

**“Dissemination of Education through Knowledge, Science and Culture.”**

**--Shikshanmaharshi Dr. Bapuji Salunkhe.**

**Shri Swami Vivekananda Shikshan Sanstha's  
Padmabhushan Dr.Vasatraodada Patil Mahavidyalay,  
Tasgaon.  
Department of Statistics**

**Certificate course on “Data Analysis Using MS-Excel”  
for B.Sc. III Statistics Students.**

**Academic Year 2019-20**

Dr.V.Y.Pawar

Head

Department of Statistics,  
P D V P College, Tasgaon

To,  
The Principal,  
P D V P College, 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. PART-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



(Dr.V.Y.Pawar)

Head,

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

**Shri Swami Vivekananda Shikshan Sanstha's  
Padmabhushan Dr.Vasatraodada Patil Mahavidyalay, Tasgaon.**


## **Department of Statistics**

**Date: 25/07/2019**

### **Notice**

The students of B.Sc. III. Statistics are hereby informed that, the certificate course on **“Data Analysis using Ms-Excel”** is organized by the department. The lecture series for the concerned course arranged during 01/08/2019 to 07/08/2019.

All the students should attend the lectures from 01/08/2019, at 11.00.am onwards.




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

# BOARD OF STUDY

Year 2019-20

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 26<sup>th</sup> July 2019 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
Dr. V. Y. Pawar	Chairman	
Mr. U. S. Mane	Member	<u>U. S. Mane</u>
Miss. S. S. Patil	Member	<u>S. S. Patil</u>
Miss. S. S. Bhosale	Member	<u>S. S. Bhosale</u>
Miss. P. S. Jadhav	Member	<u>P. S. Jadhav</u>
Miss. R. L. Patil	Member	<u>R. L. Patil</u>

Swami VivekanandShikshanSanstha's  
**Padmabhushan Dr.VasatraodadaPatilMahavidyalay, Tasgaon.**

## **Department of Statistics**

1. TITLE: Capsule course on "**Data Analysis using MS-Excel**"

2. YEAR OF IMPLEMENTATION: 2019

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 student 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 INSTRUCTION: English

7. STRUCTURE OF COURSE:

<b>Paper No and Name</b>	<b>Contact hours</b>
C *T 101:	24
C * L102:	32
<b>Total</b>	<b>56</b>

C\*T 101 Name of paper

C\*L 102

indicates subject

T indicates Theory

L indicates Lab work

**A) LIBRARY :**

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

**B) SPECIFIC EQUIPMENTS :**

Necessary to run the Course.

Computer, LCD, Projector, Visualizer, Smart board

**c) Laboratory Equipments:**

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



**Swami VivekanandShikshanSanstha's  
Padmabhushan Dr.VasatraodadaPatilMahavidyalay, Tasgaon.  
Department of Statistics**

Syllabus Introduced from June, 2019.

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Title : Capsule course on "Data Analysis using MS-Excel"

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**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 features, and generate charts, graphs, and reports.
3. To analyze numerical data by using statistical tools and functions.

**Unit 1: Introduction to MS Excel**

(08L)

Introduction, Navigating MS Excel, Cells, Rows, and Columns, Formulas, Sheet Tabs, Page 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.

**Unit2: Entering & Editing Information**

(08L)

Entering Data, Labels and Values, Copying Cells, Rows and Columns, Pasting Cells, Rows, and Columns, Paste an 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, AutoCorrect.

**Unit 3: Formatting & Adding Elements to a Worksheet**

(06L)

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

**Unit-4 :**

(02L)

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 savers.
4. Salkind Neil 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: (30 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 worksheet

#### B) 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 Columns

#### B) Perform following using MS-Excel

- i) Change Font style
- ii) Fill and Border the cell
- iii) Header and Footer
- iv) 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 colour to cell
- ii) Add image
- iii) Freez and Unfreez Row and Column
- iv) Merge cell

4) Basic functions 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 |

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**100 Marks**


## Time table

Sr.No.	Name of the Faculty	Topic Name	Date	Time
1	Mr.Mane U.S	Introduction	1/8/2019	Session I-11.00 am to 1.00pm
				Session II-2.00 pm to 5.00 pm (Practices)
2	Miss.Patil S.S	Computation of Basic averages	2/8/2019	Session I-11.00 am to 1.00pm
				Session II-2.00 pm to 5.00 pm (Practices)
3	Miss.Patil R.L	Time series	3/8/2019	Session I-11.00 am to 1.00pm
				Session II-2.00 pm to 5.00 pm (Practices)
4	Miss.Jadhav P.S	Testing of hypothesis	4/8/2019	Session I-11.00 am to 1.00pm
				Session II-2.00 pm to 5.00 pm (Practices)
5	Miss.Bhosale S.S	Fitting of Distribution	5/8/2019	Session I-11.00 am to 1.00pm
				Session II-2.00 pm to 5.00 pm (Practices)
6	Mr.Mane U.S	Modeling of Distribution	6/8/2019	Session I-11.00 am to 1.00pm
				Session II-2.00 pm to 5.00 pm (Practices)
7	Miss.Patil S.S	Correlation and Regression	7/8/2019	Session I-11.00 am to 1.00pm
				Session II-2.00 pm to 5.00 pm (Practices)
8	Miss.Jadhav P.S	Non Parametric tests	8/8/2019	Session I-11.00 am to 1.00pm
				Session II-2.00 pm to 5.00 pm (Practices)

**List Of Participate Students (01/08/2019 to 07/08/2019)**

<b>Sr. No.</b>	<b>Roll Number</b>	<b>Name of Student</b>	
1	6292	MISS	BABAR PAYAL TANAJI
2	6293	SHRI	CHAVAN ARJUN MARUTI
3	6294	MISS	CHIGARE SHRUTI ASHOK
4	6295	MISS	GAIKWAD NIKITA SATISH
5	6296	MISS	GAIKWAD SNEHAL BHARAT
6	6297	MISS	GHODAKE SANCHITA MAHADEV
7	6298	SHRI	GUJALE TUSHAR KAKASO
8	6299	SHRI	GURAV PAVAN JAGDISH
9	6300	SHRI	INGALE MANOJ HANMANT
10	6301	MISS	JADHAV AMRUTA VITTHAL
11	6302	MISS	JADHAV DHANASHRI DILIP
12	6303	SHRI	JADHAV GANESH SHAHAJI
13	6304	SHRI	JADHAV VISHAL MANIK
14	6305	MISS	JAMADADE PRATIKSHA MADHUKAR
15	6306	SHRI	KATE VIJAY BHAGWAT
16	6307	SHRI	KHOT VISHAL SHRIMANT
17	6308	SHRI	KUMBHAR ONKAR BALASO
18	6309	MISS	LENGARE PRATIKSHA JAGANNATH

19	6310	MISS	MAHAMUNI RUTUJA RAJENDRA
20	6311	MISS	MALI PRANALI MAHADEV
21	6312	SHRI	MALI SADANAND SANJAY
22	6313	SHRI	MALI SUHAS HASHARATH
23	6314	SHRI	MANE ANIKET RAVSAHEB
24	6315	SHRI	MANE SUJIT SURYAKANT
25	6316	MISS	MASKE MOHINI BALASO
26	6317	MISS	NANAVARE POOJA ANIL
27	6318	SHRI	NIKAM AKASH SADANAND
28	6319	MISS	PATIL MAYURI DATTATRAY
29	6320	MISS	PATIL MRUNALI MOHAN
30	6321	MISS	PATIL VARSHA ANANDA
31	6322	SHRI	PATIL VISHVAJIT JAGANNATH
32	6323	SHRI	PAWAR DIPAK DAGADU
33	6324	MISS	POTDAR AKSHATA RAMESH
34	6325	MISS	SHELAKE SHRADHA SHIVAJI
35	6326	MISS	SHENDAGE SUPRIYA SURESH
36	6327	MISS	SHINDE NILAM SADASHIV
37	6328	MISS	SHINDE POOJA ANIL
38	6329	MISS	TANDALE PRACHI ABASO

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





Swami VivekanandShikshanSanstha's  
Padmabhushan Dr.VasatraodadaPatilMahavidyalay, Tasgaon.  
Department of Statistics

Capsule course on "Data Analysis using MS-Excel"

Theory Question Paper

Marks-30

Q.A. Attempt all questions.

(02\*10=20)

Q. 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. Var(x) gives the value of sample variance.

Q. 2. The function used for inputting vector is.....

- a. scan()
- b. ()
- c. seq()
- d. All of the above.

Q. 3. To find density function of normal distribution, which of the following functions is useful?

- a. pnorm b. dnorm c. morm d. qnorm

Q. 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.

Q. 5. Which of the following is the property of random number generator?

- a. eplication
- b. Independence c.
- Both a & b
- d. None of these.

Q. 6. Scatter plot is given by function .....

- a. Scatter()
- b. Plot()
- c. Pie()
- d. Boxplot()

Q. 7. In `t.test()` for two independent samples, if `var.equal` argument is not specified then by default `var.equal=`.....

- a. TRUE
- b. FALSE
- c. NULL
- d. Inf

Q. 8. Output of `prop.test()` in R is.....

- a. z test
- b. t test
- c. Chi- square test d.
- F test

Q. 9. Discrete Uniform random numbers are generated by .....

- a. Congruential random numbers
- b. `runif(1)`
- c. `sample()`
- d. None of the above

Q. 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.**


- i) Write note on Applications of MS-Excel.
- ii) Write all types of functions of MS-Excel.
- iii) Write diagrammatical tools in MS-Excel.

(02\*05=10)

# Report

The department of statistics organized a special course entitled “Capsule course on “Data Analysis using MS-EXCEL” during 01/08/2019 to 08/08/2019. 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 MS-EXCEL is very useful data analysis software’s, requires less time.

All the students of the department participated in such a special course. The total 8 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, Miss.S.S.Bhosale, Miss.S.S.Patil, Miss.R.L.Patil, Miss.P.S.Jadhav and Mr.Uttam Mane also taught the various commands and how to add Data on MS-EXCEL. As a result of the course the students got very much information regarding data analysis using software’s in very less time.

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

## Marks

Sr. No.	Roll Number	Name of Student	Marks
1	6292	BABAR PAYAL TANAJI	85
2	6293	CHAVAN ARJUN MARUTI	67
3	6294	CHIGARE SHRUTI ASHOK	82
4	6295	GAIKWAD NIKITA SATISH	84
5	6296	GAIKWAD SNEHAL BHARAT	87
6	6297	GHODAKE SANCHITA MAHADEV	82
7	6298	GUJALE TUSHAR KAKASO	85
8	6299	GURAV PAVAN JAGDISH	81
9	6300	INGALE MANOJ HANMANT	83
10	6301	JADHAV AMRUTA VITTHAL	67
11	6302	JADHAV DHANASHRI DILIP	67
12	6303	JADHAV GANESH SHAHAJI	86
13	6304	JADHAV VISHAL MANIK	80
14	6305	JAMADADE PRATIKSHA MADHUKAR	89
15	6306	KATE VIJAY BHAGWAT	89
16	6307	KHOT VISHAL SHRIMANT	85
17	6308	KUMBHAR ONKAR BALASO	70
18	6309	LENGARE PRATIKSHA JAGANNATH	78

19	6310	MAHAMUNI RUTUJA RAJENDRA	80
20	6311	MALI PRANALI MAHADEV	67
21	6312	MALI SADANAND SANJAY	80
22	6313	MALI SUHAS HASHARATH	81
23	6314	MANE ANIKET RAVSAHEB	75
24	6315	MANE SUJIT SURYAKANT	75
25	6316	MASKE MOHINI BALASO	85
26	6317	NANAVARE POOJA ANIL	67
27	6318	NIKAM AKASH SADANAND	75
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*"Dissemination of Education for Knowledge, Science and Culture"-  
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*Shri Swami Vivekanand Shikshan Sanstha Kolhapur  
Padmabhushan Dr. Vasantodada Patil Mahavidyalaya, Tasgaon*

***Department of Statistics***

***Certificate Course in Data Analysis using MS-Excel  
(B.Sc.III)***

*This is Certify that Mr./Miss Babar Payal Tanaji has completed  
successfully "Certificate Course in Data Analysis using MS-Excel"  
Conducted by Department of Statistics Padmabhushan Dr. Vasantodada  
Patil Mahavidyalaya, Tasgaon Academic year 2019-20*



**Dr. V.Y. Pawar**

HEAD



**Dr. M. S. Hujare**

PRINCIPAL

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

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

**Department of Statistics**

**Certificate Course in Data Analysis using MS-Excel  
(B.Sc.III)**

*This is Certify that Mr./Miss Jadav Ganesh Shahaji has completed  
successfully " Certificate Course in Data Analysis using MS-Excel"  
Conducted by Department of Statistics Padmabhushan Dr. Vasantrodada  
Patil Mahavidyalaya, Tasgaon Academic year 2019-20*



**Dr. V.Y. Pawar**  
HEAD



**Dr. M . S . Hujare**  
PRINCIPAL