DEPARTMENT OF MATHEMATICS -OPEN COURSE

MTS5D04-MATHEMATICS FOR DECISION MAKING

SYLLABUS

Text - Elementary Statistics: Picturing the World (6/e) Ron Larson & Betsy Farber Pearson

Education, Inc (2015) ISBN : 978-0-321-91121-6

3 Hours/Week   3 Credits   75 Marks[Int: 16 + Ext : 60]

Module – I (14 hrs)

Chapter - 1: Introduction to Statistics

1.1 : An Overview of Statistics

1.2 : Data Classification

1.3 : Data Collection and Experimental Design

Chapter - 2: 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)

Chapter - 3 : 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)

Chapter - 4 : Discrete Probability Distribution

4.1 : Probability Distributions

4.2 : Binomial Distributions

4.3 : More Discrete Probability Distributions

Chapter - 5 : 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