FIFTH SEMESTER (OPEN COURSE)
(For students not having Mathematics as Core Course)

MT5D04 MATHEMATICS FOR DECISION MAKING

3 hours/week   **3 credits**   **75marks   [Int:15+Ext:60]**

Text	Elementary Statistics: Picturing the World (6/e) *Ron Larson & Betsy Farber* *Pearson Education, Inc(2015) ISBN: 978-0-321-91121-6*

Module I   14 hrs

Chapter1 Introduction to Statistics
1.1: An Overview of Statistics
1.2: Data Classification
1.3: Data Collection and Experimental Design

Chapter2 Descriptive Statistics
2.1: Frequency Distributions and their Graphs
2.2: More Graphs and Displays
2.3: Measures of Central Tendency
2.4: Measures of Variation
2.5: Measures of Position

Module II   12 hrs

Chapter3 Probability
3.1: Basic Concepts of Probability and Counting
3.2: Conditional Probability and the Multiplication Rule
3.3: The Addition Rule
3.4: Additional topics in probability and counting

Module III   22 hrs

Chapter4 Discrete Probability Distribution
4.1: Probability Distributions
4.2: Binomial Distributions
4.3:More Discrete Probability Distributions

Chapter5 Normal Probability Distribution
5.1: Introduction to Normal distributions and Standard Normal Distributions
5.2: Normal Distributions: Finding Probabilities
5.3:Normal Distributions: Finding Values

	References:
1	Mario F. Triola: Elementary Statistics(13/e) : *Pearson Education, Inc(2018) ISBN: 9780134462455*
2	Neil A. Weiss: Elementary Statistics(8/e) *Pearson Education, Inc(2012) ISBN: 978-0-321-69123-1*
3	Nancy Pfenning: Elementary Statistics: Looking at Big Picture *Brooks/Cole Cengage Learning(2011) ISBN: 978-0-495-01652-6*
4	Frederick J Gravetter, Larry B. Wallnau: Statistics for the Behavioral Sciences (10/e) *Cengage Learning(2017) ISBN: 978-1-305-50491-2*
5	Seymour Lipschutz, John J. Schiller, R. Alu Srinivasan: Beginning Finite Mathematics *Schaum's Outline Series, McGraw-Hill(2005)*
6	Michael Sullivan: Finite Mathematics An Applied Approach(11/e*) John Wiley & Sons, Inc(2011)ISBN: 978-0470-45827-3*