

**SARDAR PATEL UNIVERSITY**  
**B.Com. Semester: II**  
**Syllabus with Effect From: November/December-2019**

<b>Paper Code: UB02DCOM65</b>	<b>Total Credit:3</b>
<b>Title Of Paper: Advanced Statistics - III</b>	

**Objective:** The objectives will be to achieve a deep understanding of particular statistical methods and to learn to use some advanced tools for analyzing and developing statistical methods.

Unit	Description of Detail	Weighting (%)
<b>I</b>	<b>Population Census</b> Population census: Method of population census and its uses. Study of India's population census. Limits of population census.	<b>25%</b>
<b>II</b>	<b>Demography Methods</b> Meaning scope of demography, use of demographic statistics. Examples to find C.D.R, S.D.R and to compare the healthiness of cities. Meaning of Infant Mortality Rate (I.M.R.), Crude Birth Rate(C.B.R.), Meaning Of fertility rate, General Fertility Rate (G.F.R.), Specific Fertility Rate (S.F.R.) and total fertility rate (T.F.R.). Simple Examples.	<b>25%</b>
<b>III</b>	<b>Time Series</b> Meaning of time series, various components of time series: Trend, Seasonal, Cyclical, And random components. Method of measuring Trend by (a) Graphical Method (2) Moving Average Method. Seasonal Indices and simple sums of seasonal variations.	<b>25%</b>
<b>IV</b>	<b>Index Number</b> Definition, Limitation and uses of index number. Construction of cost of living index number, Wholesale index number, construction of index number by aggregate expenditure method and family budget method and family budget method using Laspeyers, Paasches and Fishers formula.	<b>25%</b>

**Basic Text & Reference Books:-**

- **S.C Gupta and V.K.Kapoor:** Fundamental of applied statistics, Sultan Chand and sons, New Delhi.
- **Kapoor V.K.:** Business Mathematics, Sultan chand and sons, New Delhi.
- **Parimal Mukhopadhyay:** Mathematical Statistics, Books and allied P.Ltd.