

**STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086**  
**B.Com (A & F) DEGREE: ACCOUNTING AND FINANCE**

**SYLLABUS**  
**(Effective from the academic year 2015 – 2016)**

**STATISTICAL TECHNIQUES FOR BUSINESS**

**CODE: 15CM/AC/ST45**

**CREDITS: 5**

**L T P : 5 0 0**

**TOTAL TEACHING HOURS : 65**

**OBJECTIVES OF THE COURSE**

- To give a practical exposure on the various statistical methods and to arrive at rational decision through systematic analysis and interpretation
- To educate on the effective and efficient application of various statistical tools associated with research in business fields

**Unit 1 (10 Hrs)**

**1.1 Correlation**

- 1.1 Karl Pearson's Co-efficient of Correlation
- 1.2 Partial Correlation of First Order and Second Order Co-efficient  
Co- efficient of Multiple Correlations
- 1.3 Multiple Regression Analysis

**Unit 2 (15 Hrs)**

**Analysis of Time Series**

- 2.1 Utility and Components of Time Series
- 2.2 Methods of Measuring Trend
- 2.3 Measurement of Seasonal Variations

**Unit 3 (15 Hrs)**

**Test of Hypothesis**

- 3.1 Procedure for testing Hypothesis
- 3.2 Test of Significance
- 3.3 For Large Samples
- 3.4 For Small Samples
- 3.5 Limitations of Test of Significance

**Unit 4 (15 Hrs)**

**Chi-square Test and Analysis of Variance**

- 4.1 Meaning and Conditions for applying Chi- square Test
- 4.2 Application of Chi square Test - Test of Goodness of fit and Test of  
Independence - Yates Correction
- 4.3 Variance Ratio Test
  - 4.3.1 One-way Classification Model
  - 4.3.2 Two-way Classification Model

## Unit 5

### Application of SPSS in Statistics

(10 Hrs)

- 5.1 Univariate and Bivariate Analysis
- 5.2 Analysis of Time Series
- 5.3 Test of Hypothesis
- 5.4 Analysis of Variance

### TEXT BOOK

Gupta S.P., Statistical Methods, New Delhi, Sultan Chand, 2007

### BOOKS FOR REFERENCE

Agarwal Y.P., Statistical Methods, Concepts, Applications and Computations, New Delhi, Sterling, 2006.

Beri, G.C., Business Statistics, New Delhi, Tata Mc Graw Hill , 2007

Pillai, R.S.N. & Bagavathy,V., Statistics, 13<sup>th</sup> edition, New Delhi, Sultan Chand, 2007

Sanchetti, V.C., & Kapoor, Business Statistics, 7<sup>th</sup> edition, New Delhi, Sultan Chand, 2006

Sharma J.K., Business Statistics, New Delhi, 1<sup>st</sup> edition, Pearson Education, 2006

### JOURNALS

Aligarh Journal of Statistics  
Journal of Applied Statistics

### WEBSITE

[www.ststisticsofindia.com](http://www.ststisticsofindia.com)

www.indiastat.com

### PATTERN OF EVALUATION

#### Continuous Assessment:

Total Marks: 50

Duration: 90 Mins

Section A – Answer all Questions  $7 \times 2 = 14$  Marks

Section B – Answer any Two Questions from a choice of Three  $2 \times 8 = 16$  Marks

Section C – Answer any One Question from a choice of Two  $1 \times 20 = 20$  Marks

**Third Component Tests:**

Open book tests

Assignments- Problem solving

**End Semester Examination:**

Total Marks:100

Duration: 3 Hours

Section A – short answers (max. 50 words) -  $10 \times 2 = 20$  Marks

5 Questions theory and 5 Problems

Section B – Problems  $5 \times 8 = 40$  Marks (From a choice of 7)

Section C – Problems  $2 \times 20 = 40$  Marks (From a choice of 4)