



DEPARTMENT OF MANAGEMENT STUDIES
NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI - 620 015, TAMIL NADU, INDIA

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Course Code	:	MB 701
Title of the Course	:	BUSINESS STATISTICS
Prerequisites	:	Nil
Trimester		III
Contact Hours, Type of Course	:	30
Course Assessment Methods	:	Continuous Assessment, Trimester Examination

OBJECTIVE

To create an understanding on different statistical techniques for data analysis and decision making

Unit I Measures of Central Tendency & Dispersion

Introduction to statistics-Collecting & tabulating data - Measure of Central Tendency and Dispersion in Frequency Distribution- Probability Theory: classical, objective & subjective Approach-Addition, Multiplication & Bayes Theorem –Applications

Unit II Probability Distributions

Binomial, Poisson and Normal - Decision Making under certainty, uncertainty and Risk

Unit III Sampling Distribution & Estimation

Sampling and Sampling Distribution: Types of sampling —Random Sampling-Concept of Standard Error Central Limit Theorem. Estimation: Types of estimates-Point Estimate, Interval estimate of their population mean, variance and proportion-student-t distribution.

Unit IV Hypotheses Testing

Testing Hypotheses Significance level-Type & Type II error- one Two tail tests —Hypothesis Testing of means, proportion-Chi-Square Test-Analysis of variance.

Unit V Non Parametric methods

Non Parametric methods Kolmogorov Test-Median Test – Mann –Whitney Test – Wilcoxon T Test – Friedman ANOVA-McNemar Test-Cochran's Q Test.

TEXT / REFERENCES:

1. Richard I. Levin and David S. Rubin, 'Statistics for Management', Prentice Hall of India, 12th edition' 2011
2. Srivatasava, Shenoy and Sharma, 'Quantitative Techniques for Managerial Decision Making',
3. New Age International Pvt. Ltd., 2nd edition, 2002.
4. G C Beri, " Business Statistics", Tata Mc Graw Hill, 3rd edition, 2009.

Course outcomes

At the end of the course student will be able

1. to understand the characteristics of data taken for the study
2. to analyze data using different statistical methods
3. to develop hands-on skill to work with excel and SPSS
4. to better understand what method to be applied for application taken for analysis



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COURSE OUTLINE TEMPLATE			
Course Title	BUSINESS STATISTICS		
Course Code	MB 701	No. of Credits	2 (weekly 3 hrs)
Department	Management Studies	Faculty	Dr. P.SRIDEVI
Pre-requisites Course Code	-		
Course Teacher(s) E-mail	E-Mail		psridevi@nitt.edu
Course Type		Core – I Trimester	
	√	Elective	
		Open Elective	
		Laboratory	

COURSE TEACHING AND LEARNING ACTIVITIES			
Sl.No.	Week	Topic	Mode of Delivery
1.	2 nd week of July 2017 Class – 1st week (3 Contact Hours)	Introduction to statistics-Collecting & tabulating data - Measure of Central Tendency	Lecture - Power Point Presentation
2.	Class- 2nd week (3 Contact Hours)	Dispersion in Frequency Distribution- Probability Theory: classical, objective & subjective Approach-Addition, Multiplication & Bayes Theorem – Applications	Lecture - Power Point Presentation
3.	Class- 3rd week (3 Contact Hours)	Binomial, Poisson and Normal distribution	Lecture - Power Point Presentation
4.	Class- 4th week (3Contact Hours)	Decision Making under certainty, uncertainty and Risk	Lecture - Power Point Presentation
5.	4th week (2/3 hours)	Tutorial on portions covered	Problem solving by students
6.	Class- 5th week (3 Contact Hours)	Sampling and Sampling Distribution: Types of sampling —Random Sampling-Concept of Standard Error Central Limit Theorem.	Lecture - Power Point Presentation
7.	Class- 6th week (3 Contact Hours)	Estimation: Types of estimates-Point Estimate, Interval estimate of their population	Lecture - Power Point Presentation
8.	7th week	Cycle Test for I Trimester / MBA scheduled	EXCEL orientation – Industry expert
9.	Class- 8th week (3 Contact Hours)	Mean, variance and proportion-student-t distribution	Lecture - Power Point Presentation
10.	8th week (2/3 hours)	Tutorial on portions covered	Problem solving by students
11.	Class – 9th week (3 Contact Hours)	Testing Hypotheses Significance level-Type & Type II error- one Two tail tests —	Lecture - Power Point Presentation
12.	Class - 10th week (3 Contact Hours)	Hypothesis Testing of means, proportion-Chi-Square Test-Analysis of variance.	Lecture - Power Point Presentation

13.	Class – 11th week (3 Contact Hours)	Non Parametric methods Kolmogorov Test-Median Test – Mann –Whitney Test – Wilcoxon T Test –	Lecture - Power Point Presentation
14.	11th week (3 hours)	Tutorial on 75%portions covered (Tutorial Assessment**)	Problem solving by students
15.	Class – 12th week (3 Contact Hours)	Friedman ANOVA-Mcnemar Test-Cochram's Q Test.	Lecture - Power Point Presentation ** Evaluation out off contact hours if required**
16.	October 2017	Trimester Exam Begins	

COURSE ASSESSMENT METHODS

Sl. No.	Mode of Assessment	Week / Date	Remarks	% Weightage
1.	Assessment	7 th week - 2017	1 hour 30 Minutes	25%
2.	Assignments & Tutorial	11 th week of the course 2017.	Class room understanding evaluation	10% for Assignment 15% for Tutorial
3.	End Semester Examination	October 2017	3 Hours	50%

- Note:**
1. Attending all the assessments (Assessment 1 to 3) is MANDATORY for every student.
 2. If any student is not able to attend cycle test due to genuine reason, student is permitted to appear for retest.
 3. Every student is expected to score minimum 40% (i.e., 40 marks) to pass the course. Otherwise the student would be declared fail and 'F' grade will be awarded.

FOR APPROVAL

Dr.P.SRIDEVI
Course Faculty

Dr. N.Tamaraiselvan
Chairman (Class Committee)

Dr.B.Senthil Arasu
HoD