(COMMON FOR THE FACULTIES OF ARTS & SCIENCE)
MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR
SECOND YEAR B. Sc./B.A
STATISTICS
2016-17

Papers	Periods per week	Examination Hours	Maximum Marks	
Theory Papers			**B.A**	**B.Sc.**
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
APPLIED STATISTICS

TIME: 3 hours **Max. Marks**

UNIT-1
Theory of curve Fitting: Method of least squares, fitting of straight line, parabola, Kth degree polynomial, exponential and logarithmic curves (reducible to linear forms). Most plausible solution of linear equations.

UNIT-II
Linear correlation and regression, concept of intra-class correlation, Spearman's rank correlation.

UNIT-III
Partial Correlation coefficient, Multiple correlation coefficient and multiple regression for three variables only.

UNIT-IV
Time series and its components, methods of determining trend and seasonal components.

UNIT-V
Index Numbers: Problems involved in the construction of Index numbers, types of index

numbers, construction of index numbers by aggregate methods and price relative methods, chain indices.

Requisites of an ideal index number. Uses and limitation .of the index numbers. Errors in index numbers. Base shifting, splicing and deflating concepts, cost of living and wholesale price index numbers.

Recommended Books:

1. Gupta S.C. and Kapoor V.K. : Fundamentals of Mathematical Statistics, Sultan Chand & Sons, New Delhi.
2. Gupta S.C. and Kapoor V.K. : Fundamentals of Applied Statistics, Sultan Chand & Sons, New Delhi.
3. Kapur, J.N.and Saxena H.C. : Mathematical Statistics, S.Chand & Company Ltd., New Delhi.
4. M.K. and Das Gupta, B(1991) : Fundamentals of Statistics Vol. I & II World Press, Calcutta