



# DATA ANALYSIS USING M S EXCEL

Value Added Course for the academic year 2019-20

## COURSE OUTCOME:

Upon the completion of the course, the students

1. Will be ready to work with real data so that they can understand the complexities and subtleties of analysis.
2. Grab the opportunity to explore and pursue courses that emphasize both quantitative and theoretical realms of Economics;
3. Will be Prepared for further studies in Economics at advanced centers of learning and for securing better employment opportunities



# **DATA ANALYSIS USING M.S EXCEL**

<b>Course</b>	<b>Details</b>
Code	
Title	<b>DATA ANALYSIS USING M.S EXCEL</b>
Degree	B A
Branch(s)	Economics
Semester	6
Type	Add on course
Credits	2

## **Course Description**

This course is aimed at harnessing the power of Excel and transforming it into a tool for learning basic statistical analysis. Students learn statistics in the context of analyzing data. It is important for students to work with real data, analyzing real world problems, so that they understand the complexities of analysis that makes statistics such an integral part of understanding our world.

## **Expected Outcomes**

Upon the completion of the course, the students

1. Will be ready to work with real data so that they can understand the complexities and subtleties of analysis.
2. Grab the opportunity to explore and pursue courses that emphasize both quantitative and theoretical realms of Economics;
3. Will be Prepared for further studies in Economics at advanced centers of learning and for securing better employment opportunities

## **Module- I**

### **DESCRIPTIVE STATISTICS (8 hours-4 hrs theory and 4 hrs practical)**

Measures of central tendency-Mean, Median and Mode-Percentiles, quartiles and Inter quartiles-  
Measures of Variability: Standard Deviation-Measures of Shape: Skewness and kurtosis-  
Outliers.

## **Module II**

### **PROBABILITY DISTRIBUTION (9 Hours-5 hours theory and 4 hours Practical)**

Discrete and continuous probability distribution-Random variables and Random samples-  
Parameters and estimators-Sampling distribution, Central limit Theorem-Normal, Poisson and Binomial distributions

## **Module – III**

### **Hypothesis Testing (9 Hours -4 hrs theory and 5 hrs practical)**

Null and Alternate Hypothesis, One tailed and Two tailed Tests-Confidence interval construction-Z test and students -t test-F test-Chi square test-P value

## **Module IV**

### **Regression and Correlation (6 hours -3 hrs for theory and 3 hrs for practicals)**

Simple linear regression and the regression equations-Regression functions in Excel-Performing a regression analysis-plotting regression data- calculating and interpreting regression statistics.- Correlation basics- Pearson's and Spearman's correlation coefficient-Correlation functions in Excel

## **Module V**

### **Analysis of Variance (4 hours- 2 hrs for theory, 2 hrs for practicals)**

Computing ANOVA table using manual method-Computing ANOVA using Excel- Interpretation of the ANOVA table

## **Evaluation**

1. Internal Assessment: Active participation of participants- Attendance (25% Marks)
2. Class tests (25% Marks)
3. Assignment (25% Marks)
4. Case Study (25% Marks)

## **References**

1. Berk Kenneth, Carey Patrick: Data Analysis with Microsoft Excel, Brooks and Cole (2010).



DEPARTMENT OF ECONOMICS  
ATTENDANCE SHEET

Value Added Course: DATA ANALYSIS USING EXCEL

Serial No	II DC	Roll No	Name of the Student									
			15/11/2019 3pm-4pm	16/11/2019 10am-1pm	18/11/2019 3pm-4pm	19/11/2019 3pm-4pm	20/11/2019 3pm-4pm	21/11/2019 3pm-4pm	22/11/2019 3pm-4pm	23/11/2019 10am-1pm	25/11/2019 3pm-4pm	26/11/2019 3pm-4pm
1	181104301	ALEEMA YOHANAN	X	X	X	X	X	X	X	X	X	X
2	181104302	ALI AKBAR BADUSHA	X	X	X	X	X	X	X	X	X	X
3	181104303	ASHALEKSHMI	X	a	X	X	X	a	X	X	X	X
4	181104304	EMIL MANOJ	X	X	X	a	X	X	X	X	a	X
5	181104305	GOVIND M G	X	X	X	X	X	X	X	X	X	X
6	181104306	GRESHMA SANTHI K SABU	X	X	a	X	X	X	X	X	X	a
7	181104307	IJAZ AHAMMED. A.P	a	X	X	X	X	X	X	X	X	X
8	181104308	PRIYANKA JAYARAJ	X	X	X	X	X	X	a	X	X	X
9	181104309	SHALU SANTHOSH	X	X	X	X	a	X	X	X	X	X
10	181104310	SILLA GEORGE	X	X	a	X	X	X	X	X	X	X
11	181104311	VEENA MANMATHAN	X	X	X	X	X	a	X	X	X	X
12	181104312	ABU ABRAHAM MATHEW	X	X	X	X	X	X	X	X	X	X
13	181104313	AISWARYA A NAIR	X	X	X	X	X	X	X	X	a	X
14	181104314	AKASHIBNSIDHIQUE	X	X	a	X	X	X	X	X	X	X
15	181104315	AKSHAYA O S	X	a	X	X	a	X	X	X	X	X
16	181104316	ALEENAMOL M S	X	X	X	X	X	a	X	a	X	X
17	181104317	ALEENAMOL RAJU	X	X	X	X	X	X	X	X	X	X
18	181104318	ALEN SUDHEEP	X	X	X	a	X	X	X	X	X	a
19	181104319	ALKA RAJU MOHAN	a	X	X	X	X	X	a	X	a	X
20	181104320	AMMU MARIAM SKARIA	X	a	X	X	X	X	X	X	X	X

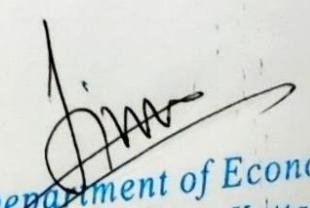
Tina Jaye Jacob



Department of Economics  
CMS College, Kottayam

21	181104321	APARNA K SANTHOSH	x	x	x	x	x	x	x	a	x	a
22	181104322	ASHBIN ANTO	a	a	a	a	a	a	a	a	a	a
23	181104323	BRIJIN PAUL MATHEW	x	x	x	x	x	x	x	a	x	x
24	181104324	DEVIKA PRASAD	x	x	x	x	x	x	x	x	x	x
25	181104325	ELIZABETH J JOHN	x	x	x	x	a	a	x	x	x	x
26	181104326	JYOTHISHA S	x	x	a	x	x	x	x	x	x	x
27	181104327	KANSUL MARIFA B M	a	x	x	a	x	x	x	x	x	a
28	181104328	KARTHIK RAJU	x	a	x	x	x	x	x	x	x	x
29	181104329	MARIA RACHEL THOMAS	x	x	x	x	x	x	x	a	x	x
30	181104330	MUHAMMED SAFUVAN U M	x	x	x	x	a	x	a	x	a	x
31	181104332	SANDRA SUNDAR	x	x	x	x	x	x	x	x	x	x
32	181104333	SANGEETHA S	x	x	x	x	x	x	x	x	x	a
33	181104334	SREELAKSHMI L	x	x	a	x	x	a	x	x	x	x
34	181104335	SREELEKSHMI S	x	a	x	x	a	x	x	x	x	x
35	181104336	THANUJA THAMPI	x	x	x	x	x	x	x	x	x	x
36	181104337	THASNIYA HALEEF	a	x	x	x	x	x	x	a	x	x
37	181104338	VIJITHA K	x	x	x	a	x	x	x	x	a	x
38	181104339	BOVAS M JUSTIN	x	x	x	x	x	x	x	x	x	x
39	181104340	JERRIN SUNNY	x	x	x	x	x	x	a	x	x	a
40	181104341	JERRY ALBERT MATHEW	x	x	a	x	x	a	x	x	x	x
41	181104342	ROHAN CHERIAN SAJI	x	a	x	x	a	x	x	x	x	x

Tina lyne Jacob

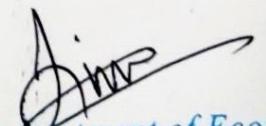
  
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**DEPARTMENT OF ECONOMICS**  
**ATTENDANCE SHEET**

**Value Added Course: DATA ANALYSIS USING EXCEL**

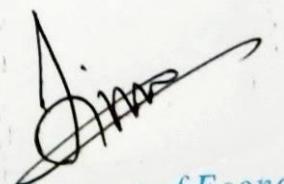
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1	181104301	ALEEMA YCHANAN	x	x	x	x	x	x	a	x	x	x	x	x	x
2	181104302	ALI AKBAR BADUSHA	a	x	x	a	x	x	x	x	x	x	x	x	a
3	181104303	ASHALEKSHMI	x	x	x	x	x	x	x	x	x	x	x	x	x
4	181104304	EMIL MANOJ	x	x	x	x	x	x	x	x	x	x	x	x	x
5	181104305	GOVIND M G	x	x	x	x	x	x	a	x	a	x	x	x	x
6	181104306	GRESHMA SANTHI K SABU	x	x	a	x	x	x	x	x	x	x	x	x	x
7	181104307	IJAZ AHAMMED. A.P	x	x	x	x	a	x	x	x	x	x	x	x	x
8	181104308	PRIYANKA JAYARAJ	x	x	x	x	x	x	x	x	x	x	x	x	a
9	181104309	SHALU SANTHOSH	x	a	x	x	x	x	x	x	x	x	x	x	x
10	181104310	SILLA GEORGE	x	x	x	x	a	x	x	x	x	x	x	x	x
11	181104311	VEENA MANMATHAN	x	x	x	a	x	x	a	x	x	x	x	x	x
12	181104312	ABU ABRAHAM MATHEW	x	x	x	x	x	a	x	x	x	x	x	x	x
13	181104313	AISWARYA A NAIR	x	x	x	x	x	x	x	x	x	x	x	x	a
14	181104314	AKASHIBNSIDHIQUE	x	x	a	x	x	x	x	x	x	x	x	x	x
15	181104315	AKSHAYA O S	x	x	x	x	x	a	x	x	x	x	x	x	x
16	181104316	ALEENAMOL M S	x	x	x	a	x	x	x	x	x	x	x	x	a
17	181104317	ALEENAMOL RAJU	x	a	x	x	x	x	x	x	x	x	x	x	x
18	181104318	ALEN SUDHEEP	x	x	x	x	a	x	x	x	x	x	x	x	x
19	181104319	ALKA RAJU MOHAN	a	x	x	x	x	x	x	x	x	x	a	x	x
20	181104320	AMMU MARIAM SKARIA	x	x	x	x	x	x	x	x	x	x	x	x	x

Time type Jacob

  
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22	181104322	ASHBIN ANTO	a	a	a	a	a	a	a	a	a	a
23	181104323	BRIJIN PAUL MATHEW	x	x	x	x	a	x	x	x	x	x
24	181104324	DEVIKA PRASAD	x	x	x	x	x	x	x	a	x	x
25	181104325	ELIZABETH J JOHN	x	x	x	x	x	a	x	x	x	a
26	181104326	JYOTHISHA S	a	x	x	x	x	x	x	x	x	x
27	181104327	KANSUL MARIFA B M	x	x	x	a	x	x	x	x	x	x
28	181104328	KARTHIK RAJU	x	x	x	x	x	x	x	x	x	x
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40	181104341	JERRY ALBERT MATHEW	x	x	x	x	x	x	a	x	x	x
41	181104342	ROHAN CHERIAN SAJI	x	x	x	x	x	x	x	a	x	x

Timmy Jacob



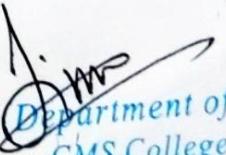
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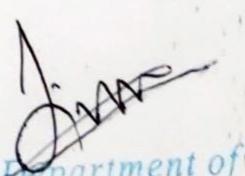
Value Added Course : DATA ANALYSIS USING EXCEL

Serial No	Roll No.	Name of the Student	II DC					
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1	181104301	ALEEMA YOHANAN	X	a	X	X	a	X
2	181104302	ALI AKBAR BADUSHA	X	X	X	X	X	X
3	181104303	ASHALEKSHMI	X	X	X	X	X	X
4	181104304	EMIL MANOJ	X	X	X	X	X	X
5	181104305	GOVIND M G	X	X	a	X	X	X
6	181104306	GRESHMA SANTHI K SABU	X	X	X	X	X	X
7	181104307	IJAZ AHAMMED. A.P	X	X	X	X	X	X
8	181104308	PRIYANKA JAYARAJ	a	X	X	a	X	a
9	181104309	SHALU SANTHOSH	X	X	X	X	X	X
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11	181104311	VEENA MANMATHAN	X	X	X	X	X	X
12	181104312	ABU ABRAHAM MATHEW	X	X	X	a	X	X
13	181104313	AI SWARYA A NAIR	X	X	X	X	X	a
14	181104314	AKASHIBNSIDHIQUE	X	X	a	X	X	X
15	181104315	AKSHAYA O S	a	X	X	X	X	X
16	181104316	ALEENAMOL M S	X	X	X	X	X	X
17	181104317	ALEENAMOL RAJU	X	X	X	X	X	X
18	181104318	ALEN SUDHEEP	X	a	X	a	X	X
19	181104319	ALKA RAJU MOHAN	X	X	X	X	X	X
20	181104320	AMMU MARIAM SKARIA	X	X	X	X	X	a

Timi Jayne Jacobs

  
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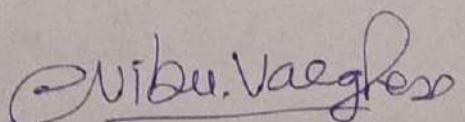
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36	181104337	THASNIYA HALEEF	X	X	X	X	a	X				
37	181104338	VIJITHA K	X	X	X	X	X	X				
38	181104339	BOVAS M JUSTIN	X	X	X	X	X	a				
39	181104340	JERRIN SUNNY	a	X	X	X	X	X				
40	181104341	JERRY ALBERT MATHEW	X	X	X	a	X	X				
41	181104342	ROHAN CHERIAN SAJI	X	X	X	X	X	a				

Tina lyne Jacob  
  
 Department of Economics  
 CMS College, Kottayam

Department of Economics  
CMS College Kottayam (Autonomous)  
Value Added Courses- II DC

Title	Value Added Courses
Date	15 November 2019- 14 December 2019
Venue	CMS College Kottayam
Focus of the event	Skill development
Organizing body	Department of Economics
Resource person	Asst. Prof.Tinuype Jacob
Total number of attendees	41

The department of Economics organized value added courses for the undergraduate students from 15<sup>th</sup> November to 14<sup>th</sup> December 2019. A thirty-six-hour course was designed for each UG class. A course on ‘Data Analysis Using Excel’ was given to thesecond-year class consisting of 41 students, Asst. Prof. Tinuype Jacob served as the resource person. Classes were scheduled on Fridays during last hour and Saturdays as forenoon sessions.



NIBU VARGHESE  
Assistant Professor and Head  
Department of Economics  
CMS College, Kottayam



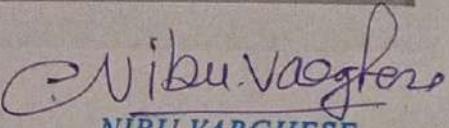
**CMS COLLEGE KOTTAYAM  
( AUTONOMOUS)**

**THE DEPARTMENT OF ECONOMICS**

**VALUE ADDED PROGRAMME  
ON**

**DATA ANALYSIS  
USING EXCEL**

Organised by the Department Of Economics  
during the academic year 2019-20

  
**NIBU VARGHESE**  
Assistant Professor and Head  
Department of Economics  
CMS College, Kottayam