

CIRCULAR: -

UNIVERSITY OF MUMBAI
No.UG/47 of 2009

A reference is invited to the Ordinances, Regulations and syllabi relating to the scheme of paper at the B.A. degree course vide this office Circular No.UG/408 of 2007 dated 10th October, 2007 and the Principals of the affiliated colleges in Arts and the Professor-cum-Director, Institute of Distance Education are hereby informed that the recommendation made by the Board of Studies in Statistics at its meeting held on 6th October, 2008 has been accepted by the Academic Council at its meeting held on 15th December, 2008 vide item No. 4.22 and that, in accordance therewith, the Paper I Descriptive Statistics at the F.Y.B.A. is corrected as per Appendix and that the same has been brought into force with effect from the academic year 2008-2009 :-

MUMBAI-400 032
31st January, 2009

PRIN. K. VENKATARAMANI
REGISTRAR

To,

The Principals of the affiliated colleges in Arts and the Professor-cum-Director, Institute of Distance Education.

A.C./4.22/15/12/2008

No. UG/47-A of 2009 MUMBAI-400 032 31st January, 2009

Copy forwarded with compliments for information to :-

- 5) The Dean, Faculty of Arts.
- 6) The Chairman, Board of Studies in Statistics.
- 7) The Controller of Examinations.
- 8) The Co- Ordinator, University Computerization Center,


(D. H. KATE)
DEPUTY REGISTRAR
(U.G./P.G.Section)

Copy to :-

The Director, Board of College and University Development, the Deputy Registrar (Eligibility and Migration Section), the Director of Students Welfare, the Personal Assistants to the Vice-Chancellor, the Pro-Vice-Chancellor, the Registrar and the Assistant Registrar, Administrative, Ratnagiri for information.

The controller of examinations (10 copies), the Finance and Accounts officer (2 copies), Record Section (5 copies), Publications Section (5 copies), the Deputy Registrar, Enrollment, Eligibility and Migration Section (3 copies), the Deputy Registrar, Statistical, Affiliation Section (2 copies), the Director Institute of Distance Education, (10 copies) the Director University Computer Center (IDE Building) (10 copies) the Deputy Registrar (Special Cell), the Deputy Registrar, (PRO), The Assistant Registrar, Executive Authorities Un



UNIVERSITY OF MUMBAI



Modified Revised Syllabus
at the F.Y.B.A. (Paper-I)
(Descriptive Statistics)
in the Subject of
Statistics

(With effect from the academic year 2008-2009)

B.V.P.A.
PAPER – I
Descriptive Statistics

- UNIT 1 Concept's of a statistical population and sample from a population, qualitative and quantitative data, time series data ; time series data discrete and continuous data. Different types of scales : nominal, ordinal, ratio and interval. Primary data-designing a questionnaire and a schedule; checking their consistency. Secondary data its major sources including some government publications. Construction of tables with one, two or three factors of classification. Requirements of a good statistical table. (15 L)
- UNIT 2 Diagramatic representation using Bar diagrams and Pie chart. Univariate frequency distribution of discrete and continuous variables. Cumulative frequency distribution. Bivariate frequency distribution. Marginal and Conditional frequency distributions. Graphical representation of frequency distribution by Histogram, Frequency polygon, Stem and leaf diagram, Frequency curve and Cumulative frequency curve. (15 L)
- UNIT 3 Concept of Central tendency or location of data Measures of Central tendency or location. Arithmetic mean (simple and weighted), Combined mean, Geometric mean. Median, Quartiles, Deciles, Percentiles. Mode. Uses of Mean, Median and Mode, their merits and demerits. Requirements of a good average. (15 L)
- UNIT 4 Range, Semi-inter quartile range, Mean absolute deviation, Standard deviation. Coefficient of variation. Raw and central moments up to fourth order and relationships among them. (Statement only) Measures of Skewness and Kurtosis based on quartile and moments. Application of Skewness and Kurtosis. Box-Whisker plot. (15 L)
- UNIT 5 **Bivariate data** ; Scatter diagram. Product moment correlation coefficient and its properties. Coefficient of determination. Rank correlation – Spearman's measure. (15 L)
- UNIT 6 **Index Numbers** : Index number as a comparative tool. Simple and composite Index numbers. Laspeyre's Paasche's, Marshall-Edgeworth's, Dorbisch and Bowley's and Fisher's Index Numbers formula. Quantity Index Numbers and Value Index Numbers. Time reversal test. Factor reversal test. Circular Test. Base shifting, Splicing and deflating. Fixed based Index numbers. Link Index Numbers and Chain Index Numbers. Cost of Living Index Number. Real Income concept of wholesale price Index Number. Stages in the construction of Price Index Numbers. (15 L)

At least one practical on each of the following topics (or a group of topics) should be conducted.

List of Practicals :

1. Classification
2. Tabulation
3. Graphs
4. Diagrams
5. Measures of Central Tendency
6. Measures of Dispersion
7. Skewness and Kurtosis
8. Correlation Analysis
9. Index Numbers

The students are required to do at least two practicals (Six Lecture periods) using Computerized Statistical package.

References :

1. Goon A.M., Gupta M.K., Dasgupta B.: Fundamentals of Statistics, Volume I. The World Press Private Limited, Calcutta.
2. Hogg R.V. and Tannis E.P.: Probability and Statistical Inference. McMillan Publishing Co.
3. Kothari C.R.: Research Methodology, Wiley Eastern Limited.
4. Shah R.J.: Descriptive Statistics, Seth Publications.
5. Spiegel M.R.: Theory and Problems of Statistics, Schaum's Publications Series. Tata McGraw-Hill.

Work – load :

Theory : 3 Lectures per week.

Practicals : 3 Lecture periods per week per batch of 20 students.

ALL THESE THREE LECTURE PERIODS OF PRACTICALS SHOULD BE CONDUCTED IN SUCCESSION TOGETHER ON A SINGLE DAY.

Students are required to do at least two practicals i.e. Six Lecture period with the help of any one of the Computerized Statistical Software