# ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM VI SEMESTER STATISTICS TIME: 4HRS/WEEK ST 6200(3) APPLIED STATISTICS MAX.MARKS:100 SYLLABUS

### **Unit-I**

Analysis of times series: Components of times series: meaning and examples, trend by least squares (straight line and parabola) methods and moving average methods. Seasonal indices by simple averages, ratio to moving average, ratio to trend and link relative methods.

### **Unit-II**

Index numbers: Meaning, problems involved in the construction of index numbers, simple and weighted index numbers. Criteria of good index numbers. Fixed base and chain base index numbers. Cost of living index numbers, wholesale price index numbers, Base shifting, splicing and deflation of index numbers.

# **Unit-III**

Official Statistics: Functions and organization of CSO and NSSO. Agricultural, area, yield of statistics, national income and its computation.

# **Unit-IV**

Vital statistics: Meaning, Definition, uses, sources of vital statistics, various Death rates-CDR, ASDR, STDR and Birth rates -CBR, ASFR, TFR.

# **Unit-V**

Reproduction Rates: Measurement of population growth, crude rate of natural increase, Pearle's vital index, Gross Reproduction Rate[GRR], Net Reproduction Rates[NRR], Life tables, construction uses of life tables and abridged life Tables.

### **Text Books:**

- 1. Fundamentals of applied statistics: VK Kapoor and SC Gupta.
- 2. BA/BSc III year paper III Statistics applied statistics Telugu academy by prof.K.Srinivasa Rao, Dr D.Giri. Dr A.Anand, Dr V.Papaiah Sastry.

# **Reference Books:**

- 1.Indian Official statistics MR Saluja.
- 2. Anuvarthita Sankyaka Sastram Telugu Academy.

# **Practicals - Semester - VI**

Conduct any 6 (Ms-exel is compulsory)

- 1.Measurement of Linear Trend
- 2. Measurement of Seasonal Indices-Link Relatives method
- 3. Reversal tests.
- 4.Cost of living Index Numbers.
- 5. Mortality, Fertility& Re-production rates.
- 6.Life tables.
- 7.MS-Excel Practical.

Practicals - Semester - VI

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- 4.Cost of living Index Numbers.
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