

**(COMMON FOR THE FACULTIES OF ARTS & SCIENCE)**  
**THIRD YEAR B. Sc./B.A**  
**STATISTICS**  
**2016-17**

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

\* 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)

Visit to Local Governments/ Organizations, Semi Governments Departments/ Organizations, Government Undertaking Organizations, Statistical Institute of repute, Private sector Statistical Organization and Research Stations within Udaipur Division may be organized to familiarize students with the practical work done at these centers

**STATISTICS PRACTICAL**

**Duration of Examination- Four Hours**

**Max. Marks.: Arts - 65**  
**Science - 75**

**The distribution of marks will be as follows:**

	<b>B.A.</b>	<b>B.Sc.</b>
Practicals	45 Marks	45 Marks
Viva-voce	10 Marks	15 Marks
Practical Record	10 Marks	15 Marks
<b>Total</b>	<b>65 Marks</b>	<b>75 Marks</b>

**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)  $\bar{X}$  & R Charts (ii)  $\bar{X}$  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 exercises 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.