

Shri. Swami Vivekanand Shikshan Sanstha's Kolhapur
PADMABHUSHAN DR. VASANTRAODADA PATIL
MAHAVIDYALAYA, TASGAON
(Affiliated to Shivaji University Kolhapur)

Department of Statistics

Certificate course on "Data Analysis using MS-Excel"
for B.Sc. III Statistics Students.

Academic Year 2020-21

Permission Letter

Prof. P.V.Patil
Head
Department of Statistics
P.D.V.P Collage, Tasgaon

To,
The Principal,
P.D.V.P Collage, Tasgaon
Tal: Tasgaon, Dist: Sangli

Sub:- Regarding Permission to commencement of course in "Data Analysis using MS-Excel".

Respected Sir,

With Reference to above subject, Department of Statistics is going to start a course entitled "Data Analysis using MS-Excel" for B.Sc. III in this current academic year. So, I request you to kindly give me permission to commencement above said Course.

Please consider the same and oblige.

Thanking you.

Yours faithfully,

*Hand to conduct certificate
course.*
[Signature]

[Signature]
(Prof. P. V. Patil)
Head,
Department of Statistics,
Padmabhushan Dr. Vasantrodada Patil
Mahavidyalaya, Tasgaon, Dist. Sangli.

Shri. Swami Vivekanand Shikshan Sanstha's Kolhapur

**PADMABHUSHAN DR. VASANTRAODADA PATIL
MAHAVIDYALAYA, TASGAON**

Department of Statistics

Date: 25/02/2021

Notice

The Students of B.Sc I and B.Sc. III Statistics are hereby informed that, The Certified course on "**Data Analysis using MS-Excel**" is organized by the department. The lecture series for the concerned course arranged during 01/03/2021 to 09/03/2021.

All the students should attend the lectures from 01/03/2021, at 11.00 AM onwards.


(Prof. F.V. Patil)

(Head of Department)

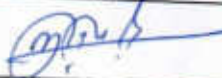

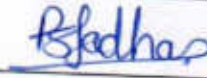
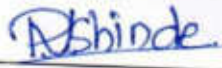
Head,

Department of Statistics,
Padmabhushan Dr. Vasantodada Patil
Mahavidyalaya Tasgaon, Dist. Sangli

BOARD OF STUDY

Year 2020-21

The meeting of the members of BOS in Certified Course on “**Data Analysis using MS-Excel**” for **B.Sc. III Statistics students** is held on 20th Feb 2021 for the preparation of syllabus. The following members are present and prepared the syllabus of above course and submitted to collage authority.

Name	Position	Signature
Prof. P.V. Patil	Chairman	
Mr. S.B. Mane	Member	
Miss. P.S. Jadhav	Member	
Miss. P.V. Shinde	Member	

Department Of Statistics

1. TITLE: Certificate Course on “Data Analysis Using MS-Excel”

2. YEAR OF IMPLEMENTATION: 2021

3. PREAMBLE:

4. GENERAL OBJECTIVES OF THE COURSE:

The main objective of this course is to provide basic knowledge of MS-Excel for Statistical Techniques to the students. The purpose of this course is to teach students to identify spreadsheet terminology and concepts, create formulas and functions, use formatting features, and generate charts, graphs and reports. At the end of the course the students are expected to be able to successfully use the program to create spreadsheets, enter data, and maintain that data, you must have more than basic knowledge. This course gives you the advanced skills you need to be able to fully use the program.

This course is design for the intermediate students who has already mastered the basic skills needed to use Excel and wants to gain Statistical Functions in MS-Excel to put to work in a business environment or for personal use.

5. DURATION: 8 Days

6. MEDIUM OF INTUCTION: English

7. STRUCTURE OF COURSE

Paper No. and Name	Contact Hours
C*T 101:	24
C*L 102	32
Total	56

C*T 101 Name of paper

C*L 102

Indicates subject

T – Theory work

L- Lab Work

A) LIBRARY:

Reference and Textbooks, Journals and Periodicals, Reference Book for Advanced Books for Advanced studies-List Attached

B) SPECIFIC EQUIPMENTS:

Necessary to run the course,
Computer, LCD, Projector, Visualizer, Smart board

C) LABORATORY EQUIPMNTS:

1. Well-furnished computer lab with sufficient computers.
2. Each computer should has MS-Office.
3. Battery backup with UPS.
4. Internet facility.

**Shri Swami Vivekanand Shikshan Sanstha's
Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon.
Department Of Statistics**

Title: Certificate course on "Data Analysis using MS-EXCEL"

Learning Objectives:

1. To provide basic knowledge of MS-Excel for Statistical Techniques to the students.
2. To identify spreadsheet terminology and concepts, create formulas and functions, use formatting feature, and generate charts, graphs, and reports.
3. To analyze numerical data by using statistical tools and functions.

Unit 1: Introduction to MS Excel

(06 L)

Introduction, Navigating MS Excel, Cells, Rows, and Columns, Formulas, Sheet Tabs, Pa Margins, Page Orientation, Page Breaks and Printing.

Worksheets and Workbooks: Definition of Worksheets and Workbooks, Naming of Worksheets, Adding and Deleting Worksheets, Hiding/Unhiding Worksheets, Hiding Columns and Rows, Saving Workbooks, Saving an existing file, Headers and Footers, Inserting, Deleting, Copy and Renaming of Worksheets.

Unit 2: Entering & Editing Information

(06 L)

Entering data, Labels and Values, Copying Cells, Rows and Columns, Pasting Cells, Rows, and Columns, Paste and Item from the Clipboard, Inserting and Deleting Rows and Columns, Filling and Editing Cell Data, Find and Replace, Go to Cell Data, Locking rows and Columns, Spell Check, Auto Correct.

Unit 3: Formatting & Adding Elements to a Worksheet

(04 L)

Change Font Styles and Sizes, Adding Borders and Colors to Cells, change a Column Width, Change a Row Height, Merge Cells, and Applying Number Formats, Creating Custom Number Formats, Align Cell Contents, Cell Style, Conditional Formatting, Freeze and Unfreeze Rows and Columns, Adding and Modifying Images, Removing A Background, Cropping and Rotating an Image, Compressing a Picture, Inserting Auto Shapes, Adding Word Art, Clip Art, and a Hyperlink

Unit 4: Graphs

(02 L)

Diagrammatic and Graphical representation by using MS-Excel.

Recommended Books:

1. Kumar Bittu, Microsoft Office 2010
2. Frag Curtis, Step by Step Microsoft Excel 2013
3. John Walkenbach, 101 Excel 2013 Tips, Tricks and Time servers.
4. Salkind Neli J. Statistics for people who (Think They) Hate Statistics, Using MS-Excel,

Learning Outcomes:

1. Students are able to draw diagram and graphs by using MS-Excel.
2. Students are creating data sheet.
3. Students are analyzing data by using statistical Formulae and functions.

Practical- I (08 Practical)

- 1) A) Perform following using MS-Excel
 - i) Create Worksheet
 - ii) Rename the worksheet
 - iii) Hide the worksheet
 - iv) Add and Delete the worksheet
 - v) Save the worksheetB) Perform following using MS-Excel
 - i) Insert and Delete Row and Column
 - ii) Hide Row and Column
 - iii) Change Column width
 - iv) Change Row Height
- 2) A) Perform Following using MS-Excel
 - i) Page Break
 - ii) Page Margin
 - iii) Header and Footer
 - iv) Hiding Rows and columnsB) Perform following using MS-Excel
 - i) Change Font style
 - ii) Fill and Border the cell
 - iii) Header and Footer
 - v) Hiding rows and Columns

3) A) Execute the following commands

- i) Find
- ii) Replace
- iii) Go To
- iv) Spell Check
- v) Copy and Paste

B) Perform following using MS-Excel

- i) Add Border and color to cell
- ii) Add image
- iii) Freeze and Unfreeze Row and Column
- iv) Merge cell

4) Basic function using MS-Excel I & II(e.g. SUM, Count, arithmetic operators, etc.), Sort data, Formula copy, and drag a formula.

5) Diagrammatic and Graphical representation using MS-Excel.

6) Measures of Central Tendency.

7) Measures of Dispersion

8) Measures of Moments, Skewness, Kurtosis

Learning Outcomes:

After completing the practical course students are getting knowledge about the MS-Excel, Students are able to drawing diagram such as Bar-Diagram, Pie-Diagram and Graphs such as Histogram, Ogive curve etc. by using MS-Excel.

EVALUATION SYSTEM:


All the students will be continuously evaluated by,

- | | |
|-------------------------|----------|
| a. Attendance | 20 Marks |
| b. Theory Exam | 30 Marks |
| c. Practical paper exam | 50 Marks |

100 Marks

Time Table

Period	Time	01/03/21	02/03/21	03/03/21	04/03/21	05/03/21	06/03/21	08/03/21	09/03/21
1	11.00-12.00	PSJ	SBM	PSJ	PVS	PSJ	PVS	SBM	SBM
2	12.00-1.00	PVS	PVS	PVS	SBM	SBM	PSJ	PSJ	PVS
3	2:00-5:00	SBM	PSJ	SBM	PSJ	PVS	SBM	PVS	PSJ


(Prof. P.V. Patil)
head,

Department of Statistics,
Padmabhushan Dr. Vasantaoada Patil
Mahavidyalaya, Tasgaon, Dist. Sangli

Certificate Course on "Data Analysis using MS-Excel"

For B.Sc. III Statistics Students

List of participate Students (01/03/21 to 09/03/21)

Sr.No	Roll No.	Name Of Students
1	6309	AMBI RUTUJA GANPATI
2	6310	CHANDANSHIVE NANDINI ADNYAN
3	6311	CHAVAN TEJASHREE SHREEKANT
4	6312	DAREKAR RUTURAJ BHAGWAN
5	6313	DESAI PRATHAMESH SANJAY
6	6314	GHATAGE PRATHAMESH SATISH
7	6315	JADHAV JYOTI SAMPAT
8	6316	JADHAV OMKAR SURESH
9	6317	LOKHANDE SHUBHAM VISHWANATH
10	6318	MALI RUPALI VITTHAL
11	6319	MANE MOHINI SANDIP
12	6320	MANE NILAM SAMPAT
13	6321	MANGALE HARSHADA VISHWANATH
14	6322	MOHITE SHWETA MACHINDRA
15	6323	MULLA MISBAH JAMIRAHMAD
16	6324	PATIL AKSHADA GANAPATI
17	6325	PATIL AMRUTA ANIL
18	6326	PATIL ANKITA SHANKAR
19	6327	PATIL JAYDIP YUVRAJ
20	6328	PATIL JYOTI ASHOK
21	6329	PATIL RUTUJA BAPUSAHEB
22	6330	PATIL SNEHAL PRAKASH
23	6331	PATIL VITTHAL JAYSING
24	6332	PAWAR PRANAV PANDURANG
25	6333	PAWAR PREMA DADASO
26	6334	PAWASE NUTAN SAMBHAJI
27	6335	SABALE SWAPNALI RAJENDRA
28	6336	SAKHARE PALLAVI MAHADEV
29	6337	SHINDE KETAN SUBHASH
30	6338	SURYAWANSHI PRADNYA ANIL
31	6339	WAKREKAR SUSMITHA SASIKANTH
32	6340	ZAREKAR SNEHAL MAHADEV

Prof.P.V.Patil

List Of Participate Students B.Sc I

Sr.No.	Roll.No.	Name of Students
1	5052	Chandanshive Pradnya Dadaso
2	5053	Edake Nikita Minil
3	5054	Gavali Akshay Ramchandra
4	5056	Ghodake Ankita Anandrao
5	5057	Jadhav Harshad Subhash
6	5058	Jadhav Neha Rajiv
7	5059	Jadhav Shital Subhash
8	5060	Jadhav Shubham Anandrao
9	5061	Jayappa Aishwarya Sanjay
10	5062	Kadam Aishwarya Nandkumar
11	5064	Kharat Suyash Sadashiv
12	5065	Khatal Gitanjali Sarjerao
13	5066	Kolekar Pratiksha Dinkar
14	5067	Koshti Shraddha Bajirao
15	5068	Madane Vaishnavi Sanjay
16	5069	Malame Rushikesh Sidram
17	5070	Mane Rohini Rajendra
18	5071	Mane Shirish Shrimant
19	5072	More Prajakta Prakash (Surekha)
20	5073	More Snehal Dinkar
21	5074	More Vijay Vishnu
22	5075	Nalawade Rutuja Vilas
23	5076	Patil Abhijeet Hanmant
24	5078	Patil Akshay Vishrant
25	5079	Patil Ganesh Balasaheb
26	5081	Patil Hrutuja Rajendra
27	5082	Patil Jyotee Vijaykumar
28	5083	Patil Manasvi Ashok
29	5084	Patil Nikhil Bhagawan
30	5085	Patil Nikita Nitin
31	5086	Patil Prajakta Vijay
32	5087	Patil Prathamesh Balaso
33	5088	Patil Punam Chandrakant
34	5090	Patil Utkarsha Vijay
35	5092	Rakshe Ashutosh Jalindar
36	5093	Rasale Kajal Baburao
37	5094	Salunkhe Shweta Babaso
38	5095	Salunkhe Suyash Dinesh
39	5096	Sasane Ritesh Balaso
40	5097	Shaikh Nilofar Shahajaan
41	5098	Shelke Suvarna Shankar
42	5100	Shinde Samruddhi Rajaram
43	5102	Sutar Abhishek Anandrao
44	5103	Swami Prathmesh Shashikant
45	5104	Utale Rutuja Balaso

46	5105	Yadav Sumit Annu
47	5106	Yadav Tejas Durvas
48	5107	Adsul Sushant Namdev
49	5108	Bhosale Jyoti Laxman
50	5109	Bhosale Nishant Maruti
51	5110	Bhosale Sonal Subhash
52	5111	Birade Nainavhelee Shivkumar
53	5112	Chavan Sanket Shahaji
54	5113	Desai Ranjit Shankar
55	5114	Desai Shweta Rajendra
56	5115	Deshmukh Sanika Sanjay
57	5116	Dhavale Rohit Bhauso
58	5117	Hate Soumaiya Satish
59	5118	Hingmire Anant Nagesh
60	5119	Jadhav Anuja Lalaso
61	5120	Jadhav Duryodhan Ravasaheb
62	5121	Jadhav Jeevan Jalindar
63	5122	Jadhav Pratik Suresh
64	5123	Kharade Sushant Anil
65	5124	Mali Pallavi Narayan
66	5125	Mane Ritesh Hanmant
67	5126	Mane Rutuja Mohan
68	5127	Mane Sarika Mansing
69	5128	Mane Vaishnavi Balaso
70	5129	More Aniket Bharat
71	5130	Mule Sanket Gajanan
72	5131	Nalawade Komal Sharad
73	5132	Patil Prathamesh Uttam
74	5133	Patil Pratiksha Tanaji
75	5134	Patil Rohit Balaso
76	5135	Patil Suhas Subhash
77	5136	Patil Sushant Nivas
78	5137	Pawar Anuradha Amrut
79	5138	Pawar Jyoti Sanjay
80	5139	Pawar Onkar Ashok
81	5140	Pawar Sanket Bandopant
82	5141	Salunkhe Dipti Shahaji
83	5142	Shendage Tushar Suresh
84	5143	Shinde Prathmesh Suresh
85	5144	Shinde Ritesh Shrikant
86	5145	Shinde Rohit Ramesh
87	5146	Shinde Sakshee Sushilkumar
88	5147	Sorate Prathmesh Vijay
89	5148	Waghmare Swati Ravindra
90	5149	Zambre Shubham Laxman

NOTICE

All the students are informed that the Certificate course on **“Data Analysis using MS-Excel” For B.Sc I and B.Sc. III** Theory and practical Examination will be held on 15 March, 2021 from however, everyone should be present on time.



(Prof. P. V. Patil)
Head,

Department of Statistics,
Padmabhushan Dr. Vasantodada Patil
Mahavidyalaya, Tasgaon, Dist. Sangli

Certificate Course on "Data Analysis using MS-Excel"
For B.Sc. III Statistics Students

Theory Question Paper

Marks-30

Q.1 Attempt all questions.

(02*10=20)

- 1) Which of the following is true?
 - a) Excel is case sensitive.
 - b) R Software is case sensitive.
 - c) Combine function is used to input matrix.
 - d) $\text{Var}(x)$ gives the value of sample variance.
- 2) The function used for inputting vector is.....
 - a) `sacn()`
 - b) `()`
 - c) `seq()`
 - d) all of the above.
- 3) To find density function of normal distribution, which of the following function is useful?
 - a) `pnorm`
 - b) `dnorm`
 - c) `rnorm`
 - d) `qnorm`
- 4) Which of the following statements is false?
 - a) Random numbers generated by computers are true random numbers.
 - b) Simulation is used for modelling the situation.
 - c) The `abline()` command can be used to add lines to charts.
 - d) Vector objects need to be of equal length before they can be made into a data frame or matrix.
- 5) Which of the following is the property of random number generator?
 - a) `eplication`
 - b) Independence
 - c) Both a & b
 - d) None of these
- 6) Scatter plot is given by function.....
 - a) `Scatter()`
 - b) `Plot()`
 - c) `Pie()`
 - d) `Boxplot()`
- 7) In `t.test()` for two independent samples, if `var. equal` argument is specified then by

default var.equal=.....

- a) TRUE
 - b) FALSE
 - c) NULL
 - d) Inf
- 8) Output of prop.test() in R is.....
- a) z test
 - b) t test
 - c) Chi-square test
 - d) F test
- 9) Discrete Uniform random numbers are generated by.....
- a) Congruential random numbers
 - b) runif(1)
 - c) sample()
 - d) None of the above
- 10) For repeating the arguments,loop is used.
- a) repeat()
 - b) for()
 - c) both a & b
 - d) None of these

Q.B Attempt any two questions.

(02*05=10)


- 1) Write note on Applications of MS-Excel.
- 2) Write all types of functions of MS-Excel.
- 3) Write diagrammatical tools in MS-Excel.

Report

The department of Statistics organized a special course entitled **“Data Analysis using MS-Excel”** during 01/03/2021 to 09/03/2021. The objective behind conducting the special course is that students 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 MS-Excel are very useful data analysis software's, requires less time.

All the students of the department participated in such a special course. The total 8 day's course carried in three sessions. The faculty member of the department Mr.S.B.Mane, Miss.P.S.Jadhav and Miss.P.V.Shinde taught the various commands.

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


(Prof. P. V. Patil)
Head,
Department of Statistics,
Padmabhushan Dr. Vasantaoada Patil
Mahavidyalaya Tasgaon, Dist. Sangli



"ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार"
- शिक्षणमहर्षी डॉ. बापुजी साळुंखे

Shri. Swami Vivekananda Shikshan Sanstha's
Padmabhushan Dr. Vasantodada Patil Mahavidyalaya,
Tasgaon, Sangli-(416312), Maharashtra

Department of Statistics

"Certificate Course in Data Analysis Using MS-Excel"

Certificate

This is to certify that, Snehal Mahadev Zarekar has completed successfully "Certificate Course in Data Analysis Using MS-Excel" conducted by Department of Statistics, Padmabhushan Dr. Vasantodada Patil Mahavidyalaya Tasgaon in academic year 2020-21

Prof. P.V. Patil
Hod

Dr. Milind S. Hujare
Principal



"ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार"

- शिक्षणमहर्षी डॉ. बापुजी साळुंखे

Shri. Swami Vivekananda Shikshan Sanstha's
Padmabhushan Dr. Vasantodada Patil Mahavidyalaya,
Tasgaon, Sangli-(416312), Maharashtra



Department of Statistics

"Certificate Course in Data Analysis Using MS-Excel "

Certificate

This is to certify that, Prathamesh Sanjay Desai has completed successfully "Certificate Course in Data Analysis Using MS-Excel" conducted by Department of Statistics, Padmabhushan Dr. Vasantodada Patil Mahavidyalaya Tasgaon in academic year 2020-21

Prof. P. V. Patil
Hod

Dr. Milind S. Hujare
Principal