Maharana Pratapsinh Shikshan Sanstha, Mumbai's
Anandibai Raorane Arts, Commerce & Science College, Vaibhavwadi

Department of Statistics

ACTIVITY REPORT

ACADEMIC YEAR	**2023-24**
Activity No.	Statistics/23-24/05
Name of the Activity	**Certificate Course on Data Analysis Using MS Excel.**
Date	**08 august 2023 to 26 October 2023 (45 Lectures)**
Time	
Venue	T.Y.B.Sc. Classroom
Organized by	Department of Statistics
Co-Ordinator	Mr. S. S. Bhaskar
Activity for College/Class/Group	Class
No. of Beneficiaries	20
Nature: Academic/Co-curricular/Extra-curricular/Extension	Academic
Objectives of Activity	To facilitate and to gain expertise in advanced techniques of MS Excel. To enhance the technical knowledge in MS Excel.
Brief Information about Activity	As per the Notice of the course, syllabus, timetable has been prepared and 45 lectures of course have been conducted. All the lectures of this course have been taken. Theory and Practical Exam has been conducted of 100 Marks. Result of exam was declared and Certificates of the course were distributed to the students.
Outcome	After participating in this event, the students understood the basic concepts in MS Excel software & enhanced the technical knowledge in MS Excel.
Feedback Analysis	The Oral feedback was taken after the event. From the response of the students, it was found that the course was successful. No suggestions were given.
Supported Documents	Activity report, Notice, list of students, attendance.

Coordinator
(S. S. Bhaskar)

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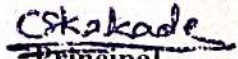
Date-05/08/2023

NOTICE

All students are hereby informed that Department of Statistics is going to start Short Term Certificate Course in **"Data Analysis Using MS-EXCEL"** in the FIRST term of academic year 2023-24 from **08 august 2023 to 26 October 2023.** the interested candidates are informed to register their names to Prof. S. S. Bhaskar on or before **07 august 2023.**

Coordinator

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Department of Statistics

A Certificate Course in
Title: -Data Analysis Using Microsoft Office Excel (MS-Excel)
2023-24
Duration: 08 august 2023 to 26 October 2023 **(45 Lectures)**

Objectives
1. To enhance the technical knowledge in MS Excel of the students.
2. We Endeavour to make this department as an advanced center of innovation in Software technologies.
3. To retain student attachment and upgrade the standards of teaching, learning and research to match global level of excellence.

Syllabus

UNIT I   (11 Lectures)
Perquisites and basic terminologies in MS-Excel, Types of data (texts, numbers, dates, functions.), Data Input, Formatting cells, Numbers, Date, Times, Font, Colors, Borders, Fills. Graphical toolbox, Data filtration, sort, text to columns. Random number generation

UNIT II   (11 Lectures)
Functions: Statistical and Mathematical Functions (ROUND, ROUNDDOWN, ROUNDUP, CEILING, FLOOR, INT, MAX, MIN, MOD, SQRT, ABS, Measures of central tendency, Dispersion, Correlation), Financial Functions (FV, PV, PMT, PPMT, IPMT, NPER, RATE, NPV, IRR).

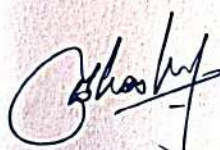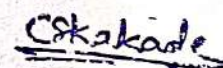### UNIT III   (11 Lectures)
Working with data: Data validation, data consolidation, Data Analysis tool box (one sample and two sample statistical tests), what-if analysis, Pivot tables and charts. MACROs: Definition and use, record a macro, assign a macro, run a macro and store a macro.

Technical (Lab.) Sessions/ Practical's   (12 Lectures)
1. Tabulation and Graphical representation of data
2. Use of Statistical and Mathematical Functions (Basic Functions, Measures of Central Tendency and Dispersion)
3. Use of Financial functions
4. One sample and two sample statistical tests
5. Pivot Tables and Pivot Chart

(S. S. Bhaskar)

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Course End Examination

- ### Theory

Theory Exam - **50 Marks**

At the end of course, Theory examination of 2 hours duration and **50 marks** based on syllabus shall be held.

- ### Practical

Practical Exam - **50 Marks**

At the end of course, Practical examination of 2 hours duration and **40 marks** based on syllabus shall be held. **10 marks** for VIVA. **(40+10=50)**

Pattern of Question paper.

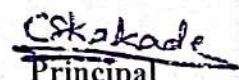- ### Theory

Question one based on all units. Ten sub-questions of **2 marks** each.

Question two based on all units. Three sub-questions of **10 marks** each.

- ### Practical

There should be Four Questions of **10 marks** each. Students should attempt all questions.

Coordinator

(3.5.Bhaskor)

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Maharana Pratapsinh Shikshan Sanstha, Mumbai's
Anandibai Raorane Arts, Commerce & Science College, Vaibhavwadi
Department of Statistics

Certificate course in "Data Analysis using MS Excel" 2023-24
(Duration: 08 august 2023 to 26 October 2023)
List of students

Sr No	Name of Students	Class
1	Humbe Pooja Pandurang Anita	S.Y.B.Sc.
2	Jethe Priyanka Ganesh Bhagyashri	S.Y.B.Sc.
3	Magdum Sagar Sanjay Snehal	S.Y.B.Sc.
4	Malim Sharmin Abdulgafar Akila	S.Y.B.Sc.
5	Patil Tejaswini Satyawan Savita	S.Y.B.Sc.
6	Ramdul Fiza Salim Ayisha	S.Y.B.Sc.
7	Rane Mahesh Manohar Sulochana	S.Y.B.Sc.
8	Raorane Nidhee Giridhar Prachi	S.Y.B.Sc.
9	Raorane Sakshee Jaywant Juhi	S.Y.B.Sc.
10	Shelke Vaibhavi Satyawan Sushama	S.Y.B.Sc.
11	Agre Dnyaneshwari Ramesh Rasika	F.Y.B.Sc.
12	Agre Prachi Ramesh Reshma	F.Y.B.Sc.
13	Bandiwadekar Pranjali Sunil Suvidha	F.Y.B.Sc.
14	Bharmal Shrushti Anil Rohini	F.Y.B.Sc.
15	Bhutal Vaishnavi Ajay Dipali	F.Y.B.Sc.
16	Chauhan Lucky Ambika Sunita	F.Y.B.Sc.
17	Chougule Akshay Pradip Jyoti	F.Y.B.Sc.
18	Gaikwad Vaishnavi Dipak Dipali	F.Y.B.Sc.
19	Gosavi Vignesh Suresh Sujata	F.Y.B.Sc.
20	Gurav Sujal Mangesh Anita	F.Y.B.Sc.

Coordinator

(S. S. Bhaskor)

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Maharana Pratapsinh Shikshan Sanstha, Mumbai's

Anandibai Raorane Arts, Commerce & Science College, Vaibhavwadi

Department of Statistics

Certificate course in "Data Analysis using MS Excel 2023-24"

(Duration: 08 august 2023 to 26 October 2023)

Mark Sheet

Sr No	Name of Students	Class	Grade
1	Humbe Pooja Pandurang Anita	S.Y.B.Sc.	A
2	Jethe Priyanka Ganesh Bhagyashri	S.Y.B.Sc.	A
3	Magdum Sagar Sanjay Snehal	S.Y.B.Sc.	A
4	Malim Sharmin Abdulgafar Akila	S.Y.B.Sc.	A
5	Patil Tejaswini Satyawan Savita	S.Y.B.Sc.	A
6	Ramdul Fiza Salim Ayisha	S.Y.B.Sc.	A
7	Rane Mahesh Manohar Sulochana	S.Y.B.Sc.	A
8	Raorane Nidhee Giridhar Prachi	S.Y.B.Sc.	A
9	Raorane Sakshee Jaywant Juhi	S.Y.B.Sc.	A
10	Shelke Vaibhavi Satyawan Sushama	S.Y.B.Sc.	A
11	Agre Dnyaneshwari Ramesh Rasika	F.Y.B.Sc.	A
12	Agre Prachi Ramesh Reshma	F.Y.B.Sc.	A
13	Bandiwadekar Pranjali Sunil Suvidha	F.Y.B.Sc.	A
14	Bharmal Shrushti Anil Rohini	F.Y.B.Sc.	A
15	Bhutal Vaishnavi Ajay Dipali	F.Y.B.Sc.	A
16	Chauhan Lucky Ambika Sunita	F.Y.B.Sc.	A
17	Chougule Akshay Pradip Jyoti	F.Y.B.Sc.	A
18	Gaikwad Vaishnavi Dipak Dipali	F.Y.B.Sc.	A
19	Gosavi Vignesh Suresh Sujata	F.Y.B.Sc.	A
20	Gurav Sujal Mangesh Anita	F.Y.B.Sc.	A

Coordinator

(S. S. Bhesbar)

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Anandibai Raorane Arts, Commerce & Science College, Vaibhavwadi
Department of Statistics

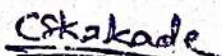## Certificate course in "Data Analysis using MS Excel 2023-24"
(Duration: 08 august 2023 to 26 October 2023)
Result Analysis

Grade	O	A	B	C	D	TOTAL
No. of Students	00	20	-	-	-	20

Coordinator

(J. S. Bhoslon)

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ANANDIBAI RAORANE ARTS, COMMERCE
& SCIENCE COLLEGE, VAIBHAVWADI

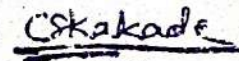## Certificate course in "Data Analysis using MS Excel 2023-24"
(Duration: 08 august 2023 to 26 October 2023)
<u>Theory Examination</u>

Course Code:	Time: 2 Hours	Date: --/--/2023	Marks-50

Q1. A. State whether following statements are TRUE or FALSE and correct if necessary (10)

   i.   Random number from can be generated from RAND() function.

   ii.   Graphical toolbox is appeared in 'HOME' tab.

   iii.   Mean() is a function that used to calculate average of a vector.

   iv.   NPV (rate, First value) syntax is used to calculate Net present value.

   v.   Variance(val1, val2.....valn) function is used to calculate variance of n specified values.

Q1. B. Fill in the blanks   **(10)**

   i.   Data can be arranged in ascending order by using ....dialogue box.

   ii.   To move previous worksheet, you will use the keys Cltr+........

   iii.   In Microsoft Excel, the .... function returns a value from a range or an array.

   iv.   ....is the two macro languages in MS-Excel.

   v.   .... returns the day of the week for a particular date counting from Sunday.

Q2. Attempt the following   **(30)**

   a)   How many data format available in MS-Excel? What is ribbon? Give five useful functions to manipulate data.

<p align="center">OR</p>

   b)   What are charts in MS-Excel? Explain data filtration technique in MS-Excel.

   c)   Explain in brief two macro languages in MS-Excel?

<p align="center">OR</p>

   d)   Explain five data analysis tools.

   e)   Write note on financial functions in MS- Excel.

<p align="center">OR</p>

   f)   What are the functions used to find measures of dispersion?

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Certificate course in "Data Analysis using MS Excel 2023-24"
(Duration: 08 august 2023 to 26 October 2023)
Practical Examination

Course Code: **Time: 2 Hours**   **Date: -- /-- /2023**   **Marks: 40+10=50**

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- **All questions are compulsory.**
- **Viva of 10 marks will be taken.**
- **Each question of 10 marks.**

****

Q.1   Solve the following questions

a)   In a new worksheet, create a table and insert the following information. Use different fonts for different columns,   **(10)**

1) Names of people (at least 10)
2) Their ages
3) Their address
4) Number of years they have worked
5) Salary per month

b)   Draw the histogram of the given data   **(10)**

class	0-10	10-20	20-30	30-40	40-50	50-60
No. Of Students	10	15	35	30	21	25

c)   Draw the Pie-chart of the given data   **(10)**

Food	Fruit	vegetable	Dairy	Proteins	Grains
Percentage	36%	14%	13%	28%	9%

d)   If the observations are 4,5,3,9,6,7,2,1,8,2,11,15.   **(10)**
Then find mean, median, mode, variance, standard deviation, quartiles, max, and min.

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Certificate course in "Data Analysis using MS Excel" 2023-24

(Duration: 08 august 2023 to 26 October 2023)

Students Attendance

Sr. No	Name of Student	01	02	03	04	05	06	07	08	09	10	11	12
1	Humbe Pooja Pandurang	P	P	P	P	P	P	P	P	P	P	P	P
2	Jethe Priyanka Ganesh	P	P	P	P	P	P	P	P	P	P	P	P
3	Magdum Sagar Sanjay	P	P	P	P	P	P	P	P	P	P	P	P
4	Malim Sharmin Abdulgafar	P	P	P	P	P	P	P	P	P	P	P	P
5	Patil Tejaswini Satyawan	P	P	P		P	P	P	P	P	P	P	P
6	Ramdul Fiza Salim	P	P	P	P	P	P	P	P	P	P	P	P
7	Rane Mahesh Manohar	P	P	P	P	P	P	P	P	P	P	P	P
8	Raorane Nidhee Giridhar	P	P	P	P	P	P	P	P	P	P	P	P
9	Raorane Sakshee Jaywant	P	P	P	P	P	P	P	P	P	P	P	P
10	Shelke Vaibhavi Satyawan	P	P	P	P	P	P	P	P	P	P	P	P
11	Agre Dnyaneshwari Ramesh	P	P	P	P	P	P	P	P	P	P	P	P
12	Agre Prachi Ramesh	P	P	P	P	P	P	P	P	P	P	P	P
13	Bandiwadekar Pranjali Sunil	P	P	P	P	P	P	P	P	P	P	P	P
14	Bharmal Shrushti Anil	P	P	P	P	P	P	P	P	P	P	P	P
15	Bhutal Vaishnavi Ajay	P	P	P	P	P	P	P	P	P	P	P	P
16	Chauhan Lucky Ambika	P	P	P	P	P	P	P	P	P	P	P	P
17	Chougule Akshay Pradip	P	P	P	P	P	P	P	P	P	P	P	P
18	Gaikwad Vaishnavi Dipak	P	P	P	P	P	P	P	P	P	P	P	P
19	Gosavi Vignesh Suresh	P	P	P	P	P	P	P	P	P	P	P	P
20	Gurav Sujal Mangesh	P	P	P	P	P	P	P	P	P	P	P	P

(S. S. Bhosoon)

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Sr. No	Name of Student	13	14	15	16	17	18	19	20	21	22	23
1	Humbe Pooja Pandurang	P	P	P	P	P	P	P	P	P	P	P
2	Jethe Priyanka Ganesh	P	P	P	P	P	P	P	P	P	P	P
3	Magdum Sagar Sanjay	P	P	P	P	P	P	P	P	P	P	P
4	Malim Sharmin Abdulgafar	P	P	P	P	P	P	P	P	P	P	P
5	Patil Tejaswini Satyawan	P	P	P	P	P	P	P	P	P	P	P
6	Ramdul Fiza Salim	P	P	P	P	P	P	P	P	P	P	P
7	Rane Mahesh Manohar	P	P	P	P	P	P	P	P	P	P	P
8	Raorane Nidhee Giridhar	P	P	P	P	P	P	P	P	P	P	P
9	Raorane Sakshee Jaywant	P	P	P	P	P	P	P	P	P	P	P
10	Shelke Vaibhavi Satyawan	P	P	P	P	P	P	P	P	P	P	P
11	Agre Dnyaneshwari Ramesh	P	P	P	P	P	P	P	P	P	P	P
12	Agre Prachi Ramesh	P	P	P	P	P	P	P	P	P	P	P
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18	Gaikwad Vaishnavi Dipak	P	P	P	P	P	P	P	P	P	P	P
19	Gosavi Vignesh Suresh	P	P	P	P	P	P	P	P	P	P	P
20	Gurav Sujal Mangesh	P	P	P	P	P	P	P	P	P	P	P

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Certificate course in "Data Analysis using MS Excel 2023-24"

(Duration: 08 august 2023 to 26 October 2023)

Feedback Form

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1. Were objectives of the course clear to you

    a) Yes ✓   b) No

2. The course content met with your expectation

    a) Strongly agree   b) Agree ✓   c) Not sure   d) Disagree

3. The exposed you to new knowledge and practices

    a) Strongly agree   b) Agree ✓   c) Not sure   d) Disagree

4. The lectures were clear and easy to understand

    a) Strongly agree ✓   b) Agree   c) Not sure   d) Disagree

5. The teaching aids were effectively used

    a) Strongly agree   b) Agree ✓   c) Not sure   d) Disagree

6. Please give overall rating of course

    a) 80-100% ✓   b) 60-80%   c) 40-60%   d) bellow 40%

7. Any suggestions

No suggestions.

Date 26 october 2023

Signature of the student

Nidhee Giridhar Raorane