SCHEME OF MBA PROGRAM

1. The Master of Business Administration (MBA) is 4 semesters program. The Program structure and credits for MBA have been taken as per AICTE guidelines and model Scheme based on the stakeholders needs and general structure of the program.

2. Minimum number of classroom contact teaching credits for MBA is 96 credits and field work/ internship of 06 credits, thus the minimum number of credits for award of MBA course is 102 credits. Out of 96 credits, 54 credits are allotted for core courses and rest 42 credits for electives including laboratory work.

3. The following shall be the scheme for teaching and examination of MBA Course for academic session 2020-21. The teaching scheme is given in terms of number of sessions for a course/lab work. Each session is of 90 minutes. There will be 5 days teaching in a week.

FIRST SEMESTER MBA TEACHING SCHEME

SN	Course Type	Paper Code	Paper Title	No of Sessions		Credits	Internal	External	Total
				Per Semester	Per Week				
1	PCC	M-101	Fundamentals of Management	24	2	3	30	70	100
2	PCC	M-102	Managerial Economics	24	2	3	30	70	100
3	PCC	M-103	Operations Management-I	24	2	3	30	70	100
4	PCC	M-104	Marketing Management	24	2	3	30	70	100
5	PCC	M-105	Information Technology for Managers	24	2	3	30	70	100
6	PCC	M-106	Organizational Behavior	24	2	3	30	70	100
7	PCC	M-107	Cost and Management Accounting	24	2	3	30	70	100
8	PCC	M-108	Business Statistics and Analytics for Decision Making	24	2	3	30	70	100
9	MCC	MCC	AUDIT COURSE	12	1	0	30	70	100*
10	REW	M-109	Seminar on Contemporary Issues	24	2	1	60	40	100
11	PCC	M-110	Data Analytics Lab.	24	2	1	60	40	100
12	PCC	M-111	Business Communication Lab.	24	2	1	60	40	100
13	SODECA		Social Outreach, Discipline & Extra Curriculum Activities	-			-	100	100
			Total for I Semester	276	23	27	420	780	1200

M-108: BUSINESS STATISTICS AND ANALYTICS FOR DECISION MAKING

OBJECTIVES
1. To familiarize with basic mathematical and statistical techniques and their applications in managerial decision making.
2. To develop understanding for managerial implications of the mathematical techniques.
3. To understand significance of measures of central tendency, symmetrical and asymmetrical distribution, patterns.

LEARNING OUTCOMES:
1. Use of matrices for solving business problems.
2. Statistically analyze business data using various tools.
3. Apply distribution techniques in business context.
4. Carry out basic Investment Analysis

SECTION A

UNIT	COURSE DESCRIPTION	SESSIONS
I	Matrices and Determinants: Definition of a matrix, types of matrices, algebra of matrices, Transpose, Adjoint, Inverse of a matrix.	2
II	Business Applications using Matrices: Solving linear equations by using matrices, Input-Output analysis. Application of matrices for solution to simple business and economic problems.	3
III	Descriptive Statistics: Measures of central tendency and dispersion and their implications, Mean, Mode, Median, Variance and standard deviation and Coefficient of Variation, Z Score, Exploratory data analysis, Box and Whisker Plot	3
IV	Correlation: Covariance and coefficient of correlation. Visual explorations using software like Microsoft Excel/MINITAB etc.	3
V	Regression: Types of Regression models, determination of simple linear regression equation using least square method, coefficient of determination, Overview of Partial and Multiple regressions.	3
VI	Index Numbers: Meaning, Types of index numbers, uses of index numbers, Construction of Price, Quantity and Volume indices: Fixed base and Chain base methods. Fisher ideal index number. Ration and Proportion.	3
VII	Probability: Basic probability concepts, conditional probability, marginal probability, and its uses in business decision making; Bayes' theorem and its applications. Probability Distributions: Concept and application of Binomial, Poisson, Exponential and Normal distributions	4
VIII	Investment Analysis: Interest: simple, compound, nominal and effective rate of interest. time value of money, discounting. Annuity, amortization and sinking funds. Breakeven Analysis.	3

SECTION B

Note: 50% of the Questions will be Numerical & Cases/Inferences based.

PRACTICAL COMPONENT:

- Identifying a business problem and solving it using matrices & determinants.
- Illustrate practical usage of Index Numbers
- Analyzing relationship between different probability distributions
- Understanding managerial implications of correlation & regression
- Conducting investment analysis of five individual investors

BOOKS RECOMMENDED:

1 Doane. Applied Statistics in Business and Economics. Tata McGraw-Hill.
2 Aczel. Complete Business Statistics, Tata McGraw-Hill.
3 Gupta, S.P. Statistical Methods. Sultan Chand & Sons.
4 John C. Lee., Business and Financial Statistics Using Minitab 12 and Microsoft Excel 97. World Scientific Publisher
5 Sharma, J.K.., Business Mathematics, Theory and Application, Ane Books India.
6 Francis Andre, Ben Mousley,Business Mathematics and Statistics (2014), Cengage Learning
7 C. R. Kothari, Quantitative Techniques, Vikas Publishing House, 2009.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/ARTICLES:

1. Proceedings of the Indian Academy of Sciences: Mathematical Sciences
2. Journal of the Ramanujan Mathematical Society
3. Journal of the Indian Mathematical Society
4. Sankhya: The Indian Journal of Statistics
5. Journal of Applied Statistics