a seamless transition into their careers.
5. **Networking Opportunities:** To build professional connections that may assist students in their career progression.

Program Structure:

- **Duration:** 3 months (12 weeks)
- **Mentorship:** Students will be assigned a mentor/supervisor from the host company to guide and evaluate their progress.
- **Deliverables:** Students must submit periodic reports, maintain a daily logbook, and deliver a final presentation outlining their contributions and learnings.
- **Assessment:** Performance evaluation will be based on feedback from the company mentor, submitted deliverables, and an end-of-term viva or review.

  At the end of practical training, the student should submit a certificate obtained from organization / industry. The student should prepare a Project Report under the supervision of a guide from the faculty of management of the concerned college.

  Two copies of Project dissertation certified by the Project Supervisor shall be submitted to the Department. The candidate should have to secure minimum 50% marks in External assessment of Project viva-voce and 50% marks in Project Report.

Course Outcomes: Upon successful completion of the internship, students will be able to:

1. **Apply Knowledge:** Demonstrate the ability to integrate theoretical concepts with practical applications in a professional setting.
2. **Skill Enhancement:** Develop and refine technical, analytical, and interpersonal skills essential for career success.
3. **Professionalism:** Display a thorough understanding of workplace ethics, professional conduct, and effective communication.
4. **Industry Readiness:** Be well-prepared for employment, equipped with relevant experience and industry insights.
5. **Networking:** Establish a professional network within the industry to support future career aspirations.

MBABA VAC001 - VALUE ADDED COURSE – SOFT SKILLS

Course		Soft Skills
Course Code	Type	Duration
VAC001	Value Added	30 Hours

Course Objectives :

1. To make students learn effective communication skills.
2. To develop writing skills of students..
3. To develop reading skills of students.
4. To inculcate employability skills in students to make them job fit.

SYLLABUS

Unit-I:

Development of English Language Skills: essential grammar, applied grammar and usage, common errors and misappropriation, basics of phonetics.

Unit-II:

Writing Skills: Paragraph writing, essay writing, business letter writing, review writing, resume, e-mail writing, blog writing.

Unit-III:

Reading Skills: The Art of Effective Reading, Reading Comprehension, Steps of Effective Reading.

Unit-IV:

Speaking Skills: Non-Verbal communication, Dynamics of professional presentation, Group Discussion ,Job Interview ,Public Speaking ,Conversation ,Dialogues and Debates, The Art of Negotiation.

Case studies are compulsory

Outcomes

1. Students will understand the basics of good written communication.
1. Students will be able to improve writing skills.
2. Students will be able to improve reading skills.
3. Enables students to get employment in corporate and other sectors.

References :

1. Sanjay Kumar and Pushpa lata, communication Skills, Oxford University press
2. Wren and Martin, Blackie ELT books.
3. Abhishek Arora, Communication Skills and Personality Development, Kalyani Publication, New Delhi.
4. Jeff Butterfield, Soft Skills for Everyone, Cengage Learning India Private Limited.

MBABA VAC002 - VALUE ADDED COURSE HUMAN VALUES AND PROFESSIONAL ETHICS

Course Objectives :

1. To enable students appreciate the essential complementarily between "values" and "Skills" to ensure sustained happiness and prosperity which are the core aspiration of all human beings.
2. To highlight plausible implication of the above holistic understanding in terms of human conduct, trustful and mutually satisfying human behaviour and mutually enriching interaction with nature.

Unit-I:

Ethical Theories: Basic Moral Theories: i) Beneficence: doing good to others ii) Non-violence or peace iii) Justice

Unit-II:

Classification of Ethical Theories:
i) Consequentialism –Mill's Utilitarianism- greatest Happiness to greatest number of people ii) Deontology-Kantianism –Actions must satisfy the Categorical imperative
iii) Virtue theory- Aristotlelianism virtue is a mean Between two extremes of action or passion

Unit-III:

Rights & Responsibilities of a Citizen :
i) Fundamental duties as stipulated in the constitution Of India
ii) The rights to individuals guaranteed by Indian Constitution
iii) (a) Rights of a professional (b) Professional responsibilities

Unit-IV:

Human Values & Attitudes :
i) Classification of Values ii) Analysis of desirable Values iii) The importance of attitude in personal & Professional lives

Unit-V:

Ethical Living: i) Maslow's theory of Hierarchy of needs ii)Clayton Alderfer's ERG (Existence, Relatedness and Growth) theory iii) Concept of harmony in life

Out Comes

1. The Students identify the importance of human values and Skills for Sustained happiness
2. The Students strike a balance between profession and personal happiness/ goals.
3. The Students develop/propose appropriate technologies and management patterns to create harmony in professional and personal life

References :

1. Thomas Donaldson, Ethics of International Business, Oxford University Press.
2. Business Ethics, William Shaw, Wordsworth Publishing Company.

MBABA VAC003 - VALUE ADDED COURSE: FRENCH

Course Objectives :

1. To acquire knowledge of Francophone cultures and the skills of collaboration and critical thinking.
2. To make students develop to the greatest possible extent a competency in comprehending and producing in French language.

Unit-I:

Grammer, Daily converstion, Phonetics, Present tense. The Grammer, Daily conversation, phonetics, present tense. The student will become familiar with the Language.

Unit-II:

Conjugation of verbs, tenses, present & past tenses, French Culture. After completing 10 lessons, the student will be in a position to converse in French in present & past tense.

Unit-III:

Tenses: Past & past continuous and imperatives. Vocabulary (Lesson 11 to 15) will improve. They will be given video presentations in French to Understand the usage of French.

Unit-IV:

All the tenses will be taught, writing, speaking and understanding will improve. Various situations will be taught. Proficiency will improve.

Unit-V:

All tenses are revised. Focus on French Culture, life style, Food habits. Business trends will be taught. After completing the 28th

Outcomes

1. Students can recognize and describe the cultural forces (history,social values ,economic practises) that shape the professional practises in target cultural
2. Students demonstrate an understanding of the nature of language through comparisons of the language studied and their own.

References :

1. Gaston Maugar, Le Francais et la vie, Alliance Francaise (1971), David Pascal
2. Dondo, Modern French Course, Oxford India.

MBABA VAC004 - VALUE ADDED COURSE: SOFT SKILLS

Course Objectives :

1. To make students learn effective communication skills.
2. To make students practice effective presentation skills for corporate success.
3. To inculcate employability skills in students to make them job fit.

Unit-I:

Development of English Language Skills: essential grammar, applied grammar and usage, common errors and misappropriation, basics of phonetics.

Unit-II:

Writing Skills: Paragraph writing, essay writing, business letter writing, review writing, resume, e-mail writing, blog writing.

Unit-III:

Reading Skills: The Art of Effective Reading, Reading Comprehension, Steps of Effective Reading.

Unit-IV:

Speaking Skills: Non-Verbal communication, Dynamics of professional presentation, Group Discussion, Job Interview, Public Speaking ,Conversation ,Dialogues and Debates, The Art of Negotiation.

Outcomes

1. Students will understand the basics of good written communication.
2. Improves confidence in students to face job interviews.
3. Students will be able to exhibit effective business correspondence.
4. Enables students to get employment in corporate and other sectors.

References :

1. Sanjay Kumar and Pushpa lata, communication Skills, Oxford University press
2. Wren and Martin, Blackie ELT books.
3. Abhishek Arora, Communication Skills and Personality Development, Kalyani Publication, New Delhi.
4. Jeff Butterfield, Soft Skills for Everyone, Cengage Learning India Private Limited.

MBABA VAC005 - VALUE ADDED COURSE: TALLY

Course Objectives :

1. To acquaint the students with computer aided accounting information
2. System.
3. To provide them a firsthand knowledge on the procedure of analyzing, recording and reporting of financial transactions in Tally ERP 9.
4. To acquire knowledge on generating reports of GSTR.

Unit-I:

BASIC OF ACCOUNTING: Introduction, Accounting Principles, Types of Accounts, Financial Statements and Transactions – Recording Transactions, FUNDAMENTALS OF TALLY.ERP 9: Introduction, Technological Advantages, Getting Functional with Tally ERP9, setting up of a company in TallyERP9 , Configurations. CREATE ACCOUNTING MASTERS IN TALLY ERP 9: Ledger creation in single and multiple, Ledger Alteration.

Unit-II:

CREATING INVENTORY MASTERS IN TALLY ERP9: Creating Stock Groups, Displaying stock category, Altering Stock category, Units of measure, godowns – creating godowns , Displaying godowns, Altering godowns - Stock Items – creating Stock Items, Displaying stock items, Altering stock items, VOUCHER TYPES: Creating Voucher Types, Displaying and Altering Voucher types. VOUCHER ENTRY IN TALLY ERP 9: Accounting Vouchers, Inventory vouchers – Purchase Order- Sale Order, Rejection Out, Rejection In, Stock Journal, Delivery Note, Receipt Note, Physical Stock Voucher.

Unit-III:

GENERATING BASICS IN TALLY .ERP9 : Financial Statements, Balance Sheet, Profit& loss A/C, Trial Balance, Accounting Books& Reports, Cash Book, Bank Book, Purchase Register, Sales Register, Journal Register, Debit Note Register, Credit Note Register, Day Book, Inventory Books& Reports, Stock Summary, Stock Group Summary, Stock Transfer, Verification of Outstanding Reports.

Unit-IV:

GST: INTRODUCTION OF GST, Activating GST Options, Ledger creation in GST, Stock creation with GST, Transactions with GST, Generating the Reports of GSTR 1, GSTR 2 and GSTR 3B.

Unit-V:

How to alter the company. 2. How to Provide Security to the Company, 3. How to take Back-Up, 4. How to Restore the Data which is lost, 5. Splitting the Data

Outcomes

1. Students will be able to understand the power and potential of Tally Accounting software from the business perspective.
2. Able to provide speedy solutions or different operations of business through Tally ERP9.
3. Undertake major responsibilities in different arenas of the corporate world including accounting &Finance.

References :

1.ASHOK K NADHANI,TALLY, BPB PUBLICATIONS.

MBABA VAC006 - VALUE ADDED COURSE: YOGA

Course Objectives :

1. To provide the necessary basic knowledge of the theory and practice of yoga.
2. To train students to practice yoga for promoting their health and wellness.
3. To introduce the key concepts and practices of yoga and meditation in the light of Management of stress at work place.

SYLLABUS

Unit-I:

Yoga : Etymology, definitions, aim, objectives, nature, scope and history. Application of yoga in improving the quality of life.

Unit-II:

Paths of Yoga: Karma, Bhakti, Jnana and Raja yoga; Outlines of Hatha Yoga and Asthanga yoga; Different types of yoga and their relevance in day-to-day life; Importance of Yogic Diet in Health Management.

Unit-III:

Meditation and Relaxation Techniques and their role in Improving Management Abilities.

Unit-IV:

Yoga and Physical Exercises; Mental Health and stress management through Yoga.

Outcomes

1. After completion of the course the candidate is expected to apply the knowledge of yoga in solving the problems associated with his personal wellbeing and improve the Quality of life through Management of stress.

References :

2. *Certification of Yoga Professionals official guide book*, Ministry of AYUSH, Excel Books, New Delhi.
3. Sw. Satyananda Saraswathi, *Asana, Pranayama, Mudra and Bandha*, Bihar School of Yoga, Munger
4. Iyengar B K S, *Light on Yoga*, Horpor Collins, New Delhi.
5. Yogacharya Raparthi Rama Rao, *Yoga Chaitanya, Pradipika*, Yoga Consiousness Trust, Vijinigiri, Vizianagaram Dist, AP.
6. Udupa, K. N. *Stress and its management by yoga*. Motilal Banarsidass Publ., 1985.

YOGA PRACTICALS

SYLLABUS

KRIYAS

Jalanethi; Sutraneti; Kapalabhati; Trataka; Jala Dhouti;

Sukshma Vyayam

Surya Namaskaras

Meditative Postures

Sukhasan, Vajrsan, Ardha Padmasan, Padmasan, Siddhasan.

Standing Postures

Tadaasana, Trikonasan, Parsva Konasan, Veerabhadrasan, Utkatasan,

Prasarita Padaotanasan,

Balancing Postures

Vrukshasan, Natarajasan, Garudasan, Padangustasan

Sitting Postures

Simhasan, Shasankasan, Ustrasan, Baddakonasan, Janu Sirshasan, Paschimottanasan, Vakrasan, Ardha, Matsyendrasan, , Gomukhasan Yoga Mudrasan, Uttitapadmasan.

Prone Postures

Makharasan, Bhujangasan, Shalabhasan, Dhanurasan.

Supine Postures

Uttanapadasan, Pawanmuktasan, Navasan, Sethubandhasan, Chakrasan, Mastyasan

Inverted Postures

Sarvangasan, Halasan, Sirshasan

PRANAYAMA

Abdomenal breathing, Yoga Swasa, Bramari; Uijayi; Sheetali; Shetkari, Suryabedana;

BANDHA

Moola; Uddayana; Jalandhara;

Relaxation Methods

QRT (Quick Relaxation Technique), **IRT** (Instant Relaxation Technique), **DRT (**Deep Relaxation Technique), 61points, Yoganidra.

DHYANA (Guided Meditation).

Reference books:

1. Certification of Yoga Professionals official guide book, Ministry of AYUSH, Excel Books, New Delhi.
2. Joshi K S: Yoga in daily life.
3. Yogacharya Raparthi Rama Rao, Yoga Chaitanya, Pradipika, Vijinigiri, Vizayanagaram, AP
4. Sw. Satyananda Saraswathi, Asana, Pranayama, Mudra & Bandha, Bihar School of Yoga, Munger
5. Sw. Satyananda Saraswathi,Yogic Management of Common Disease, Bihar School of Yoga, Munger.

MBA-Business Analytics

Faculty Profiles:

S.No.	Name of the Faculty	Designation	Qualification Degree (Highest Degree)	Experience (Industry + Teaching)
1	Prof. K.V.V. Murali Someswara Rao	Professor Head of the Department	MBA(Sys), M.Phil., PGDIM, Ph.D.	24
2	Dr. G. Surya Prakasa Rao	Associate Professor	MA(Qnt Eco), PGDBF, Ph.D.	22
3	Dr. R. Suneetha	Assistant Professor	B.Tech (CS & IT), MBA, Ph.D.	14
4	Dr. P. Jayasaradadevi	Assistant Professor	M.Sc. (Comp), M.Tech (Comp), MBA, Ph.D.	10
5	Dr. N. Neeraja	Assistant Professor	B.Tech (CS & IT), MBA, Ph.D.	12
6	Mrs. Neha Singh	Assistant Professor	MBA, (Ph.D.)	7

Key Takeaways

• Industry demand based course curriculum • Skill Enhancement sessions (PDs) • Internship in IV semester • Choice based credit system CBCS • Industrial Visits • Mini study on Contemporary relevant issues • Project Work	• Open electives • Mentorships • Management Events • Cultural Fests • Alumni Mentorships • Alumni GL & Interactions • Sports & Games • Guest Lectures by Industry Experts • MOOCs courses.

VISION OF THE INSTITUTION

Creating Human Excellence for a Better Society

MISSION OF THE INSTITUTION

Unfold in to a world – class organization with strong academic and research base, producing responsible citizens to cater to the changing needs of the society.

QUALITY POLICY OF THE INSTITUTION

Attaining Global Standards through

- ***Academic Excellence***
- ***Discipline***
- ***Social Interface***