Shri Swami Vivekananda Shikshan Sanstha's

Padmabhushan Dr.Vasantraodada Patil Mahavidyalaya, Tasgaon.

Department of Statistics

Certificate course on **"MINITAB"**
for M.Sc. II Statistics Students.

Academic Year 2019-20

Department of Statistics

Date: 25/01/2020

Notice

The students of M.Sc. II. Statistics are hereby informed that, the certificate

course on **"MINITAB"** is organized by the department. The lecture series for the

concerned course arranged during 06/02/2020 to 07/02/2020. All the students should

attend the lectures from 06/02/2020, at 11.00.am onwards.

(Dr.V.Y.Pawar)
Head,
Department of Statistics,
Padmabhushan Dr. Vasantraodada Patil
Mahavidyalaya, Tasgaon, Dist. Sangli.

Learning Outcomes:

After completing the practical course students are getting knowledge about MINITAB. Students are able to draw plots such as Histograms, Box plots, Bar charts, Pie charts, Scatter plots. Also students are able to do statistical basics such as Measures of central tendency, Measures of dispersion, Matrix operations, correlations, Regressions etc. using MINITAB.

Evaluation Systems. All the students will be continuously evaluated by

a. Theory exam   20 Marks

SYLLABUS

An Introduction To Minitab

- Getting started with Minitab: Menu bar, Worksheet, Minitab commands and sub commands, Data entry into worksheet, importing data, Saving, Retrieving, Printing file.

- Operators and functions: Arithmetical operations, Mathematical functions, Column and Row statistics, Comparisons and Logical operations, Coding, Computing ranks, sorting data, Stacking and Unstacking columns.

- Exploratory data analysis: Tallying data, Describing data, Histograms, Box plots, Bar charts Pie charts. Correlation and Regression: Correlation: Scatter plots, Karl Pearson correlation coefficient, Regression: Simple and Multiple regression.

- Matrix operation and Macros: Creating matrices, Commands for matrix operations, writing simple macros.

Time table

Sr.No.	Name of the Faculty	Topic Name	Date	Time
1	Mr.D.J.Nalavade	Getting started with Minitab	6/2/2020	Session I-11.00 am to 1.00pm
				Session II-2.00 pm to 5.00 pm (Practices)
2	Miss.Patil S.S	Exploratory data analysis	7/2/2020	Session I-11.00 am to 1.00pm
				Session II-2.00 pm to 5.00 pm (Practices)

Report

       The department of statistics organized a special course entitled course on "**MINITAB**" during 06/02/2020 to 07/02/2020. The objective behind conducting the special course is that student familiarizes statistical tools with software's, which will be helpful to the students to get jobs in various sectors. While analyzing data we need complicated calculations which are more time consuming. The software's namely MINITAB is very useful data analysis software's, requires less time.

       All the students of the department participated in such a special course. The total 2 days course carried in two sessions. The faculty member of the department Miss.S.S.Patil introduced the need of software's and introduction of software's, Mr.Nalavade D.J. also taught the various commands and how to right the MINITAB software.

       As a result of the course the students got very much information regarding data analysis using software's in very less time.

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DEPARTMENT OF STATISTICS
M.Sc. II Statistics -2019-20

Attendence Report For MINITAB

Sr.No.	Roll No.	NAME OF STUDENT	6-2-2020	6-2-2020	7-2-2020	7-2-2020
1	9301	Attar A.N.				
2	9302	Dabhaade S. S.				
3	9303	Divate D. S.				
4	9304	Ghali R. R.				
5	9305	Jadhav P. S.				
6	9306	Jawalkote A. S.				
7	9307	Koshti K. M.				
8	9308	Mali R. B.				
9	9309	Mane S. B.				
10	9310	Medhe A. G.				
11	9311	More D. M.				
12	9312	Patil M.S.				
13	9313	Phalake P. V.				
14	9320	Pujari P. R.				
15	9314	Salunkhe P.B.				
16	9315	Shinde A. S.				
17	9316	Shinde P. V.				
18	9317	Thakur P. M.				
19	9318	Varude S. D.				
20	9319	Vedpathak S.K.				

Department of Statistics
M.Sc.(Part-II) (Sem-IV)
MINITAB

Time: 03:00 pm–04:00pm   Date:08/02/2020

Instructions: *1) All questions are compulsory.*
                           2) Figures to the right indicate full marks.

Q.1 Select the correct alternative out of given ones   **(1 X 5)**

  a) MINITAB is a statistics package developed at the
      i.   AT&T Bell Laboratories
      ii.   Pennsylvania State University
      iii. University of Oxford
      iv. Massachusetts Institute of Technology

  b) MINITAB do not recognize the following data types
      i.   Numeric and Text
      ii.   Date and Time
      iii. Both of these
      iv. None of these

  c) The function/option used to combine text values from two or more columns into a single column.
      i.   Concatenate
      ii.   Stack
      iii. Unstack
      iv. None of these

  d) An extension of the global macro file in MINITAB is_____.
      i.   MTB
      ii.   MAC
      iii. MPJ
      iv. MAD

e) The Normality test_____is not available in MINITAB.

     i.   MTB

     ii.   MAC

     iii.   MPJ

     iv.   MAD

Q.2 The given data has BMI, age, Cholesterol, Glucose, gender and city of the 100 adult patients. Using this information to answer the following questions.   **(3 X 4)**

    a) Check the behavior of BMI using boxplot.

    b) Compare the BMI of male and female patients using appropriate test.

    c) Calculate the BMI of the male patient who live in Satara and has age=25, Cholesterol=170 and Glucose=90.

    d) Compare the BMI of the patients of different cities.

    Comments on your results.

Q.3 Write down the MINITAB code/macro for generating 100 random numbers from N (10,1) and calculate its mean, median and standard deviation.   **(3 X 1)**

Evaluation of certified course

SR.No	Roll No.	Marks
1	9301	**18**
2	9302	**18**
3	9303	**19**
4	9304	**18**
5	9305	**17**
6	9306	**18**
7	9307	**17**
8	9308	**18**
9	9309	**18**
10	9310	**19**
11	9311	**18**
12	9312	**17**
13	9313	**17**
14	9314	**18**
15	9315	**18**
16	9316	**19**
17	9317	**17**
18	9318	**16**
19	9319	**18**
20	9320	**18**

Learning Outcomes:

1. Students are able to draw diagram and graphs using MINITAB.

2. Students are creating worksheet.

3. Students are analyzing data by using statistical formulae and functions.

Practical-I

1 A) Perform following using MINITAB.

     i) Create Worksheet.

     ii) Rename the worksheet.

     iii) Add and delete worksheet.

     iv) Save worksheet.

     v) Data entry in worksheet.

  B) Perform following using MINITAB.

     i) Importing data,

     ii) Data Saving,

     iii) Data Retrieving,

     iv) Printing Data.

2 A) Perform Operators and functions using MINITAB.

     i) Arithmetical operations,

     ii) Mathematical functions,

     iii) Column and Row statistics,

iv) Comparisons and Logical operations,

 v) Coding

 B)

i) Computing ranks,

ii) sorting data,

iii) Stacking columns.

iv) Unstacking columns.

3. Perform Exploratory data analysis using MINITAB.

i) Tallying data,

ii) Describing data,

iii) Histograms,

iv) Box plots,

v) Bar charts

vi) Pie charts.

4. Graphical representation using MINITAB for correlation and regression.

5. Karl Pearson Correlation coefficient using MINITAB.

6. Measures of central tendency.

7. Measures of dispersion.

8. Matrix operation and Macros using MINITAB.

"Dissemination of Education for Knowledge, Science and Culture"-
Shikshanmaharashi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha Kolhapur
Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon

Department of Staistics

Certificate Course in An Introduction to MINITAB
(M.Sc.II)

This is Certify that Mr./Miss **Shankar Bhagwan Mane** *has completed successfully* "Certificate Course in An Introduction to MINITAB" *Conducted by Department of Statistics Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon Academic year 2019-20*

Dr. V.Y. Pawar

HEAD

Dr. M . S . Hujare

PRINCIPAL

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Certificate Course in An Introduction to MINITAB
(M.Sc.II)

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Dr. V.Y. Pawar

HEAD

Dr. M . S . Hujare

PRINCIPAL