

#	A	B	C	D	E	F	G	H	I	J	K	L
1	roll no.	name	marks	result	Number?	Final Result	result distinction	rank	rank 2	rank 3		
2	1	a	45	=IF(C2>=33,"pass","fail")	=ISNUMBER(C2)	=IF(E2=TRUE,D2,"Absent")	=IF(E2=TRUE,IF(C2>=75,"distinction",""),")	=RANK(C2,C2:C16,0)	=RANK(C2,C2:C16,0)	=IFERROR(RANK(C2,C2:C16,0),"")		
3	2	b	45	=IF(C3>=33,"pass","fail")	=ISNUMBER(C3)	=IF(E3=TRUE,D3,"Absent")	=IF(E3=TRUE,IF(C3>=75,"distinction",""),")	=RANK(C3,C3:C17,0)	=RANK(C3,C3:C17,0)	=IFERROR(RANK(C3,C3:C17,0),"")		
4	3	c	21	=IF(C4>=33,"pass","fail")	=ISNUMBER(C4)	=IF(E4=TRUE,D4,"Absent")	=IF(E4=TRUE,IF(C4>=75,"distinction",""),")	=RANK(C4,C4:C18,0)	=RANK(C4,C4:C18,0)	=IFERROR(RANK(C4,C4:C18,0),"")		
5	4	d	A	=IF(C5>=33,"pass","fail")	=ISNUMBER(C5)	=IF(E5=TRUE,D5,"Absent")	=IF(E5=TRUE,IF(C5>=75,"distinction",""),")	=RANK(C5,C5:C19,0)	=RANK(C5,C5:C19,0)	=IFERROR(RANK(C5,C5:C19,0),"")		
6	5	e	11	=IF(C6>=33,"pass","fail")	=ISNUMBER(C6)	=IF(E6=TRUE,D6,"Absent")	=IF(E6=TRUE,IF(C6>=75,"distinction",""),")	=RANK(C6,C6:C20,0)	=RANK(C6,C6:C20,0)	=IFERROR(RANK(C6,C6:C20,0),"")		
7	6	f	1	=IF(C7>=33,"pass","fail")	=ISNUMBER(C7)	=IF(E7=TRUE,D7,"Absent")	=IF(E7=TRUE,IF(C7>=75,"distinction",""),")	=RANK(C7,C7:C21,0)	=RANK(C7,C7:C21,0)	=IFERROR(RANK(C7,C7:C21,0),"")		
8	7	g	78	=IF(C8>=33,"pass","fail")	=ISNUMBER(C8)	=IF(E8=TRUE,D8,"Absent")	=IF(E8=TRUE,IF(C8>=75,"distinction",""),")	=RANK(C8,C8:C22,0)	=RANK(C8,C8:C22,0)	=IFERROR(RANK(C8,C8:C22,0),"")		
9	8	h	5	=IF(C9>=33,"pass","fail")	=ISNUMBER(C9)	=IF(E9=TRUE,D9,"Absent")	=IF(E9=TRUE,IF(C9>=75,"distinction",""),")	=RANK(C9,C9:C23,0)	=RANK(C9,C9:C23,0)	=IFERROR(RANK(C9,C9:C23,0),"")		
10	9	i	76	=IF(C10>=33,"pass","fail")	=ISNUMBER(C10)	=IF(E10=TRUE,D10,"Absent")	=IF(E10=TRUE,IF(C10>=75,"distinction",""),")	=RANK(C10,C10:C24,0)	=RANK(C10,C10:C24,0)	=IFERROR(RANK(C10,C10:C24,0),"")		
11	10	j	99	=IF(C11>=33,"pass","fail")	=ISNUMBER(C11)	=IF(E11=TRUE,D11,"Absent")	=IF(E11=TRUE,IF(C11>=75,"distinction",""),")	=RANK(C11,C11:C25,0)	=RANK(C11,C11:C25,0)	=IFERROR(RANK(C11,C11:C25,0),"")		
12	11	k	55	=IF(C12>=33,"pass","fail")	=ISNUMBER(C12)	=IF(E12=TRUE,D12,"Absent")	=IF(E12=TRUE,IF(C12>=75,"distinction",""),")	=RANK(C12,C12:C26,0)	=RANK(C12,C12:C26,0)	=IFERROR(RANK(C12,C12:C26,0),"")		
13	12	l	A	=IF(C13>=33,"pass","fail")	=ISNUMBER(C13)	=IF(E13=TRUE,D13,"Absent")	=IF(E13=TRUE,IF(C13>=75,"distinction",""),")	=RANK(C13,C13:C27,0)	=RANK(C13,C13:C27,0)	=IFERROR(RANK(C13,C13:C27,0),"")		
14	13	m	37	=IF(C14>=33,"pass","fail")	=ISNUMBER(C14)	=IF(E14=TRUE,D14,"Absent")	=IF(E14=TRUE,IF(C14>=75,"distinction",""),")	=RANK(C14,C14:C28,0)	=RANK(C14,C14:C28,0)	=IFERROR(RANK(C14,C14:C28,0),"")		
15	14	n	89	=IF(C15>=33,"pass","fail")	=ISNUMBER(C15)	=IF(E15=TRUE,D15,"Absent")	=IF(E15=TRUE,IF(C15>=75,"distinction",""),")	=RANK(C15,C15:C29,0)	=RANK(C15,C15:C29,0)	=IFERROR(RANK(C15,C15:C29,0),"")		
16	15	p	15	=IF(C16>=33,"pass","fail")	=ISNUMBER(C16)	=IF(E16=TRUE,D16,"Absent")	=IF(E16=TRUE,IF(C16>=75,"distinction",""),")	=RANK(C16,C16:C30,0)	=RANK(C16,C16:C30,0)	=IFERROR(RANK(C16,C16:C30,0),"")		
17												
18												

Para 8.2

(iv) The amount of instalment is given in cell B5. To get this value, enter the formula =B\$5 in cell D7 and copy this formula to cells D8 to D26. (Figure 8.43)

(v) To calculate Closing Balance, add Opening Balance and Interest and Subtract Amount of Instalment. To do this, enter the formula =B7+C7-D7 in cell E7 and copy this formula in cells E8 to E26. (Figure 8.43)

	A	B	C	D	E
1	Amount of Loan	100000			
2	Periodicity	4			
3	Years	5			
4	Rate of Interest	0.15			
5	Amount of Instalment	=PMT(B4/B2,B2*B3,-B1)			
6	Instalment No.	Opening Balance	Interest	Instalment	Closing Balance
7	1	=B1	=B7*\$B\$4/\$B\$2	=B\$5	=B7+C7-D7
8	2	=E7	=B8*\$B\$4/\$B\$2	=B\$5	=B8+C8-D8
9	3	=E8	=B9*\$B\$4/\$B\$2	=B\$5	=B9+C9-D9
10	4	=E9	=B10*\$B\$4/\$B\$2	=B\$5	=B10+C10-D10
11	5	=E10	=B11*\$B\$4/\$B\$2	=B\$5	=B11+C11-D11
12	6	=E11	=B12*\$B\$4/\$B\$2	=B\$5	=B12+C12-D12
13	7	=E12	=B13*\$B\$4/\$B\$2	=B\$5	=B13+C13-D13
14	8	=E13	=B14*\$B\$4/\$B\$2	=B\$5	=B14+C14-D14
15	9	=E14	=B15*\$B\$4/\$B\$2	=B\$5	=B15+C15-D15
16	10	=E15	=B16*\$B\$4/\$B\$2	=B\$5	=B16+C16-D16
17	11	=E16	=B17*\$B\$4/\$B\$2	=B\$5	=B17+C17-D17
18	12	=E17	=B18*\$B\$4/\$B\$2	=B\$5	=B18+C18-D18
19	13	=E18	=B19*\$B\$4/\$B\$2	=B\$5	=B19+C19-D19
20	14	=E19	=B20*\$B\$4/\$B\$2	=B\$5	=B20+C20-D20
21	15	=E20	=B21*\$B\$4/\$B\$2	=B\$5	=B21+C21-D21
22	16	=E21	=B22*\$B\$4/\$B\$2	=B\$5	=B22+C22-D22
23	17	=E22	=B23*\$B\$4/\$B\$2	=B\$5	=B23+C23-D23
24	18	=E23	=B24*\$B\$4/\$B\$2	=B\$5	=B24+C24-D24
25	19	=E24	=B25*\$B\$4/\$B\$2	=B\$5	=B25+C25-D25
26	20	=E25	=B26*\$B\$4/\$B\$2	=B\$5	=B26+C26-D26

FIGURE 8.43

4. Having completed all the 3 steps above, the final output is shown in the figure 8.44

RATIO ANALYSIS

Para 8.6

Balance Sheet of M/s ABC Ltd.					
As on 31/3/2016					
Liabilities	Amount	Assets	Amount		
Capital Account	=SUM(B5:B6)	Fixed Assets	=SUM(E5:E7)		
Reserves & Surplus	500000	Furniture	292500		
Capital A/c	1800000	Land & Building	2300000		
Loans (Liability)	=SUM(B8:B9)	P&M	475000		
Secured Loans	2500000	Investments			
Unsecured Loans	500000	Investments			
Current Liabilities	=SUM(B11:B15)	Current Assets	=SUM(E11:E16)		
Provisions	240000	Closing Stock	1429407		
Sundry Creditors	250600	Sundry Debtors	397000		
BP	100000	Cash-in-hand	20000		
Rent Outstanding	50000	Bank Accounts	1247600		
Salaries Outstanding	50000	B/R	50000		
		Prepaid Insurance	7800		
Profit & Loss A/c	=SUM(B18:B20)				
Opening Balance	300000				
Current Period Profit	148707				
Less: Transferred	-220000				
Total	=SUM(C4:C20)	Total	=SUM(F4:F20)		

FIGURE 8.37

2. The Result of this is as under:

Balance Sheet of M/s ABC Ltd.					
As on 31/3/2016					
Liabilities	Amount	Assets	Amount		
Capital Account		Fixed Assets			3067500
Reserves & Surplus	500000	Furniture	292500		
Capital A/c	1800000	Land & Building	2300000		
Loans (Liability)		P&M	475000		
Secured Loans	2500000	Investments			
Unsecured Loans	500000	Investments			
Current Liabilities	690600	Current Assets			3151807
Provisions	240000	Closing Stock	1429407		
Sundry Creditors	250600	Sundry Debtors	397000		
BP	100000	Cash-in-hand	20000		
Rent Outstanding	50000	Bank Accounts	1247600		
Salaries Outstanding	50000	B/R	50000		
		Prepaid Insurance	7800		
Profit & Loss A/c	228707				
Opening Balance	300000				
Current Period Profit	148707				
Less: Transferred	-220000				
Total	6219307	Total			6219307

FIGURE 8.38

3. Enter the above Trading and Profit and Loss Account in this excel Sheet.
The Value of Total of Trading Account, Indirect Expenses, Indirect

RATIO ANALYSIS

Para 8.6

5. To Calculate the above ratios enter the following information and Formula in the excel sheet:

A	B	C
Ratio to be Computed	Accounting Formula to be used	Formula to be used in Excel
1. Current Ratio	Current Assets/Current Liabilities	=F10/C10
2. Quick Ratio	Quick Assets/Current Liabilities	=(F10-E11-E16)/C10
3. Debt/Equity Ratio	Debts/Capital Employed	=C7/(C4+C17)
4. Gross Profit Ratio	Gross Profit/Sales	=C28/F25
5. Net Profit Ratio	Net Profit/ Sales	=C40/F26
6. Operating Cost Ratio	1-Net Profit Ratio	=1-C50
7. Return on Working Capital	Net Profit/Working Capital	=C40/(F10-C10)
8. Return on Capital Employed	Net Profit/Capital Employed	=C40/(C4+C17)
9. Inventory Turnover Ratio	Cost of goods sold/average inventory	=(C26+C27-F27)/F27
10. Working Capital Turnover Ratio	Net Sales/ Average Working Capital	=F26/(F10-C10)

FIGURE 8.41

6. The Result of the above formula is shown below:

A	B	C
Ratio to be Computed	Accounting Formula to be used	Formula to be used in Excel
1. Current Ratio	Current Assets/Current Liabilities	4.56
2. Quick Ratio	Quick Assets/Current Liabilities	2.48
3. Debt/Equity Ratio	Debts/Capital Employed	1.19
4. Gross Profit Ratio	Gross Profit/Sales	0.45
5. Net Profit Ratio	Net Profit/ Sales	0.24
6. Operating Cost Ratio	1-Net Profit Ratio	0.76
7. Return on Working Capital	Net Profit/Working Capital	0.06
8. Return on Capital Employed	Net Profit/Capital Employed	0.06
9. Inventory Turnover Ratio	Cost of goods sold/average	0.24
10. Working Capital Turnover Ratio	Net Sales/ Average Working Capital	0.25

FIGURE 8.42

account; the Gross Profit from Trading Account; and Net profit by subtracting Indirect Expenses from the total of right hand side of Profit and Loss account; as shown below:

Trading and Profit & Loss A/c of M/s ABC Ltd.					
For the Financial Year ending on 31/3/2016					
Particulars	Amount		Particulars	Amount	
Opening Stock	1729800		Sales Accounts		625000
Purchase Accounts	43000		Closing Stock		1429407
Gross Profit c/o	=F30-SUM(C26:C27)				
	=SUM(C26:C29)				=SUM(F26:F29)
Indirect Expenses	=SUM(B33:B39)		Gross Profit b/f		=C28
Depreciation	57500		Indirect Incomes		120200
Discount Allowed	20000		Discount Received	200	
Electricity	10000		Profit on Sale of Inv	120000	
Insurance Premium	15600				
Rent	60000				
Salaries	85000				
Telephone	5000				
Nett Profit	=F42-C32				
Total	=SUM(C32:C40)		Total		=SUM(F32:F41)

FIGURE 8.39

The Result is as under:

For the Financial Year ending on 31/3/2016					
Particulars	Amount		Particulars	Amount	
Opening Stock	1729800		Sales Accounts		625000
Purchase Accounts	43000		Closing Stock		1429407
Gross Profit c/o	281607				
	2054407				2054407
Indirect Expenses		253100	Gross Profit b/f		281607
Depreciation	57500		Indirect Incomes		120200
Discount Allowed	20000		Discount Received	200	
Electricity	10000		Profit on Sale of Inves	120000	
Insurance Premium	15600				
Rent	60000				
Salaries	85000				
Telephone	5000				
Nett Profit		148707			
Total		401807	Total		401807

FIGURE 8.40

	A	B	C	D
1	Empid	Name of Employees	Basic	DA
2			5000	=MIN(C3*10%,5400)
3	1	a	8000	=MIN(C4*10%,5400)
4	2	s	11000	=MIN(C5*10%,5400)
5	3	d	14000	=MIN(C6*10%,5400)
6	4	f	22000	=MIN(C7*10%,5400)
7	5	g	30000	=MIN(C8*10%,5400)
8	6	h	38000	=MIN(C9*10%,5400)
9	7	j	46000	=MIN(C10*10%,5400)
10	8	k	54000	=MIN(C11*10%,5400)
11	9	l	62000	=MIN(C12*10%,5400)
12	10	o	=SUM(C3:C12)	=SUM(D3:D12)
13		Total		

FIGURE 8.2

3. (i) As per question the HRA rate for basic Salary upto ₹ 10,000 is 10% of Basic Salary. For basic salary between ₹ 10,001 to ₹ 25,000 the rate of HRA is ₹ 1,000 + 20% of basic salary above ₹ 10,000. For basic salary above ₹ 25,000 the rate of HRA is ₹ 4,000 + 30% of basic salary above 25,000. To calculate HRA Enter the formula =IF(C3<10000,C3*10%,IF(C3<25000,1000+(C3-10000)*20%,4000+(C3-25000)*30%)) in cell E3. Copy this formula in cells E4 to E12 (Figure 8.3).

- (ii) To calculate gross salary Enter sum function in cell F3 with formula =SUM(C3:F3). Copy this formula in cells F4 to F12 (Figure 8.3).

E	F
Payroll for the Month of January 2013	
HRA	Gross
=IF(C3<10000,C3*10%,IF(C3<25000,1000+(C3-10000)*20%,4000+(C3-25000)*30%))	=SUM(C3:E3)
=IF(C4<10000,C4*10%,IF(C4<25000,1000+(C4-10000)*20%,4000+(C4-25000)*30%))	=SUM(C4:E4)
=IF(C5<10000,C5*10%,IF(C5<25000,1000+(C5-10000)*20%,4000+(C5-25000)*30%))	=SUM(C5:E5)
=IF(C6<10000,C6*10%,IF(C6<25000,1000+(C6-10000)*20%,4000+(C6-25000)*30%))	=SUM(C6:E6)
=IF(C7<10000,C7*10%,IF(C7<25000,1000+(C7-10000)*20%,4000+(C7-25000)*30%))	=SUM(C7:E7)
=IF(C8<10000,C8*10%,IF(C8<25000,1000+(C8-10000)*20%,4000+(C8-25000)*30%))	=SUM(C8:E8)
=IF(C9<10000,C9*10%,IF(C9<25000,1000+(C9-10000)*20%,4000+(C9-25000)*30%))	=SUM(C9:E9)
=IF(C10<10000,C10*10%,IF(C10<25000,1000+(C10-10000)*20%,4000+(C10-25000)*30%))	=SUM(C10:E10)
=IF(C11<10000,C11*10%,IF(C11<25000,1000+(C11-10000)*20%,4000+(C11-25000)*30%))	=SUM(C11:E11)
=IF(C12<10000,C12*10%,IF(C12<25000,1000+(C12-10000)*20%,4000+(C12-25000)*30%))	=SUM(C12:E12)
=SUM(E3:E12)	=SUM(F3:F12)

FIGURE 8.3