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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 2018** | **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** |  **Core course Elective course** **V** |
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| **SYLLABUS**  |
| **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-Cochram’s Q Test.  |
| **COURSE OBJECTIVES**  |
| *To create an understanding on different statistical techniques for data analysis and decision making* |
| **COURSE OUTCOMES (CO)** |
| **Course Outcomes** | **Aligned Programme Outcomes (PO)** |
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| 1. To understand the characteristics of data and methods taken for the study
 | **2, 5** |
| 1. To analyze data using different statistical methods
 | **3, 5, 6** |
| 1. To develop decision making skills by analysis results
 | **3, 4, 5** |
| 1. To better understand business problems and develop problem solving skills
 | **1, 2, 3, 5, 6** |

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|  **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. | 2nd week of July 2018Class – 1st week(3 Contact Hours) | Introduction to statistics-Collecting & tabulating data - Measure of Central Tendency | Lecture - Power Point Presentation & board |
| 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 & board |
| 3. | Class- 3rd week (3 Contact Hours) | Binomial, Poisson and Normal distribution  | Lecture - Power Point Presentation & board |
| 4. | Class- 4th week (3Contact Hours) | Decision Making under certainty, uncertainty and Risk(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 Central Limit Theorem.  | Lecture - Power Point Presentation & board |
| 6. | Class- 6th week (3 Contact Hours) | Estimation: Types of estimates-Point Estimate, Interval estimate of their population | Lecture - Power Point Presentation & board |
| 7. | 7th week  | **Cycle Test for I Trimester / MBA scheduled** |  |
| 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 & Type II error- one Two tail tests — | Lecture - Power Point Presentation & board |
| 10. | Class - 10th week(3 Contact Hours) | Hypothesis Testing of means, proportion-Chi-Square Test-Analysis of variance. | Lecture - Power Point Presentation & board |
| 11. | Class – 11th week (3 Contact Hours) | Non Parametric methods Kolmogorov Test-Median Test – Mann –Whitney 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  |
| \*\* Evaluation out off contact hours if required\*\*  |
| 14. | October 2018 | **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.  |
| **COURSE ASSESSMENT METHODS** |
| **Sl. No.** | **Mode of Assessment** | **Week / Date** | **Remarks** | **% Weightage** |
| 1. | Assessment 1 | 7th week - 2018 | 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 2018 | 3 Hours | 50% |
| **Note:** A.Attending all the assessments (Assessment 1 to 4) is MANDATORY for every student.B. 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. |
| **COURSE EXIT SURVEY** |
| * Feedbacks are collected before final examination through MIS or any other standard format followed by the institute
* 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 having attendance 65% to 74% are eligible for the end semester exam only after attending the extra classes and submitting assignments. Students have to redo the course, if they have less than 65% of attendance.
* 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
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| **ADDITIONAL INFORMATION** |
| * The students can get their doubts clarified at any time with their faculty member with prior appointment.
* Excel induction workshop date will be intimated based on expert availability
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| **FOR APPROVAL** |
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| **P.SRIDEVI** |  **Dr.V.J.Sivakumar**  |  **Dr.B.Senthil Arasu** |
| **Course Faculty** | **Chairman (Class Committee)** |  **HoD** |

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