Semester – I

18CCP212 **4-H,2-C**

PRACTICAL 4–EXCEL FOR BUSINESS

Instruction Hours / week: L: 0 T: 0 P: 4 **Marks:** Internal: **40** External: **60** Total: **100**

End Semester Exam: 3 Hours

COURSE OBJECTIVES

1. To inculcate analytical skills among students on using Excel
2. To assist students on Decision making ability
3. To make students to understand time value of money

COURSE OUTCOME

1. Assists students to Understanding the three key financial statements
2. Help students to forecast financial data
3. Aid student to understand the concept of the time value of money and apply it to various types of financial decisions
4. Assist student to identify sources and costs of capital and understand how to use them to compute a firm's WACC

EXERCISES

Corporate Financial Statements - Organizing and creating spreadsheets; entering and formatting data values; entering expressions for calculating values; linking worksheets; splitting screens to facilitate working between several worksheets

Analysis of Financial Statements - Using logical IF statements; using conditional formatting to call attention to conditions that need correcting; pasting an Excel document into a Word document

Forecasting Annual Revenues - Creating, validating, and using linear, quadratic, cubic, and exponential regression models to fit the trends of historical data; creating various types of charts (e.g., scatter diagrams, forecast charts, error patterns, and downside risk curves); estimating the accuracy of forecasts; expressing forecast accuracy in terms of confidence limits and downside risk curves.

Forecasting Financial Statements - Using forecasts of revenues to forecast financial statements; using Excel's Scenario Manager to do sensitivity analysis

Forecasting Seasonal Revenues - Creating a seasonally-adjusted forecasting model by joining seasonal adjustments to an annual trend line or a moving average trend line; using error feedback to correct a model so that the average error is zero; using period values to update annual forecasts and revise the model

Time Value of Money - Using Excel's financial functions for calculating the present value of a futureamount, the future value of a present amount, the net present value of a series of cash flows, periodicpayments for mortgages and loans, etc.; linking an Excel worksheet to a Word document.

Cash Budgeting - Organizing a spreadsheet into modules for different parts of a company and linkingresults; using a one-variable input table for sensitivity analysis to evaluate alternate operating tactics.

Cost of Capital - Calculating the weighted average cost of capital (WACC); using Excel's Goal Seekand Solver tools to find the value of an independent variable (e.g., return on equity) to satisfy a relatedgoal (e.g., a specified WACC); evaluating the WACC for different amounts of capital raised andcreating charts to display the results.

Profit, Break Even, and Leverage - Calculating profits from a firm's cash flows; using Excel's Solver tool to determine the sales volume needed to break even; evaluating a firm's operating, financial, and combinedleverages

Capital Budgeting: - Organizing spreadsheets to move from sales revenues to after-tax cash flows; usingExcel's financial functions to calculate depreciation schedules; calculating financial measures ofsuccess, such as net present value and internal rate of return; using nested IF statements to determinethe discounted years to break even; creating two-variable input tables for sensitivity analysis; usingExcel's Solver tool to determine changes that must be made to achieve specified goals, such as aspecified net present value or discounted years to break even.

Applications of Capital Budgeting - Creating spreadsheets that evaluate the financial payments from various types of capital investments; using one- and two-variable input tables to analyze the sensitivity of financialpayoffs to changes in conditions

Capital Budgeting: Risk Analysis with Scenarios - Using Excel's Scenario Manager to analyze the effects of various combinations of conditions (e.g., best-on-best, most probable, and worst-on-worst) on future payoffs.

Capital Budgeting: Risk Analysis with Monte Carlo Simulation - Using Excel's tools for Monte Carlo simulation; using Excel's random number generator to generate random numbers that follow different probability distributions (e.g., uniform, normal, and triangular distributions) and use the results.

Valuation of Common Stocks - Determining the value of shares of common stocks from their expected future cash flows and an investor's expected rate of return; performing sensitivity and risk analysis related to thevalue of stocks.

Valuation of Bonds - Determining the value of bonds from their fixed future cash flows and an investor'sexpected rate of return; performing sensitivity and risk analysis related to the value of bonds; evaluatethe effect of call date on a bond's value.

Text Book

Bill Jelen (2016). *Advanced Excel 2016 In Depth.* New Delhi, BPB Publications

References

Jordon Goldmeier (2014). *Advanced Excel Essentials*. New York, Apress

Bernd Held (2015).*Excel Functions and Formulas*. New Delhi, BPB Publications

EX: NO: 01

DATE: 15.11.18

CORPORATE FINANCIAL STATEMENTS

AIM:

To Prepare a Financial statement of organizing and creating spreedsheets, Formating data and calculating Values.

ALGORITHM

STEP 1 : Start the process

STEP 2 : Start → All programs → Microsoft office → Microsoft Excel.

Data Entry

STEP 3 : Type the column name as (year, Gross profit, Expenses, Net profit, Percentage) and Enter the Values.

calculating values

STEP 4 : Type the net profit in this cell we use =(C2-D2) press enter button.

STEP 5 : Type the percentage in this cell we use = (E2*2/10

press enter button.

Linking Worksheets:

STEP 6: To link data from sheet 1 to sheet 2 by using =sheet!c2 and enter button

STEP 7: Data → Existing connections → Browse for more → Select a particular sheet and click ok.

Spliting screen

STEP 8: select the table which is to be splitted using click view → split

STEP 9: Save the program and stop the process

Result:

Thus the above program has been executed and the output is verified.

Output:

Calculating values - Net profit

Microsoft Excel

Home Insert Page Layout Formulas Data Review View

fx = C2 - D2

A S.NO	B Year	C Gross profit	D Expenses	E Net Profit
1	2001	15000	1500	13500
2	2002	20000	800	19200
3	2003	25000	900	24100
4	2004	30000	1300	28700
5	2005	18000	1200	16800
6	2006	17500	1800	15700
7	2007	23500	1350	22150
8	2008	22000	1700	20300
9	2009	24000	1100	22900
10	2010	28000	1000	27000

Calculating values - Percentage

Microsoft Excel

Home Insert Page Layout Formulas Data Review View

fx = E2 * 2/100

A S.NO	B Year	C Gross profit	D Expenses	E Net profit	F Percentage
1	2001	15000	1500	13500	270
2	2002	20000	800	19200	384
3	2003	25000	900	24100	482
4	2004	30000	1300	28700	574
5	2005	18000	1200	16800	336
6	2006	17500	1800	15700	314
7	2007	23500	1350	22150	443
8	2008	22000	1700	20300	406
9	2009	24000	1100	22900	458
10	2010	28000	1000	27000	540

Linking Worksheets

Microsoft Excel

Home Insert Page Layout Formulas Data Review View

fx =Sheet1!A:D6

A S.NO	B Year	C Gross Profit	D Expenses	E Net Profit	F Percentage
1	2001	15000	1500	13500	270
2	2002	20000	800	19200	384
3	2003	25000	900	24100	482
4	2004	30000	1300	28700	574
5	2005	18000	1200	16800	336
6	2006	17500	1800	15700	314
7	2007	23500	1350	22150	443
8	2008	22000	1700	20300	406
9	2009	24000	1100	22900	458
10	2010	28000	1000	27000	540

Spliting Screen

Microsoft Excel

Home Insert Page Layout Formulas Data Review View

Fx

A S.NO	B year	C Gross Profit	D Expenses	E Net Profit	F percentage	G	H	I	J
1	2001	15000	1500	13500	270				
2	2002	20000	800	19200	384				
3	2003	25000	900	24100	482				
4	2004	30000	1300	28700	574				
5	2005	18000	1200	16800	336				

EX: NO: 02

DATE: 22.11.18

ANALYSIS OF FINANCIAL STATEMENTS

AIM:

To Analysis of Financial statement using Logical If statement, conditional Formating and convert excel document into word document.

ALGORITHM

STEP 1 : Start the process

STEP 2 : start → All programs → Microsoft Office → Microsoft Excel.

STEP 3 : Enter the necessary details for financial statement

STEP 4 : If statement used to check wheather the value if true or false using : IF (Logical-test), [value-if-true], [value-if-false]

STEP 5 : Select any row from financial statement and click home → conditional Formatting → highlight cell rules

Excel Document into word Document

STEP 6: Select the Financial statement table in Excel document table → border → all borders

STEP 7: Copy the Financial statement and Paste in Microsoft word Document.

STEP 8: End the process

Result:

Thus the above program has been executed Successfully and the output is verified

Output

Microsoft Excel

Home Insert Page Layout Formulas Data View

fx =IF>50000,("good")(bad")

A	B	C	D	E	F
S.NO	year	Gross profit	Expenses	net Profit	
1	2010	100000	10000	90000	good
2	2011	200000	20000	180000	good
3	2012	300000	30000	270000	good
4	2013	400000	40000	360000	good
5	2014	500000	50000	450000	good
6	2015	600000	60000	540000	bad
7	2016	700000	70000	630000	bad
8	2017	800000	80000	720000	bad
9	2018	900000	90000	810000	bad
10	2019	1000000	100000	900000	bad

EX: NO: 03

DATE: 30.11.18

FORECASTING ANNUAL REVENUES

AIM

To Forecasting annual revenues creating validity and using Linear, Quardractic Bubic·Cubic and Exponential Regression models to fit the trend of historical data by using scatter diagram

ALGORITHM

STEP 1 : Start the process

STEP 2 : Start → All programs → Microsoft office → Microsoft Excel

STEP 3 : Enter the details in Excel for 10 years

Trendline

STEP 4 : Select the details → Insert → scatter → select one chart → Go to Layout → Trend Line → Linear trendline. next click the exponential trendline

STEP 5: Select the series → Exponential and click display equation on chart and click ok

STEP 6: Select the Series 2 → Polynomial and click display R^2 squared value on chart and click ok.

Regression

STEP 7: Data → Data analysis → Regression → select Rank R2 and the output range click ok and summary output will be display

STEP 8: End the process

Result:

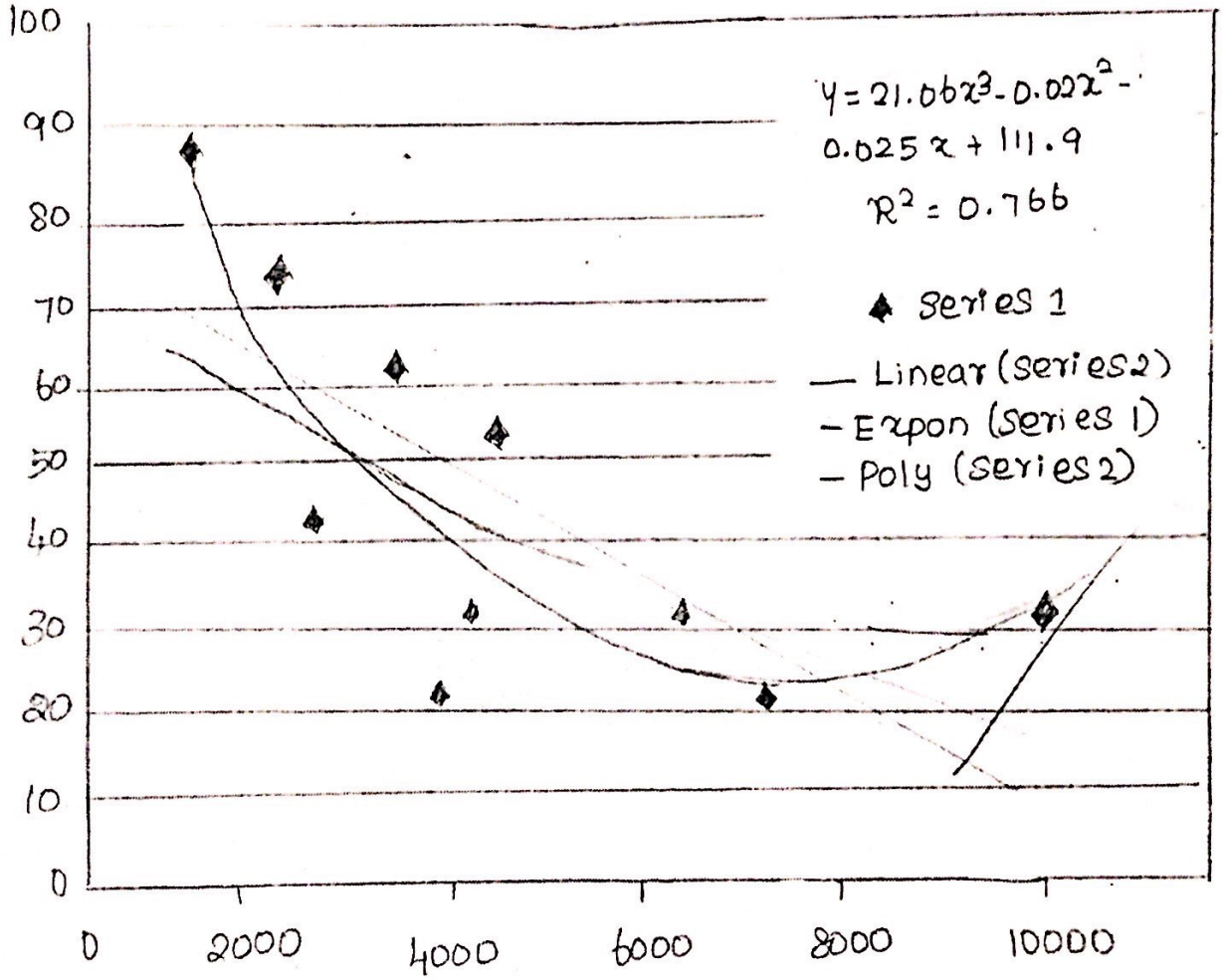
Thus the above program has been executed successfully and the output is verified.

Output :

Microsoft Excel

Home Insert Page Layout Formulas Data Review

A B C D E F G H I



Microsoft Excel

Home Insert Page Layout Formulas Data View

SUMMARY OUTPUT

Regression Statistics

Multiple F	0.720913
R Square	0.519716
Adjusted	0.459681
Observati	10

ANOVA

	df	SS	MS	F	gnificancef
Regressio	1	27900440	27900440	8.656815	0.018645
Residual	2	25783560	3222945		
Total	9	53684000			

Ex: NO: 4.2	FORECOSTING FINANCIAL & STATEMENTS
7.12.18	

AIM:

TO Forecost the revenues using sensitivity analysis.

ALGORITHM

STEP 1 : Start the process

STEP 2 : Start → All programs → Microsoft Office → Microsoft Excel

STEP 3: Type the data as value of dividend, growth rate

STEP 4: Types the values like sales of chair, cost, price, salary

STEP 5: To Find the revenue and cost of sales

STEP 6: Enter the different price in column wise and different sales in Row wise.

STEP 7: Select → Data → what If analysis → Data Table

STEP 8: Display the value and end the process

Result:

Thus the above program has been executed successfully

Microsoft Excel

A	B	C	D	E	F
Sensitivity Analysis					
Assumptions					
chairs sold	1000				
Price / chair	150				
cost / chair	50				
Store Rent	10,000				
Payroll	50,000				
Profit & Loss Statement					
Revenue	1,50,000				
cost of Sales	50,000				
Gross profit	100000				
SG&A	60000				
operating profit	$ 40,000				

$40,000	500	750	1000	1250	1500
$ 200	15000	52500	90000	127500	165000
$ 175	2500	33750	65000	96250	127500
$ 150	-10000	15000	40000	65000	90000
$ 125	-22500	-3750	15000	33750	52500
$ 100	-35000	-22500	-10000	2500	15000
$ 75	-47500	-41250	-35000	-28750	-22500

EX:NO:05

DATE: 12.12.18

FORECOSTING SEASONAL REVENUE

AIM

TO Forecost the seasonal Revenue

ALGORITHM

STEP 1 : Start the process

STEP 2 : Start → All Programs → Microsoft Office → Microsoft Excel

STEP 3 : Enter the values like year and seasons to Excel

STEP 4 : Select the data → Insert → chart

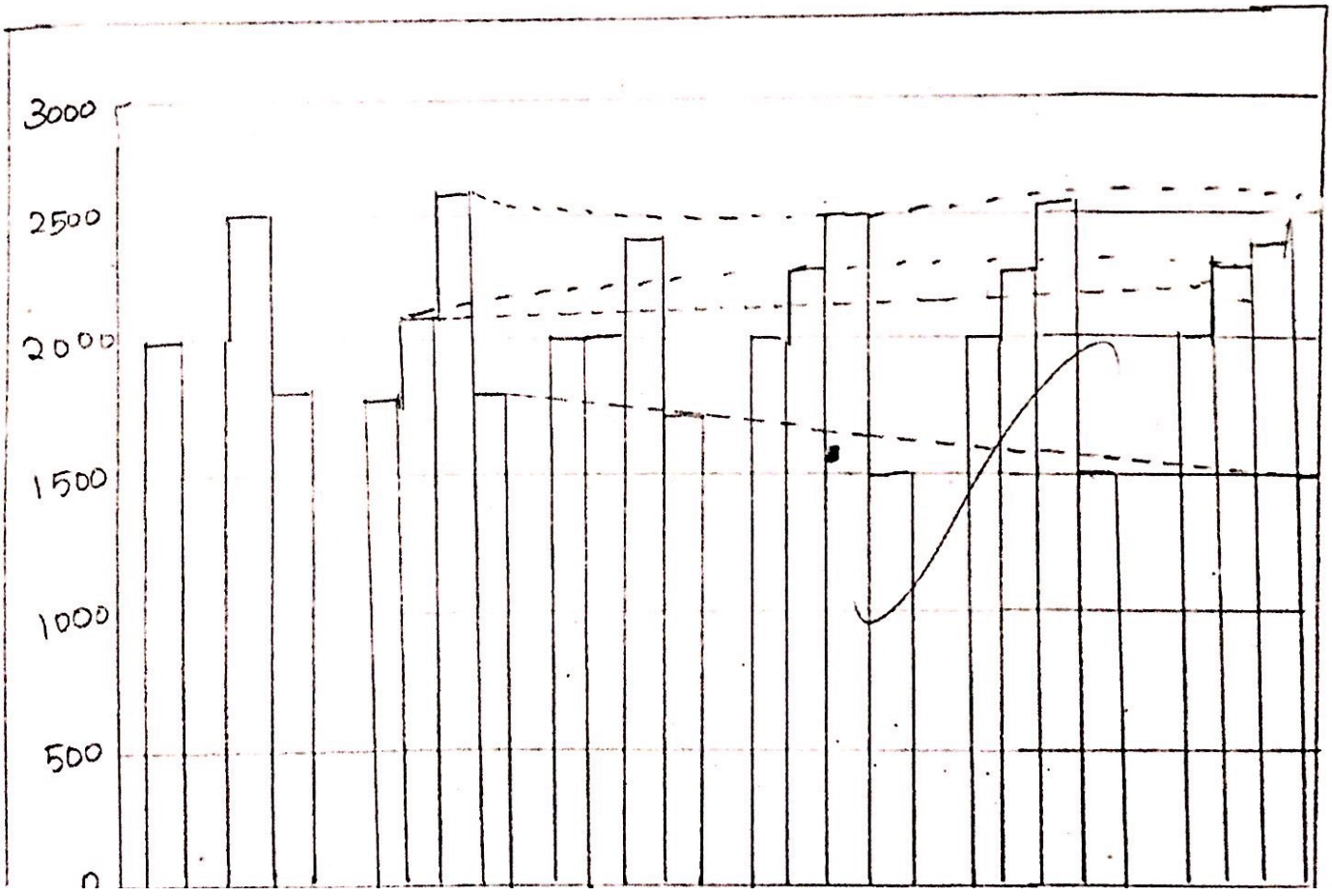
STEP 5 : Go to Layout → Trend Line → Series 1 → Moving TrendLine

STEP 6 : End the process

Output

Seasons

year				
2013	1985	2001	2532	1843
2014	1850	2200	2645	1852
2015	1942	2180	2454	1750
2016	1997	2254	2447	1687
2017	1999	2354	2052	2099
2018	2998	2422	2500	2500



Ex:No:6

Date: 18.12.18

TIME VALUE OF MONEY

AIM:

TO Forecast the time value of Money using the Financial For Calculating the Present Value by Using the NPV, IRR, PMT.

ALGORITHM:

STEP 1: Start the Process.

STEP 2: Start -> All programs -> Microsoft office -> Microsoft Excel.

STEP 3: Type the data as value of year cashflow Interest and enter the value for Loan, Interest periods, comparting, period payer

STEP 4: Calculating the NPV Using formula (B1+NPV(B2/B3:B6) and press enter the button

STEP 5: calculating the IRR Using Formula= IRR(B2:B6/74)

STEP 6: calculating the Pmt using formula to find the monthly instalment = Pmt,(20/12,(25,(19)

STEP 7 : Calculating the pmt for 10 month using formula = (2*10)

STEP 8 : Display the Result

STEP 9 : Stop the process.

Result:

Thus the above program has been executed successfully and the output is verified.

Year	Cash flow	Interest
0	-12.000	5%
1	15000	"
2	13500	"
3	12250	"
4	18200	"

NPV = 4008580 - 8%

Year	Cash flow	Interest
0	12000	5%
1	15000	"
2	13500	"
3	12250	"
4	18200	"

IRR = 115 %

loan amount 500

Interest rate 4.50%

Period 60

Compainting Period per year } 12

Monthly Investment 93.21509621

60 months 5592.905772

EX: NO: 07	CASH BUDGETING
DATE: 21.12.18	

AIM

To Organizing the cash Budgeting using sensitivity Analysis.

ALGORITHM

STEP 1 : Start the process

STEP 2 : Start → All Programs → Microsoft office → Microsoft Excel

STEP 3: Type the data as value of dividend, growth rate of dividend and discount rate and enter the values.

STEP 4: Calculating the value of stock using the formula = C2 * (1+C3) / (C4-C3) and enter the button

STEP 5: Select Data → what if analysis → Data Table → select the growth rate and enter the button

STEP 6: To link data from sheet1 to sheet 2 by using = sheet1 C2 and enter the button.

STEP 7: Display the result and stop the process

output

Microsoft Excel

Home Insert Page Layout Formulas Data View

fx | =Sheet1!B:C4

A	B	C	D	E
	Value of dividend (do)	300		
	Growth rate (g)	6		
	Discount rate (ke)	50		
	value of stock	47.72727		
	Growth rate	value of stock		
	6	47.72727		
	7	55.81395		
	8	64.28571		
	9	73.17073		
	10	82.5		

EX: NO: 08

DATE: 9.1.18

COST OF CAPITAL

AIM

To calculate the weighted average cost of capital using the tools of Goal Seek.

ALGORITHM

STEP 1 : Start the process

STEP 2 : Start → All Programs → Microsoft office → Microsoft Excel

STEP 3 : Type the column name as (equity, Debt, cost of equity, cost of debt and Tax rate) and enter the values

STEP 4 : To calculate the weighted average cost of capital using the formula for = B2/B2+B3 * B4 + B3/B2+B3 * B5 * (1-B6) and enter the button

STEP 5 : To Identify the Goal seeking Data → what If analysis → Goal seek

STEP 6: In the set se cell select the value of weighted average cost of capital. To value mention the Value you want to change by changing cell in which you want to change in the value (Debt, Equity)

STEP 7: Display the result

STEP 8: Stop the process.

Result:

Thus the above program has been executed successfully and the output is verified.

output

Microsoft Excel

fx = B2/B2+B3 * B4 + B3/B2+B3 * B5 * (1-B6)

	A	B	C	D	E	F
1		2017	2018	2019		
2	Equity	500	528	635		
3	Debt	100	459	254		
4	Cost of Equity	14%	14 %	14%		
5	Cost of Debt	5%	5%	5%		
6	Tax rate	30%	30%	30%		
7						
8	WACC	18.7	82.19432	36.595		

Microsoft Excel

fx = B2/B2+B3 x B4 + B3/B2+B3 * B5 x (1-B6)

	A	B	C	D	E	F
1		2017	2018	2019		
2	Equity	500	528	635		
3	Debt	1689	459	254		
4	Cost of Equity	14%.	14 %,	14 %.		
5	Cost of Debt	5%.	5%,	5%.		
6	Tax rate	30%.	30%.	30%		
7						
8	WACC	300	82.19432	36.595		

EX:NO:09

DATE: 22.1.19

PROFIT BREAK EVEN AND LEVERAGE

AIM:

To calculating profit from a firms cashflow using Excel Solver.

ALGORITHM

STEP 1: Start the process

STEP 2: Start → All programs → Microsoft office → Microsoft Excel

STEP 3: Type the Row name as [show room, coffee machine, furniture] and enter the values.

STEP 4: To calculate the value of Total fixed cost using the formula (=B5+B6+B7) and enter and calculate the profit using the formula (=B19*B17-B19*B13-B9) and enter

STEP 5: Select Data → Solver Tool Dialogue Box will be open, In set cell select the profit (with formula) and set the value of 0.

STEP 6: By changing cell → select the changing cell (click unit sales) and subject to the constraints → Add →

cell reference [click unit sales] → select greater than → To value is 0 and then click solve

STEP 7: Save the program

STEP 8: End the process

Result:

Thus the above program has been executed successfully and the output is verified.

Output :

Microsoft Excel

1. fx = B19 * B17 − B19 * B13 − B9

	A	B	C	D
1	Exp in the fixed cost			
2	Show room	1500	Per month	
3	Coffee machine	200	Per month	
4	furniture	300	Per month	
5				
6	Fixed cost total	2000		
7				
8	Exp on the variable cost			
9	Coffee ingredients and the labour	2	Per unit	
10				
11	revenue			
12	coffee Sales	5	Per unit	
13				
14	Unit sales	667	Cost per month	
15				
16	Profit	1E-06	monthly	

EX:NO:10:1	CAPITAL BUDGETING:-
28.1.2019	DEPRECIATION SCHEDULE

AIM:

To calculate Depriciation schedule

ALGORITHM

STEP 1 : Start the process

STEP 2: Start → All programs → Microsoft Office → Microsoft Excel

STEP 3: Enter the details like original cost, Residual value and useful life in years and enter the values

STEP 4: To calculating annual depriciation using the formula
=(C3-C4)/C5

STEP 5: Type the row as period, Book value in the beginning, Annual Depriciation on Expenses, Accumulated Depriciation on Expenses and Book value in the ending.

STEP 6: To Find the Annual Depriciation value using F4 key.

STEP 7: To calculated accumulated Depriciation on add the E13+D14 and drag it.

STEP 8: To Find the Book value in Ending year using the formula C13-D13 and drag it

STEP9: To Find the Book value in beginning year using the key =E13 and enter.

Output:

Microsoft Excel

fx = C13 - D13

A	B	C	D	E	F
	Original cost	500000			
	Residual or Salvage value	5000			
	useful life(in yrs)	10			
	Annual Depreciation Exp	49500			

Period	Book value in the beginning	Annual Depreciation exp	Accumulated Depreciation or Exp	Book value in ending year
1	500000	49500	49500	450500
2	450500	49500	99000	401000
3	401000	49500	148500	351500
4	351500	49500	198000	302000
5	302000	49500	247500	252500
6	252500	49500	297000	203000
7	203000	49500	345500	153500
8	153500	49500	396000	104000
9	104000	49500	445500	54500
10	54500	49500	495000	5000

EX: NO: 10:2	CAPITAL BUDGETING:
28.1.2019	NPV

AIM

To calculate NPV and IRR statement

ALGORITHM

STEP 1 : Start the process

STEP 2: Start → All programs → Microsoft Office → Microsoft Excel

STEP 3: Enter the details like years, Initial Quality, and after tax and enter the values.

STEP 4: To calculate the WACC for using the formula after tax ÷(1+10%)^1 drag the value to 5 years.

STEP 5: calculate the present value = Sum B4:F4 (select weighted average cost of capital values)

STEP6: To subtract the initial quality from present value will get the NPV.

STEP7: Goto Data → What if analysis → Goal seek.

STEP8: Save the program and End the process

Result:

Thus the above program has been executed Successfully and the output is verified.

Output:

Microsoft Excel

fx | =16-17

A	B	C	D	E	F	G
Years		1	2	3	4	5
	2016	2017	2018	2019	2020	2021
Initial Quality	-25000					
After tax cash		100000	150000	200000	250000	300000
WACC		90909.09	123966.9	150263	1707534	186276.4
10%						
				Present value	722168.8	
				Less inti	250000	
				NPV	472168.8	

Ex: NO:10.3	CAPITAL BUDGETING-
28.1.2019	TWO VARIABLE

AIM:

To creating variable input table using sensitivity analysis.

ALGORITHM:

STEP 1 : Start the process

STEP 2 : Start → All programs → Microsoft office → Microsoft Excel

STEP 3: Type the values like sales of chair, cost, price, Rend and salary.

STEP 4: To find the revenue and cost of sales.

STEP 5: Enter the different price in column wise and different sales in Row wise.

STEP 6: Select → Data → what if analysis → Data Table

STEP 7: Display the Value

STEP 8: End the process

Result:

Thus the above program has been executed successfully and the output is verified.

Microsoft Excel

A	B	C	D	E	F
Sensitivity Analysis					
Assumptions					
chairs sold	1000				
Price/chair	$150				
Cost/chair	$50				
Store Rent	$10,000				
Payroll	$50,000				
Profit & Loss Statement					
Revenue	$150,000				
Cost of sales	50000				
Gross profit	100000				
SG&A	60000				
operating Profit	40,000				

	Chairs Sold				
$ 40,000	500	750	1000	1250	1500
$ 200	1500	52500	90000	127500	165000
$ 175	2500	33750	65000	96250	127500
$ 150	-10000	15000	40000	65000	90000
$ 125	-22500	-3750	15000	33750	52500
$ 100	-35000	-22500	-10000	2500	15000
$ 75	-47500	-41250	-35000	-28750	-22500

EX:NO:11

18.2.2019

APPLICATION OF CAPITAL BUDGETING

AIM:

To create a spreadsheet on evaluate the Financial payments using one and two variable input table using sensitivity analysis.

ALGORITHM:

STEP 1 : Start the process

STEP 2: Start → All programs → Microsoft Office → Microsoft Excel

STEP 3: Type the nessesary details and enter the values

STEP 4: To calculate Balance in using formula = FV(B4/B5, B6*B5,,-B3) and enter.

STEP 5: To Find one variable Data Table → select → Data → what if analysis → data Table → select the Initial Investment and drag it.

STEP 6: To Find two variable Data Table → Select Data → What if analysis → data Table → In the Row Input cell → select year → In the Column Input cell to Select Initial Investment.

STEP 7: Display the result

STEP 8: Stop the process

Result:

Thus the above program has been executed successfully and the output is verified.

Output

(ONE VARIABLE)

Microsoft Excel

fx | =FV(B4/B5, B6*B5, -B3)

A	B	C	D	E
Compound Interest Calculator				
Initial Investment	$2000			
Annual Interest rate	5%			
Compounding periods per year	12			
Years	5			
Balance	$2566.72			

(TWO VARIABLE)

Microsoft Excel

	Years		
$2566.72	3	4	5
$1000	$1161.47	$1220.90	$1,283.36
$2000	$2,322.94	$2441.79	$2,566.72
$3000	$3,484.42	$3,662.69	$3,850.08
$4000	$4,645.89	$4,883.58	$5,133.43
$5000	$5,807.36	$6,104.48	$6,416.79

Ex: NO: 12	CAPITAL BUDGET - RISK ANALYSIS
27.2.2019	

AIM

To calculate the capital Budgeting Risk analysis using Excel Scenario manager.

ALGORITHM:

STEP 1 : Start the process

STEP 2 : Start → All programs → Microsoft Office → Microsoft Excel

STEP 3: Enter the cost and profit 60%.

STEP 4: To calculate the selling using = 1500 + (1500 + 60%)

Go to Data → what if analysis → Scenario Manager.

STEP 5: In that dialogue box click ADD → changing cell → Best profit 0.9 → ok

STEP 6: In the same way Add the most and worst

STEP 7: click → summary

STEP 8: save the program and Display the process

Result:

Thus the program has been executed Successfully and the output is verified.

output

Microsoft Excel

cost	1500		best	90%			
Profit	90%		most	60%			
selling	2850		Worst	30%			

Scenario Summary

	Current Value	best	most	worst
Changing cells.				
L33	90%	90%	60%	30%
Result cells				
L34	2850	2850	2400	1950

EX: NO: 13	CAPITAL BUDGETING - MORTOCARLO STIMULATION
4. 3. 2019	

AIM

Capital budgeting Risk analysis using mortocarlo stimulation using Excel tools.

ALGORITHM

STEP1 : Start the process

STEP 2 : start → All programs → Microsoft office → Microsoft Excel

STEP 3: Go to data Analysis in data tab in the data analysis dialogue box select random number generation.

STEP 4: In random number generation dialog box number of Variable column 1 and in number random number is 30.

STEP 5: select the required distribution (uniform, normal and triangular distribution) in the distribution dropdown.

STEP 6: Give appropriate required parameters in the parameters column

STEP 7: select the output options in the list and click OK.

STEP 8: End the process.

Output

Microsoft Excel

Random Number Generation

Number of variables: 2 — Ok

Number of Random Numbers: 30 — Cancel

Distribution: Binomial — Help

Parameters

p value = 0.05

Number of trails = 1

Random Seed:

Output Options

◉ Output Range:

○ New Worksheet Ply: G15

○ New Workbook

Ex: NO: 14

14.3.2019

VALUATION OF COMMON STOCKS

AIM

To calculate Valuation of Common Stocks using sensitivity analysis

ALGORITHM

STEP 1 : Start the process

STEP 2 : Start → All programs → Microsoft Office → Microsoft Excel

STEP 3 : Type the data as value of dividend, growth rate of dividend and discount rate and enter the values.

STEP 4 : Calculating the value of stock using the formula =C2*(1+C3) / (C4-C3) and enter the button.

STEP 5 : Select Data → what if analysis → Data Table → Select the growth rate and enter the button

STEP 6 : Display the result and stop the process

Result:

Thus the above program has been executed Successfully and output is verified.

Output:

Microsoft Excel

Home Insert Page Layout Formulas Data View

fx | =C2*(1+C3)/(C4-C3)

A	B	C	D	E	F
	Value of Dividend(do)	300			
	Growth rate (g)	6			
	Discount rate (ke)	50			
	Value of stock	47.72727			
	Growth Rate	Value of Stock			
	6	47.72727			
	7	55.81395			
	8	64.28571			
	9	73.17073			
	10	82.5			
	11	92.30769			
	12	102.6316			
	13	113.5135			
	14	125			
	15	137.1429			

Ex: NO: 15	VALUATION OF BONDS
19.3.2019	

AIM:

To calculate Valuation of Bonds using sensitivity analysis.

ALGORITHM

STEP 1 : Start the process

STEP 2 : Start → All programs → Microsoft Office → Microsoft Excel.

STEP 3: In Formula tab → Financial → select PV and enter the rate, Nper, Pmt and future value and click ok → present value will be generated.

STEP 4: Select the data Table range, including your formula, variable values cells and empty cells for the results.

STEP 5: Select Data → what if analysis → data Table → select the column Input cell → click Investment and → ok

STEP6: Display the result and stop the process

Result:

Thus the above program has been executed successfully and the output is verified.

Output

Function Arguments

PV

Rate	4%	= 0.04
Nper	10	= 10
Pmt	25	= 25
FV	1000	= 1000
Type		= number

= -878.3365633

Formula result = ($878.34)

Microsoft Excel

fx | =PV(B1,B2,B3,B4)

A	B	C	D	E	F
rate	0.04				
nper	10				
Pmt	25				
fv	1000				
Compound Value	$878.34				
fv	Compound value				
1000	$878.34				
2000	$1553.90				
3000	$2,229.46				
4000	$2,905.03				
5000	$33,980.98				