Final Report of the work done on the Minor Research Project

1. Project report No. : 2 (Final)

2. UGC Reference No. : 47-1790/11(WRO)

3. Period of report: from Jan.2012 to Jan. 2014

4. Title of research project: Statistical software : Common statistical tests

5. (a) Name of the Principal Investigator: Prof. V.R. Pawgi

(b) Department and College where work has progressed:

Department of Statistics , Abasaheb Garware College, Karve Road, Pune – 411 004

6. Effective date of starting of the project: Feb. 2012

7. Grant approved and expenditure incurred during the period of the report:

a. Total amount approved Rs. 2,00,000/-

b. Total amount received : 1,90,000/-

b. Total expenditure Rs: 1,48,309/-

Report of the work done

1. Brief objective of the project :

Now a days computers are widely used for analyzing statistical data. For statistical data analysis and interpretation of results , various commercial statistical soft wares are available in the market. However these available soft wares are very costly and sometimes they do not fulfill the requirements of users. Therefore we have decided to develop such a statistical software according to the needs by consulting researchers , teachers in subjects like zoology, botany, biotechnology, economics etc.

2. Work done and results achieved :

According to the requirements of users from different fields , we have formulated the main menus and submenus to be included in our software and the following main menus are prepared.

(I) Non-parametric tests (II) Parametric tests (iii) Analysis of variance(ANOVA)
(iv) Correlation and regression

Each of the above main menus includes submenus consisting of help and illustrations also. The remaining programming part of preparation of above main menus and submenus is is completed I . Testing of various main menus and submenus is also completed. The necessary help about using the software is also included in the software itself.

This software will be useful for analyzing data in various fields like microbiology, zoology, botany, bio statistics, biotechnology, economics, psychology, medical sciences , geography etc.

Our software is based on R software which is freely available on internet.

Our software covers almost all commonly used statistical methods required for data analysis .

3 Objectives of the project and achievement :

Now a days computers are widely used for analyzing statistical data.

For statistical data analysis and interpretation of results , various commercial statistical soft wares are available in the market. However these available soft wares are very costly and sometimes they do not fulfill the requirements of users. Therefore we have developed such a statistical software according to the needs by consulting researchers , teachers in subjects like zoology, botany, biotechnology, economics etc.

We observed that the software is useful for researchers,students etc. Hence we can say that the objectives of the project are achieved.

4 Summary of the findings :

According to the requirements of users from different fields , we have formulated the main menus and submenus to be included in our software and the following main menus are prepared.(I) Non-parametric tests (II) Parametric tests (iii) Analysis of variance(ANOVA) (iv) Correlation and regression

Each of the above main menus includes submenus consisting of help and illustrations also. Testing of various main menus and submenus is also completed. The necessary help about using the software is also included in the software itself. Our software covers almost all commonly used statistical methods required for data analysis .

5 . Contribution to the society :

This software will be useful for analyzing data in various fields like microbiology, zoology, botany, bio statistics, biotechnology, economics, psychology, medical sciences , geography etc. Our software is based on R software which is freely available on internet. This software can be made as open source software for data analysis..