MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR THIRD YEAR B. Sc. STATISTICS 2016-17

STATISTICS PRACTICAL

Duration of Examination- Four Hours

Max. Marks.: Arts - 65

Science - 75

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. Large sample test of significance for mean, standard deviation and proportion for one and two sample problems.
- 2. t-test for the significance of single mean and difference of means (paired and unpaired cases).
- 3. Test for, the significance of correlation coefficient and regression coefficients,
- 4. F-test for equality. of two population variances.
- 5. Chi-square test for (i) goodness of fit (ii) Independence of attributes (iii) significance of single variance (iv) Homogeneity of several correlation coefficients.
- 6. Confidence interval for (i) Mean in case of large and small samples and (ii) proportion.
- 7. Sign test, Run Test and Median Test
- 8. Analysis of variance for (i) One-way classification, (ii) Two-way classification with one observation per cell.
- 9. Analysis of (i) CRD (ii) RBD and (iii) LSD.
- 10. Estimation of single missing value In RBD and LSD
- 11. Statistical Quality Control: (i) \overline{X} & R Charts (ii) X and a charts (iii) p, np and c-charts.
- 12. Sample Surveys: (i) SRS (ii) Stratified sampling including allocation problems.
- 13. Vital Statistics: (i) CDR, Age specific death rates, Standardized death rates (ii) CBR, GFR, ASFR, TFR (iii) Standardized birth rate (iv) Crud rate of natural increase GRR and NRR (v) Life tables and to find out certain values with its help.

NOTE:

- 1. "Students may be tried to familiarize and utilize statistical packages in solving the relevant statistical practical execercises on Computers.
- 2. Try to give the practical exercises in such a way that the student decide which experimental design, sampling scheme and which method of vital statistics are to be applied, instead of directly telling them.