DEPARTMENT OF MANAGEMENT STUDIES
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COURSE PLAN – PART I			
Course Title	**BUSINESS STATISTICS**		
Course Code	MB 701	**No. of Credits**	**2**
Course Code of Pre-requisite subject(s)	NIL		
Session	JULY- OCT 2019	**Section**	
Name of Faculty	Dr. P.Sridevi	**Department**	MBA
Email	psridevi@nitt.edu	**Telephone No.**	041-2503711
Name of Course Coordinator(s) (if, applicable)	NIL		
E-mail		**Telephone No.**	
Course Type	V Core course	☐ Elective course	

SYLLABUS

Unit I Inferential and Descriptive statistics:
Introduction to Statistics-Measures of Central Tendency and Measures of Dispersion in Frequency Distribution

Unit II Probability Theory
Rules – Probability under conditions of Statistical independence and dependence - Bayes Theorem –Probability Distributions-Binomial, Poisson and Normal distribution.

Unit III Sampling Distribution
Sampling and Sampling Distribution: Types of sampling -Concept of Standard Error - Sampling from normal and non-normal population - Central Limit Theorem.

Unit IV Hypotheses Testing
Testing Hypotheses Significance level-Type & Type II error-One tail and Two tail tests —Hypothesis Testing of means, proportion- z-test, t- test, Chi-Square Test- F distribution, Analysis of variance(ANOVA)-One way and Two way ANOVA –Introduction to simple regression and correlation.

Unit V Non Parametric methods
-Non Parametric methods Kolmogorov Test-Median Test –Mann –Whitney U-Test –Wilcoxon T-Test –Friedman ANOVA- Mcnemar Test-Cochran's Q -Test

COURSE OBJECTIVES	
To create an understanding on different statistical techniques for data analysis and decision making in business perspective	
COURSE OUTCOMES (CO)	
Course Outcomes	**Aligned Programme Outcomes (PO)**
1. To understand the characteristics of data and methods taken for the study	**2, 5**
2. To analyze data using different statistical methods	**3, 5, 6**
3. To develop decision making skills by analysis results	**3, 4, 5**
4. To better understand business problems and develop problem solving skills	**1, 2, 3, 5, 6**

COURSE PLAN – PART II

COURSE OVERVIEW

This course describes statistics techniques on business perspectives

COURSE TEACHING AND LEARNING ACTIVITIES

Sl.No.	Week	Topic	Mode of Delivery
1.	4th week of July 2019 Class – 1st week (3 Contact Hours)	Introduction to statistics- Arranging data- constructing & graphing frequency distribution	Lecture - Power Point Presentation & board
2.	Class- 2nd week (3 Contact Hours)	Measures of central tendency and measures of Dispersion in Frequency Distribution	Lecture - Power Point Presentation & board
3.	Class- 3rd week (3 Contact Hours)	Probability Theory: classical, objective & subjective Approach-Addition, Multiplication	Lecture - Power Point Presentation & board
4.	Class- 4th week (3Contact Hours)	Bayes Theorem –Applications Binomial, Poisson and Normal distribution (Assignment topic to be discussed – Problem/ Case)	Lecture - Power Point Presentation
5.	Class- 5th week (3 Contact Hours)	Sampling and Sampling Distribution: Types of sampling —Random Sampling-Concept of Standard Error.	Lecture - Power Point Presentation & board
6.	Class- 6th week (3 Contact Hours)	Sampling from normal and non-normal population- Central Limit Theorem	Lecture - Power Point Presentation & board
7.	7th week	**Cycle Test for I Trimester / MBA scheduled**	**Microsoft power BI workshop – Industry expert (Depends on expert availability) - Batches**
8.	Class- 8th week (3 Contact Hours)	Mean, variance and proportion-student-t distribution	Lecture - Power Point Presentation & board
9.	Class – 9th week (3 Contact Hours)	Testing Hypotheses Significance level-Type I & Type II error- one Two tail tests — Hypothesis Testing of means, proportion-Chi-Square Test-Analysis of variance	Lecture - Power Point Presentation & board
10.	Class - 10th week (3 Contact Hours)	One way and Two way ANOVA- Introduction to simple regression and correlation.	Lecture - Power Point Presentation & board
11.	Class – 11th week (3 Contact Hours)	Non Parametric methods Kolmogorov Test-Median Test – Mann –Whitney U-Test – Wilcoxon T Test	Lecture - Power Point Presentation & board

12.	11th week (3 hours)	Tutorial on 75% portions covered (Tutorial Assessment**) – on additional hours	Problem solving by students
13.	Class – 12th week (3 Contact Hours)	Friedman ANOVA-Mcnemar Test-Cochram's Q Test.	Lecture - Power Point Presentation & board
			** Evaluation out off contact hours if required**
14.	October 2019	**Trimester Exam Begins**	

TEXT / REFERENCES:

1. Richard I. Levin and David S. Rubin, 'Statistics for Management', Prentice Hall of India, 12h edition' 2011
2. Srivatasava, Shenoy and Sharma, 'Quantitative Techniques for Managerial Decision Making', New Age International Pvt. Ltd.,2nd edition, 2002.
3. G C Beri, " Business Statistics", Tata Mc Graw Hill, 3rd edition, 2009.
4. T N Srivastava, Shailaja rego, "Statistics for management", Tata McGraw-Hill Publishing Company Ltd., 2008.
5. Srivatasava, Shenoy and Sharma, 'Quantitative Techniques for Managerial Decision Making', New Age International Pvt. Ltd.,2nd edition, 2002.
6. Linda Herkenhoff, John Fogli, "Applied Statistics for Business and Management using Microsoft Excel", Springer, 1st edition, 2013.

COURSE ASSESSMENT METHODS

Sl. No.	Mode of Assessment	Week / Date	Remarks	% Weightage
1.	Assessment 1	7th week - 2019	1 hour 30 Minutes	25%
2.	Assignment	Will beAssigned 4th Week	Submit during end term	10%
3.	Tutorial	11th week of the course 2018	Class room understanding evaluation	15%
4.	Trimester Examination	October 2019	3 Hours	50%

Note:

    A. Attending all the assessments (Assessment 1 to 4) is MANDATORY for every student.
    B. Passing minimum for the course shall be the Class Average/2. If not scoring the minimum, the student would be declared fail and 'F' grade will be awarded.

COURSE EXIT SURVEY

- Feedbacks are collected before final examination through MIS as per the institute guidelines
- Students, through their Class Representatives, may give their feedback at any time to the course faculty which will be duly addressed.

The students may also give their feedback during Class Committee Meeting.

ATTENDANCE:

- Minimum 75% is mandatory to write the trimester examination. Students with less than 65% of attendance shall be prevented from writing the final assessment and shall be awarded 'V' grade.
- Medical Certificate / On Duty Certificate should be submitted immediately after rejoining.

COMPENSATION ASSESSMENT:

- One compensation assessment will be given after completion of Assessment 1 for the students those who are absent for any assessment due to genuine reason.
- The prior permission and required document must be submitted for absence.

ACADEMIC HONESTY & PLAGIARISM:

- Avoid usage of electronic devices at classes, test and exam.
- The students are expected to come out with their original solution for the problems given in the assignment. If found to copy from internet/other students, marks will be reduced.
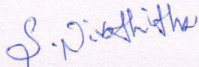- Need to maintain honesty & discipline in class room and exam hall

ADDITIONAL INFORMATION

- The students can get their doubts clarified at any time with their faculty member with prior appointment.
- Microsoft power BI induction workshop date will be intimated based on expert availability

FOR APPROVAL

Dr. P.SRIDEVI Course Faculty	Chairman (Class Committee)	Dr. P. Sridevi HoD