

(COMMON FOR THE FACULTIES OF ARTS & SCIENCE)

MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR

FIRST YEAR B.A /B.Sc

STATISTICS

2016-17

Papers	Periods per week	Examination Hours	Maximum Marks	
			B.A	B.Sc.
Theory Papers				
Paper I	2	3	45	50
Paper II	2	3	45	50
Paper III	2	3	45	50
Practicals**	4	4	65	75
Total Marks			200	225

* 1 Period = 1 hours

** per batch

NOTE:

1. Common papers will be set for both the Faculties of Arts & Science.
2. Students are allowed to use simple electronic desk calculators (as per University guidelines).
3. Statistical Tables may be used (as per University guidelines)

**PAPER - III
COMPUTATIONAL TECHNIQUES & OFFICIAL STATISTICS**

TIME: 3 hours

Max. Marks

UNIT - I

Statistical Organizations in India Central Statistical Organization, National Sample Survey Organization, their functions and publications, Agricultural Statistics, Area and Yield Statistics, Trade Statistics, Statistical Organizations in Rajasthan, their functions and publications.

UNIT - II

Linear Programming: Definition of Linear Programming Problem (LPP), formulation of LPP, Graphical method (for two variables), Simplex computational procedure and Duality.

UNIT - III

Theory of Finite Differences: Operator, Δ , E & ∇ with their properties, Problems of identities involving Δ & E & ∇ , Factorial function; Newton-Gregory's forward and backward interpolation formulae, Estimation of missing value in equal intervals.

UNIT - IV

Theory of divided differences and its properties, Newton's divided difference & Lagrange's interpolation formulae, inverse interpolation by making use of Lagrange's formula.

UNIT - V

Numerical Integration : Trapezoidal rule, Simpson's 1/3 & 3/8th rule, Weddle's rule and

related problems.

Recommended Books:

1. Saxena H.C. : Finite Differences and Numerical Analysis, S.Chand & Company Ltd., New Delhi.
2. Gokhroo D.Cand Saini S.R. : Numerical Analysis (Hindi edition), Navkar Prakashan, Ajmer
3. Gokhroo D.C.and Saini S.R. : Elements of Linear Programming (Hindi and English editions), Jaipur Publishing House
4. Asthana B.N. & Srivastava S.S. : Applied Statistics of India, Chaitanya Publishing House, Allahabad.
5. Porwal L.S.and Agarwal N.P. : Applied & Economic Statistics of India (Hindi Ed.)

Reference Books :

1. Bhargava S.L., Sharma, K.D. : Linear Programnling (Hindi edition), Jaipur and Bhati, S.S. Publishing House, Jaipur
2. Nagar, K.N. : Fundamentals of Statistics (Hindi edition) Meenakshi Prakashan, Meerut
3. Gupta, B.N. : Statistics: Theory & Practice (Hindi and English editions), Sahitya Bhawan, Agra.
4. Saluja M.R. : Indian Official Statistical Systems, Statistical Publishing Society, Calcutta