



"Dissemination of Education through Knowledge, Science and Culture".  
--Shikshanmaharshi Dr. Bapuji Salunkhe

**Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's**  
**Padmabhushan Dr. Vasantodada Patil**

**Mahavidyalaya, Tasgaon**

Tal. Tasgaon. Dist. Sangli-416 312 (Maharashtra)

(Affiliated to Shivaji University, Kolhapur)

**DEPARTMENT OF COMPUTER-SCIENCE**

**REPORT**

(2018-19)

A CERTIFICATE COURSE IN

MS-EXCEL & R-SOFTWARE



Kumbhar V.T.  
Course Co-ordinator,  
Career Oriented Course,  
6<sup>th</sup> August, 2018

To,  
The Principal,  
P D V P College,  
Tasgaon- 416 312.

Sub: - Regarding Permission to commencement of (COC) Certificate course.....

Respected Sir,

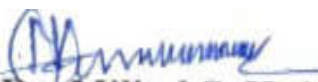
With reference to above subject, our college is going to start a certificate course entitled "MX-Excel & R-software" for B.SC. PART-I,II&III (Computer students) in

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

  
MOD  
Head,  
Department of Computer Science  
Padmabhushan Dr. Vasanttraodada Patil  
Mahavidyalaya, TASGAON- Dist. Solapur

  
Prin. Dr. Milind S. Hujare  
Principal  
Padmabhushan Dr. Vasanttraodada Patil  
Mahavidyalaya, Tasgaon (Solapur).

"Dissemination of Education for Knowledge, Science and Culture" -Shikshamaharashi Dr. Babuji Salunkhe  
Shri Swami VivekanandShikshanSanstha, Kolhapur's

**PadmabhushanDr.vasatraodadaPatilMahavidyalaya, Tasgaon**

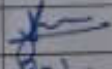
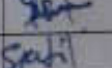
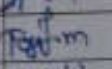
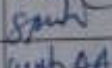

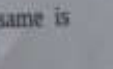
**DEPARTMENT OF COMPUTER SCIENCE**

**Syllabus for Certificate Course Of MS-EXCEL &R-SOFT**

**MEETING FOR SYLLABUS PREPARATION**

**(B.O.S)**


The meeting of C.O.C. for preparation of syllabus of a certificate course in MS-excel & R-SOFT was held on Monday 01/08/2018. The following members of the committee were present for the preparation of syllabus.

Sr. No.	Name	Designation	College Name	Sign
1	Mr.Kumbhar V.T.	Chairman	P.D.V.P.College, Tasgaon	
2	Mirs.Kumbhar N.V.	Member	P.D.V.P.College, Tasgaon	
3	Mr. Santinath Patil	Member	K.W.C.College, Tasgaon	
4	Mr.Toshif Mulla.	Member	Adarsh College, Vita	
5	Mr. Sandeep Patil.	Member	A.C.S.College, Palus	
6	Mr. Wagh A.A.	Member	P.D.V.P.College, Tasgaon	

The syllabus for said course has been prepared and the copy of the same is enclosed herewith for your kind information and further action.

Thanking you,

  
(Mr. V.T.Kumbhar)  
Course coordinator

  
Yours faithfully,  
(Mr. V.T.Kumbhar)



''ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार'' - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

**PADMABHUSHAN DR. VASANTODADA PATIL MAHAVIDYALAYA**

TASGAON, Dist. Sangli, Pin- 416 312 ☎ - STD : 02346-250665, 250575 FAX : 250575

● Affiliated to Shivaji University, Kolhapur ●

E-mail : san.pdvpm.tas@gmail.com Website : www.pdvpmtasgaon.edu.in

► Established Year : June 1962 ► P. B. No. : 14 ► Jr. College No. : J22-10-001 ► Sr. College Code No. : <sup>SIAC4</sup>X Jr.: C-8



NAAC Reaccredited 'B' (276)

ISO Certified : 9001:2015

**Shikshanmaharshi  
Dr. Bapuji Salunkhe**  
B.A., B.T., D.Lit.  
FOUNDER

**Hon. Chandrakant (Dada) Patil**  
PRESIDENT  
B.Com.  
Ex- Minister of Revenue, Public Works  
Govt. of Maharashtra

**Prin. Abhaykumar Salunkhe**  
M.A.  
CHAIRMAN

**Prin. Mrs. Shubhangi Gawade**  
M.Sc. B.Ed.  
SECRETARY

**Dr. Milind S. Hujare**  
M.Sc., Ph.D.  
PRINCIPAL

Ref.No. : PDVPMT /

Date :

10-08-2018

To,  
Mr. V.T Kumbhar,  
Assistant Professor,  
Department of Computer Science,  
P. D. V. P. College, Tasgaon

**Subject: - Regarding Meeting of BOS for Syllabus Preparation.....**

Respected Sir/Madam,

With reference to the above mentioned subject, you are appointed as Member of Board of Studies (BOS) of Certificate Course entitled "**Ms-Excel & R-software**" to be conducted by The Department of Computer Science in our college during the academic year 2018-19.

The meeting of BOS is conveyed on **10<sup>th</sup> August 2018** for the preparation of syllabus of Certificate course entitled "**Mx-Excel & R-software**". So, you are kindly requested to attend the meeting at 11:00 a.m. in IQAC Office of the college.

Thanking you,

*Atka*

**IQAC Director**

*Prin. Dr. Milind S. Hujare*  
**Prin. Dr. Milind S. Hujare**  
**Principal**  
Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon (Sangli).



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**Dr. Milind S. Hujare**  
M.Sc., Ph.D.  
PRINCIPAL

Ref.No. : PDVPMT /

Date :

**10-08-2018**

To,  
Miss. N.V. Kumbhar ,  
Assistant Professor,  
Department of Computer Science,  
K.W.C.College,sangli

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**Prin. Dr. Milind S. Hujare**  
**(Principal)**  
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SECRETARY

Dr. Millind S. Hujare  
M.Sc., Ph.D.  
PRINCIPAL

Ref.No. : PDVPM /

Date :

10/08/2019

To,  
Mr. Shantinath Patil,  
Assistant Professor,  
Department of Computer Science,  
K.W.C.College,sangli

Subject: - Regarding Meeting of BOS for Syllabus Preparation.....

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*Dr. Millind S. Hujare*  
Prin. Dr. Millind S. Hujare  
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Padmabhushan Dr. Vasantodada Patil  
Mahavidyalaya, Tasgaon (Sangli).



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PRINCIPAL

Ref.No. : PDVPMT /

Date :

10/08/2019

To,  
Mr. Toshif Mulla  
Assistant Professor,  
Department of Computer Science,  
Adarsh College, Vita

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Dr. Milind S. Hujare  
PRINCIPAL  
M.Sc., Ph.D.

Ref.No. : PDVPMT /

Date :

10/08/2019

To,  
Mr. Sandeep Patil,  
Assistant Professor,  
Department of Computer Science,  
A.C.S. College, Palus

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M.Sc., Ph.D.  
PRINCIPAL

Ref.No. : PDVPMT /

Date :

10/08/2019

To,  
Mr.WaghA.A.  
Assistant Professor,  
Department of Computer Science,  
P. D. V. P. College, Tasgaon

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Mahavidyalaya, Tasgaon (Sangli).

## Course Syllabus

### Unit 1:- Overview of the Basics of Excel

- Customizing common options in Excel
- Absolute and relative cells
- Protecting and un-protecting worksheets and cells

### Unit 2:-Working with Functions

- Writing conditional expressions (using IF)
- Using logical functions (AND, OR, NOT)
- Using lookup and reference functions (VLOOKUP, HLOOKUP, MATCH, INDEX)
- VlookUP with Exact Match, Approximate Match
- Nested VlookUP with Exact Match
- VlookUP with Tables, Dynamic Ranges
- Nested VlookUP with Exact Match
- Using VlookUP to consolidate Data from Multiple Sheets

### Unit 3:- Data Validations

- Specifying a valid range of values for a cell
- Specifying a list of valid values for a cell
- Specifying custom validations based on formula for a cell

### Unit 4:-Working with Templates

- Designing the structure of a template
- Using templates for standardization of worksheets

### Unit 5:-Sorting and Filtering Data

- Sorting and Filtering Data
- Using multiple-level sorting
- Using custom sorting
- Filtering data for selected view (AutoFilter)
- Using advanced filter options

## Course Syllabus

### Unit 1:-Introduction

- What is R Programming Language? Introduction & Basics
- How to Download & Install R, RStudio, Anaconda on Mac or Windows
- R Data Types, Arithmetic & Logical Operators with Example
- R Matrix Tutorial: Create, Print, add Column, Slice
- Factor in R: Categorical & Continuous Variables

### Unit 2:-Data Preparation

- R Data Frame: Create, Append, Select, Subset
- List in R: Create, Select Elements with Example
- R Sort a Data Frame using Order()
- R Dplyr Tutorial: Data Manipulation(Join) & Cleaning(Spread)
- Merge Data Frames in R: Full and Partial Match
- Functions in R Programming (with Example)

### Unit 3:-Programming

- F, ELSE, ELSE IF Statement in R
- For Loop in R with Examples for List and Matrix
- While Loop in R with Example
- apply(), lapply(), sapply(), tapply() Function in R with Examples
- Import Data into R: Read CSV, Excel, SPSS, Stata, SAS Files
- How to Replace Missing Values(NA) in R: na.omit & na.rm
- R Exporting Data to Excel, CSV, SAS, STATA, Text File
- Correlation in R: Pearson & Spearman with Matrix Example
- R Aggregate Function: Summarise & Group\_by() Example
- R Select(), Filter(), Arrange(), Pipeline with Example

### Unit 4:-Data Analysis

- Scatter Plot in R using ggplot2 (with Example)
- How to make Boxplot in R (with EXAMPLE)
- Bar Chart & Histogram in R (with Example)
- T Test in R: One Sample and Paired (with Example)
- R ANOVA Tutorial: One way & Two way (with Examples)

### Unit 5:-Machine Learning

- R ANOVA Tutorial: One way & Two way (with Examples)
- Decision Tree in R with Example
- R Random Forest Tutorial with Example
- Generalized Linear Model (GLM) in R with Example
- K-means Clustering in R with Example

### Evaluation System

#### Nature Of Question Paper

Question1	Short Question (10 Question)	20
Question2	Descriptive type Question(4 out of 6)	20
Question3	Descriptive type Question(2 out of 4)	20
Question4	Short note on(5 out of 6)	20
Question5	Program(2 out of 3)	20
Total		100

#### Reference:

1. R for Data science : Timport, tidy, Transform
2. Discovering Statistics
3. R for Dummies
4. R in Action : Data Analysis & Graphics with R.

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**Department of Computer Science**  
**A Certificate Course in Mx-Excel & R-software**  
**Academic year 2018-19**

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## NOTICE

8 AUGUST 2018

All the students of B.SC. PART-I,II &III (Computer students) are hereby informed that, our college is going to start a certificate course entitled "**Mx-Excel & R-software**" for this current academic year .All the students should take admissions as earlier

  
HOD  
Head,

Department of Computer Science  
Padmabhushan Dr. Vasantrodada Patil  
Mahavidyalaya, TASGAON, Dist. Sangli

  
Prin. Dr. Milind S. Hujare  
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**PadmabhushanDr.vasatraodadaPatilMahavidyalaya, Tasgaon**

**Department of Computer Science**

**A Certificate Course in Mx-Excel & R-software**

**Admission B.SC I,II,III 2018-19**

**B. Sc. I**

<b>Roll No</b>		<b>NAME OF STUDENTS</b>
5052	SHRI	JADHAV KRISHNA SUBHASH
5053	SHRI	PATIL RAHUL PRADIP
5054	MISS	PATIL SUSHMITA VITTHAL
5055	MISS	RAJMANE GAYATRI VISHWAS
5056	SHRI	TANGADE SOURABH SHANKAR
5061	MISS	DHANAWADE SNEHAL SUBHASH
5100	SHRI	DEVKULE ABHISHEK SUGRIV
5101	SHRI	BHOSALE RAHUL ANKUSH
5102	SHRI	CHAVAN VISHWAJEET VINAYAK
5103	MISS	JAGANADE PRITI SUNIL
5104	MISS	JANGAM POOJA PRABHAKAR
5105	SHRI	KAMBLE SHAILESH LAXMAN
5106	SHRI	KOLI SURAJ SURYAKANT
5107	SHRI	LOKHANDE PRABHAT RAMCHANDRA
5108	SHRI	LONDHE MAYUR DILIP
5110	SHRI	MALI TUSHAR SANJAY
5111	SHRI	MULANI PARVEZ PHAIYAJ
5112	SHRI	PAWAR ROSHAN DINKAR
5150	SHRI	JADHAV NITIN BAJARANG
5228	SHRI	BHOSALE SATYAJEET GANESH
5230	SHRI	JADHAV AVINASH JALINDAR
5231	MISS	JADHAV PRITEE RAVINDRA
5232	MISS	JAMADADE HARSHADA HARISHCHANDRA
5233	MISS	JAMADADE MEGHA SAJJAN
5234	SHRI	JAMADADE TUSHAR BALASO
5235	SHRI	JAMDADE SURAJ FADNIS
5236	SHRI	KHADE SUNNY SATISH
5237	SHRI	MALI NITIN ASHOK
5238	SHRI	MANE SANTOSH BAJARANG
5239	SHRI	PAWAR ANISH DADASAHEB
5240	SHRI	PAWAR ROHIT SURYAKANT
5241	SHRI	RAJMANE ABHIJIT VILAS
5242	SHRI	SHENDAGE RUSHIKESH RAVINDRA

5243	SHRI	SHINDE MAYUR NAMDEV
5247	SHRI	AUTADE TEJAS SANJAY
5273	MISS	JADHAV RUTUJA TANAJI
5311	MISS	MORE RIYA PRADIP
5319	SHRI	PATIL DHANAJI VIKAS
5334	MISS	PATIL RUTUJA SHIVAJI
5338	MISS	PATIL SMITA ASHOK
5354	SHRI	RAKSHE MUKUND SANTOSH
5362	SHRI	SHENDAGE ROHIT DILIP
5367	MISS	SHINDE AMRUTA JALINDAR
5391	MISS	GAIKWAD PURVA VIJAY
5392	SHRI	JADHAV PRATHMESH YUVRAJ
5393	SHRI	JADHAV YOGESH UDDHAV
5394	SHRI	JAGADALE SANTOSH KERABA
5395	SHRI	JAMADADE SOURABH HARISHCHANDRA
5398	MISS	MAHAJAN PURVA PRAVIN
5399	MISS	MALDAR MUSKAN NISAR
5400	SHRI	MOHITE DILIP NETAJI
5401	SHRI	MULLA NAWAJ RAFIK
5402	SHRI	MUNJE PRADIP SHIVLINGAPPA
5403	SHRI	PATIL ABHIJIT VIJAYKUMAR
5405	SHRI	PATIL AJIT ANNASO
5406	MISS	PATIL ANURADHA ANANDRAO
5407	SHRI	PATIL DIGVIJAY GANPATI
5408	MISS	PATIL KAJAL RAJARAM
5409	MISS	PATIL KOMAL SHASHIKANT
5410	MISS	PATIL PRATIKSHA GOVIND
5411	MISS	PATIL PRATIKSHA RAVSAHEB
5412	SHRI	PATIL ROHIT MAHADEV
5413	SHRI	PATIL RUSHIKESH DADASO
5415	MISS	PATIL SNEHAL LAXMAN
5416	SHRI	PATIL SOMESH SANJAY
5417	SHRI	PATIL SOMESH UDAY
5418	SHRI	PATIL SURAJ RAMCHANDRA
5419	SHRI	PATIL SUSHIL SUNIL
5420	MISS	PATIL VAISHNAVI SAMPAT
5422	SHRI	PAWAR PRATHAMESH CHANDRAKANT
5423	SHRI	POL RUTVIK DIPAKRAO
5424	SHRI	SHINDE KRITESH MOHAN
5425	SHRI	SHINDE SANTOSH SHRIKANT
5426	SHRI	SHINDE SHUBHAM BHAUSAHEB
5427	MISS	THORBOLE SAKSHI ASHOK
5428	MISS	CHAVAN SUPRIYA YASHWANT

5429	MISS	GHALE POOJA GUNDA
5430	SHRI	PATHAN ASIF AYUBKHAN
5431	SHRI	PATHAN SAHIL AHAMAD
5432	SHRI	PATIL DNYANESHWAR BHIMRAO
5433	SHRI	PATIL NARAYAN BHASKAR
5434	MISS	SAPKAL ANJALI KRISHNA
5435	SHRI	SARGAR DINESH BHAGAVAN

### B. Sc. II


Roll No		NAME OF STUDENTS
5792	SHRI	EDAKE MANGESH MARUTI
5793	SHRI	JAMADADE RAJVARDHAN SURYAKANT
5794	SHRI	JAMDADE VISHVAJEET VASANTRAO
5795	MISS	PAWAR POOJA BALASO
5796	SHRI	PAWAR SHUBHAM VIJAY
5866	SHRI	JADHAV PRATIK PRADIP
5867	SHRI	JADHAV SUSHANT JALINDAR
5868	SHRI	K JISHNU GANGADHARAN
5869	SHRI	KARMALKAR ABHIJEET DILIP
5870	MISS	MALI SHUBHANGI ASHOK
5871	MISS	MULANI MASUM RAJEKHAN
5872	SHRI	NIMBALKAR PRATIK YUVRAJ
5873	SHRI	PATIL YOGESH LALASO
5877	SHRI	BABAR AKSHAY SUBHASH

### B. Sc. III

Roll No		Name Of
6210	MISS	BABAR JYOTI MARUTI
6211	MISS	BHOSALE MAYURI MANIK
6212	MISS	BOBADE ROHINI SANJAY
6213	SHRI	GARANDE ANIRUDH ASHOK
6214	MISS	GAVALI SNEHAL ASHOK (Provisional)
6215	MISS	GURAV AMRUTA UTTAM
6216	SHRI	GURAV OMKAR UTTAM
6217	MISS	JADHAV POOJA UTTAM
6218	SHRI	KHABALE SANIKET HARIDAS
6219	MISS	KULKARNI SHRADDHA NARENDRAKUMAR
6220	MISS	MALI DIPALI JAYWANT
6221	MISS	MALI RUPALI SHIVAJI
6222	MISS	MORE MADHURI JAGANNATH
6223	MISS	PATIL ROHINI BAJARANG



6224	SHRI	PATIL ROHIT SHAMGONDA
6225	MISS	PATIL RUTUJA RAJENDRA
6226	MISS	PATIL SHWETA VISHNU
6227	SHRI	PAWAR ARJUN SUBHASH
6228	MISS	POL SUPRIYA SUNIL
6229	MISS	SADAKALE BHAGYASHRI GORAKHNATH
6230	MISS	SAPKAL LAXMI EAKNATH

  
HOD  
Head,  
Department of Computer Science  
Fak. Sahakarshan Dr. Vankaroodada Poo  
Mangaluru, JAWA. TASSAOP. Dis. Sangh

"Dissemination of Education for Knowledge, Science and Culture" -Shikshanamaharashi Dr. Babuji Salunkhe  
Shri Swami VivekanandShikshanSanstha, Kolhapur's


**PadmabhushanDr.vasatraodadaPatilMahavidyalaya, Tasgaon**  
**Department of Computer Science**

**A Certificate Course in EXCELL &R-SOFT**  
**Time Table**  
**Academic year 2018-19**

Time	Monday	Thursday	Wednesday	Thursday	Friday	Saturday
8 to 9 am	Thory	Thory	Thory	Thory	Thory	Thory
9 to 10 am	Practical	Practical	Practical	Practical	Practical	Practical



Mr. V.T. Kumbhar  
Course coordinator



Principal

Padmabhushan Dr. Vasatraodada Patil  
Mahavidyalaya, Tasgaon (Sangli).









"Dissemination of Education for Knowledge, Science and Culture" -Shikshanmaharashi Dr. Bapuji Salunkhe  
Shri Swami VivekanandShikshanSanstha, Kolhapur's  
**Padmabhushan Dr.vasatraodadaPatil Mahavidyalaya, Tasgaon**  
**Department of Computer Science**  
**A Certificate Course in Advanced Data Science**  
**Academic year 2018-19**

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## NOTICE

18 March 2019

All the students of B.SC. PART-I,II &III (Computer students) are hereby informed that, the examination Of Ms-Excel and R-software certificate course will be held as per following shedule.

SR.NO	PAPER	DAY	DATE	TIME
1	Theory	MONDAY	25/08/2020	8 to 11 am
2	Practical	THURSDAY	10/09/2020	8 to 11 am

  
MOD  
Head,  
Department of Computer Science  
Padmabhushan Dr. Vasatraodada Patil  
Mahavidyalaya, TASGAON, Dist. Sangli.

  
Prin. Dr. Milind S. Hujare  
Principal  
Padmabhushan Dr. Vasatraodada Patil  
Mahavidyalaya, Tasgaon (Sangli).

**Q.1) Short Question (10 Question)**

**Marks:-20**

- 1)What is ms excel?
- 2)What is ribbon?
- 3)Explain Spreadsheet and its Basics.
- 4)How many data formats are available in Excel? Name some of them.
- 5)Specify the order of operations used for evaluating formulas in Excel.
- 6)How can you wrap the text within a cell?
- 7)Explain Macro in MS-Excel.Which are the two macro languages in MS-Excel?
- 8) Is it possible to prevent someone from copying the cell from your worksheet?
- 9)What are charts in MS-Excel?
- 10)How can you sum up the Rows and Column number quickly in the Excel sheet?

**Q.2) Descriptive type Question(4 out of 6)**

**Marks:-20**

- 1)Difference between COUNT, COUNTA, COUNTIF and COUNTBLANK in Ms-Excel.
- 2)What is IF function in Excel?
- 3) Explain the difference between SUBSTITUTE and REPLACE function in MS-Excel?
- 4)Explain few useful functions in Excel
- 5)What is the "What If" condition in Excel formulas?
- 6)How can you disable the automating sorting in pivot tables?

**Q.3) Descriptive type Question(2 out of 4)**

**Marks:-20**

- 1)How cell reference is useful in the calculation?
- 2)What is the quick way to return to a particular area of a worksheet?
- 3)What is the benefit of using formula in Excel sheet?
- 4)How can you disable the automating sorting in pivot tables?

**Marks:-20**

**Q.4) Short note on(5 out of 6)**

- 1)Pie Chart
- 2)Column Chart
- 3)Line Chart
- 4)Dot Graph
- 5)NUM
- 6)COUNT

**Marks:-20**

**Q.5) Program(2 out of 3)**

- 1)Illustrates how to create a basic spreadsheet by entering text, numbers, and formulas.
- 2)Illustrates how to dress up a table using special formats and how to export a table or chart into a Microsoft Word document.
- 3) Use a worksheet to calculate descriptive statistics (e.g., mean, standard deviation, skewness, kurtosis, frequency distribution, correlation).
- 4)Estimate a bivariate regression equation and related summary statistics.



**Question Paper For Advance excel**

**Q.1) Short Question (10 Question)**

Marks:-20

- 1) Describe R functions for Reading a Matrix or Data Frame From a File
- 2) Explain about Variables, Constants and Data Types in R Programming
- 3) How to create, name, access, merging and manipulate list elements? Explain with examples.
- 4) Write about Arithmetic and Boolean operators in R programming?
- 5) How to create user defined function in R? How to define default values in R? Write syntax and examples?
- 6) Explain functions for accessing the keyboard and monitor, Reading and writing files
- 7) Write an R function to find sample covariance.
- 8) Fit a poisson distribution to the following data  
x 0,1,2,3,4,5  
f 3,9,12,27,4,1
- 9) Calculate the coefficient of correlation to the following data  
X 10 12 18 24 23 27  
Y 13 18 12 25 30 10
- 10) Mention any two applications of t-distribution

Marks:-20

**Q.2) Descriptive type Question(4 out of 6)**

- 1) Explain different data structures in R.
- 2) Implement binary search tree with R
- 3) Explain different types of operators in R.
- 4) Write about control statements in R
- 5) Write about all summary commands in R?
- 6) What is cumulative sum, product, min, max? Explain with example?

Marks:-20

**Q.3) Descriptive type Question(2 out of 4)**

- 1) Write Explain its importance?
- 2) Explain about descriptive statistics? Write examples?
- 3) Fit a Binomial distribution to the following data x=0 1 2 3 4 5 f=2 16 28 12 9 3
- 4) Write in detail about Random Forest

Marks:-20

**Q.4) Short note on(5 out of 6)**

- 1) Write about vectors in R
- 2) Write about type conversions in R?
- 3) Describe 3 math functions in R?
- 4) Write about lines() function
- 5) Mention any two applications of t-distribution
- 6) Write about logistic regression

Marks:-20

**Q.5) Program(2 out of 3)**

- 1) Write a R program to get all prime numbers up to a given number (based on the sieve of Eratosthenes).

Question paper No. 1  
Advance Excel Training (Theory paper)

Lucky Page No.  
Date / /

Q. 1 Short question

(1) What is ms excel ?

→ MS Excel is a commonly used Microsoft office application. It is a spreadsheet program which is used to store & analyse numerical data.

MS Excel is a spreadsheet program where one can record data in the form of tables. It is easy to analyse data in an Excel spreadsheet.

(2) What is ribbon ?

→ The ribbon is a user interface element created by Microsoft. It is part of the "Microsoft Office Fluent" interface & combines the menu bar & toolbars into a single floating pane.

The ribbon is located at the top of the screen in office applications, such as Access, Excel, PowerPoint, Word & Outlook.

(3) Explain spreadsheet & its Basics.

→ A spreadsheet is a sheet of paper that shows accounting or other data in rows & columns; a spreadsheet is also a computer application program that simulates a physical spreadsheet by capturing, displaying & manipulating data arranged in rows & columns.

Basic features of spreadsheet =

(1) Grids, Rows & columns

- (i) Functions
- (ii) Formulas
- (iii) commands
- (iv) Text Manipulation
- (v) printing

(4) How many data formats are available in Excel? Name some of them.

→ Eleven data formats are available in Microsoft Excel for data storage.

Example :

- (i) Number - stores data as a number.
- (ii) Currency - stores data in the form of currency.
- (iii) Date - Date is stored as dates.
- (iv) Percentage - stores numbers as a percentage.
- (v) Text formats - stores data as string of text.

(5) Specify the order of operations used for evaluating formulas in Excel.

→ Excel uses an order of operations when evaluating different operators within the formula bar.

- (i) parentheses
- (ii) Exponents
- (iii) Multiplication
- (iv) Division
- (v) Addition
- (vi) subtraction.

When evaluating formulas, Excel always processes



# sampleanswerpaper



7



8



9



10



11



12

## Sample Certificate

					
<p><i>'Dissemination of Education through Knowledge, Science and Culture'</i> - Shikshanmaharshi Dr. Bapuji Salunkhe Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's</p> <p><b>PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,</b> Tasgaon, Dist.: Sangli.</p> <p>Organized By</p> <p>DEPARTMENT OF COMPUTER SCIENCE <b>CERTIFICATE COURSE IN</b> <i>MS-Excel &amp; R-Soft</i></p> <p style="text-align: center;"><b>CERTIFICATE</b></p> <p>This is to certify that Mr./Miss/Mrs.----- of Arts/Commerce/Science I/II/III has competition <i>MS-Excel &amp; R-Soft</i> course.</p> <table><tr><td><b>Mr. Kumbhar Y.T</b> Coordinator</td><td><b>Mr. Kumbhar Y.T</b> Organizing Secretary</td><td><b>Dr. Milind S. Hujare</b> Principal</td></tr></table>			<b>Mr. Kumbhar Y.T</b> Coordinator	<b>Mr. Kumbhar Y.T</b> Organizing Secretary	<b>Dr. Milind S. Hujare</b> Principal
<b>Mr. Kumbhar Y.T</b> Coordinator	<b>Mr. Kumbhar Y.T</b> Organizing Secretary	<b>Dr. Milind S. Hujare</b> Principal			

  
Report submitted by  
( Prof.S.V.Patil)