



# Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore

## MBA-BUSINESS ANALYTICS – III SEMESTER (20-22)

### MBAI301C ADVANCED HUMAN VALUES AND PROFESSIONAL ETHICS

| SUBJECT CODE | SUBJECT NAME                                  | TEACHING & EVALUATION SCHEME |               |                       |                         |                       |   |   |   |         |
|--------------|---|------------------------------|---------------|-----------------------|-------------------------|-----------------------|---|---|---|---------|
|              |   | THEORY                       |               |                       | PRACTICAL               |                       | L | T | P | CREDITS |
|              |   | END SEM University Exam      | Two Term Exam | Teachers Assessment * | END SEM University Exam | Teachers Assessment * |   |   |   |         |
| MBAI301C     | Advanced Human Values and Professional Ethics | 60                           | 20            | 20                    | -                       | -                     | 4 | - | - | 4       |

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

\***Teacher Assessment** shall be based on following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

#### Course Objective

The objective of the course is to disseminate the theory and practice of moral code of conduct and familiarize the students with the concepts of “right” and “good” in individual, social and professional context

#### Examination Scheme

The internal assessment of the students’ performance will be done out of 40 Marks. The semester Examination will be worth 60 Marks. The question paper and semester exam will consist of two sections A and B. Section A will carry 36 Marks and consist of five questions, out of which student will be required to attempt any three questions. Section B will comprise of one or more cases / problems worth 24 marks.

#### Course Outcomes

1. Help the students to understand right conduct in life.
2. To equip students with understanding of the ethical philosophies, principles, models that directly and indirectly affect personal and professional life.

### COURSE CONTENT

#### **Unit I: Inculcating Values at Workplace**

1. Values: Concept, Sources, Essence
2. Classification of Values.
3. Values in Indian Culture and Management: Four False Views, Value Tree
4. Eastern and Western Values; Values for Global Managers



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## Unit II: Professional Ethics

1. Ethics: Concept, Five P's of Ethical Power, Organisational Tools to Cultivate Ethics
2. Theories of Ethics: Teleological and Deontological
3. Benefits of Managing Ethics in an Organisation
4. Ethical Leadership

## Unit III: Indian Ethos and Management Style

1. Indian Ethos and Workplace
2. Emerging Managerial Practices
3. Ethical Considerations in Decision Making and Indian Management Model
4. Core Strategies in Indian Wisdom and Ethical Constraints

## Unit IV: Human Behavior – Indian Thoughts

1. Guna Theory
2. Sanskara Theory
3. Nishkama Karma
4. Yoga: Types, Gains; Stress and Yoga

## Unit V: Spirituality and Corporate World

1. Spirituality: Concept, Paths to Spirituality
2. Instruments to achieve spirituality
3. Vedantic Approach to Spiritual and Ethical Development
4. Indian Spiritual Tradition.

## Suggested Readings

1. Kausahl, Shyam L. (2006). *Business Ethics – Concepts, Crisis and Solutions*. New Delhi: Deep and Deep Publications Pvt. Limited
2. Murthy, C.S.V. (2012). *Business Ethics –Text and Cases*. Himalaya Publishing House: Mumbai
3. Chakraborty, S. K. (1999). *Values and Ethics for Organizations*. Oxford university press
4. D.Senthil Kumar and A. Senthil Rajan (2008). *Business Ethics and Values*. Himalaya Publishing House: Mumbai



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## MBAI302C PROJECT MANAGEMENT

| SUBJECT CODE | SUBJECT NAME       | TEACHING & EVALUATION SCHEME |               |                       |                         |                     |   |   |   |         |
|--------------|--------------------|------------------------------|---------------|-----------------------|-------------------------|---------------------|---|---|---|---------|
|              |                    | THEORY                       |               |                       | PRACTICAL               |                     | L | T | P | CREDITS |
|              |                    | END SEM University Exam      | Two Term Exam | Teachers Assessment * | END SEM University Exam | Teachers Assessment |   |   |   |         |
| MBAI302C     | Project Management | 60                           | 20            | 20                    | -                       | -                   | 4 |   | - | 4       |

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

\***Teacher Assessment** shall be based on following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

### Course Objectives

The course is intended to develop the knowledge of the students in the management of projects. It is aimed at imparting knowledge on managing entire life cycle of a project – from conceptualization to commissioning.

### Examination Scheme

The internal assessment of the students' performance will be done out of 40 Marks. The semester Examination will be worth 60 Marks. The question paper and semester exam will consist of two sections A and B. Section A will carry 36 Marks and consist of five questions, out of which student will be required to attempt any three questions. Section B will comprise of one or more cases / problems worth 24 marks.

### Course Outcomes

1. Understanding of various phases in a project life cycle.
2. Ability to establish feasibility of a project and various methods of project financing
3. Learn to organize and coordinate with different functions for successful project implementation
4. Develop ability to monitor and control projects and risk involved.

### **COURSE CONTENT**

#### **Unit I: Concept of Project**

1. Overview, key concepts, classification, characteristics of project
2. Project life cycle and its phases
3. Project Feasibility: Project Identification, Market and Demand Analysis, Technical analysis and technology selection

#### **Unit II: Project Feasibility and Investment Evaluation**

1. Project Cost Estimate



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2. Project Appraisal: Time Value of Money, Project Cash Flows, Payback Period, Cost of Capital, Project Rate of Return, Social Cost Benefit Analysis
3. Sources of financing
4. Optimum capital structure.
5. Investment decision rule

## Unit III: Project Implementation

1. Project Planning and scheduling
2. Network analysis, construction of networks
3. Time-cost trade-off and crashing of projects
4. Resource allocation using network analysis, resource leveling
5. Project contracting: Contract pricing, Contract types

## Unit IV: Human Aspects of Project Management

1. Project organization
2. Project Leadership: Motivation in Project Management, Communication in Project Environment, Conflict in Project Management
3. UNIDO approach
4. Shadow pricing of resource

## Unit V: Project Review and Administrative Aspects

1. Project monitoring
2. Project cost control
3. Abandonment analysis
4. Computer based project management
5. PMIS
6. Project Audit and Termination

## Suggested Readings

1. Chandra, Prasanna (2011). *Project Planning: Analysis, Selection, Implementation and Review*. New Delhi; Tata McGraw Hill.
2. Choudhury S. (2017), *Project Management*. Chennai; McGraw Hill Education (I) Pvt. Ltd.
3. Singh, Narendra (2003). *Project Management and Control*. New Delhi; Himalaya Publishing House.
4. Nicholas, John M. (2008). *Project Management for Business and Technology: Principles and Practice*. Pearson Publication.
5. Gray & Larson (2010). *Project Management: The Managerial Process*. New Delhi; TMH
6. Pinto (2010). *Project Management: Achieving Competitive Advantage*. New Jersey; Pearson.
7. Abrol, Sunil (2010). *Cases in Project Management*. New Delhi; Excel Books
8. Maylor (2010). *Project Management*. New Jersey; Pearson.



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## MBABAN303 BUSINESS ANALYTICS

| SUBJECT CODE | SUBJECT NAME       | TEACHING & EVALUATION SCHEME |               |                       |                         |                       |   |   |   |         |
|--------------|--------------------|------------------------------|---------------|-----------------------|-------------------------|-----------------------|---|---|---|---------|
|              |                    | THEORY                       |               |                       | PRACTICAL               |                       | L | T | P | CREDITS |
|              |                    | END SEM University Exam      | Two Term Exam | Teachers Assessment * | END SEM University Exam | Teachers Assessment * |   |   |   |         |
| MBABAN303    | Business Analytics | 60                           | 20            | 20                    | -                       | -                     | 4 |   | - | 4       |

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

\***Teacher Assessment** shall be based on following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

### Course Objective

The course would enable the students to gain knowledge on turning large amounts of data into meaningful and actionable information.

### Examination Scheme

The internal assessment of the students' performance will be done out of 40 Marks. The semester Examination will be worth 60 Marks. The question paper and semester exam will consist of two sections A and B. Section A will carry 36 Marks and consist of five questions, out of which student will be required to attempt any three questions. Section B will comprise of one or more cases / problems worth 24 marks.

### Course Outcomes

1. After learning this course students will have basic knowledge of business analytics.
2. At the end of the course students will be able to utilize the information for making effective business decisions.

## COURSE CONTENT

### **Unit I: Introduction**

1. Business Enterprise Organization, Functions and Process – Use of IT in Business.
2. Types of Digital Data - OLTP and OLAP – Architectures, Data Models.
3. Role of OLAP Tools in Business Intelligence Architecture.

### **Unit II: Business Intelligence – Introduction and Evolution**

1. Business Intelligence – Introduction, Evolution
2. Value Chain – Component Framework
3. Users – Applications Roles and Responsibilities – Tools



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## Unit III: Data Warehouse

1. Data Warehouse
2. Data Integration - Data Integration Technologies
3. Data Quality and Profiling

## Unit IV: Multidimensional Data Modelling

1. Multidimensional Data Modelling
2. Types of Data model
3. Data Modelling Techniques
4. Dimensional Table, Models and Life Cycle - Measures – Metrics – KPIs – Performance Management

## Unit IV: Introduction to Enterprise Reporting, Data Computing

1. Enterprise Reporting
2. Balanced Scorecard - Dashboards
3. Business Intelligence and Mobility, Cloud Computing – Business Intelligence for ERP Systems.

## Suggested Readings

1. Prasad, R. N. & Seema Acharya (2011). *Business Analytics*. Wiley: New Delhi.
2. Christian S. Albright & Wayne L. Winston (2015). *Business Analytics & Decision Making*. Cengage Learning: New Delhi.
3. Evans, R. Joel (2014). *Business Analytics* (1<sup>st</sup> ed.) Pearson Education: New Delhi.



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## MBABAN304 STATISTICS FOR ANALYTICS

| SUBJECT CODE | SUBJECT NAME             | TEACHING & EVALUATION SCHEME |               |                       |                         |                       |   |   |   |         |
|--------------|--------------------------|------------------------------|---------------|-----------------------|-------------------------|-----------------------|---|---|---|---------|
|              |                          | THEORY                       |               |                       | PRACTICAL               |                       | L | T | P | CREDITS |
|              |                          | END SEM University Exam      | Two Term Exam | Teachers Assessment * | END SEM University Exam | Teachers Assessment * |   |   |   |         |
| MBABAN 304   | Statistics for Analytics | 60                           | 20            | 20                    | -                       | -                     | 4 |   | - | 4       |

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

\***Teacher Assessment** shall be based on following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

### Course Objective

This course is designed to provide prospective management studies students with the skills necessary to generate reports, analyses and decisions based on a study of relevant data. This course provides the set of skills that are most frequently used in the work place to generate and critically analyze reports.

### Examination Scheme

The internal assessment of the students' performance will be done out of 40 Marks. The semester Examination will be worth 60 Marks. The question paper and semester exam will consist of two sections A and B. Section A will carry 36 Marks and consist of five questions, out of which student will be required to attempt any three questions. Section B will comprise of one or more cases / problems worth 24 marks.

### Course Outcomes

1. After learning this course the learners will be able to understand the relevance of statistics in the functional areas of business
2. Gain knowledge on how to use excel spread sheets and focus on interpretation of results.

## COURSE CONTENT

### **Unit I: Introduction**

1. Statistical Thinking and Definition of Statistics
2. Basic Statistical Terms
3. Variable Type and Data Measurement Scales

### **Unit II: Central Tendency**

1. Measures of Central Tendency
2. Measures of Dispersion - Measures of Shape
3. Examining Data Distribution



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## Unit III: Overview of Statistical Methods

1. Overview of Statistical Methods
2. Sampling and Sampling Methods
3. Presenting Data in Tables and Charts

## Unit IV: Concept of Probability

1. Basic Concept of probability
2. Types of Probability, Probability Rules
3. Conditions of Probability
4. Probability Distributions
5. Probability Trees, Bayes's Theorem

## Unit V: Binomial, Poisson & Normal Distribution

1. Binomial Distribution
2. Poisson Distribution
3. The Normal Distribution, Characteristics, Normality check

## Suggested Readings

1. Deepak Chawla and Neena Sondhi (2008). *Research Methodology Concepts and Case*. Vikas Publishing House Pvt Ltd: New Delhi.
2. Gerald, Keller (2011). *Managerial Statistics*. Cengage Learning. Boston: USA.
3. Arora, P.N. (2009). *Managerial Statistics*. S.Chand Limited: New Delhi.
4. Srivastava T.N. (2008). *Statistics for Management*. Tata McGraw Hill Publishing: New Delhi.



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## MBABAN305 DATA MANAGEMENT

| SUBJECT CODE | SUBJECT NAME    | TEACHING & EVALUATION SCHEME |               |                       |                         |                       |   |   |   |         |
|--------------|-----------------|------------------------------|---------------|-----------------------|-------------------------|-----------------------|---|---|---|---------|
|              |                 | THEORY                       |               |                       | PRACTICAL               |                       | L | T | P | CREDITS |
|              |                 | END SEM University Exam      | Two Term Exam | Teachers Assessment * | END SEM University Exam | Teachers Assessment * |   |   |   |         |
| MBABAN305    | Data Management | 60                           | 20            | 20                    | -                       | -                     | 4 | - | 4 |         |

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

\***Teacher Assessment** shall be based on following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

### Course Objective

The objective of the course is to enable an understanding of data management concept and process data management process.

### Examination Scheme

The internal assessment of the students' performance will be done out of 40 Marks. The semester Examination will be worth 60 Marks. The question paper and semester exam will consist of two sections A and B. Section A will carry 36 Marks and consist of five questions, out of which student will be required to attempt any three questions. Section B will comprise of one or more cases / problems worth 24 marks.

### Course Outcomes

1. After the course students will be familiar with the techniques of data management.
2. Students will have understanding of data architecture, and
3. R programs and its applications.

## COURSE CONTENT

### **Unit I: Data Management & Applications**

1. Concept of data management
2. The New Science of Winning Business Analytics – Definition, Market, Trends and People
3. The Paradigm Shift from Data to Insight and from Business Intelligence to Business Analytics – Descriptive - Predictive and Prescriptive Analytics.



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## Unit II: Database Architecture and Gathering Process

The Business Analytics Cycle Information summary about Books – Tools – Blogs – Resources – Groups –Communities – Videos - Useful links - Sources of Data - Database Architecture and Data Gathering Process - Types of Data - Overview of an online survey/research project.

## Unit III: Introduction to R Programs

1. Intro to R programs - Running R programs
2. Mastering Fundamental R concepts
3. How to diagnose and correct syntax errors - Getting familiar with R data sets

## Unit IV: Creating R Data Sets

1. Creating R data sets
2. Reading raw data files (column input/formatted input)
3. Assigning variable attributes - changing variable attributes - reading MS spread sheets in R

## Unit V: Reading R Data Sets and Creating Variables

1. Reading R data sets and creating variables - Reading Delimited Raw Data Files
2. Using Excel for Data Management
3. Purpose of the Database – Relational Databases Entities
4. Relationships and Attributes - Specify Keys - Primary and Foreign
5. Create Relationships among Tables - Refinement and Normalization - Microsoft Access and R.

## Suggested Reading

1. Times Pro full content.
2. Gardener, M (2013). *Beginning R: The Statistical Programming Language*. Wiley India: New Delhi.
3. Teetor, P. (2014). *R Cookbook (O' Reilly)*. Shroff Publishers: Mumbai.



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## MBABAN306 DATA WAREHOUSING FOR ANALYTICS

| SUBJECT CODE | SUBJECT NAME                   | TEACHING & EVALUATION SCHEME |               |              |                         |                       |   |   |   |         |
|--------------|--------------------------------|------------------------------|---------------|--------------|-------------------------|-----------------------|---|---|---|---------|
|              |                                | THEORY                       |               |              | PRACTICAL               |                       | L | T | P | CREDITS |
|              |                                | END SEM University Exam      | Two Term Exam | Assessment * | END SEM University Exam | Teachers Assessment * |   |   |   |         |
| MBABAN 306   | Data Warehousing for Analytics | 60                           | 20            | 20           | -                       | -                     | 4 |   | - | 4       |

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

\***Teacher Assessment** shall be based on following components: Quiz/Assignment/Project/Participation in Class, given that no component shall exceed more than 10 marks.

### Course Objective

This course will help the students understanding on the design and management of data warehouse (DW) and business intelligence (BI) systems. The DW is the central element in collecting, integrating, and making sense – knowledge discovery – of an organization’s data. BI concerns the full range of analytical applications and its delivery to the desktop of users.

### Examination Scheme

The internal assessment of the students’ performance will be done out of 40 Marks. The semester Examination will be worth 60 Marks. The question paper and semester exam will consist of two sections A and B. Section A will carry 36 Marks and consist of five questions, out of which student will be required to attempt any three questions. Section B will comprise of one or more cases / problems worth 24 marks.

### Course Outcome

1. After learning this student will be able to form the basis of modern business analytics and decision making in organizations today.

## COURSE CONTENT

### Unit I: Data Warehouse-Introduction

1. What is a Data Warehouse? – Data Warehouse Architectures
2. Types of Systems - Data Mart – OLAP – OLTP - Data Movement (ETL-Extract, Transform and Load)
3. Data Querying and Reporting
4. Reading Hierarchical Raw Data Files



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## Unit II: Conditional Processing & Data Cleaning

1. Conditional processing
2. Dropping and keeping variables
3. Reading Excel spread sheets in R that contains Date Fields
4. Data Cleaning - Manipulating Character Values
5. Manipulating Numeric Values - Manipulating Numeric Values Based on Dates

## Unit III: Process of Producing Summary Report

1. Converting Variable Type
2. Concatenating R Data Sets
3. Merging R Data Sets
4. Producing Summary Reports in R - Creating an Accumulating Total Variable
5. Accumulating Totals for a Group of Data

## Unit IV: Array Processing, Data Integrity, Data Enrichment

1. DO Loop Processing
2. Array Processing
3. Using arrays in R
4. Match-Merging Two or More R Data Sets, Simple joins using SQL
5. Data Integrity - Data Enrichment

## Unit V: Data Quality & Data Privacy

1. Data Quality - Data Quality Assurance
2. Data access
3. Data Privacy and Ethics
4. Data security - Overview of BI and Data Mining Technology

## Suggested Reading

1. Kimball,R., Ross,M., Thornthwaite, W.,Mundy,J. and Becker (2008). *The Data Warehouse Lifecycle Toolkit: Practical Techniques for Building Data Warehouse and Business Intelligence Systems*. John Wiley & Sons: New York: USA.
2. Morabito, J., Stohr, E., Genc, Y (2011). *Enterprise Intelligence: A Case Study and the Future of Business Intelligence. International Journal of Business Intelligence Research*, 2(3), 1-20.
3. Kimball, R. and Ross, M. (2006). *The Data Warehouse Toolkit” The Complete Guide to Dimensional Modeling Second Edition*. John Wiley & Sons: New York: USA.
4. Kimball, R., and Caserta (2004). *The Data Warehouse ETL Toolkit. Practical Techniques for Extracting, Cleaning, Conforming, and Delivering Data*. John Wiley & Sons: New York: USA.