MANAGEMENT ACCOUNTING

UNIT-I

PART-A

1. What is management accounting?
   Management accounting provides information to the management to use it as a base for decision making. The emphasis of management accounting is to redesign accounting in a manner which is helpful to the management in framing the policies and control of their execution.

2. Define management accounting.
   Batty's definition describes" Management Accounting as a combination of various accounting systems and techniques which are designed to meet the needs of the management.

3. Define Accounting.
   Eric L.Kohler defines: the procedure of analysis, classification and recording transactions in accordance with a preconceived plan for the benefit of (a) providing a means by which an enterprise can be conducted in an orderly fashion (b) establishing a basis for reporting the financial condition of an enterprise and the results of its operations"

PART-B

1.What are the characteristics of management accounting?

i) Providing financial information:

The main emphasis of management accounting is to provide financial information to management.

ii)Cause and effect analysis:

Financial accounting confines itself to presentation of P& L account and balance sheet. Management accounting analyses the cause and effect of the facts and figures thereon

iii) Use of special techniques and concepts:

Management accounting employs special techniques like standard costing, budgetary control, marginal costing, fund flow responsibility accounting etc.

iv) Decision making:

Main objective of management accounting is to provide relevant information to management to take various important decisions.

v) No fixed conventions:

Financial accounting has various established principles and rules preparing the financial accounts. Management accounting has no such fixed rules.

2.What is the scope of Management accounting?

(i) Financial accounting:

Financial accounting deals with financial aspects by preparation of profit and loss account and balance sheet. Management accounting rearranges and uses the financial statements.

ii) Cost accounting: cost accounting is an essential part of management accounting. Cost accounting through its various techniques reveals efficiency of various divisions.

iii) Budgeting and forecasting: Budgeting is setting targets by estimating expenditure and revenue for a given period. Targets are fixed for various departments and responsibility is pinpointed for achieving the targets.

iv) Inventory control: This includes planning, coordinating and controlling inventory from the time of acquisition to the stage of disposal.

v) Statistical Analysis: In order to make the information more useful statistical tool and applied. These tools include charts, graphs, diagrams, index numbers etc.

3. Objectives and functions of management accounting:

i) Presentation of data:

Traditional profit and loss account and the balance sheet are not analytical for the decision making.

ii) Aid of planning and forecasting: Management accounting is helpful to the management in the process of planning through the techniques of budgetary control and standard costing.

iii) Help in organizing: Organizing is concerned with establishment of relationship among different individuals in the form. It included delegation of authority and fixing responsibility.

iv) Decision making: Management accounting provides comparative data for analysis and interpretation for effective decision making and policy formulation

v) Effective control: Standard costing and budgetary control and integral part of management accounting. These techniques lay down targets; compare performance, adherence to plans and progress of various sections of the organization.

PART-C

1.What are the tools and techniques of management accounting

i) Financial policy and accounting: Every business concern has not plan for its sources of funds. The fund can be raised out of different sources.Utlising a particular source depends on cost of servicing the source, terms of repayment in case of borrowings.

ii) Analysis of financial statement:

Analysis of financial statements is means to classify and present the data in a manner useful to the management.

iii) Historical cost accounting:

Costs are recorded after being incurred for comparison with predetermined. The actual are compared with budgets to reveal deviations and individuals responsible for the same.

iv) Standard costing: Standard costing is an a important technique of cost control. In standard costing the costs are determined in advance by systematic analysis.

v) Marginal costing: Under marginal costing, the cost of products is divided into fixed and variable portions. While the variable costs are taken for decision making, fixed costs are treated as period costs to be charged to costing profit and loss account.

vi) Management Information system: An important function of management accounting is reporting. This function has improved considerably with the developing of electronic data processing data.

2. Difference between financial accounting and management accounting?

Financial Accounting

i)The purpose of financial accounting is to ascertain profit and loss by preparing profit and loss and balance sheet

ii) Financial accounting records transactions as when they occur .

iii) Financial accounting is historical and ojective

iv) Financial accounting analyses data of the business as a whole

v) Financial accounting provides consolidated information of the whole enterprise

Management accounting

i) The purpose of management accounting is to provide information to the management for decisions making on internal operations.
ii) management accounting is concerned with future plans and operations
iii) management accounting evaluates the performance of different department, divisions and as per the requirement of the management
iv) the management accountant has flexibility in following different standards set by the management
v) management accounting is of voluntary adoption y the management to function effectively
vi) Prompt quick reporting is the main feature of management accounting
vii) management accounting does not have rigid principles
viii) the management accounting statements and reports are means for internal purpose and they are not subject to audits

UNIT-II

PART-A

1. What are financial statements?

Financial statements refer to formal and original statements prepared by a business concern to disclose its financial information. Financial statements prepared for the purpose of presenting a periodical review or report on the progress by the management.

2. What is common size statement?

Common size statements indicate the relationship of various items with some common items. Income statements, the sale figure is taken as basis and all other figures are expressed as percentage of sales.

3. Explain the meaning of trend Analysis of financial statements.

Trend signifies a tendency and as such the review and appraisal of tendency in accounting variables are nothing but trend analysis. Trend analysis is carried out by calculating trend ratios (percentage) plotting the accounting data on graph or chart. Trend analysis is significant for forecasting and budgeting.

PART-B

1.The following are the income statement of jeevan ltd, for the year ending 31st December 1998 and 1999. you are required to prepare a comparative income statement for the two years.

Particulars	31.121998 Rs	31.12.1999 Rs
Net sales	10,00,000	12,00,000
Cost of goods sold	5,50,000	6,05,000
Operating expenses: Adminstration Selling	 80,000 60,000	 1,00,000 80,000
Non-operating expenses: Interest Income-tax	 40,000 50,000	 50,000 80,000

solution:

Jeevan limited

Comparative Income statement

for the years ended 31st December 1998 and 1999

	1998 Rs	1999 Rs	Increase or decrease in 1998 and 1999 Amount percentage Rs	%
Net sales	10,00,000	12,00,000	2,00,000	20
Less: cost of goods sold	5,50,000	6,05,000	55000	10
Gross profit	4,50,000	5,95,000	1,45,000	32.22
Operating expenses:				
Adminstration	80,000	1,00,000	20000	25
Selling	60,000	80,000	20000	33.33
Total Operating expenses	1,40,000	1,80,000	40,000	28.57
Operating profit A-B	3,10,000	4,15,000	1,05,000	33.87
Non operating expenses:				
Interest	40,000	50,000	10000	25
Income tax	50,000	80,000	30,000	60
Total non operating expense (D)	90,000	1,30,000	40,000	44.44
Net profit (C-D)	2,20,000	2,85,000	65,000	29.55

PART-C

1. Dhandapani and co ltd furnishes the following balance sheet for the years 1997 and 1998.Prepare common size balance sheets.

Balance sheet

Liabilities	1997 Rs	1998 Rs	Assets	1997 Rs	1998 Rs
Share capital	2,00,000	3,00,000	Buildings	4,00,000	4,00,000
Reserves	6,00,000	7,00,000	Machinery	6,00,000	10,00,000
10% debentures	2,00,000	3,00,000	Stock	2,00,000	3,00,000
Creditors	3,00,000	5,00,000	Debtors	2,00,000	2,50,000
Bills payable	1,00,000	80,000	Cash at bank	1,00,000	50,000
Tax payable	1,00,000	1,20,000			
	15,00,000	20,00,000		15,00,000	20,00,000

solution:

Dhandapani & co ltd

Common size balance sheet as on 31st December 1997 and 1998

Assets	1997 Amount	%	1998 Amount	%
Current Assets:				
Cash at bank	1,00,000	6.67	50,000	2.50
Debtors	2,00,000	13.33	2,50,000	12.50
Stock	2,00,000	13.33	3,00,000	15.00
Total current Assets (A)	5,00,000	33.33	6,00,000	30.00
Fixed Assets:				
Buildings	4,00,000	26.67	4,00,000	20.00
Machinery	6,00,000	40.00	10,00,000	50.00
Total fixed Assets	10,00,000	66.67	14,00,000	70.00

Total Assets (A+B)	15,00,000	100.00	20,00,000	100.00
Liabilities and capital: Creditors Bills payable Tax payable	 3,00,000 1,00,000 1,00,000	 20.00 6.67 6.66	 5,00,000 80,000 1,20,000	 25.00 4.00 6.00
Total current liabilities(A)	5,00,000	33.33	7,00,000	35.00
Long term liabilities: 10% Debentures	 2,00,000	 13.33	 3,00,000	 15.00
Total liabilities A+B=C	7,00,000	46.67	10,00,000	50.00
Capital & Reserves: Share capital Reserves	 2,00,000 6,00,000	 13.33 40.00	 3,00,000 7,00,000	 15.00 35.00
Total share holders' funds (D)	8,00,000	53.33	10,00,000	50.00
Total Liabilities and capital (C+D)	15,00,000	100.00	20,00,000	100.00

UNIT –III

PART-A

1.What is Ratio?

Ratio can be defined as " Relationship expressed in quantitative terms, between figures which have cause and effect relationship or which are connected with each other in some manner or the other"

2.What is Ratio Analysis?

Ratio analysis is an age old technique of financial analysis. " the process of determining and presenting the relationship of items and groups of items in the financial statements"

3. Explain the meaning, of R.O.I.

This is called "Return on Investment. It measures the sufficiency or otherwise of profit in relation to capital employed.

4. What are the steps involved in Ratio Analysis?

i) Selection of relevant information

ii)Comparison of calculated Ratios

iii) Interpretation and Reporting

5. What are the modes of expressing ratios?

i) In proportions

ii) In Rate or time or coefficient

iii) In percentage.

PART-B

1. Calculate stock turnover ratio and stock turnover period form the following.

sales Rs.10,00,000, gross profit ratio 20% stock at the beginning of the year Rs.1,75,000, stock at the end of the year Rs.1,45,000.

solution:

$$\text{stock turn over ratio} = \frac{\text{Cost of sales}}{\text{Average stock}}$$

Cost of sales = Sales – Gross profit

1,00,000- (1,00,000*20%)

= 10,00,000-2,00,000 = Rs.8,00,000

$$\text{Average stock} = \frac{\text{Opening stock + closing stock}}{2}$$

$$= \frac{1,75,000+1,45,000}{2}$$

= Rs 1, 60,000

$$\text{Stock turnover ratio} = \frac{8,00,000}{1,60,000} = 5 \text{ times}$$

$$\text{Stock turnover period:} \frac{\text{Days / months in the year}}{\text{stock turnover ratio}}$$

Stock turnover period in days =365/5 = 73 days

Stock turnover period in months= 12/5 = 2.4 months

2. You are given the following information:

Cash	18,000
Debtors	1,42,000
Closing stock	1,80,000
Bills payable	27,000
Creditors	50,000
Outstanding exp	15,000
Tax payable	75,000

calculate (a) current ratio (b) Liquidity ratio (c) Absolute liquidity ratio.

solution:

$$\text{(a) current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

current assets:		**Current liabilities:**	
cash	18000	Bills payable	27,000
Debtors	1,42,000	Creditors	50,000
Clsoing stock	1,80,000	Outstanding expenses	15,000
		Tax payable	75,000
total=	3,40,000	total =	1, 67,000

$$\text{current ratio} = \frac{3,40,000}{1,67,000} = 2.036 \text{ times}$$

$$\text{b) Liquid ratio} = \frac{\text{liquid assets}}{\text{current liabilities}}$$

liquid assets = current assets-stock and prepaid expenses

= 3,40,000-1,80,000 = 1,60,000

= 1,60,000/1,67,000 = 0.96

$$\text{c)Absolute liquidity ratio} = \frac{\text{cash and bank balance+ Marketable securities}}{\text{current liabilities}}$$

$$= \frac{18,000}{1,67,000} = 0.11$$

PART –C

1.Prepare a Balance sheet with as many details as possible from the following information.

Gross profit ratio	20%
Debtors turnover	6 times
Fixed assets to net worth	0.80
Reserves to capital	0.50
current ratio	2.50
Liquid ratio	1.50

Net working capital Rs. 3,00,000
Stock turnover ratio 6 times
solution:

Liabilities	RS	Assets	RS	RS
Capital 10,00,000 Reserves and surplus 5,00,000 Current liabilties	 15,00,000 2,00,000	Fixed assets Current assets: Closing stock Debtors Liquid assets	 2,00,000 2,50,000 50,000	12,00,000 5,00,000
	17,00,000			17,00,000

i) Current ratio given = 2.50

$$\text{current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$

working capital = current assets- current liabilities
= 2.5-1 =1.5
current assets = 3,00,000*2.5/1.5 = Rs.5,00,000

Current liabilities = 3,00,000*1/1.5 = Rs 2,00,000

ii) Calculation of liquid assets and stock
liauid ratio given = 1.50

$$\text{Liquid ratio} = \frac{\text{liquid assets}}{\text{current liabilities}}$$

$$1.5 = \frac{\text{liquid assets}}{2,00,000}$$

liquid assets = 2,00,000*1.5 = Rs.3,00,000
liquid assets = current assets-stock
3,00,000 = 5,00,000-stock
stock = 5,00,000-3,00,000

= Rs. 2,00,000

iii) Calculation of Debtors

Stock turnover ratio given = 6 times

$$\text{stock turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

$$6 = \frac{\text{cost of good sold}}{2,00,000}$$

cost of goods sold = 2,00,000*6

= Rs . 12,00,000

Gross profit ratio given 20%

when sales=100 gross profit=20 cost of good sold = 80

sales = cost of goods sold = 100/80

= 12,00,000* 100/80 = Rs 15,00,000

Debtors turnover = Credit sales/ Average receivables

6 = 15,00,000/Average receivables

Average receivables = 15,00,000/6

= 2,50,000

iv) other liquid assets

liquid assets 3,00,000

less: Debtors 2,50,000

other liquid assets = 50,000

v) Calculation of fixed assets and net worth

Fixed assets to net worth given 0.80

Assuming there are no long tem debt and fictitious assets

Balance sheet equation= net worth+ current liabilities = fixed assets +current assets

Assuming net worth as x

x+ 2,00,000 = 8x+5,00,000

x-8x = 5,00,000-2,00,000 2x= 3,00,000

x= 3,00,000/2 Rs = 15,00,000

Net worth = 15,00,000

Fixed assets = 15,00,000*.8 = 12,00,000

vi) Calculation of capital and reserves

Reserves to capital given = 0.50

Net worth = 0.50+1= 1.5

Net worth = 1.5 = 15,00,000

capital = 15,00,000* 1/1.5 =Rs 10,00,000

Reserves = 15,00,000* 0.5/1.5 = Rs 5,00,000

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Unit.IV

Part – A

1. Find out the quantity of Raw material to be purchased from the following details

	Rs
opening Stock of Raw material	10000
Material consumed	21000
closing Stock of Material	7000

Solution

Material consumed	21000
+ closing Stock	7000
	28000
– opening stock	10000
	18000

2) Prepare production budget

Budgeted sales Rs	50000
stock on 31-12-16	10000
stock on 1-1-16	15000

Solution

Sales	50000
+ clo stock	10000
	60000
– op. stock	15000

3) Fixed cost at 50% activity level is Rs 50000. what will be the fixed cost at 60% and 80% activity level

Solution: Fixed cost Rs 50000 for 60% and 80% activity level.

4) Variable overhead for production of 10000 units at Rs 20000. what will be the variable overheads for production of (a) 15000 units (b) 20000 units.

Solution (a) $\frac{20000}{10000} \times 15000 = 30000$

(b) $\frac{20000}{10000} \times 20000 = 40000$ //

5) Ascertain the amount of profit or Loss on sale of Machinary

Cost of Machinary	100000
Accumulated Depreciation	30000
Sales value of Machinary	85000

Solution:

Cost	100000
(-) Accu Dep	30000
Book value	70000
Sales value	85000
Profit on Sale	15000

Part-B

1.) From the following particulars, prepare production budget for 3 months ending 30th June 2013.

	Estimated sales units
April 2013	140 000
May 2013	160 000
June 2013	130 000
July 2013	120 000

It is the policy of the company to maintain 50% of the month's sales are opening stock.

Solution

	April	May	June
Estimated sales	140000	160000	130000
(+) closing stock	80000	65000	60000
	220000	225000	190000
(-) Op stock	70000	80000	65000
Production ⇒	150000	145000	125000

2) prepare a Flexible Budget for overheads on the basis of the following data. Ascertain overhead rate 50%.

	At 60% capacity
Variable overhead:	
Indirect Material	6000
Indirect Labour	18000
Semi-variable O.H:	
Electricity 40% Fixed	30000
Repair 80% Fixed	3000
Fixed O.H:	
Depreciation	16500
Insurance	4500
Salaries	93000
Total over head	₹ 186000

Solution

Flexible budget

		50%	60%
Indirect Material		5000	6000
Indirect wages		15000	18000
Electricity	Fixed	12000	12000
	Variable	15000	18000
Repair	Fixed	2400	2400
	Variable	500	600
Fixed O.H:	Dep	16500	16500
	Insurance	4500	4500
	Salaries	15000	15000
Total cost		155000	186000

3) From the following information, calculate Cash from operation:

	Rs.
Net profit for the year	200000
Total sales	400000
Debtors at the beginning of the year	132000
Debtor at the end of the year	99000

Solution

Statement of Cash from Operation

Net profit	200000
(+) Dec in CA	33000
Cash from operation	233000

4) Calculate funds from operation from the following Profit or Loss a/c

Profit and Loss Account

To Expenses paid	300000	By Gross profit	450000
To Depreciation	70000	By Gain on sale of land	60000
To Loss on sale of Machine	4000		
To Discount	200		
To Goodwill	20000		
To Net profit	115800		
	510000		510000

Statement showing funds from operation

N.P as per P&L		115800
Add Dep	70000	
Loss on sale of Machine	4000	
Goodwill	20000	94000
		209800
Less Gain on sale of land		60000
Funds from operation		149800

Part-C

① The company at present operating 80% capacity production and sells 40 000 units.

	Per unit
Direct material	15
Direct wages	10
Factory OH 30% Fixed	5
Office OH. 60% variable	3
Selling & Distribution OH (50% variable)	2

Prepare a budget at 60% and 90% capacity

Solution

Flexible budget

Par	30000 units 60% P.U	Amt	40 000 units 80% P.U	Amt	45000 units 90% P.U	Amt
Direct material	15	450000	15	600000	15	675000
D. wages	10	300000	10	400000	10	450000
Factory OH: V 70%	3.5	105000	3.5	140000	3.5	157500
F 30%	2.0	60000	1.5	60000	1.33	60000
office overhead:						
V: 60%	1.8	54000	1.8	72000	1.8	81000
F 40%	1.6	48000	1.2	48000	1.07	48000
Selling OH						
variable 50%	1	30000	1	40000	1	45000
Fixed 50%	1.33	40000	1	40000	0.89	40000
Total cost	36.23	1087000	35	1400000	34.59	1556500

2) From the following Balance sheet, prepare a cash flow statement:

Liabilities	2011	2012	Asset	2011	2012
Share capital	200000	250000	Land	50000	66000
P&L a/c	10000	23000	Stock	80000	90000
Creditors	70000	45000	Drs.	180000	115000
			Cash	30000	47000
	280000	318000		280000	318000

Solution

Cash Flow Statement

N P before tax	13000	
Operating profit	13000	
Increase Stock	(10000)	
Dec in Drs	5000	
Dec in Crs	(25000)	(17000)
Net cash		
Purchase of Land	(16000)	(16000)
Issue of Shares	50000	50000
Net increase in cash		17000
Add Cash in the beginning		30000
Cash closing balance =>		47000

3) From the following information, prepare a cash budget for the period from Jan to April

	Expected sales Rs.	Expected purchase Rs
January	60,000	48,000
February	40,000	45,000
March	45,000	31,000
April	40000	40,000

Wages to be paid to workers will be Rs 5000 pm. Cash balance of 1st Jan. may be assumed to be Rs 8000.

Solution:

Cash budget for 4 months

Particulars:	Jan:	Feb	March	April
Opening Cash	8000	15000	5000	14000
Add Receipts	60000	40000	45000	40000
(A)	68000	55000	50000	54000
Payments:				
payment to Suppliers	48000	45000	31000	40000
Payment of wages	5000	5000	5000	5000
	53000	50000	36000	45000
Closing Cash bal (A) - (B)	15000	5000	14000	9000

Unit: V

part-A

① Comput the Margin of Safety.

Profit Rs 225000
P/V ratio 40%.

Solution: $MOS = \frac{profit}{PV}$

$= \frac{225000}{40\%}$

$= 562500$

② Sales Rs 2,00000
Variable cost Rs 100000
Find out PV ratio

Solution = PV ratio $= \frac{C}{S} \times 100$

$= \frac{100000}{200000} \times 100$

$= 50\%$.

③ Find out Variable Cost
Sales Rs 400000
PV ratio 25%.

Solution: Variable cost $400000 \times 75\%$
$= 300000$.

4) Calculate the amount of Contribution

Profit Rs 75000

Fixed cost Rs 2,30000

Solution:

$$\text{Contribution} = 75000 + 230000$$

$$= 305000$$

5) Profit required Rs 200000

Fixed cost Rs 400000

P/V ratio 40%

Find out the required sales to earn a profit required.

Solution:

$$\text{Required Profit} = \frac{FC + RP}{PV}$$

$$= \frac{400000 + 200000}{40\%}$$

$$= \frac{600000}{40\%}$$

$$= \text{Rs } 15{,}00000.$$

Part-B

1) From the following information, find out PV ratio and Margin of safety

Sales Rs.10,00 000

Variable cost Rs 400000

Fixed cost Rs 400000

Solution:

Marginal cost statement

Sales	10,00 000
(-) Variable Cost	4,00000
Contribution	600000
(-) Fixed cost	400000
Profit	200000

(i) PV Ratio $= \frac{C}{S} \times 100 \quad \frac{600000}{10,00000} \times 100$

$= 60\%$

(ii) MOS $= \frac{\text{Profit}}{\text{PV}} = \frac{200000}{60\%}$

$= 3,33,333$

2) From the following information to ABC Ltd.,
you are required to find out
a) P/V Ratio (b) BEP (c) Profit (d) MOS.

	Rs.
Total fixed cost	4500
Total variable cost	7500
Total sales	15000

Solution:

Marginal cost statement

sales	15000
(−) VC	7500
Cont	7500
(−) FC	4500
profit	3000

(a) PV ratio $= \frac{C}{S} \times 100 \quad \frac{7500}{15000} \times 100 = 50\%$.

(b) BEP $= \frac{FC}{PV} = \frac{4500}{50\%} = 9000$

(c) profit 3000

(d) MOS = AS − BEP 15000 − 9000 = 6000 //

3) Calculate the Break Even point from the following data:

Fixed expenses Rs 150000

Variable cost per unit Rs 10

Selling prize per unit Rs 15

Solution

$$BEP = \frac{FC}{\text{Contribution PU}}$$

$$\text{Contribution PU} = SP - VC$$

$$= 15 - 10$$

$$= 5$$

$$BEP = \frac{150000}{5}$$

$$= 30\,000 \text{ units}$$

$$BEP = 30\,000 \times 15$$

Rs: 450000

4)

From the following data, determine the break-even point and Margin of Safety

fixed overhead Rs 25000

Sales Rs 400000

variable OH Rs 300000

Also find out sales to earn a profit of Rs 40000

<u>Solution</u> Marginal cost statement

Sales	400000
(−) VC	300000
C :	100000
(−) FC	25000
Profit	75000

(i) $PV = \frac{C}{S} \times 100$ $\frac{100000}{400000} \times 100 = 25\%$

(ii) $BEP = \frac{FC}{PV}$ $\frac{25000}{25\%} = 100000$

(iii) $MOS = AS - BEP$ $400000 - 100000 = 300000$

(iv) $sales = \frac{FC + RP}{PV} = \frac{25000 + 40000}{25\%}$

$\frac{65000}{25\%} = 260000$ //

Part. C

1. The sales turnover and profit during two years were as follows:

year	sales Rs.	profit Rs.
2013	140000	15000
2014	160000	20000

Calculate

(a) P/V ratio (b) BEP

(c) Sales required to earn a profit of Rs 40000

d) Fixed expenses

e) Profit when sales are Rs 120000.

Solution:

$$\text{PV ratio} = \frac{\text{changes in profit}}{\text{changes in sales}} \times 100$$

$$\frac{5000}{20000} \times 100 = 25\%$$

$$BEP = FC/PV$$

FC = 140000 × 25% = 35000

(−) profit 15000

FC. 20000

$$BEP = \frac{20000}{25\%} = 80000$$

c) Sales required to earn a profit of Rs 40000

$$Sales = \frac{FC + RP}{PV}$$

$$= \frac{40000 + 20000}{25\%}$$

$$= 240000$$

d) $FC = 20000$

(e) Profit when sales are Rs 120000

$$Cont = 120000 \times 25\%$$

$$= 30000$$

less FC	20000
profit:	10000

(2) From the following details find out
a) Profit volume ratio (b) BEP (c) Margin of Safety.

	₹
Sales	100000
Total Cost	80000
Fixed cost	20000
Net profit	20000

Solution

Marginal cost statement

Sales	100000
(−) VC	60 000
Contribution	40 000
(−) FC	20 000
profit	20 000

$$PV \text{ ratio} = \frac{C}{S} \times 100 \quad \frac{40000}{100000} \times 100 = 40\%$$

$$BEP = \frac{FC}{PV} = \frac{20000}{40\%} = 50000$$

$$MOS = AS - BEP$$

$$100000 - 50000$$

$$= 50000$$

(3) x ltd has prepared the following budget estimates for the year 2007-08.

Sales units 15000

Fixed expenses Rs 34000

sales value Rs 150000

Variable cost 6 per unit

You are required to:

(i) Find out Pv ratio, BEP and Margin of safety

(ii) Calculate the Revised Pv ratio BEP and Margin of safety on decrease of 10%. in Selling Price.

Solution:

Marginal cost Statement

Sales		150000
(-) VC	15000 x 6	90000
	C	60000
	(-) FC	34000
	Profit	26000

(i) $Pr = \frac{C}{S} \times 100$ $\frac{60000}{150000} \times 100 = 40\%$

(ii) $BEP = \frac{FC}{PV} = \frac{34000}{40\%} = 85000$

(iii) $MOS = \cancel{AS} - BEP$ $150000 - 85000 = 65000$

<u>Revised</u>

$$
\begin{array}{ll}
SP: & 10 \\
(-)\ Dec\ 10\% & 1 \\
\hline
 & 9 \\
\hline
\end{array}
$$

$Pr = \frac{C}{S} \times 100$ $\frac{3}{9} \times 100 = 33.33\%$

$BEP = \frac{FC}{PV} = \frac{34000}{33.333\%} = 102000$

$MOS = AS - BEP$

$= 135000 - 102000$

$= 33000$//.