

JanataShikshanSanstha's

# KISAN VEER MAHAVIDYALAYA, WAI



## **Certificate Course Report**

Supportive Documents for Certificate Course Annual Report

**Supportive Documents for** 

**Certificate Course Annual Report includes-**

- 1. Short Report of the Particular Academic Year
- 2. Syllabus of the Course

3. Course Objectives and Outcomes

- 4. List of enrolled students.
- 5. Attendance Sheets
- 6. One Sample Certificate



JanataShikshanSanstha's

KISAN VEER MAHAVIDYALAYA, WAI

**Department of Statistics** 



# "Certificate course in R- Software"

# **Course Report 2018-19**

From 2017-18 the Department of Statisticsconducted 01 certificate course. The title of the course for B.Sc. III is "Certificate course in R-Software". The course was started on9July 2018. The time-table was displayed on the department's notice board.

18 students were admitted for the said course.Examination of the said course was conducted along with practical exam of B.Sc. III. Students gained the new knowledge about use of R software for statistical computation. The supportive staff and the administration of the College and specially Hon. Principal supported a lot.

### Dr.E.B.Bhalerao

I/C Principal Kisan Veer Mahavidyalay,Wai **Prof. R. H. Waliv** Course Co-ordinator Department of Statistics

## 2. Syllabusof the Course

Janata Shikshan Sanstha's Kisan Veer Mahavidyalaya, Wai **Department of Statistics** Certificate Course in R-Software

### **Syllabus**

#### 1. Introduction to R

- I. Introduction
- II. R as a Statistical Software and language
- III. Data types and arithmetic operators
- IV. R preliminaries

### 2. Methods of Data Input

- I. C- function
- II. Seq-function
- **III.** Scan function
- IV. Rep-function
- V. Data-frame function
- VI. Matrix function

#### 3. Diagrammatic presentation

Standard plot functions, arguments to plot function, low level plotting functions Bar diagram, Sub-divided bar diagram, multiple bar diagram, subdivided bar diagram, pie- diagram, stem and leaf plot.

# 4. Preparation of frequency table and graphical representation

Construction of frequency distribution table (for discrete and grouped data).Graphical representation- Rod and Spike graph, Histogram, Frequency polygon, Ogive curves.

## 5. Measures of central tendency and dispersion-

Arithmetic Mean, Geometric mean, Harmonic mean, Median, Quartiles Deciles, Percentiles, Mode.Interquartile range, Mean deviation about mean, Variance, Standard Deviation, Coefficient of variation.

### 6. Measures of Moments ,Skewness and kurtosis-

Raw and central moments, Measures of Skewness, Measures of Kurtosis.

### 7. Probability and Probability Distribution

Application of Binomial Distribution, Fitting of Binomial distribution Application of hypergeometric distribution, fitting of hypergeometric distribution, Poisson Distribution.

Normal Distribution, Exponential Distribution.

## 8. Statistical Inference

- I. Sampling distribution of sample mean
- II. Estimation of parameters
- III. Plots to check normality
- IV. Hypothesis testing, chi-square test, t-test, f-test
- V. Goodness of fit tests.

## 3. Objectives of the Course

# **Objectives of the course**

- 1) To introduce statistical Technology to the students.
- 2) To get the knowledge for analysis of statistical data by using R software.
- 3) To get job opportunities in industrial sector.
- 4) To develop a skill for statistical consultancy.

# 4. List of enrolled students

| Catificate Course in Rooth |          |                             |                   |  |  |  |  |  |  |  |  |
|----------------------------|----------|-----------------------------|-------------------|--|--|--|--|--|--|--|--|
| Janata Shikashan Sanstha's |          |                             |                   |  |  |  |  |  |  |  |  |
| Ki                         | san Ve   | er Mahavidyalaya,Wai        |                   |  |  |  |  |  |  |  |  |
|                            |          | B. Sc. III                  |                   |  |  |  |  |  |  |  |  |
|                            |          | 2018- 2019                  |                   |  |  |  |  |  |  |  |  |
|                            |          | Student List                |                   |  |  |  |  |  |  |  |  |
| Sr. No.                    | Roll No. |                             |                   |  |  |  |  |  |  |  |  |
| 1                          | 121      | KUMBHAR PRIYANKA SHASHIKANT |                   |  |  |  |  |  |  |  |  |
| 2                          | 122      | SUKALE MANASI MANOJ         |                   |  |  |  |  |  |  |  |  |
| 3                          | 123      | BAVALEKAR NILESH VASANT     |                   |  |  |  |  |  |  |  |  |
| 4                          | 124      | YADAV AKASH RAMCHANDRA      |                   |  |  |  |  |  |  |  |  |
| 5                          | 125      | DHANWADE GANESH MAHADEV     |                   |  |  |  |  |  |  |  |  |
| 6                          | 126      | SHEWALE SUSHANT MOHAN       |                   |  |  |  |  |  |  |  |  |
| 7                          | 127      | RAJPURE PRAJAKTA SUNIL      |                   |  |  |  |  |  |  |  |  |
| 8                          | 128      | NIMBALKAR HARSHADA PRAMOD   |                   |  |  |  |  |  |  |  |  |
| 9                          | 129      | POPHALE ARATI SURESH        |                   |  |  |  |  |  |  |  |  |
| 10                         | 130      | BAGWAN VASIMA YUSUF         |                   |  |  |  |  |  |  |  |  |
| 11                         | 131      | JADHAV POOJA BALU           |                   |  |  |  |  |  |  |  |  |
| 12                         | 132      | PISAL SMITA VIJAYKUMAR      |                   |  |  |  |  |  |  |  |  |
| 13                         | 133      | PISAL URMILA SHIVAJI        |                   |  |  |  |  |  |  |  |  |
| 14                         | 134      | BHOSALE RUTUJA RUPCHAND     | The second second |  |  |  |  |  |  |  |  |
| 15                         | 135      | THORAT SAYALI SHIVAJI       |                   |  |  |  |  |  |  |  |  |
| 16                         | 136      | SHELAR UTKARSHA UTTAM       |                   |  |  |  |  |  |  |  |  |
| 17                         | 137      | MARDHEKAR MAYUR SUNIL       |                   |  |  |  |  |  |  |  |  |
| 18                         | 143      | SHINDE CHAITANYA SHUREH     |                   |  |  |  |  |  |  |  |  |

Head

Department of Statistics Kinan Veer Mahavidyalaya, V Diet, Satara - 412803

# 6. Attendance Sheets:

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| Sr.<br>No. | Roll<br>No. | 6/12/18    | 7192118    | 13/12/18   | 14/12/18   |  |             |            |            |           |             |
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| 2          | 122         | markall    | moutale    | Morikall   | moukall    | moukale  | Morekall    | Moritall   | Mosukale   | Markale   | Tristinen   |
| 3          | 123         |            |            |  |            |  |             |            |            |           |             |
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| 6          | 126         | 84         | -          | Rioula   | Rioux      | Fripyx   | Lupure      | Ripux      | Lypux      | Lupux     | -fripux     |
| 7          | . 127       | - Fujpyre  | Ripux      | - Fripux<br>Votimber   | doughings  | dalimike   | Haspine     | Hashington | alashimter |           |             |
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# 7. One Sample Certificate

