SCHOOL OF COMPUTING SCIENCE &ENGINEERING (2021-25)

(DATA ANALYTICS EXCEL TABLEAU)

SUBMITTED BY ***SUBMITTED TO***

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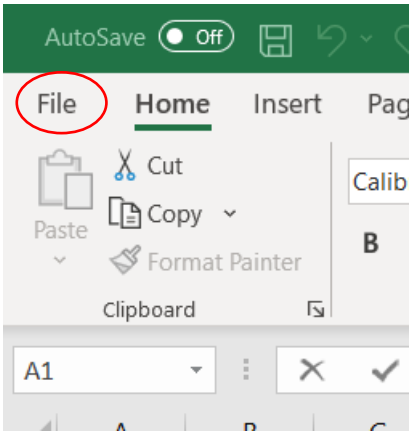
(21SCSE1010515)

EXPERIMENT NO-1

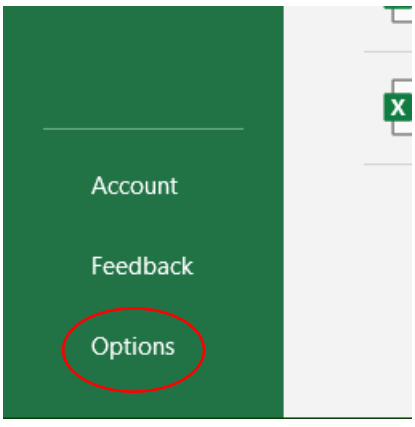
INSTALLING DATA ANALYSIS TOOL IN EXCEL

AIM: *Installing Data Analysis Tool in Excel.*

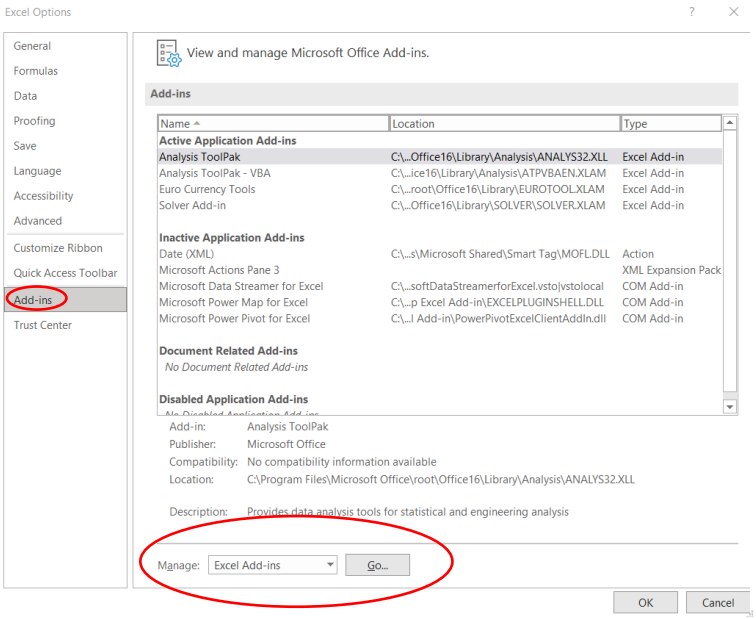
Procedure: Step 1: Click on the file tab.



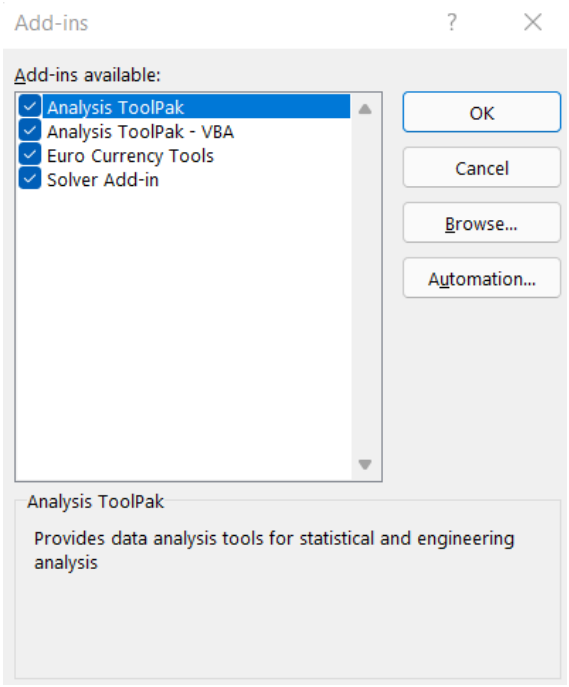
Step 2: Click Option then click Add-ins.



Step 3: In the manage box, select Excel Add-ins and Click GO



Step 4: In Add-ins select the Analysis tool pack and Click OK. (Fig.4)



Step 5: Finished installing Data Analytics tool in Excel. (Fig.5)

ANALYSIS USING FORMULAS IN EXCEL

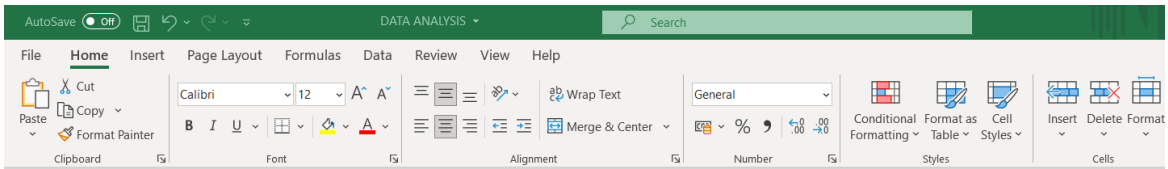
AIM: *To find out the common functions (i.e., Sum, Avg. etc) on a given excel sheet.*

Procedure: 1. First open a new excel and fill it by adding Some details (i.e., Name, Subject Name, Marks, Etc.) in row and column format.

2. Create new fields like (Sum, Avg., Max, Min, etc.)
3. Fill them by the help of formula bar.
4. Complete it and also innovate it (by adding Background colours, **B**, *I*, U, etc.)

Output: As shown in Figure.

Result: Analysis Completed.



	A	B	C	D	E	F	G	H	I	J	K	L
1			SUBJECTS MARKS ANALYSIS									
2	S. NO.	STUDENT NAMES	MATHS	PHYSICS	CHEMISTRY	ENGLISH	COMPUTER	TOTAL MARKS	MIN.MARKS	MAX. MARKS	AVERAGE	
3	1	NISHA KUMARI	99	89	85	95	99	467	85	99	93.4	
4	2	VIVEK KUMAR	96	85	74	42	98	395	42	98	79	
5	3	AKSHAT	95	96	85	93	75	444	75	96	88.8	
6	4	YASH	91	75	96	81	94	437	75	96	87.4	
7	5	RISHIKA	81	82	54	72	98	387	54	98	77.4	
8	6	ROUNAK KUMAR	86	75	85	85	96	427	75	96	85.4	
9	7	PRIYANSHU RANJAN	79	82	96	74	93	424	74	96	84.8	
10	8	NEHA	95	79	54	94	91	413	54	95	82.6	
11	9	SHAKSHI	75	74	86	86	94	415	74	94	83	
12	10	TANISHQ	96	82	83	84	97	442	82	97	88.4	
13												
14												

EXPERIMENT NO-2

TO PERFORM BASICS OPERATIONS AND FUNCTIONS USING EXCEL.

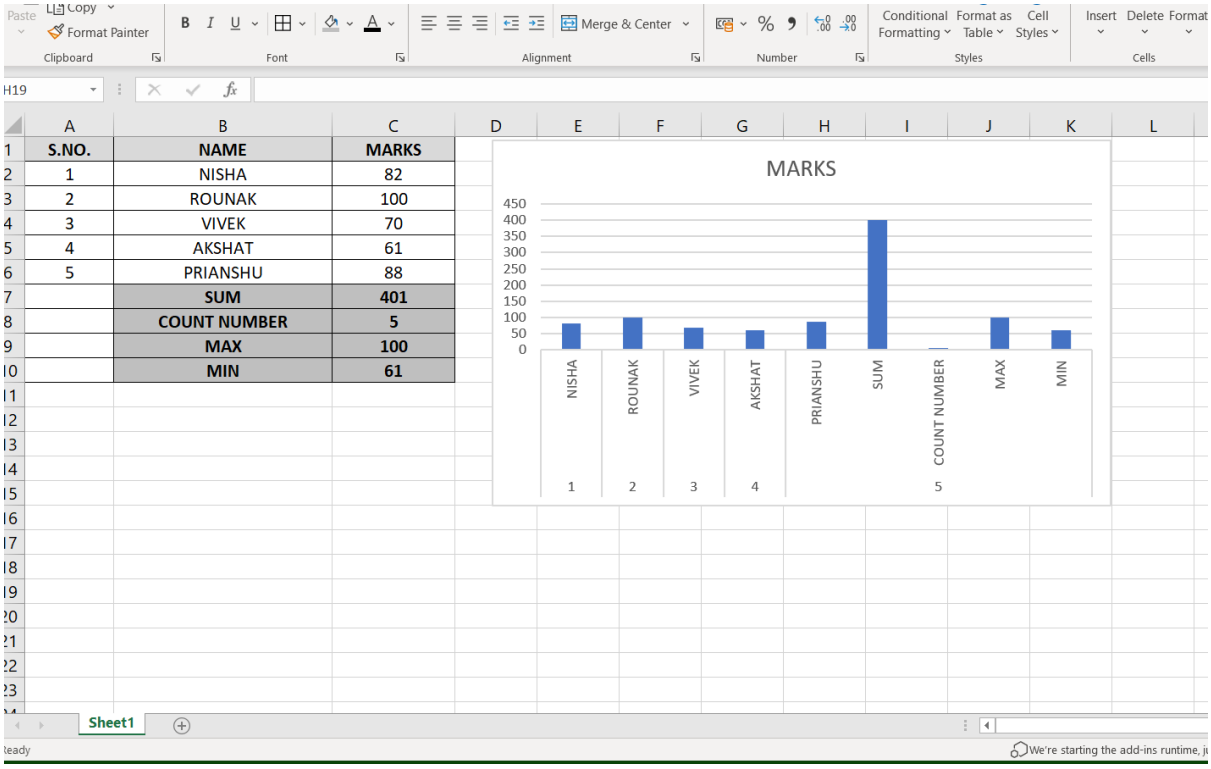
AIM: *To find out common function (i.e., Sum, Max, Min, Count no.) and a bar graph on a given excel sheet.*

Procedure: 1. First open a new excel and fill it by adding Some details (i.e., Name, Marks etc.) in row and column format and to calculate the bar graph.

2. Create new fields like (Sum, Max, Min, Count no.).
3. Fill them by the help of autosum.
4. Complete it and innovate it (by adding **B**, *I*, U, etc.)

Output: As shown in Figure.

Result: Analysis Completed.



S.NO.	NAME	MARKS
1	NISHA	82
2	ROUNAK	100
3	VIVEK	70
4	AKSHAT	61
5	PRIANSHU	88
	SUM	**401**
	COUNT NUMBER	**5**
	MAX	**100**
	MIN	**61**

EXPERIMENT-3

TO PERFORM BASICS MATHEMATHEMATICAL FORMULAS AND FUNCTIONS IN EXCEL

AIM: To find out basic mathematical function using excel (i.e. sum, percentage, left, mid, right, concentrate, rand between, time etc) on a given excel sheet.

PROCEDURE:

1. Click on the file tab.
2. Then, fill it by adding some details (i.e. name, marks) in row and column format and to calculate the percentage and IF.
3. Create new fields using different functions like max, min, count, concatenate etc.
4. Fill them with the help of formula bar, the excel provide calculation of all the marks.

OUTPUT: As shown in the figure.

RESULT: Analysis is completed.

EXPERIMENT-4

TO PERFORM FILTERING OPERATIONS, PIVOT TABLES AND CHARTS USING EXCEL

PROCEDURE:

To filter data:

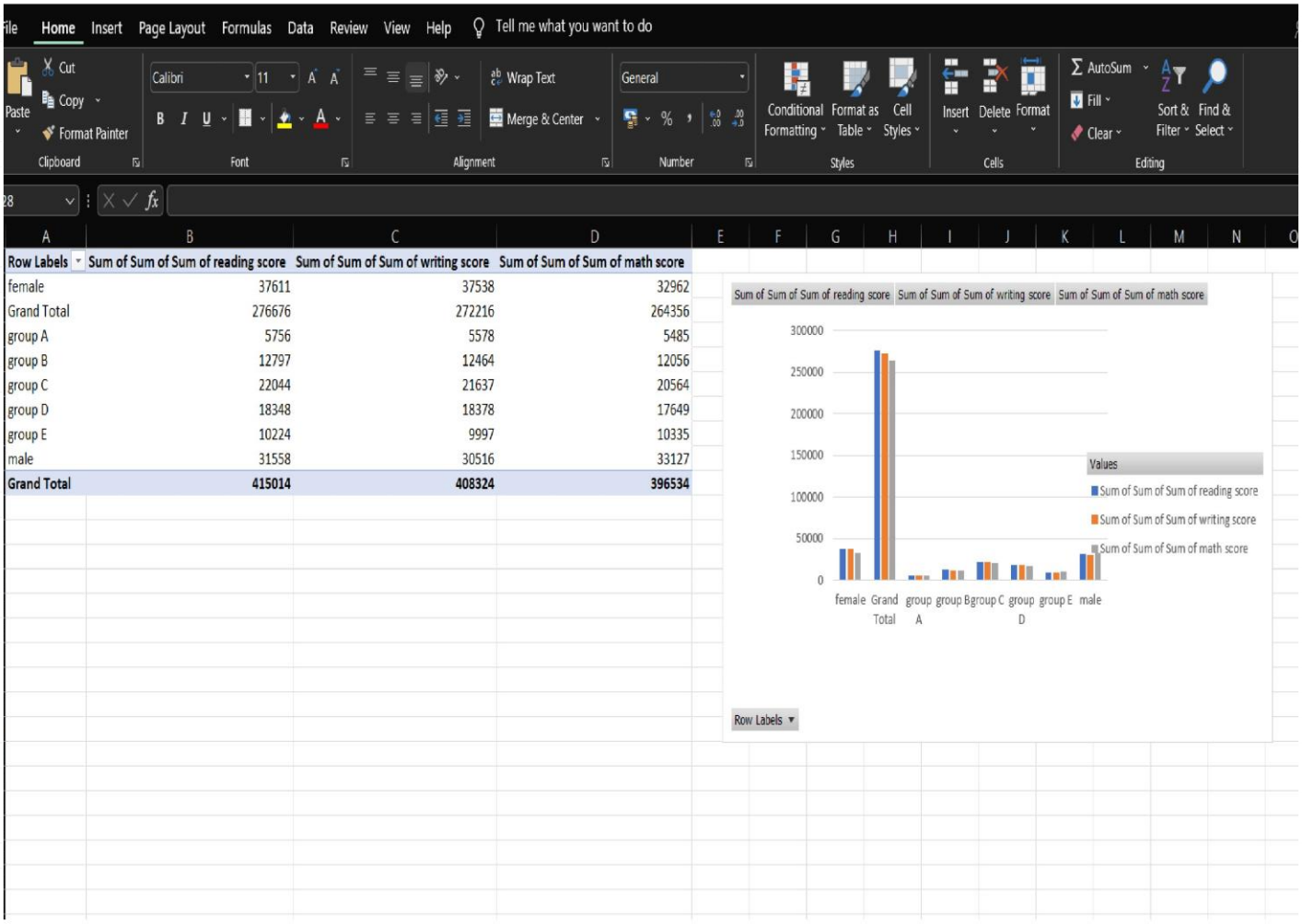
1. Select the data tab then locate the sort and filter group.
2. Click the filter command.
3. Then, drop down will appear in the header of each column.
4. Click the drop-down arrow that we want to filter.
5. The filter menu will appear.
6. Uncheck the boxes that we don't want to view and check the boxes next to the data that we want to view.
7. Click OK. All the data will be filtered.

PIVOT TABLE:

1. Select the cell that we want to create.
2. Select insert and then choose pivot table and choose the data that we want to analize.
3. Select a table or range. In table verify the cell range.
4. Now, select pivot table where we want to be placed.
5. Select new worksheet to place the pivot table and then select the location where we want to pivot table to appear.
6. Select OK button.

BAR CHART:

1. Arrange the data in rows/columns on the worksheet.
2. Select the data.
3.
4. On the insert tab, Click the bar chart.
5. Point the mouse on each of the icons then double click the chart type that suits our data.
6. A bar is inserted.



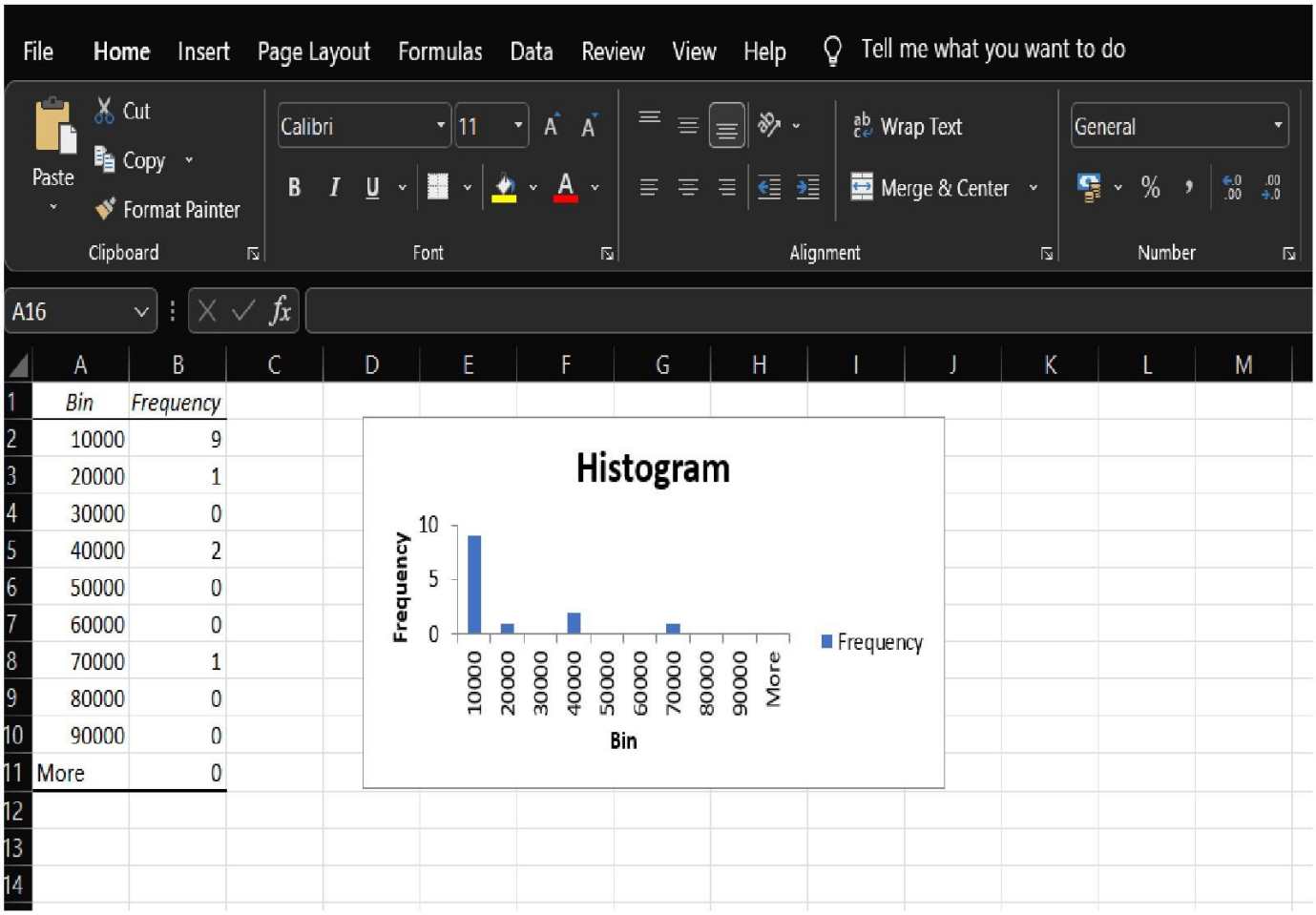
Row Labels	Sum of Sum of Sum of reading score	Sum of Sum of Sum of writing score	Sum of Sum of Sum of math score
female	37611	37538	32962
Grand Total	276676	272216	264356
group A	5756	5578	5485
group B	12797	12464	12056
group C	22044	21637	20564
group D	18348	18378	17649
group E	10224	9997	10335
male	31558	30516	33127
Grand Total	**415014**	**408324**	**396534**

EXPERIMENT-5

TO PERFORM HISTOGRAM IN EXCEL

PROCEDURE:

1. Select the entire datasheet.
2. Click the insert tab.
3. In the charts group, click on ‘Insert Chart Option’.
4. On the Histogram group, Click on the Histogram chart icon.

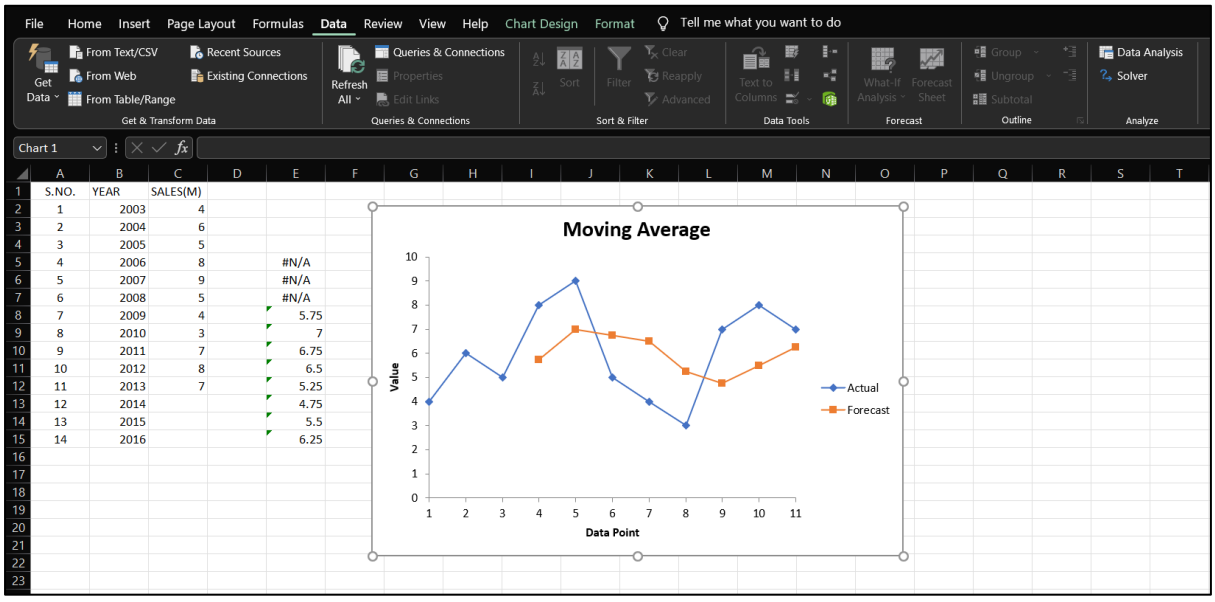


EXPERIMENT-6

TO PERFORM WITH MOVING AVERAGE.

PROCEDURE:

1. Go to Data tab.
2. Click on the data analysis in the analyses group.
3. Data analysis dialog box will appear.
4. From the analysis drop down menu select the moving average and click on OK button.
5. We will get another moving average dialog box will appear.
6. Click on Input range. Then, select the range from which you want to get the input.
7. Tick on output range & select the cell where you want to show.
8. Tick on the chart output in the box.
9. Click on OK button.**OUTPUT:**
10. As shown in Figure.



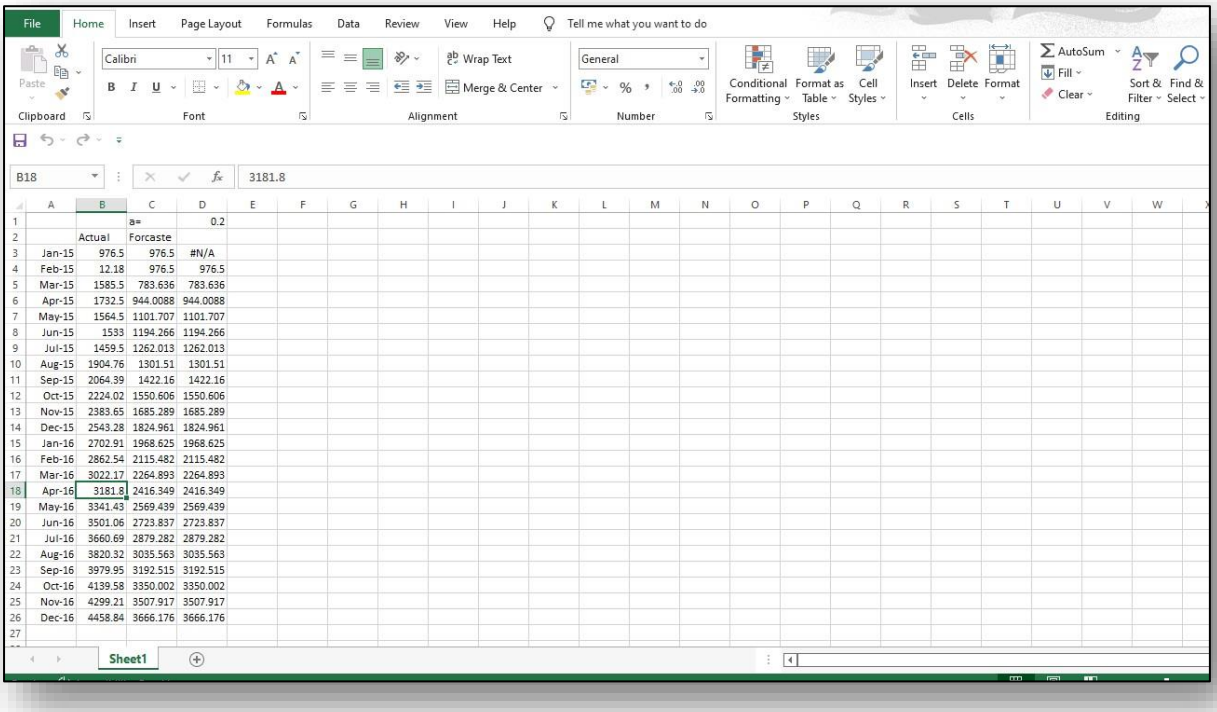
EXPERIMENT-7

TO PERFORM WITH EXPONENTIAL SMOOTHING.

PROCEDURE:

1. Go to data tab.
2. Click on Data Analysis in the analyses group.
3. Data analysis dialog box will appear.
4. From the analysis tool drop down menu select the exponential smoothing and click on OK button.
5. An exponential smoothing dialog box will appear.
6. Click on Input range. Then, select the range from which you want to get the input.
7. Then, tick on Chart Output.
8. Click on OK button.

OUTPUT: As shown in figure.



	A	B	C	D
1		a=		0.2
2		Actual	Forcaste	
3	Jan-15	976.5	976.5	#N/A
4	Feb-15	12.18	976.5	976.5
5	Mar-15	1585.5	783.636	783.636
6	Apr-15	1732.5	944.0088	944.0088
7	May-15	1564.5	1101.707	1101.707
8	Jun-15	1533	1194.266	1194.266
9	Jul-15	1459.5	1262.013	1262.013
10	Aug-15	1904.76	1301.51	1301.51
11	Sep-15	2064.39	1422.16	1422.16
12	Oct-15	2224.02	1550.606	1550.606
13	Nov-15	2383.65	1685.289	1685.289
14	Dec-15	2543.28	1824.961	1824.961
15	Jan-16	2702.91	1968.625	1968.625
16	Feb-16	2862.54	2115.482	2115.482
17	Mar-16	3022.17	2264.893	2264.893
18	Apr-16	3181.8	2416.349	2416.349
19	May-16	3341.43	2569.439	2569.439
20	Jun-16	3501.06	2723.837	2723.837
21	Jul-16	3660.69	2879.282	2879.282
22	Aug-16	3820.32	3035.563	3035.563
23	Sep-16	3979.95	3192.515	3192.515
24	Oct-16	4139.58	3350.002	3350.002
25	Nov-16	4299.21	3507.917	3507.917
26	Dec-16	4458.84	3666.176	3666.176
27				