(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	
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)

STATISTICS PRACTICAL

Duration of Examination: Four Hours   **Max. Marks: Arts - 65**

TIME: 3 hours   **Max. Marks Science75**

The distribution of marks will be as follows:

	B.A.	B.Sc.
Practicals	45 Marks	45 Marks
Viva-voce	10 Marks	15 Marks
Practical Record	10 Marks	15 Marks
Total	**65 Marks**	**75 Marks**

The following topics are prescribed for practical work:

1. Presentation of raw data.

2. Graphical representation by (I) Histogram (ii) Frequency polygon (iii) Frequency curve and (iv) Ogives.

3. Diagrammatic representation by (i) Bars (ii) Pie diagram.

4. Measures of Central Tendency: Mean, Median, Mode, G.M., H.M., Quartiles, Deciles & Percentiles.

5. Measures of Dispersion (i) Range (ii) Semi interquartile range (iii) Mean Deviation (iv) Standard Deviation and Variance (v) Coefficient of Variation (vi) Lorenz Curve.

6. Moments and various measures of Skewness and Kurtosis.

7. Evaluation of probabilities using addition and multiplication theorems, conditional Probabilities and Baye's Theorem.

8. Exercises on Mathematical expectation and finding measures of central tendency, dispersion, Skewness and kurtosis of uni-variate probability distribution.

9. Exercises on determination of class frequencies, consistency of data and association of attributes.

10. Exercises on Finite Difference Theory: (i) Construction of finite difference table.

    (ii) Newton Gregory's forward and backward interpolation formulae (iii) Estimation of missing value in case of equal intervals.

11. Lagrange's and Newton's divided difference formulae

12. Inverse interpolation by Langrange's formula.

13. Numerical Integration by Trapezoidal, Simpson's 1/3rd & 3/8th rules.

14. Solution of LPP by Graphical and Simplex methods.