FACULTY OF MANAGEMENT STUDIES

Integrated MBA(IMBA) – Five Years (Sem-V)
Effective from Academic Year 2022-23

Subject Code: 1MS3010502	Subject Title: Analytical Tools and Techniques for Business Decision Making

1. **Course Objectives:**

   The course is designed to provide in-depth knowledge of handling analytical tools and techniques that can be used for fact-based decision-making for students. Further, this course is being designed as a practical guide for students to make strategic business decisions. Tools and techniques described in the course outline will aid students to take intelligent business decisions based on the data sets. In fact, it also gives them an understanding how they can plug and play these analytical techniques which are useful in various functional domains of a business. Also, this course is prepared in order to improve analytical skills of the students for faster decision making.

2. **Learning Outcome:**

   At the end of semester students would be able to
   - Understand the importance of analytical tools & techniques for decision making
   - Knowledge about the applications of various tools & techniques and its usefulness in making effective business decisions.
   - This will facilitate the students in making strategic business decisions
   - Develop in-depth knowledge of analysis tools in various functional department in a business

3. **Teaching Scheme (Hours per week)**

Lecture (Hrs.)	Tutorial	Practical	Credit	Examination Evaluation		Total
				University Assessment	Continuous Assessment	
4	0	0	4	60	40	100

4. **Syllabus:**

Module No.	Contents	Total Hours	Weight (%)
1	**Introduction to decision making** • What is decision making? • Significance of decision making in a business • Types of business decisions • Decision making process • Strategies for decision making **Analytical tools in decision making** • Importance of analytical tools in decision making • Significance of tools and technique in decision making. • Types of analytical tools and techniques used in business (business related examples)	11	25
2	**Descriptive statistics for decision making** • Frequency analysis and interpretation	12	25

	• Descriptive analysis using tables, graphs, and charts, cross tabulation **Inferential statistics for decision making** • Hypothesis testing, type-I and type-II error, • Chi-square test, T test, Z test, ANOVA • Correlation and simple regression analysis		
3	**Decision making in functional areas** **Marketing** • Marketing metrics • New product decisions, advertisement cost analysis (Impact frequency & reach) • Product pricing Decisions **Finance & HR** • Shut Down/Continue, make/buy, processing of joint products, introducing a new product. • Cost volume profit (CVP) analysis and margin of safety • Budgetary control, master budget, flexible budget • Staffing, supply and demand forecasting	12	25
4	**Decision making in functional areas** **Inventory management** • Managing inventory of independent demand items • EOQ, quantity discounts, ABC Analysis **Waiting line analysis(Queuing)** • Elements of waiting line • Queuing (waiting line) analysis & quality, single server models **Project management** • CPM, PERT, crashing of network	11	25

5. Suggested Reference Books:

Author /s	Name of the Book	Publication
Arnab Laha & Vinay Bhaskar	IIMA - How to Make the Right Decision	Random Business
V. Rajasekaran R. Lalitha	Cost Accounting	Pearson
Black, K.,	Business Statistics for Contemporary Decision Making	Wiley
N.D. Vohra.	Quantitative Techniques in Management	The McGraw-Hill
R Panneerselvam	Production and Operations Management	Prentice-Hall India
Kanishka Bedi	Production and Operations Management	Oxford Higher Education

6. Evaluation Scheme

The evaluation of participants will be on continuous basis comprising of the following Elements:

Component	Weight

Internal Assessment Depending on the need and objectives of the subject, internal assessment should include minimum three of the following sub-components; • Class Test, Quiz, Assignments, Case Presentation, Class Participation, Projects, Team/Individual Assignments. • The weightage of a sub-component should not exceed 50% of internal assessment component weight. • The bifurcation of sub-components shall be communicated by the instructor before commencement of the academic sessions.	**40%**
University Examination * For the written examination, the open book examination may be opted by the paper setter appropriately	**60%**