

"Education through self-help is our motto" - KARMAVEER
RAYAT SHIKSHAN SANSTHA'S
RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR
DEPARTMENT OF STATISTICS

Organized
Exploratory Data Analysis Using MS-Excel
Self – Funded under Short Term Courses in the academic year 2024-25

COURSE REPORT

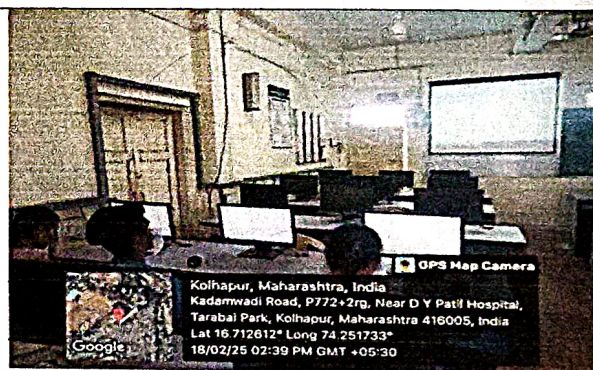
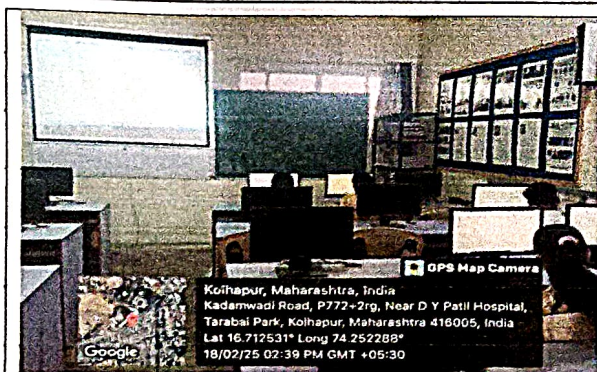
Department of statistics organized the certificate course in Exploratory Data Analysis Using MS-Excel in statistics for B.Sc. I Computer Science (entire) students for the academic year 2024-25. The main objectives of this course are:

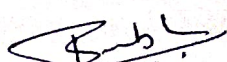
- To indicate names and functions of excel interface components.
- To learn how to enter and edit the data.
- To learn how to formulate the data and cells.
- To learn how to create and modify chart and graph.
- Preview and print worksheets.
- To identify different statistical inbuilt functions.
- To learn techniques of computations of various statistical measures using Excel.

For this course fee of Rs.300 charged to the students. The course was conducted in the period of 10/02/2025 to 28/02/2025. Total number of beneficiaries for this course is 15. After completion of this course student's knowledge was checked through various computation tasks through assignments. Each student who successfully completed this course was awarded by certificate. Mr. Chougule P. S., Dr. Kurane T.S.(co-ordinator). Smt. Kamble S.M. and Mr. Kamble S.S. worked as a Resource person for this course.

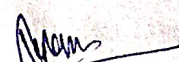
Outcomes: The students shall become confident and they acquire the knowledge requires to perform exploratory data analysis activities using MS-Excel.

**Total number of
beneficiaries is 17.**




Dr. T.S. Kurane
Coordinator


Mr. P. S. Chougule
Head
Department of Statistics


Dr. M.K. Kannade
Incharge
Short term Courses


Dr. U. S. Shelke
IQAC
Coordinator


Prof. Dr. D. R. Bhosale
I/C Principal
R. C. Shahu College,
Kolhapur

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 Rayat Shikshan Sanstha's
Rajarshi Chhatrapati Shahu College, Kolhapur
Department of Statistics
 Organized
Exploratory Data Analysis using MS-Excel
 (Self – Funded)
 Under
 Short Term Courses
 2024-2025
Income and Expenditure Statement

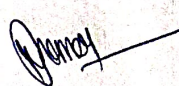
Income	Amount (in Rs.)	Expenditure	Amount (in Rs.)
Particulars		Particulars	
1) Total Participants = 17 (17*300)	5100/-	1) GST 18%	918/-
		2) Certificate Printing	260/-
		2) Remuneration for Recourse Person Lumsum (40% of Total amount 3922/- is 1568/- is equally distributed into 2 persons)	
		i) Smt. Kamble S. M.	784/-
		ii) Mr. Kamble S. S.	784/-
		3)Balance to College	2354/-
Total	5100=00	Total	5100=00



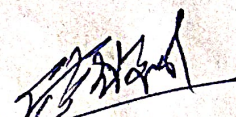
Dr. T. S. Kurane
 Coordinator
 Department of Statistics



Mr. P. S. Chougule
 Head
 Department of Statistics



Dr. M.K. Kannade
 In charge,
 Short Term Courses



Prof. Dr. D. R. Bhosale
 I/C Principal
 R. C. Shahu College, Kolhapur

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Rayat Shikshan Sanstha's



RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR

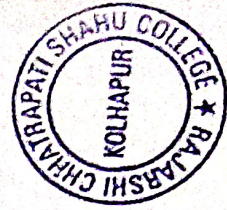
NAAC 4th Cycle Reaccredited with A++ (CGPA- 3.78)

DEPARTMENT OF STATISTICS AND COMPUTER SCIENCE

CERTIFICATE

This is to certify that Prof./Shri./Smt. _____ of

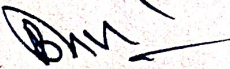
Rajarshi Chhatrapati Shahu College, Kolhapur has attended and Participated/Delivered a Lecture as Resource Person/Successfully Completed Certificate Course on Exploratory data analysis using MS-Excel jointly organized by Department of Statistics and Department of Computer Science of Rajarshi Chhatrapati Shahu College, Kolhapur from 10/02/2025 to 28/02/2025.

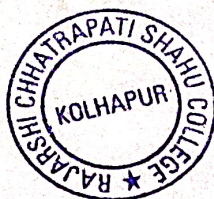


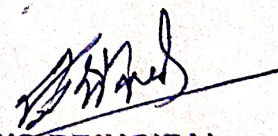
Dr. T. S. Kurane Coordinator Dept. of Statistics	Mr. P. S. Chougule Head Dept. of Statistics	Dr. M. K. Kannade In charge Short term Courses	Dr. U. S. Shelke IQAC Coordinator	Prof. Dr. D. R. Bhosale I/C Principal, R. C. Shahu College, Kolhapur.
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Education through self-help is our motto"- KARMAVEER
Rayat Shikshan Sanstha's
Rajarshi Chhatrapati Shahu College, Kolhapur
Department of Statistics
Organized
"Exploratory Data Analysis Using MS-Excel"
Student Enrollment List

Sr. No.	Name of Student	Name of College	Fee
1	Shreya Shrimant Kadam	RCSC	300
2	Pratiksha Rajendra Hatgine	RCSC	300
3	Shraddha Shital Parit	RCSC	300
4	Sanika Arun Sonule	RCSC	300
5	Arpita Sandip Kadam	RCSC	300
6	Samruddhi Sarjerao Patil	RCSC	300
7	Kaustubh Kabir Surve	RCSC	300
8	Omkar Ashok Ghadage	RCSC	300
9	Sanchar Kishan Kachare	RCSC	300
10	Kiran Rajaram Anuse	RCSC	300
11	Rutik Ashok Mote	RCSC	300
12	Harshad Umesh Avaghade	RCSC	300
13	Sushant Shrikant Patil	RCSC	300
14	Shraddha Umesh Aysekar	RCSC	300
15	Ranveer Pravin Sadhau	RCSC	300
16	Anand Balaso gaikwad	RCSC	300
17	Nagesh navalu kanake	RCSC	300
Total Amount (in Rs.)			5100


Head
Department of Statistics
Rajarshi Chh. Shahu College, Kolhapur




H.C. PRINCIPAL
R.C. SHAHU COLLEGE
KOLHAPUR

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Rayat Shikshan Sanstha's
Rajarshi Chhatrapati Shahu College, Kolhapur
Department of Statistics

Organized
"Certificate course on Exploratory Data Analysis Using MS-Excel"
Exam (2024-25)

Date:27/02/2025

Marks:50

Time: 1 hour

Q.1 Represent the following data using simple bar diagram

(10)

Year	Production (in million tons)
1985	35
1986	45
1987	50
1988	47
1989	52

Q.2 Present the following data using a suitable (sub-divided bar diagram).

(10)

Class	F.Y.	S.Y.	T.Y.
Pass	300	325	210
Fail	100	125	90
Total	400	450	300

Q. 3 Find A.M,G.M,H.M. of the following data.

(10)

32, 35, 36, 37 ,39, 41,43 ,47 ,48 ,38.

Q. 4 Obtain M.D. about mean, C.V. for the following data.

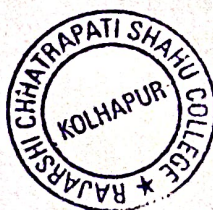
(10)

Class	10-15	15-20	20-25	25-30	30-35
Frequency	3	12	34	21	7

Q. 5 Find Correlation Coefficient between X and Y.

(10)

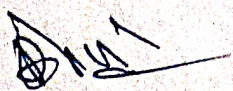
Price (X)	71	68	66	67	70	72	69	73	70	65
Supply(Y)	59	64	65	63	62	61	60	58	57	65



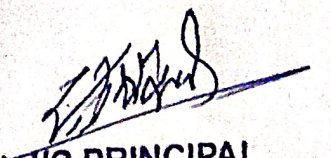
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Rayat Shikshan Sanstha's
Rajarshi Chhatrapati Shahu College, Kolhapur
Department of Statistics
Organized

"Certificate course on Exploratory Data Analysis Using MS-Excel"
Result of Enrolled Students (2024-25)

Sr. No.	Name of Student	Class	Marks
1	Shreya Shrimant Kadam	B.C.S I	45
2	Pratiksha Rajendra Hatgine	B.C.S I	49
3	Shraddha Shital Parit	B.C.S I	49
4	Sanika Arun Sonule	B.C.S I	48
5	Arpita Sandip Kadam	B.C.S I	42
6	Samruddhi Sarjerao Patil	B.C.S I	49
7	Kaustubh Kabir Surve	B.C.S I	47
8	Omkar Ashok Ghadage	B.C.S I	49
9	Sanchar Kishan Kachare	B.C.S I	44
10	Kiran Rajaram Anuse	B.C.S I	44
11	Rutik Ashok Mote	B.C.S I	46
12	Harshad Umesh Avaghade	B.C.S I	48
13	Sushant Shrikant Patil	B.C.S I	48
14	Shraddha Umesh Aysekar	B.C.S I	46
15	Ranveer Pravin Sadhau	B.C.S I	43
16	Namrata Dhuleshwar Sadalge	B.C.S I	43
17	Nagesh navalu kanake	B.C.S I	49


Head
Department of Statistics
Rajarshi Chh. Shahu College, Kolhap.




T/C PRINCIPAL
R.C. SHAHU COLLEGE
KOLHAPUR

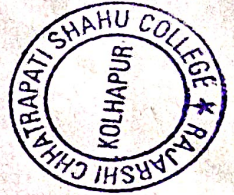
RAYAT SHIKSHAN SANSTHA'S
RAJARSHI CHHTRPATI SHAHU COLLEGE, KOLHAPUR

DEPARTMENT OF STATISTICS

Exploratory Data Analysis Using MS-Excel

Sr.No.	Name of the Students	10/02/25	11/02/25	12/02/25	13/02/25	14/02/25	15/02/25	17/02/25	18/02/25
1	Shreya Shrimant Kadam	Shreya Patil	Shreya Kadam	Shreya Kadam	Shreya Kadam	Shreya Kadam	Shreya Kadam	Shreya Kadam	Shreya Kadam
2	Pratiksha Rajendra Haigine	P.R.H	P.R.H	P.R.H	P.R.H	P.R.H	P.R.H	P.R.H	P.R.H
3	Shraddha Shital Parit	Shraddha Parit	Shraddha Parit	Shraddha Parit	Shraddha Parit	Shraddha Parit	Shraddha Parit	Shraddha Parit	Shraddha Parit
4	Sanika Arun Sonule	S.A.Sonule	S.A.Sonule	S.A.Sonule	S.A.Sonule	S.A.Sonule	S.A.Sonule	S.A.Sonule	S.A.
5	Arpita Sandip Kadam	Arpita Kadam	Arpita Kadam	Arpita Kadam	Arpita Kadam	Arpita Kadam	Arpita Kadam	Arpita Kadam	Arpita Kadam
6	Samruddhi Sarjerao Patil	S.S.Patil	S.S.Patil	S.S.Patil	S.S.Patil	S.S.Patil	S.S.Patil	S.S.Patil	S.S.Patil
7	Kaustubh Kabir Surve	Kaustubh Surve	Kaustubh Surve	Kaustubh Surve	Kaustubh Surve	Kaustubh Surve	Kaustubh Surve	Kaustubh Surve	Kaustubh Surve
8	Omkar Ashok Ghadage	Omkar Ghadage	Omkar Ghadage	Omkar Ghadage	Omkar Ghadage	Omkar Ghadage	Omkar Ghadage	Omkar Ghadage	Omkar Ghadage
9	Sanchar Kishan Kachare	S.K.Kachare	S.K.Kachare	S.K.Kachare	S.K.Kachare	S.K.Kachare	S.K.Kachare	S.K.Kachare	S.K.Kachare
10	Kiran Rajaram Anuse	Kiran Anuse	Kiran Anuse	Kiran Anuse	Kiran Anuse	Kiran Anuse	Kiran Anuse	Kiran Anuse	Kiran Anuse
11	Rutik Ashok Mote	Rutik Mote	Rutik Mote	Rutik Mote	Rutik Mote	Rutik Mote	Rutik Mote	Rutik Mote	Rutik Mote
12	Harshad Umesh Avaghade	H.V.A.	H.V.A.	H.V.A.	H.V.A.	H.V.A.	H.V.A.	H.V.A.	H.V.A.
13	Sushant Shirikant Patil	S.S.P	S.S.P	S.S.P	S.S.P	S.S.P	S.S.P	S.S.P	S.S.P
14	Shraddha Umesh Aysekar	S.U.Aysekar	S.U.A.	S.U.A.	S.U.A.	S.U.A.	S.U.A.	S.U.A.	S.U.A.
15	Ranveer Pravin Sadhau	Ranveer Sadhau	Ranveer Sadhau	Ranveer Sadhau	Ranveer Sadhau	Ranveer Sadhau	Ranveer Sadhau	Ranveer Sadhau	Ranveer Sadhau
16	Namrata Dhuleshwar Sadalge	N.D.Sadalge	N.D.Sadalge	N.D.Sadalge	N.D.Sadalge	N.D.Sadalge	N.D.Sadalge	N.D.Sadalge	N.D.Sadalge
17	Nagesh navalu kanake	N.K.	N.K.	N.K.	N.K.	N.K.	N.K.	N.K.	N.K.

Department of Statistics
Rajarsi Chh. Shahu College, Kolhapur



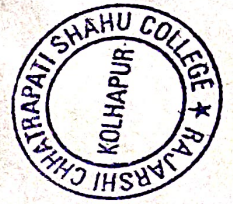
JIC PRINCIPAL
R.C. SHAHU COLLEGE
KOLHAPUR

RAYAT SHIKSHAN SANSTHA'S
RAJARSHI CHHTRPATI SHAHU COLLEGE, KOLHAPUR
DEPARTMENT OF STATISTICS

Exploratory Data Analysis Using MS-Excel

Sr.No.	Name of the Students	20/02/25	21/02/25	22/02/25	24/02/25	25/02/25	27/02/25	28/02/25
1	Shreya Shrinant Kadam	Shrey Kadam	Shrey Kadam	Shrey Kadam	Shrey Kadam	Shrey Kadam	Shrey Kadam	Shrey Kadam
2	Pratiksha Rajendra Hatgine	P.R.H	P.R.H	P.R.H	P.R.H	P.R.H	P.R.H	P.R.H
3	Shraddha Shital Parit	Shraddha	Shraddha	Shraddha	Shraddha	Shraddha	Shraddha	Shraddha
4	Sauka Arun Sonule	S.A.Sonule	S.A.Sonule	S.A.Sonule	S.A.Sonule	S.A.Sonule	S.A.Sonule	S.A.Sonule
5	Arpita Sandip Kadam	Arpita Kadam	Arpita Kadam	Arpita Kadam	Arpita Kadam	Arpita Kadam	Arpita Kadam	Arpita Kadam
6	Samruddhi Sarjerao Patil	S.S.Patil	S.S.Patil	S.S.Patil	S.S.Patil	S.S.Patil	S.S.Patil	S.S.Patil
7	Kaustubh Kabir Surve	Kaustubh	Kaustubh	Kaustubh	Kaustubh	Kaustubh	Kaustubh	Kaustubh
8	Omkar Ashok Ghadage	Omka	Omka	Omka	Omka	Omka	Omka	Omka
9	Sanchar Kishan Kachare	S.K.Kachare	S.K.Kachare	S.K.Kachare	S.K.Kachare	S.K.Kachare	S.K.Kachare	S.K.Kachare
10	Kiran Rajaram Anuse	Kiran	Kiran	Kiran	Kiran	Kiran	Kiran	Kiran
11	Rutik Ashok Mote	Ramok	Ramok	Ramok	Ramok	Ramok	Ramok	Ramok
12	Harshad Umesh Avaghade	H.V.A.	H.V.A.	H.V.A.	H.V.A.	H.V.A.	H.V.A.	H.V.A.
13	Sushant Shrikant Patil	S.S.P	S.S.P	S.S.P	S.S.P	S.S.P	S.S.P	S.S.P
14	Shraddha Umesh Aysekar	S.V.A.	S.V.A.	S.V.A.	S.V.A.	S.V.A.	S.V.A.	S.V.A.
15	Ranveer Pravin Sadhau	R.P.	R.P.	R.P.	R.P.	R.P.	R.P.	R.P.
16	Namrata Dhuleshwar Sadalge	N.P.Sadalge	N.P.Sadalge	N.P.Sadalge	N.P.Sadalge	N.P.Sadalge	N.P.Sadalge	N.P.Sadalge
17	Nagesh navalu kanake	N.K	N.K	N.K	N.K	N.K	N.K	N.K

Head
 Department of Statistics
 Rajarshi Chh. Shahu College, Kolhar



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Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur

Department of Statistics

Organized

"Exploratory Data Analysis Using MS-Excel"

Student Enrollment List

Sr. No.	Name of Student	Name of College	Fee	Signature of student
1	Shreya Shrimant Kadam	RCSC	300	Shreya Kadam
2	Pratiksha Rajendra Hatgine	RCSC	300	P. R. H
3	Shraddha Shital Parit	RCSC	300	S. S. Parit
4	Sanika Arun Sonule	RCSC	300	S. A. Sonule
5	Arpita Sandip Kadam	RCSC	300	Arpita Kadam
6	Samruddhi Sarjerao Patil	RCSC	300	S. S. Patil
7	Kaustubh Kabir Surve	RCSC	300	Kaustubh S
8	Omkar Ashok Ghadage	RCSC	300	Omkar
9	Sanchar Kishan Kachare	RCSC	300	S K Kachare
10	Kiran Rajaram Anuse	RCSC	300	Kiran
11	Rutik Ashok Mote	RCSC	300	R. Mote
12	Harshad Umesh Avaghade	RCSC	300	H. U. Avaghade
13	Sushant Shrikant Patil	RCSC	300	Sushant
14	Shraddha Umesh Aysekar	RCSC	300	S. U. Aysekar
15	Ranveer Pravin Sadhau	RCSC	300	R. Sadhau
16	Namrata Dhuleshwar Sadalge	RCSC	300	N. D. Sadalge
17	Nagesh navalu kanake	RCSC	300	N. Kanake
Total Amount (in Rs.)			5100	

Head

Department of Statistics
Rajarshi Chh. Shahu College, Kolhapur



Principal
R.C. SHAHU COLLEGE
KOLHAPUR

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Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur
Department of Statistics

Organized

"Certificate course on Exploratory Data Analysis Using MS-Excel "

List of Enrolled Students(2024-25)

Sr. No.	Name of Student	Name of College	Class	Receipt No.	Signature of student
1	Shreya Shrimant Kadam	RCSC	B.C.S I	6959	Shreya Kadam
2	Pratiksha Rajendra Hatgine	RCSC	B.C.S I	6960	P. R. H
3	Shraddha Shital Parit	RCSC	B.C.S I	6961	SS Parit
4	Sanika Arun Sonule	RCSC	B.C.S I	6962	S. A. Sonule
5	Arpita Sandip Kadam	RCSC	B.C.S I	6963	Arpita Kadam
6	Samruddhi Sarjerao Patil	RCSC	B.C.S I	6964	S. S. Patil
7	Kaustubh Kabir Surve	RCSC	B.C.S I	6965	Kaustubh S
8	Omkar Ashok Ghadage	RCSC	B.C.S I	6966	Omkar . . .
9	Sanchar Kishan Kachare	RCSC	B.C.S I	6967	S K Kachare
10	Kiran Rajaram Anuse	RCSC	B.C.S I	6968	Ramote
11	Rutik Ashok Mote	RCSC	B.C.S I	6969	Ramote
12	Harshad Umesh Avaghade	RCSC	B.C.S I	6970	H. U. Avaghade.
13	Sushant Shrikant Patil	RCSC	B.C.S I	6971	S
14	Shraddha Umesh Aysekar	RCSC	B.C.S I	6972	S. U. Aysekar
15	Ranveer Pravin Sadhau	RCSC	B.C.S I	6973	RVS
16	Namrata Dhuleshwar Sadalge	RCSC	B.C.S I	6974	N. D. Sadalge
17	Nagesh navalu kanake	RCSC	B.C.S I	6975	N. Kanake

Head

Department of Statistics
Rajarshi Chh. Shahu College, Kolhap



H.C. PRINCIPAL
R.C. SHAHU COLLEGE
KOLHAPUR

Rayat Shikshan Sanstha's'
Rajarshi Chhatrapati Shahu College, Kolhapur
Department of Statistics

Organized

Certificate Course on Exploratory data analysis using MS-Excel
(Self - Funded Under COC)

Time Table 2024-25

	Venue	Date	4.00 - 5.30	10/2/2025	11/2/2025	12/2/2025	13/2/2025	14/2/2025	15/2/2025	17/2/2025	18/2/2025
		Time									
Theory & Practical	Lab 1 (Stat.Lab.)			SMK	SSK	SMK	SMK	SSK	SMK	SSK	SMK

	Venue	Date	4.00 - 5.30	20/2/2025	21/2/2025	22/2/2025	24/2/2025	25/2/2025	27/2/2025	28/2/2025
		Time								
Theory & Practical	Lab 1 (Stat.Lab.)			SSK	SMK	SSK	SMK	SSK	SMK	SSK

Sr. No.	Name of Lecturer	
	SMK	Smt. Kamble.S.M
	SSK	Mr.Kamble.S.S

Head
Department of Statistics
Rajarshi Chh. Shahu College, Kolhapur

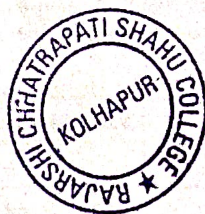


11C PRINCIPAL
R.C. SHAHU COLLEGE
KOLHAPUR

**RAYAT SHIKSHAN SANSTHA'S
RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR
DEPARTMENT OF STATISTICS
B.Sc. I Computer Science (Entire) (2024-25)**

NOTICE

All students of B.Sc. I Computer Science (Entire) hereby informed that, your **“Exploratory Data Analysis Using MS-Excel”** organized by Department of Statistics, will be start from 10/02/2025. The course will be conducted in Statistics lab from 2:30 PM to 5:30 PM. All students are requested to attend the course regularly and actively participate.



A handwritten signature in black ink, appearing to be "DNU", with a horizontal line extending from the end.

Head

Department of Statistics
Rajarshi Chh. Shahu College, Kolhar

रयत शिक्षण संस्थचे
राजर्षी छत्रपती शाहू कॉलेज, कोल्हापूर
शॉर्ट टर्म/सीओसी कोर्सेस फी आणि त्याच्या खर्चाबाबतचा ठराव

प्रस्ताव : महाविद्यालयातील विद्यार्थिनींनी पारंपरिक शिक्षणाबरोबरच विविध कौशल्ये आत्मसात करून त्यांनी आत्मनिर्भर व्हावे यासाठी महाविद्यालयात एकूण 22 शॉर्ट टर्म कोर्स व ३ सी. ओ. सी. कोर्स राबविले जात आहेत. या शॉर्ट टर्म व सी. ओ. सी. कोर्सेस साठी महाविद्यालयातील विद्यार्थी प्रवेशित होत असतात. या कोर्स साठी रू. ३००/- एवढी फी प्रति विद्यार्थी आकारली जाते. सदर प्रत्येक कोर्समधून जमा होणाऱ्या फी पैकी GST व प्रमाणपत्र खर्च वजाकरता उर्वरित रकमेच्या ४०% रक्कम कोर्सच्या मानधनासाठी खर्च करावी व ६०% रक्कम महाविद्यालयाच्या विकासासाठी खर्च करण्यात यावी.

तांत्रिक माहिती: महाविद्यालयात कला, वाणिज्य, विज्ञान, बी.एस्सी.कॉम्प्युटर सायन्स, बी.एस्सी.कॉम्प्युटर सायन्स (इन्टायर) तसेच एम.ए. इंग्लीश, एम.कॉम.(आएटी), एम. एस्सी.केमिस्ट्री, एम. एस्सी. संख्याशास्त्र इ. विद्याशाखांमध्ये महाविद्यालयाचे शैक्षणिक कामकाज सुरू आहे. चालू वर्षात महाविद्यालयात एकूण १२३२ विद्यार्थिनींनी प्रवेश घेतला आहे. तसेच विद्यार्थ्यांना विद्यापीठाच्या अभ्यासक्रमाव्यतिरिक्त त्यांच्या विषयाच्या अनुषंगाने तसेच इतर कौशल्य विकसित व्हावित यासाठी गेली अनेक वर्षे महाविद्यालयातील विद्यार्थिनींना खालील शॉर्ट टर्म व सी. ओ. सी. कोर्सेसची संधी उपलब्ध करून देण्यात आली आहे. यामध्ये

Sr.No	Course Name	Fee
1	Biodiversity Conservation	300/-
2	Understanding of Basic Electronics Devices	300/-
3	Secretarial Training	300/-
4	Preparation of Household Chemical	300/-
5	Mudritshoduan koushalya (मुद्रितशोधन)	300/-
6	Application of MS.Excel in Statistics	300/-
7	Advanced Excel	500/-
8	Computation of statistics using R-Software	500/-
9	Exploratory Data Analysis Using MS- Excel	300/-
10	Computation of Statistics using open source software	500/-
11	Entrepreneurs Development	300/-
12	Retail Marketing	300/-
13	Yoga & meditation	300/-
14	Introducing Forts in Maharashtra	300/-
15	Event Management	300/-
16	Foundry Technology	300/-
17	Anuvad Siddhant Aur Prayog (अनुवाद सिद्धांत और प्रयोग),	300/-
18	Certificate course in Vermitechnology	300/-
19	Fashion Designing	300/-
20	Beauty Parlour	1,000/-
21	Basic using PHP Programming Lanuguage	300/-
22	Surveying	300/-

यासारखे कोर्सेस उपलब्ध करून दिले जातात. सदर शॉर्ट टर्म व सी. ओ. सी. कोर्सेस पूर्ण करून महाविद्यालयातील अनेक विद्यार्थ्यांनी स्वतःचे व्यवसाय सुरू करून ते स्वावलंबी होऊ शकतात.

आर्थिक तरतूद : महाविद्यालयामध्ये प्रवेश घेतलेल्या विद्यार्थ्यांपैकी जे विद्यार्थी सदर कोर्सेस साठीही प्रवेश घेतात त्या विद्यार्थ्यांकडून प्रति विद्यार्थी प्रति कोर्स साठी रुपये ३००/- या प्रमाणे फी आकारली जाते सदर प्रत्येक कोर्समधून जमा होणाऱ्या फी पैकी GST व प्रमाणपत्र खर्च वजाकरता उर्वरित रकमेच्या ४०% रक्कम कोर्सच्या मानधना साठी खर्च करावी व ६०% रक्कम महाविद्यालयाच्या विकासासाठी खर्च करण्यास यावी.

कार्यालयाचे मत: महाविद्यालयामध्ये सुरू असलेले शॉर्ट टर्म व सी. ओ. सी. कोर्सेस हे विद्यार्थिनींच्याबरोबरच महाविद्यालयाच्या विकासासाठी उपयुक्त आहेत. या माध्यमातून अनेक विद्यार्थ्यांना आपले स्वतंत्र व्यवसाय सुरू केले आहेत. त्यामुळे सदर शॉर्ट टर्म कोर्सेसमधून विद्यार्थिनींच्या कौशल्याबरोबरच महाविद्यालयास चांगल्या प्रकारचे उत्पन्न प्राप्त होत असते. सदर उत्पन्नातून प्रत्यक्ष खर्च करण्यात येणाऱ्या ४०% रकमेचे खर्चाची विवरण खालील प्रमाणे करण्यात यावा

1. जमा होणाऱ्या फी पैकी GST व प्रमाणपत्र खर्च वजाकरता उर्वरित रकमेच्या ४०% रक्कम, व कोर्स अध्यापन, मानधन, स्टेशनरी, पुस्तके व अनुषंगिक इतर सर्व खर्च
2. जमा होणाऱ्या फी पैकी GST व प्रमाणपत्र खर्च वजाकरता उर्वरित रकमेच्या ४०% रक्कम वजा करता उर्वरित ६०% रक्कम महाविद्यालयात जमा करावी.

ठराव: महाविद्यालयाच्या सर्व विभागप्रमुखांची मिटींग मा. प्राचार्य उपस्थितीत दिनांक २०/१२/२०२४ रोजी पार पडली. सदर मिटींगमध्ये चर्चा करून सर्वानुमते महाविद्यालयामध्ये सुरू असलेले शॉर्ट टर्म व सी. ओ. सी. कोर्सेस हे विद्यार्थिनींच्याबरोबरच महाविद्यालयाच्या विकासासाठी उपयुक्त आहेत. त्यामुळे सदर शॉर्ट टर्म कोर्सेसमधून विद्यार्थिनींच्या कौशल्याबरोबरच महाविद्यालयास चांगल्या प्रकारचे उत्पन्न प्राप्त होत असते. त्यामुळे सदर कोर्सेस चालू करावेत व प्रति कोर्सेसकरिता रुपये ५०० फी घ्यावी व त्या जमा होणाऱ्या एकूण फी च्या मधून GST व प्रमाणपत्र खर्च वजाकरता उर्वरित रकमेच्या ४०% रक्कम ही कोर्स अध्यापन, मानधन, स्टेशनरी, पुस्तके व अनुषंगिक इतर बाबींवर खर्च करावी व उर्वरित उर्वरित ६०% रक्कम महाविद्यालयात जमा करावी. असे सर्वानुमते ठरले. सदर मिटींग करिता खालील विभाग प्रमुख उपस्थितीत होते करण्यास महाविद्यालय विकास समितीची मान्यता देण्यात येत आहे.

सूचक: डॉ. लवेकर एस. एस.

अनुमोदक: डॉ. पाटील आर. सी.

ठराव सर्वानुमते मंजूर

सदर मिटींग करिता खालील विभाग प्रमुख उपस्थितीत होते

- 1) प्रो. डॉ. देसाई एम. बी.
- 2) प्रो. डॉ. खोले एस. सी.
- 3) प्रो. डॉ. पीस्ते पी. बी.
- 4) श्री. चौगुले पी. एस.
- 5) डॉ. कन्नाडे एम. के.
- 6) डॉ. कदम एम. डी.
- 7) डॉ. लवंगारे जी. एम.
- 8) डॉ. फरास एस. ए.
- 9) डॉ. लवेकर एस. एस.
- 10) डॉ. पाटील आर. सी.
- 11) डॉ. पाटील ए. आर.
- 12) डॉ. शेख एस. डी.
- 13) श्री. शेडगे एस. डी.
- 14) श्रीमती शेख झेड. जे.
- 15) श्रीमती मालवेकर डी. ए.



प्र. प्राचार्य
राजर्षी छ. शाहू कॉलेज,
कोल्हापूर



राजर्षी छत्रपती शाहू कॉलेज, कोल्हापूर

**"Education through self-help is our motto"-Karmveer
Rayat Shikshan Sanstha's**

Rajarshi Chhatrapati Shahu College, Kolhapur

Department of Statistics

Information regarding Skill Development Courses/Career Oriented Courses

Name of the Department: Department of Statistics

Course name: Exploratory Data Analysis using MS- Excel

Course Coordinator name & Contact number: Dr. Tejaswi S. Kurane (8928650101)

Duration: 15 days

Course Fee: Rs. 300/-

Eligibility: It's suitable for undergraduates, graduates and researchers from any field that uses statistical computing.

Minimum intake Capacity: 20

Objectives of the Course:

This course aims to provide knowledge about how to

- Apply advanced formulas to lay data in readiness for analysis
- Use advanced techniques for report visualizations
- Understand various statistical methodologies of summarizing data

Learning Outcomes: At the end of the course, students should be able to:

- Import and export data from other applications.
- Share workbooks with others.
- Identify the different components of the Excel worksheet.
- Open an existing workbook and create a new workbook
- Save and print workbooks.
- Enter text and formulas in to an Excel spreadsheet .
- Work with cell references.

- Create a spreadsheet to tabulate and record numeric values
- Learn to use functions and formulas.
- Create and edit charts and graphics.
- Create, sort, and filter table data
- Differentiate between formulas and functions in Excel.
- Save and print workbooks.
- Construct formulas, including the use of built-in functions, and relative and absolute references.
- Create charts and share information.

Syllabus:

1. Why Microsoft Excel?

1.1 Introduction to Ms-Excel, features of Ms-Excel, starting and ending of Ms-Excel, getting help in Ms-Excel.

1.2 workbooks and worksheets, moving the cell pointer, Excel file operations, opening file, entering data, text entry, text editing, copying cells contents, spell check, formatting numbers in cells, cells merging, alignment property page,

1.3 Writing and using formulae in Excel

1.4 Mathematical and Statistical Functions using Excel.

a) Absolute value, combination, Exponent, Factorial, multinomial, Random numbers, Square root, sum.

b) Statistical Functions: Mean, geometric mean, Harmonic mean, mode, median, quartile, deciles, percentiles, variance.

2. Diagrams:

Simple bar diagram, subdivided bar diagram, multiple bar diagram, Pie diagram

3. Graphs:

Histogram (both equal and unequal class intervals), frequency polygon, ogive curves, empirical distribution function.

4. Measures of central Tendency:

Computation of following measures for all types of data. Mean, mode, median, quartiles, Deciles, Percentiles, Geometric mean, Harmonic mean.

5. Measures of dispersion:

Computation of following measures for all types of data. Range, Quartile Deviation, Variance, Standard Deviation, Coefficient of Variation, Mean Deviation, Mean Squared Deviation.

6. Measures of Skewness and Kurtosis:

Bowley's coefficient and Karl Pearson's coefficient of Skewness.

7. Moments:

Computation of Raw and central moments, measures of Skewness and kurtosis

8. Correlation and Regression

Fitting of lines of regression, computation of correlation coefficient, fitting of second curve.

