

Reg. No-----
[16CCP301]

KARPAGAM UNIVERSITY
Karpagam Academy of Higher Education
(Established Under Section 3 of UGC Act, 1956)
COIMBATORE-641 021
(For the candidates admitted from 2016 onwards)
Third Semester
COMMECE (CA)
Second Internal Examination September 2017
II – M.Com (CA)
MANAGEMENT ACCOUNTING

Time: 2 Hrs
Date: 11/09/2017

Maximum Marks: 50

PART – A (20 X 1 =20 marks)
ANSWER ALL QUESTIONS

1. Management accounting involves _____
a) Recording of costs b) Recording of transaction
c) Preparation of accounts d) **Analysis and interpretation of data**
2. Management accounting and cost accounting are _____
a) Supplementary to each other b) **Complementary to each other**
c) Independent to each other d) Opposite to each other
3. Management accounting makes _____ process more modern and scientific by providing significant information relating to various alternatives in terms of cost and revenue
a) Forecasting b) Planning c) **Decision making** d) budgeting
4. Management accounting is an important medium of _____
a) Motivation b) Co-ordination c) **Communication** d) Delegation
5. The ideal current ratio is _____
a) **2:1** b) 3:1 c) 4:1 d) 3:2
6. Liquid ratio is also known as _____ ratio.
a) Current b) **Acid test** c) Velocity d) Absolute Liquid
7. A _____ inventory ratio indicates an inefficient management of inventory.
a) Low b) High c) Medium d) **Both a and b**
8. _____ ratio attempts to measure the utilization and effectiveness of the use of current assets
a) **Current assets turn over** b) Current ratio c) Net current assets turnover d) Liquid Ratio
9. The networking capital can be _____
a) Positive b) Negative c) **positive or negative** d) Neutral
10. Making prompt payment is a base to create and maintain _____
a) Cash discount b) Good will c) **Ability to face crisis** d) Credit
11. Short term working capital are of _____ types.
a) **One** b) Two c) Three d) Four
12. _____ can be discounted with a bank.
a) **Credit papers** b) Trade credit c) Bank credit d) Customer's cr
13. For _____ marginal costing is more helpful to the management.
a) Planning b) co-ordinating c) Decision making d) **Staffing**
14. Economists define marginal cost as the producing one additional unit as _____
a) Total cost b) Average cost c) **Additional cost** d) Marginal cost
15. _____ is a technique or working costing, which is used in conjunction with other methods of costing.
a) Job costing b) Standard costing c) **Marginal costing** d) Standard costing
16. Period costs are not carried forward to next years _____
a) **Income** b) Expenses c) Profit d) Loss
17. A master budget is also known as _____ all functional budgets.
a) **Summary** b) Production c) Sales d) Finance

18. _____ budget is one which incorporates all functional budgets.
 a) **Master** b) Flexible c) Sales d) Finance
19. Sales budget is _____
 a) **A functional budget** b) a Expenditure budget c) a Master budget
 d) A Flexible budget
20. A factor which influences all other budget is _____
 a) **Limiting factor** b) Production factor c) Master budget d) External factor

PART – B (3X2=6marks)
ANSWER ALL QUESTIONS

21. Write a short notes on production Budget

The preparation of production budget is dependent on the sales budget . production budget is an estimate of quantity of goods that must be produced during the budget period. It may be stated in terms of money or quantity (weights, units etc) or both. Production may be calculated as follows:

Units to produced= budget sales+ Desired closing stock- Opening stock

22. Write a short note on fixed and variable cost.

Fixed cost:

Expenses that do not vary with the volume of production are known as fixed expenses. Eg Manager's salary, rent and taxes, insurance etc. It should be noted that fixed charges are fixed overhead is most useful in formulating a price fixing policy. Fixed cost per unit is not fixed.

Variable cost:

Expenses that vary almost in direct proportion to the volume of production or sales are called variable expenses. Eg Electric power and fuel, packing materials, consumable stores. It should be noted that variable cost per unit is fixed.

23. How cash flow statement differs from funds flow statement?

Cash flow statement differs from funds flow statement in following ways:

- 1) In a cash flow statement, only cash receipts and payment are recorded. But in a funds flow statement increase or decrease in working capital is recorded.
- 2) The cash flow statement indicates the causes for changes in cash position. On the other hand, a funds flow statement shows the cause of changes in working capital.
- 3) Cash flow statement is appropriate for short range changes for short range planning while funds flow statement is appropriate for long range planning.
- 4) Whenever there is inflow of cash there will definitely be inflow of funds. But it is not vice versa .inflow of funds does not necessarily mean inflow of cash.

PART – C (3X8=24 marks)

ALL THE QUESTION CARRY EQUAL MARKS

24.a) From the following two balance sheets as at march 31, 1999 and 2000 you are required to prepare a fund flow statement.

Particulars	31 st March 1999 Rs	31 March 2000 Rs	31 st March 1999 Rs	31March 2000 Rs
Liabilities :				
Share capital	40,000	45,000		
Trade creditors	10,000	23,000		
Profit &loss A/c	2,30,000	2,50,000		
Assets:				
Cash			30,000	47,000
Debtors			1,20,000	1,15,000
Stock-in-trade			80,000	90,000
Land			50,000	66,000
	2,80,000	3,18,000	2,80,000	3,18,000

Sol: Schedule of changes in working capital

Particulars	31.03.1999 Rs	31.03.2000 Rs	Increase Rs	Decrease Rs
Current assets:				
Cash	30,000	47,000	17,000	_____
Debtors	1,20,000	1,15,000		5,000
Stock –in-trade	80,000	90,000	10,000	_____
	2,30,000	2,52,000		
Less: Current liability:				
Trade creditors	10,000	23,000	----	13,000
Working capital	2,20,000	2,29,000	27,000	18,000
Increase in working Capital	9,000			9,000
	2,29,000	2,29,000	27,000	27,000

Fund flow statement for the year ended 31st march, 2000

Sources	Rs	Application	Rs
Issue of shares	5,000	purchase of land	16,000
Fund from operation	20,000	Increasing in capital	9,000
	<hr/>		<hr/>
	25,000		25,000

(Or)

b) Statement of financial position of Mr.Arun is given below.

Liabilities	30.6.1999	30.6.2000	Assets	30.6.1999	30.6.2000
Accounts payable	29,000	25,000	cash	40,000	30,000
Capital	7,39,000	6,15,000	Debtors	20,000	17,000
			stock	8,000	13,000
			building	1,00,000	80,000
			Other fixed assets	6,00,000	5,00,000
	7,68,000	6,40,000		7,68,000	6,40,000

Additional information:

- 1) There were no drawings
- 2) There were no purchases or sale of either building or other fixed assets. Prepare a statement of cash flow

Sol:

Cash flow statement of Arun

Sources	Rs	Uses	Rs
Opening cash balance	40,000	Decrease in accounts payable	4,000
Decrease in debtors	3,000	Increase in stock	5,000
		Cash trading loss	4,000
		Closing cash balance	30,000
	<hr/>		<hr/>
	43,000		43,000

Building Accounting

To balance b/d	1,00,000	By adjusted profit	20,000
		By balance c/d	80,000
	<u>1,00,000</u>		<u>1,00,000</u>

Other Fixed Assets Account

To balance b/d	6,00,000	By adjusted profit	1,00,000
		By Balance c/d	5,00,000
	<u>6,00,000</u>		<u>6,00,000</u>

Capital Account

To Balance c/d	7,39,000	By Balance b/d	7,39,000
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Adjusted Profit and Loss Account

1,24,000	By Net loss	1,24,000
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25. a) "From the following information relating to Vandaiyar Bros Ltd you are required to find out i) P/V ratio ii) break even point iii) profit iv) margin of safety v) volume of sales to earn profit of Rs.6,000.

	Rs.
Total fixed costs	4,500
Total variable costs	7,500
Total sales	15,000

Sol:

$$\begin{aligned} \text{a) Profit volume ratio} &= \frac{\text{Contribution}}{\text{Sales}} \times 100\% \\ &= \frac{7,500}{15,000} \times 100\% = 50\% \end{aligned}$$

b) Break even point (in Rs.) = Fixed expences

P.V. ratio

$$= \frac{4,500}{50} \times 100 = \text{Rs.}9000$$

c) Profit = sales-total cost

Rs. 3000

d) Margin of safety = present sales - break even sales

Rs=6,000

(Or)

(b) Assuming that the cost structure and selling prices remain the same in periods I and II find out:

1. P/V Ratio 2. Break even Sales 3. Profit when sales are Rs.1,00,000

4. Sales required to earn a profit of Rs.20,000

5. Margin of safety in II nd period

Period	Sales Rs.	Profit Rs.
I	1,20,000	9,000
II	1,40,000	13,000

a) Profit volume ratio = $\frac{\text{Contribution}}{\text{Sales}} \times 100\%$

$$\frac{4000}{20,000} \times 100 = 20\%$$

b) Break even point

Contribution = sales × P.V ratio

F. exp =15,000p.a

c) Profit when sales are Rs. 1,00,000:

$$\text{Contribution} = \text{sales} \times \text{P.V ratio}$$

$$\text{Profit} = \text{Rs.5,000}$$

d) Sales required to earn a profit of Rs.20,000
Fixed expenses +desired profit

$$\frac{\text{Rs.1,75,000}}{\text{P.V ratio}}$$

e) Margin of safety in II period.

$$= \frac{\text{Profit}}{\text{P.V ratio}} = \frac{13,000}{20} \times 100 = \text{Rs.65,000}$$

26.a) The expenses of budgeted production of 10,000 units in a factory are furnished below:

	Per Unit (Rs.)
Materials	70
Labour	25
Variable Overhead	20
Fixed Overhead (Rs. 1,00,000)	10
Variable Expenses (Direct)	5
Selling Expenses (10% Fixed)	13
Distribution Expenses (20% Fixed)	7
Administration Expenses (Rs. 50,000)	5

Total Cost per unit (to make and sell)	155

Prepare a budget for production of :

(a) 8,000 units, (b) 6,000 units, and (c) indicate cost per unit at both the levels.

Assume that administration expenses are fixed for all levels of production.

Sol:

Flexible budget					
10,000 units		8,000units		6,000units	
Per unit	total amount	Per unit	total amount	Per unit	total amount
Rs	Rs	Rs	Rs	Rs	Rs
155.00	15,50,000	159.425	12,75,400	166,801	10,00,800

$$\frac{\text{Fixed 10\% (i.e.) } 13 \times 10}{100} = \text{Rs. 1.30}$$

For 10,000 units = $10,000 \times 1.30 = \text{Rs. 13,000}$

$$\frac{\text{Variable 90\% (i.e. } 13 \times 90)}{100} = \text{Rs. 11.70}$$

(Or)

b) BPL Ltd. Wishes to arrange overdraft facilities with its banker during the period April to June 2008, when it will be manufacturing mostly for stock. Prepare cash budget for the above period from the following data, indicating the extent of the bank facilities the company will require at the end of each month.

Month	Credit Sales (Rs.)	Purchases (Rs.)	Wages (Rs)
February 2008	1,80,000	1,24,800	12,000
March	1,92,000	1,44,000	14,000
April	1,08,000	2,43,000	11,000
May	1,74,000	2,46,000	10,000
June	1,26,000	2,68,000	15,000

2. 50% of credit sales are realized in the month following the sales and the remaining 50% in the second month following. Creditors are paid in the month following the month of purchase. Lag in payment of wages 1 month.

3. Cash at bank on 1-4-2008 Rs.25,000

Sol:

Cash budget for 3 months ending June 2008

	April	May	June
	Rs	Rs	Rs
Receipts:			
total	2,11,000	2,03,000	1,41,000
payments			
total	1,58,000	2,54,000	2,56,000

RegisterNo.....[16CCP301]

KARPAGAM UNIVERSITY
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COIMBATORE-21
(For the candidate admitted 2016 onwards)
First Internal Test- July 2017
MANAGEMENT ACCOUNTING
II MCOM CA

Time: 2 hours

Maximum Marks: 50

PART-A (20*1=20 Marks)

Choose the Best Answer

- 1) Management accounting is also known as
a) Cost accounting b) financial accounting c) Corporate accounting d) Decision accounting.
2. In management accounting, the analysis is done for _____
a) Monetary transactions b) Non-Monetary transactions c) Both d) Accrual only
3. Management accounting helps the management in _____
a) Planning b) Organizing c) Staffing & Control d) All of the above
4. Which of the following accounting system has a wider scope?
a) Financial Accounting b) Management Accounting c) Financial Management
d) Cost Accounting
5. Management accounting involves
a) Recording of costs b) Recording of transaction c) Preparation of accounts
d) Analysis and interpretation of data
6. ----- is helpful in increasing interpretation of data.
a) Financial accounting b) Management accounting
c) Cost accounting d) Corporate accounting.
7. Current assets include -----
a) Trade Investments b) Machinery c) Goodwill d) Sundry Debtors
8. The term _____ represent the difference between current assets and current liabilities
a) Gross working capital b) Net working capital c) Networth d) Management Decision
9. The indicated quotient of two mathematical expression is known as _____
a) Ratio b) Analysis c) Working capital d) Statements
- 10) Current ratio is an example for _____ ratio.
a) Balance sheet b) Income statement c) Inter statement d) Intra Statement
- 11) _____ ratio is an example for long term solvency ratio.
a) Gross profit b) Debt equity c) Net profit d) Price earning
- 12) ideal current ratio is _____
a) 2:1 b) 3:1 c) 4:1 d) 3:2
- 13) Liquid ratio is also known as _____ ratio.
a) current b) Acid test c) Velocity d) Quick
- 14) Operating cost /net sales X 100= _____

- a) Gross profit ratio b) Net profit ratio c) Operating ratio d) Current ratio
- 15) _____ ratio denotes the relationship between stock and sales.
 a) Stock turn over ratio b) fixed assets turnover ratio
 c) working capital ratio d) gross profit ratio
- 16) Opening stock + closing stock/2 = _____
 a) Total stock b) Average stock c) Total liabilities d) Total Assets
- 17) Proprietary funds= -----+Working capital
 a) Total asset b) Current asset c) Fixed asset d) Contingent Assets
- 18) _____ is essential for achieving business objectives
 a) Modification of data b) Planning and forecasting
 c) Financial analysis and interpretation d) Communication
- 19) Return on capital employed is one of the tools of _____
 a) Financial accounting b) Cost accounting c) Corporate accounting
 d) Management accounting
- 20) _____ is also known as Management oriented accounting.
 a) Management accounting b) Cost accounting c) Financial accounting d) Corporate Accounting

PART-B (3*2=6 Marks)
ANSWER ALL THE QUESTIONS

21. Define Management Accounting
22. Calculate gross profit ratio:
 Sales Rs.2,20,000, Sales Returns Rs.20,000, opening stock Rs.30,000, purchases Rs.1,75,000, purchase returns 15,000, closing stock Rs.40,000
23. Current ratio 2.5, working capital Rs.63,000. Calculate Current assets and current Liabilities

PART-B (3*8=24 Marks)
ANSWER ALL THE QUESTIONS

24. a) What are the difference between Financial Accounting and Management Accounting?
 (Or)
 b) What are the Scope and Functions of Management Accounting?
25. a) From the following information prepare a balance sheet .Show workings
- | | |
|--------------------------------------|--------------|
| 1. Working Capital | Rs. 75,000 |
| 2. Reserves and Surplus | Rs. 1,00,000 |
| 3. bank overdraft | Rs. 60,000 |
| 4. Current Ratio | 1.75 |
| 5. Liquid Ratio | 1.15 |
| 6. Fixed assets to proprietors funds | 0.75 |
| 7. Long term liabilities | NIL |

(Or)

b) Using on the information and the form given below, compute the balance sheet items for a firm having a sales of Rs.36 lakhs

Sales/Total Assets	3
Sales/Fixed Assets	5
Sales/Current Assets	7.5
Sales/Inventories	20
Sales/Debtors	15
Current ratio	2
Total Assets/Net worth	2.5
Debt/equity	1

Liabilities	Rs.	Assets	Rs.
Net worth	-----	Fixed assets	-----
Long term debt	-----	Inventories	-----
Current Liabilities	-----	Debtors	-----
		Liquid assets	-----
Total	-----	Total	-----

26.a) From the following particulars pertaining to assets and liabilities of a company.
calculate i) current ratio, ii) liquid ratio, iii) proprietary ratio iv) debt-equity ratio v)
Capital gearing ratio

Liabilities	Rs	Assets	Rs
50,000 equity shares of Rs.100 each	5,00,000	Land & building	6,00,000
2,000 8% preference shares of Rs.100 each	2,00,000	Plant and machinery	5,00,000
5,000 9% debentures of Rs.100 each	5,00,000	Stock	2,40,000
Reserves	1,50,000	Debtors	2,00,000
Creditors	1,50,000	Cash and bank	55,000
Bank overdraft	1,00,000	Prepaid expenses	5,000
	16,00,000		16,00,000

(Or)

b) Following ratios are related to the trading activities of Indian Traders Ltd.,

Debtor's velocity	3 months
Stock velocity	8 months
Creditor's velocity	2 months
Gross profit ratio	25%

Gross profit for the year ended 31st December 2010 amounts Rs.4,00,000. Closing stock of the year is Rs.10,000 above the opening stock. Bills receivable amount to Rs.25,000 and Bills payable to Rs.10,000.

Find out (a) Sales (b) Sundry debtors (c) Closing Stock (d) Sundry Creditors.



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Coimbatore - 641 021

SYLLABUS (2016-18)

16CCP301	MANAGEMENT ACCOUNTING	Semester – III			
		L	T	P	C
		4	-	-	4

Program Outcome

- ❖ The course incorporates Financial Statement Analysis, Ratio Analysis, Fund Flow and Cash Flow Analysis, Budgeting and Marginal Costing

Program Learning Outcome

- ❖ To familiarizes the students with the various concepts and elements of Financial Statement.
- ❖ To analysis the company's Performance with financial tools.
- ❖ To provide the students knowledge about budgetary control.

Unit – I

Management Accounting – Meaning – Definition – Objectives and Scope – Relationship between Management Accounting and Financial Accounting – Management Accounting and Cost Accounting

Unit – II

Financial Statement Analysis – Types of Financial Statement Analysis - Ratio Analysis – Meaning – Uses – Limitations – Classification of Ratios – Computation of Ratios from Financial Statements

Unit – III

Fund Flow Analysis – Cash Flow Analysis – Working Capital Statements – Funds from Operations

Unit – IV

Budgetary Control – Flexible Budget – Sales Budget – Cash Budget – Production Budget – Purchase Budget

Unit – V

Marginal Costing – Break Even Analysis – Applications of Marginal Costing Techniques – Determination of Sales Mix – Key factor – Make or Buy Decision (Simple Problems Only)

Note: Theory -20% Problems - 80%

SUGGESTED READINGS

Text Book

Maheswari, S.N. (2007). *Management Accounting*. New Delhi, Kalyani Publishers.

References

Sharma Shashi K. Gupta (2003). *Management Accounting*. New Delhi, Kalyani Publishers.

Khan, P.K. and Jain (2009). *Management Accounting*. New Delhi, Tata Mc Graw Hill Publishing Company Limited.



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II M. Com. CA

(2016-18)

MANAGEMENT ACCOUNTING – 16CCP301

LECTURE PLAN
UNIT - I

S. No.	Lecture Duration (hours)	Topics to be covered	Support material
1	1	Introduction to Management Accounting: Meaning, Definition of Management Accounting	R1 : 1 R2 : 1.10-1.12
2	1	Nature and scope of Management Accounting	R2 : 1.13-1.16
3	1	Functions of management accounting	T1 : 5 - 6
4	1	Management accounting Vs Cost accounting	T1: 9
5	1	Management accounting Vs Financial accounting	R2 : 1.19-1.21
6	1	Advantages of Management accounting	T1:1.16-1.17
7	1	Disadvantages of Management accounting	T1:9-10
8	1	Recapitulation and important question discussion	
Total number of hours planned for unit –I			8 Hours

UNIT II

S. No	Lecture Duration (hours)	Topics to be covered	Support material
1	1	Analysis and Interpretation of Financial Statements: -Introduction and Meaning	T1 : 92 - 95
2	1	Types of financial Analysis Analysis and Interpretation	T1 : 16 – 19
3	1	Ratio Analysis Meaning, objectives of Ratio Analysis	T1 : 116 – 117
4	1	Significance and limitations of Ratio Analysis	T1 : 117 – 118
5	1	Classifications of Ratio Analysis 1. Traditional Classification 2. Functional Classification 3. Significance Ratio	T1 : 118 – 124
6	1	Computation and Interpretation Profitability Ratios	T1 : 120
7	1	Problems on Profitability Ratios, turnover ratios, financial ratios and balance sheet	T1 : 118 – 138
8	1	Recapitulation and important question discussion	
Total number of hours planned for unit –II			8 Hours

UNIT III

S. No	Lecture Duration (hours)	Topics to be covered	Support material
1	1	Fund flow and Cash flow : Introduction ,Meaning, Definition, uses	T1 : 183 - 185
2	1	Procedure for Preparing Fund Flow statement	R2: 5.10 -5.12
3	1	Problems for Fund Flow Statement	T1 : 5 - 13
4	1	Cash Flow Statement -Introduction, Meaning, Objectives And Significance, advantages and disadvantages	T1 : 251
5	1	Procedure for Preparation of Cash Flow Statement	T1 : 253 – 254
6	1	Problems for Cash Flow Statement	R2: 6.11 – 6.13
7	1	Problems for Cash Flow Statement	R2: 6.17 – 6.20
8	1	Recapitulation and important question discussion	
Total number of hours planned for unit –III			16 Hours

UNIT-IV

S.no	Lecture Duration (hours)	Topics to be covered	Support material
1	1	Budgetary control - Meaning of Budget, Budgeting and budgetary control	T1:462-463
2	1	Definition, Importance, Essentials of Budgeting	R2:10.3 – 10.28
3	1	Advantages and limitations of Budgetary Control	R2:10.6-10.10
4	1	Classification of Budgets-According to Time Factor, Function, Flexibility, Time Factor, Function, Flexibility Master Budget	T1:470-474
5	1	Preparation of different budgets 1. Purchase Budget	T1:475 - 477
6	1	2. Production Budget	T1:473 - 475
7	1	3.Sales Budget	R2:10.13-10.14 R2:10.23-10.28
8	1	4.Cash Budget	R2:10.10-10.12
9	1	5. Flexible budget 6. Master budget	R2:10.29-10.35
10	1	7. Zero based budget	R2:10.35-10.36
11	1	Steps in Budgetary Control	R2:10.36
12	1	Recapitulation and important question discussion	
Total number of hours planned for unit –IV			12 Hours

UNIT - V

S. No.	Lecture Duration (hours)	Topics to be covered	Support material
1	1	Marginal Costing: -Introduction , Definition	T 1 : 301
2	1	-Features and objectives of Marginal Costing	T 1 : 302
3	1	Marginal Costing and Absorption Costing	R 2 : 8.3
4	1	Managerial applications of marginal costing	R2: 8.4–8.8
5	1	Advantages and limitations of Marginal Costing	T 1 : 304 – 306
6	1	Cost Volume Profit Analysis -Meaning, Contribution, Sales Ratio,	T 1 : 316 – 317
7	1	PV Ratio - Problems	T 1 : 317 – 319
8	1	Break Even point - Margin of Safety, Angle of Incidence	T 1 : 319 – 322
9	1	Break-Even Point and Chart- Calculation of Break-Even Sales	R2: 8.21 – 8.24 R2: 8.14 – 8.17
10	1	Advanced problem with in Marginal Costing	R 2 :8.41-8.56
11	1	Problems in marginal costing	R 2 :8.41-8.56
12	1	Problems in marginal costing	R 2 :8.41-8.56
13	1	Recapitulation and important question discussion	
14	1	Previous year ESE questions discussion	
15	1	Previous year ESE questions discussion	
16	1	Previous year ESE questions discussion	
Total number of hours planned for unit – V			16 Hours

Text books:

T1 : Maheswari, S.N. (2012). *Management Accounting*. New Delhi, Kalyani Publishers.

References:

R1 : Khan M.Y. and Jain P.K., (2014) Cost and Management Accounting, New Delhi, Tata Mc. Graw-hill Publishing Company Ltd.

R2 : Shashi K.Gupta, R.K.Sharma (2013), Management Accounting, Kalyani Publishers, New Delhi.

Website address:

- 1) http://my.safaribooksonline.com/book/accounting/9788131774991/chapter-14dot-budgetary-control/sub14_10_xhtml



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Coimbatore - 641 021.

UNIT I
MANAGEMENT ACCOUNTING

UNIT-I

Management Accounting – Meaning – Definition – Objectives and Scope –
Relationship between Management Accounting and Financial Accounting –
Management Accounting and Cost Accounting

INTRODUCTION:

A business enterprise must keep a systematic record of what happens from day- to-day events so that it can know its position clearly. Most of the business enterprises are run by the corporate sector. These business houses are required by law to prepare periodical statements in proper form showing the state of financial affairs. The systematic record of the daily events of a business leading to presentation of a complete financial picture is known as accounting. Thus, Accounting is the language of business. A business enterprise speaks through accounting. It reveals the position, especially the financial position through the language called accounting.

MEANING AND DEFINITION OF ACCOUNTING:

The American Institute of Certified Public Accountants Committee on Terminology proposed in 1941 that accounting may be defined as, “The art of recording, classifying and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character and interpreting the results thereof”.

BRANCHES OF ACCOUNTING:

Accounting can be classified into three categories:

1. Financial Accounting
2. Cost Accounting, and
3. Management Accounting

FINANCIAL ACCOUNTING:

Financial Accounting is commonly carried on in the general offices of a business. It is concerned with revenues, expenses, assets and liabilities of a business house. Financial Accounting has two-fold objective, viz,

1. To ascertain the profitability of the business, and
2. To know the financial position of the concern.

COST ACCOUNTING:

It is a method of accounting for cost. The process of recording and accounting for all the elements of cost is called cost accounting.

The Institute of Cost and Works Accountants, India defines cost accounting as, “the technique and process of ascertainment of costs. Cost accounting is the process of accounting for costs, which begins with recording of expenses or the bases on which they are calculated and ends with preparation of statistical data”.

To put it simply, when the accounting process is applied for the elements of costs (i.e., Materials, Labour and Other expenses), it becomes Cost Accounting.

MANAGEMENT ACCOUNTING

Management accounting is not a specific system of accounting. It could be any form of accounting which enables a business to be conducted more effectively and efficiently. It is largely concerned with providing economic information to managers for achieving organizational goals. It is an extension of the horizon of cost accounting towards newer areas of management. Much management accounting information is financial in nature but has been organized in a manner relating directly to the decision on hand.

Management Accounting is comprised of two words “Management and Accounting”. It means the study of managerial aspect of accounting. The emphasis of management accounting is to redesign accounting in such a way that it is helpful to the management in formation of policy, control of execution and appreciation of effectiveness.

Management accounting is of recent origin. This was first used in 1950 by a team of accountants visiting U. S. A under the auspices of Anglo-American Council on Productivity

Definition:

The American Accounting Association defines Management Accounting as “the methods and concepts necessary for effective planning for choosing among alternative business actions and for control through the evaluation and interpretation of performances”.

The Institute of Chartered Accountants of India defines Management Accounting as follows: “Such of its techniques and procedures by which accounting mainly seeks to aid the management collectively has come to be known as management accounting”

From these definitions, it is very clear that financial data is recorded, analyzed and presented to the management in such a way that it becomes useful and helpful in planning and running business operations more systematically.

OBJECTIVES OF MANAGEMENT ACCOUNTING:

The main objectives of management accounting are as follows:

- To assist the management in promoting efficiency. Efficiency includes best possible services to the customers, investors and employees.
- To prepare budgets covering all functions of a business
- To compare the actual performance with plan for identifying deviations and their causes.
- To interpret financial statement to enable the management to formulate future policies
- To arrange for the systematic allocation of responsibilities

- To submit to the management at frequent intervals operating statement and shot term financial statements.

NATURE OF MANAGEMENT ACCOUNTING

The following paragraphs discuss about the nature of management accounting.

1. Provides accounting information:

Management accounting is based on accounting information. Management accounting is a service function and it provides necessary information to different levels of management.

2. Cause and effect analysis.

The role of financial accounting is limited to find out the ultimate result, i.e., profit and loss; management accounting goes a step further. Management accounting discusses the cause and effect relationship. The reasons for the loss are probed and the factors directly influencing the profitability are also studied. Profits are compared to sales, different expenditures, current assets, interest payables, share capital, etc.

3. Use of special techniques and concepts.

Management accounting uses special techniques and concepts according to necessity to make accounting data more useful. The techniques usually used include financial planning and analyses, standard costing, budgetary control, marginal costing, project appraisal, control accounting, etc.

4. Taking important decisions.

It supplies necessary information to the management which may be useful for its decisions. The historical data is studied to see its possible impact on future decisions. The implications of various decisions are also taken into account.

5. Achieving of objectives.

Management accounting uses the accounting information in such a way that it helps in formulating plans and setting up objectives. Comparing actual performance with targeted figures will give an idea to the management about the performance of various departments. When there are deviations, corrective measures can be taken at once with the help of budgetary control and standard costing.

6. No fixed norms.

No specific rules are followed in management accounting as that of financial accounting. Though the tools are the same, their use differs from concern to concern. The deriving of conclusions also depends upon the intelligence of the management accountant. The presentation will be in the way which suits the concern most.

7. Increase in efficiency.

The purpose of using accounting information is to increase efficiency of the concern. The performance appraisal will enable the management to pin-point efficient and inefficient spots. Effort is made to take corrective measures so that efficiency is improved. The constant review will make the staff cost – conscious.

8. Supplies information and not decision.

Management accountant is only to guide and not to supply decisions. The data is to be used by the management for taking various decisions. „How the data to be utilized is will depend upon the caliber and efficiency of the management.

9. Concerned with forecasting.

The management accounting is concerned with the future. It helps the management in planning and forecasting. The historical information is used to plan future course of action. The information is supplied with the object to guide management for taking future decisions.

SCOPE AND FUNCTION OF MANAGEMENT ACCOUNTING

Management accounting is concerned with presentation of accounting information in the most useful way for the management. Its scope is, therefore, quite vast and includes within its fold almost all aspects of business operations. However, the following areas can rightly be identified as falling within the ambit of management accounting:

1) Financial Accounting:

Management accounting is mainly concerned with the rearrangement of the information provided by financial accounting. Hence, management cannot obtain full control and coordination of operations without a properly designed financial accounting system.

2) Cost Accounting:

Standard costing, marginal costing, opportunity cost analysis, differential costing and other cost techniques play a useful role in operation and control of the business undertaking.

3) Revaluation Accounting:

This is concerned with ensuring that capital is maintained intact in real terms and profit is calculated with this fact in mind.

4) Budgetary Control:

This includes framing of budgets, comparison of actual performance with the budgeted performance, computation of variances, finding of their causes, etc.

5) Inventory Control:

It includes control over inventory from the time it is acquired till its final disposal.

6) Statistical Methods:

Graphs, charts, pictorial presentation, index numbers and other statistical methods make the information more impressive and intelligible.

7) Interim Reporting:

This includes preparation of monthly, quarterly, half-yearly income statements and the related reports, cash flow and funds flow statements, scrap reports, etc.

8) Taxation:

This includes computation of income in accordance with the tax laws, filing of returns and making tax payments.

9) Internal Audit: This refers to the establishment of a suitable internal audit system for internal control.

LIMITATIONS OF MANAGEMENT ACCOUNTING:

Management Accounting is in the process of development. Hence, it suffers from all the limitations of a new discipline. Some of these limitations are:

1. Limitations of Accounting Records:

Management accounting derives its information from financial accounting, cost accounting and other records. It is concerned with the rearrangement or modification of data. The correctness or otherwise of the management accounting depends upon the correctness of these basic records. The limitations of these records are also the limitations of management accounting.

2. It is only a Tool:

Management accounting is not an alternate or substitute for management. It is a mere tool for management. Ultimate decisions are being taken by management and not by management accounting.

3. Heavy Cost of Installation:

The installation of management accounting system needs a very

elaborate organization. This results in heavy investment which can be afforded only by big concerns.

4. Personal Bias:

The interpretation of financial information depends upon the capacity of interpreter as one has to make a personal judgment. Personal prejudices and bias affect the objectivity of decisions.

5. Psychological Resistance:

The installation of management accounting involves basic change in organization set up. New rules and regulations are also required to be framed which affect a number of personnel and hence there is a possibility of resistance from some or the other.

6. Evolutionary stage:

Management accounting is only in a developmental stage. Its concepts and conventions are not as exact and established as that of other branches of accounting. Therefore, its results depend to a very great extent upon the intelligent interpretation of the data of managerial use.

7. Provides only Data:

Management accounting provides data and not decisions. It only informs, not prescribes. This limitation should also be kept in mind while using the techniques of management accounting.

8. Broad-based Scope:

The scope of management accounting is wide and this creates many difficulties in the implementations process. Management requires information from both accounting as well as non-accounting sources. It leads to inexactness and subjectivity in the conclusion obtained through it.

1.3 Difference between Financial Accounting and Management Accounting

Particulars	Financial Accounting	Management Accounting
1.Objectives	It provides general information about the profit or loss and financial position of a business.	1.It provide information to the internal Management
2.Legal Compulsion	These accounts are required by law	2.These accounts are kept voluntarily
3.Control	It does not provide any type of control.	3. It provides a detailed system of control.
4. Reports	It gives reports usually at the end of the year.	4. Submission of report is optional one
5. Monetary Transactions	It relates to monetary transaction of a business.	5. It relates to monetary and non monetary transactions.
6. Data used	It is based on actual facts and figures.	6. It is mostly based on future plan.
7.Application	In Brief, it is the accounting system for the whole business.	7. It is prepared for particular department or division
8. Nature	Financial accounting is based on Measurement	Management accounting is based on judgement

Difference between Cost Accounting and Management Accounting

1. Objective

The objective of cost accounting is the ascertainment and control of costs of products or services. But the objective of management accounting is to help the management in decision-making, planning, control etc..

2. Scope

Cost accounting deals primarily with cost data. But management accounting deals with both cost and revenue. It includes financial accounting, cost accounting, budgeting, reporting to management and interpretation of financial

data. Thus, scope of management accounting is wider than that of cost accounting.

3. Data Used

In cost accounting, only those transactions which can be expressed in figures are taken. Only quantitative aspect is recorded in cost accounting. But management accounting uses both quantitative and qualitative information.

4. Nature

Cost accounting uses both past and present figures. But management accounting is concerned with the projection of figures for future. The policies and plans are prepared for providing future guidelines.

Management Accountant

Management Accountant is an officer who is entrusted with Management Accounting function of an organization. He plays a significant role in the decision making process of an organization. The organizational position of Management Accountant varies from concern to concern depending upon the pattern of management system. He may be an executive in some concern, while a member of Board of Directors in case of some other concern. However, he occupies a key position in the organization.

Role of Management Accountant (Accounting) in Decision making

Management Accountant, otherwise called Controller, is considered to be a part of the management team since he has the responsibility for collecting vital information, both from within and outside the company. The functions of the Controller has been laid down by the Controller's Institute of America. These Functions are:

1. To establish, coordinate and administer, as an integral part of management, an adequate plan for the control of operations. Such a plan would provide, to the extent required in the business cost standards, expense budgets, sales forecasts, profit planning, and programme for capital investment and financing, together with necessary procedures to effectuate the plan.

2. To compare performance with operating plan and standards and to report and interpret the results of operation to all levels of management, and to the owners of the business. This function includes the formulation and administration of accounting policy and the compilations of statistical records and special reports as required
3. To consult withal segments of management responsible for policy or action conserving any phase of the operations of business as it relates to the attainment of objective, and the effectiveness of policies, organization strictures, procedures.
4. To administer tax policies and procedures.
5. To supervise and coordinate preparation of reports to Government agencies.
6. The assured fiscal protection for the assets of the business through adequate internal; control and proper insurance coverage.
7. To continuously appraise economic and social forces and government influences, and interpret their effect upon business.

REQUISITES FOR INSTALLATION OF MANAGEMENT ACCOUNTING SYSTEM

Following are the requisites for installation of an effective and efficient Management Accounting System in an organization:

- Introduction of appropriate organization manual defining therein power, functions, responsibilities and scope of the employees of the organization.
- Recruitment of adequate number of employees and arrangement of time-to-time proper training for those employees.
- Classification and codification of accounts.
- Introduction of sound systems of internal control and internal audit in the organization.

- Setting up of suitable systems of budgetary control and standard costing technique.
- Setting up of a suitable system for integrating cost and financial data.
- Setting up of suitable cost centres and profit centres.
- Setting up of a suitable system of responsibility accounting.
- Developing of a sound management information system.
- Developing of an operational research system in the organization.
- Preparation of an effective proforma for feedback receiving and managerial report

Tools and Techniques of Management Accounting

1. Analysis of Financial Statements: Analysis of financial statements is the main tool of management accounting. In this tool, we collect four financial statements; one is profit and loss account, second is balance sheet, third is cash flow statement and fourth and last is fund flow statement. After this, we calculate more than 30 ratios and also analyze the financial statement by financial analysis, fund flow analysis and cash flow analysis. Main aims of analysis of financial statements are following:

- **Profitability** - its ability to earn income and sustain growth in both short-term and long-term. A company's degree of profitability is usually based on the income statement, which reports on the company's results of operations;
- **Solvency** - its ability to pay its obligation to creditors and other third parties in the long-term;
- **Liquidity** - its ability to maintain positive cash flow, while satisfying immediate obligations;
- **Stability**- the firm's ability to remain in business in the long run, without having to sustain significant losses in the conduct of its business. Assessing a company's stability requires the use of the income statement and the balance sheet, as well as other financial and non-financial indicators.

2. Budgetary Control : This is that tool of management accounting in which we make budgets for planning and control of fund. All budgets are made with past historical

accounting data and future expectations. After this budgeted data is compared with actual recorded accounting data and performance is calculated on the basis of deviation between actual and expected performance.

3. Decision Accounting (Marginal costing): There are lots of decision which businessman has to take on the basis of tools of management accounting. One of management accounting tool is decision accounting. It is helpful to take main decision which we can explain following ways:

- a) To buy or to construct any fixed asset
- b) Do's or Dont's to do any business activity
- c) To choose best alternative
- d) Calculation the price of product

4. Throughput accounting: Throughput Accounting (TA) is a dynamic, integrated, principle-based, and comprehensive management accounting's tool that provides managers with decision support information for enterprise optimization. Actually this is the extension of decision accounting. Throughput accounting is relatively new in management accounting. It is an approach that identifies factors that limit an organization from reaching its goal, and then focuses on simple measures that drive behavior in key areas towards reaching organizational goals.

5. Management Information System: We MIS tool, management accountant provides information needed to manage organizations effectively. If we have to understand MIS, we need to understand ERP, SCM, CRM, DSS and other computer techniques for providing information with effective ways.

6. Financial Policy: Financial policy is that tool of management accounting which is needed to make good structure of capital mix we decide the proportion of share capital and loans in capital structure. Financial and operating leverages are also its sub-tools.

7. Working Capital Management : With this tool of management accounting, we manage short term assets and short term liabilities. All cash management, debtor

management and inventory management will include in working capital management. We make also working capital cycle for knowing the firm's ability to convert its resources into cash. If there is low time for conversion of raw material into sales and then cash from debtor, it is good indication.

Possible Questions

PART - B

1. What is financial accounting
2. Define Cost Accounting
3. Define Management Accounting?
4. Enlist the two functions of management accounting.
5. List out the two relationship between management Accounting and Cost Accounting.
6. State the two objectives of Management Accounting?
7. Write note on role of management Accountant?
8. Mention any two scope of management Accounting.
9. What are the limitation of Management Accounting

PART - C

1. What is management accounting? What are its advantages
2. Define Management Accounting. State any six functions of Management Accounting.
3. Explain Scope of management accounting
4. What are the objectives of Management Accounting
5. What is management accounting? How is it different from Financial Accounting?
6. Distinguish between Management Accounting and cost Accounting
7. Explain The Tools of Management Accounting.
8. Discuss the various steps required for installing management accounting system.
9. What are the roles of Management Accountant?



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UNIT– II

FINANCIAL STATEMENTS ANALYSIS

Financial Statement Analysis – Types of Financial Statement Analysis - Ratio Analysis – Meaning – Uses – Limitations – Classification of Ratios – Computation of Ratios from Financial Statements

MEANING AND TYPES OF FINANCIAL STATEMENTS

A financial statement is an organized collection of data according to logical and consistent accounting procedures. Its purpose is to convey an understanding of some financial aspects of a business firm. It may show a position at a moment of time as in the case of a balance sheet, or may reveal a series of activities over a given period of time, as in the case of an Income Statement.

Thus, the term 'financial statements' generally refers to two basic statements: (i) the Income Statement and (ii) the Balance Sheet. A business may also prepare (iii) a Statement of Retained Earnings, and (iv) a Statement of Changes in Financial Position in addition to the above two statements.

The meaning and significance of each of these statements is being explained below:

1. Income Statement

The Income statement (also termed as Profit and Loss Account) is generally considered to be the most useful of all financial statements. It explains what has

Happened to a business as a result of operations between two balance sheet dates. For this purpose it matches the revenues and costs incurred in the process of earning revenues and shows the net profit earned or less suffered during a

particular period.

The nature of the 'Income' which is the focus of the Income Statement can be well understood if a business is taken as an organization that uses 'inputs' to 'produce' output. The outputs are the goods and services that the business provides to its customers. The values of these outputs are the amounts paid by the customers for them. These amounts are called 'revenues' in accounting. The inputs are the economic resources used by the business in providing these goods and services. These are termed as 'expenses' in accounting.

2. Balance Sheet

It is a statement of financial position of a business at a specified moment of time. It represents all assets owned by the business at a particular moment of time and the claims of the owners at outsiders against those assets at that time. It is in a way a snapshot of the financial condition of the business at that time.

The important distinction between an income statement and a Balance Sheet is that the Income Statement is for a period while Balance Sheet is on a particular date. Income Statement is, therefore, a flow report, as contrasted with the Balance Sheet which is a static report. However both are complementary to each other.

3. Statement of Retained Earnings

The term retained earnings means the accumulated excess of earnings over losses and dividends. The balance shown by the Income Statement is transferred to the Balance Sheet through this statement, after making necessary appropriations. It is thus a connecting link between the Balance Sheet and the Income Statement. It is fundamentally a display of things that have caused the beginning of the period retained earnings balance to be changed into the one shown in the end- of the period balance sheet. The statement is also termed as Profit and Loss Appropriation Account in case of companies.

4. Statement of Changes in Financial Position (SCFP)

The Balance Sheet shows the financial condition of the business at a particular moment of time while the Income Statement discloses the results of operations of business over a period of time. However, for a better understanding of the affairs of the business, it is essential to identify the movement of working capital or cash in and out of the business. This information is available in the statement of changes in financial position of the business. The statement may emphasize any of the following aspects relating to change in financial position of the business:

- i. **Change in working capital position.** In such a case the statement is termed as SCFP (Working Capital basis) or popularly Funds Flow Statement.
- ii. **Change in cash position.** In such a case the statement is termed as SCFP (Cash basis) or popularly Cash Flow Statement.
- iii. **Change in overall financial position.** In such a case the statement is termed simply as Statement of Changes in Financial Position (SCFP).

ANALYSIS AND INTERPRETATION OF FINANCIAL STATEMENTS

Financial Statements are indicators of the two significant factors:

- i. Profitability, and
- ii. Financial soundness

Analysis and interpretation of financial statements, therefore, refers to such a treatment of the information contained in the Income Statement and the Balance Sheet so as to afford full diagnosis of the profitability and financial soundness of the business.

A distinction here can be made between the two terms - 'Analysis' and interpretation". The term 'Analysis' means methodical classification of the data given in the financial statements. The figures given in the financial statements will not help one unless they are put in a simplified form. For example, all items relating to 'Current

It Assets' are put at one place while all items relating to 'Current Liabilities' are put at another place. The term 'Interpretation' means explaining the meaning and significance of the data so simplified. However, both 'Analysis' and 'Interpretation' are complementary to each other. Interpretation requires Analysis, while Analysis is useless without Interpretation. Most of the authors have used the term 'Analysis' only to cover the meanings of both analysis and interpretation, since analysis involves interpretation. According to Myres, "Financial statement analysis is largely a study of the relationship among the various financial factors in a business as disclosed by a single set of statements and a study of the trend of these factors as shown in a series of statements." For the sake of convenience, we have also used the term 'Financial Statement Analysis' throughout the chapter to cover both analysis and interpretation. '

TYPES OF FINANCIAL ANALYSIS

Financial Analysis can be classified into different categories depending upon (i) the material used, and (ii) the *modus operandi* of analysis.

1. On the Basis of Material Used

According to this basis, financial analysis can be of two types:

a. External Analysis.

This analysis is done by those who are outsiders for the business. The term outsiders include investors, credit agencies, government agencies and other creditors who have no access to the internal records of the company. These persons mainly depend upon the published financial statements. Their analysis serves only a limited purpose. The position of, these analysts has improved in recent times on account of increased governmental control over companies and governmental regulations requiring more detailed disclosure of information by the companies in their financial statements.

b. Internal Analysis.

This analysis is done by persons who have access to the books of account and other information related to the business. Such an analysis can, therefore, be done by executives and employees of the organization or by officers appointed for this purpose by the Government or the Court under powers vested in them. The analysis is done depending upon the objective to be achieved through this analysis.

2. On the basis of modus operandi

According to this, financial analysis can also be of two types:

(i) Horizontal Analysis.

In case of this type of analysis, financial statements for a number of years are reviewed and analyzed. The current year's figures are compared with the standard or base year. The analysis statement usually contains figures for two or more years and the changes are shown regarding each item from the base year usually in the form of percentage. Such an analysis gives the management considerable insight into levels and areas of strength and weakness. Since this type of analysis is based on the data from year to year rather than on one date, it is also termed as 'Dynamic Analysis'.

(ii) Vertical Analysis.

In case of this type of analysis a study is made of the quantitative relationship of the various items in the financial Statements on a particular date. For example, the ratios of different items of costs for a particular period may be calculated with the sales for that period. Such an analysis is useful in comparing the performance of several companies in the same group, or divisions or department in the same company. Since this analysis depends on the data for one period, this is not very conducive to a proper analysis of the company's financial position. It is also called 'Static Analysis' as it is frequently used for referring to ratios developed on one date or for one accounting period.

STEPS INVOLVED IN FINANCIAL STATEMENTS ANALYSIS

The analysis of the financial statements requires:

- Methodical classification of the data given in the financial statements.
- Comparison of the various inter-connected figures with each other by different 'Tools of Financial Analysis'.

TECHNIQUES OF FINANCIAL ANALYSIS

A financial analyst can adopt one or more of the following techniques/tools of financial analysis:

1. Comparative Financial Statements

Comparative financial statements are those statements which have been designed in a way so as to provide time perspective to the consideration of various elements of financial position embodied in such statements. In these statements figures for two or more periods are placed side by side to facilitate comparison. Both the Income Statement and Balance Sheet can be prepared in the form of Comparative Financial Statements.

a. Comparative Income Statement.

The Income Statement discloses Net Profit or Net Loss on account of operations. A Comparative Income Statement will show the absolute figures for two or more periods, the absolute change from one period to another and, if desired, the change in terms of percentages. Since the figures for two or more periods are shown side by side, the reader can quickly ascertain whether sales have increased or decreased, whether cost of sales has increased or decreased, etc. Thus, only a reading of data included in Comparative Income Statements will be helpful in deriving meaningful conclusions.

b. Comparative Balance Sheet.

Comparative Balance Sheet as on two or more different dates can be used for comparing assets and liabilities and finding out any increase or decrease in those items. Thus; while in a single Balance Sheet the emphasis is on present position, it is on change in the comparative Balance Sheet. Such a Balance Sheet is very useful in studying the trends in an enterprise.

Comparative Financial Statements can be prepared for more than two periods or more than two dates. However, it becomes very cumbersome to study the trend with more than two period's data. Trend percentages are more useful in such cases.

The American Institute of Certified Public Accountants has explained the utility of preparing the Comparative Financial Statements as follows:

The presentation of comparative financial statements in annual and other reports enhances the usefulness of such reports and brings out more clearly the nature and trend of changes affecting the enterprise. Such presentation emphasizes the fact that statement for a series of periods is far more significant than those of a single period and that the accounts of one period are but an installment of what is essentially a continuous history. In any one year, it is ordinarily desired that the Balance Sheet, the Income Statement and the Surplus Statement be given for one or more preceding years as well as for the current year."

The utility of preparing the Comparative Financial Statements has also been realized in our country. The Companies Act, 1956, provides that companies should give figures for different items for the previous period, together with Current period figures in their Profit and loss Account and Balance Sheet.

2. Common-size Financial Statements

Common-size Financial Statements are those in which figures reported are converted into percentages to some common base. In the Income Statement the sale figure is assumed to be 100 and all figures are expressed as a percentage of this total.

3. Trend Percentages

Trend percentages are immensely helpful in making a comparative study of the financial statements for several years. The method of calculating trend percentages involves the calculation of percentage relationship that each item bears to the same item in the base year. Any year may be taken as the base year. It is usually the earliest year. Any intervening year may also be taken as the base year. Each item of base year taken as 100 and on that basis the percentages for each of the items of each of the *years* is calculated. These percentages can also be taken as Index Numbers showing relative changes in the financial data resulting with the passage of time.

4. Funds Flow Analysis

Funds flow analysis has become an important tool in the analytical kit of financial analysts, credit granting institutions and financial managers. This is because the Balance Sheet of a business reveals its financial status at a particular point of time. It does not sharply focus those major financial transactions which have been behind the Balance Sheet changes. For example, if a loan of Rs.2,00,000 was raised and paid during the accounting year, the balance sheet will not depict this transaction. However, a financial analyst must know the purpose for which the loan was utilized and the source from which it was obtained. This will help him in making a better estimate about the company's financial position and policies.

5. Cost-Volume-Profit Analysis

Cost-Volume-Profit Analysis is an important tool of profit planning. It studies the relationship between cost, volume of production, sales and profit. Of course, it is not strictly a technique used for analysis of financial statements. However, it is an important tool for the management for decision-making since the data is provided by both cost and financial records. It tells the volume of sales at which firm will break-even, the effect on profit on 'account of variation in output, selling price and cost, and finally, the quantity to be produced and sold to reach the, target profit level.

6. Ratio Analysis

This is the most important tool available to financial analysts for their work. An accounting ratio shows the relationship in mathematical terms between two interrelated accounting figures. The figures have to be interrelated (*e.g.*, Gross Profit and Sales, Current Assets and Current Liabilities), because no useful purpose will be served if ratios are calculated between two figures which are not at all related to each other, *e.g.*, sales and discount on issue of debentures.

LIMITATIONS OF FINANCIAL ANALYSIS

Financial analysis is a powerful mechanism which helps in ascertaining the strengths and weaknesses in the operations and financial position of an enterprise. However, this analysis is subject to certain limitations. Most of these limitations are because of the limitations of the financial statements themselves. These limitations are as follows:

1. Financial Analysis is only a Means

Financial analysis is a means to an end and not the end itself. The analysis should be used as a starting point and the conclusion should be drawn not in isolation, but keeping view the overall picture and the prevailing economic and political situation.

2. Ignores Price Level Changes

Financial statements are normally prepared on the concept of historical costs. They do not reflect values in terms of current costs. Thus, the financial analysis based on such financial statements or accounting figures would not portray the effects of price level changes over the period.

3. Financial Statements are Essentially Interim Reports

The profit shown by Profit and Loss Account and the financial position as depicted by the Balance Sheet is not exact. The exact position can be known only when the business is closed down. Again, the existence of contingent liabilities

and deferred revenue expenditure make them more imprecise.

4. Accounting Concepts and Conventions

Financial statements are prepared on the basis of certain accounting concept and conventions. On account of this reason the financial position as disclosed by statements may not be realistic. For' example, fixed assets in the balance sheet, shown on the basis of going concern concept. This means that value placed on& assets may not be the same which may be realized on their sale. On account convention of conservatism the income statement may not disclose true income of the business since probable losses are considered while probable incomes are ignored.

5. Influence of Personal Judgment

Many items are left to the personal judgment of the accountant. For example, the method of depreciation, mode of amortization of fixed assets, treatment of deferred revenue expenditure - all depend on the personal judgment of the accountant. The soundness of such judgment will necessarily depend upon his competence and integrity. However convention of consistency acts as a controlling factor on making indiscreet personal judgments.

6. Disclose only Monetary Facts

Financial statements do not depict those facts which cannot be expressed in terms of money. For example, development of a team of loyal and efficient workers, enlightened management, the reputation and prestige of management with the public are matters which are of considerable importance for the business, but they are nowhere depicted by financial statements.

RATIO ANALYSIS

Ratio Analysis is a very important tool of financial analysis. It is the process of establishing a significant relationship between the items of financial statements to provide a meaningful understanding of the performance and financial position of a firm. In view of the requirements of various users (e.g., Short-term Creditors,

Long- term Creditors, Management, Investors) of the ratios, one may classify the ratios into the following four groups:

Liquidity Ratios, Solvency Ratios, Activity Ratios and Profitability Ratios

Liquidity Ratios

These ratios measure the concern's ability to meet short-term obligations as and when they become due. These ratios show the short-term financial solvency of the concern. Usually the following two ratios are calculated for this purpose:

1. Current Ratio and 2.Quick Ratio

1. Current Ratio

(a) Meaning: This ratio establishes a relationship between current assets and current liabilities.

(b) Objective: The objective of computing this ratio is to measure the ability of the firm to meet its short-term obligations and to reflect the short-term financial strength / solvency of a firm. In other words, the objective is to measure the safety margin available for short-term creditors.

(c) Components: There are two components of this ratio which are a under:

(i) **Current Assets** which mean the assets which are held for their conversion into cash within a year and include the following:

Cash Balance	Bank Balances
Marketable Securities	Debtors (less Provision)
Bills Receivable (less Provisions)	Stock of all types, viz., Raw-Materials
Prepaid Expenses	Work-in-progress, Finished Goods
Incomes accrued but not due	Short-term Loans and Advances
Advance Payment of tax	(Debit Balances)

Tax reduced at source (Debit Balance)	Incomes due but not received
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(ii) **Current Liabilities** which mean the liabilities which are expected to be matured within a year and include the following:

Creditors for Goods	Creditors for Expenses
Bills Payable	Bank Overdraft
Short-term Loans and Advances	Income received-in-advance
Provision for Tax	Unclaimed dividend

d) Computation: This ratio is computed by dividing the current assets by the current liabilities. This ratio is usually expressed as a pure ratio e.g. 2 : 1. In the form of a formula, this ratio may be expressed as under:

$$\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$$

(e) Interpretation:

It indicates rupees of current assets available for each rupee of current liability, Higher the ratio, greater the margin of safety for short-term creditors and vice-versa. However, too high / too low ratio calls for further investigation since the too high ratio may indicate the presence of idle funds with the firm or the absence of investment opportunities with the firm and too low ratio may indicate the over trading/under capitalization if the capital turnover ratio is high.

Traditionally, a current ratio of 2: 1 is considered to be a satisfactory ratio. On the basis of this traditional rule, if the current ratio is 2 or more, it means the firm is adequately liquid and has the ability to meet its current obligations but if the current ratio is less than 2, it means the firm has difficulty in meeting its current obligations. The logic behind this rule is that even if the value of current assets becomes half, the firm can still meet its short-term obligations.

However, the traditional standard of 2: 1 should not be used blindly since there may be firms having current ratio of less than 2, which are working efficiently and

meeting their short-term obligations as and when they become due while the other firms having current ratio of more than 2, may not be able to meet their current obligations in time. This is so because the current ratio measures the quantity of current assets and not their quality. Current assets may consist of doubtful and slow paying debtors and slow moving and obsolete stock of goods. That is why, it can be said that current ratio is no doubt a quick measurement of a firm's liquidity but it is crude as well.

f) Precaution:

While computing and using the current ratio, it must be ensured (a) that the quality of both receivables (debtors and bills receivable) and inventory has been carefully assessed and (b) that all current assets and current liabilities have been properly valued.

2. Quick Ratio

(a) Meaning: This ratio establishes a relationship between quick assets and current liabilities.

(b) Objective: The objective of computing this ratio is to measure the ability of the firm to meet its short-term obligations as and when due without relying upon the realization of stock.

(c) Components There are two components of this ratio which are as under:

(i) Quick assets: which mean those current assets which can be converted into cash immediately or at a short notice without a loss of value and include the following:

Cash Balances	Bank Balances
Marketable Securities	Debtors
Bills Receivable	Short-term Loans and Advances

(ii) Current liabilities: (as explained earlier in Current Ratio)

(d) Computation This ratio is computed by dividing the quick assets by the current liabilities. This ratio is usually expressed as a pure ratio e.g., 1: 1. In the

form of a formula, this ratio may be expressed as under:

$$\text{Quick Ratio} = \text{Quick Assts/ Current Liabilities}$$

(e) Interpretation:

It indicates rupees of quick assets available for each rupee of current liability. Traditionally, a quick ratio of 1:1 is considered to be a satisfactory ratio. However, this traditional rule should not be used blindly since a firm having a quick ratio of more than 1, may not be meeting its short-term obligations in time if its current assets consist of doubtful and slow paying debtors while a firm having a quick ratio of less than 1, may be meeting its short-term obligations in time because of its very efficient inventory management.

(f) Precaution:

While computing and using the quick ratio, it must be ensured, (a) that the quality of the receivables (debtors and bills receivable) has been carefully assessed and (b) that all quick assets and current liabilities have been properly valued.

SOLVENCY RATIOS

These ratios show the long-term financial solvency and measure the enterprise's ability to pay the interest regularly and to repay the principal (i.e. Capital amount) on maturity or in pre-determined installments at due dates. Usually, the following ratios are calculated to judge the long-term financial solvency of the concern.

Debt-Equity Ratio

(a) Meaning: This ratio establishes a relationship between long-term debts and share-holders' funds.

(b) Objective: The objective of computing this ratio is to measure the relative proportion of debt and equity in financing the assets of a firm.

(c) Components: There are two components of this ratio, which are as under:

(i) Long-term Debts, which mean long-term loans (whether secured or unsecured (e.g., Debentures, bonds, loans from financial institutions)).

(ii) Shareholders' Funds which mean equity share capital plus preference share capital plus reserves and surplus minus fictitious assets (e.g., preliminary expenses).

(d) Computation: This ratio is computed by dividing the long-term debts by the shareholders' funds. This ratio is usually expressed as a pure ratio e.g., 2: 1. In the form of a formula, this ratio may be expressed as under:

$$\text{Debt-Equity Ratio} = \text{Long term Debts} / \text{Shareholders Funds}$$

(e) Interpretation:

It indicates the margin of safety to long-term creditors. A low debt equities ratio implies the use of more equity than debt which means a larger safety margin for creditors since owner's equity is treated as a margin of safety by creditors and vice versa.

Debt Total Funds Ratio

This ratio is a variation of the debt-equity ratio and gives the similar indications as the debt-equity ratio. In this ratio, the outside long-term liabilities are related to the total capitalization of the firm and not merely to the shareholders' funds. This ratio is computed by dividing the long-term debt by the capital employed. In the form of a formula, this ratio may be expressed as under:

$$\text{Debt-Total Funds Ratio} = \frac{\text{Capital Employed}}{\text{Long-term Debt}}$$

Where, the Capital Employed comprises the long-term debt and the shareholders' funds.

Interest Coverage Ratio (or Time-interest Earned Ratio or Debt-Service Ratio)

(a) Meaning: This ratio establishes a relationship between net profits before

interest and taxes and interest on long-term debt.

(b) Objective: The objective of computing this ratio is to measure the debt-servicing capacity of a firm so far as fixed interest on long-term debt is concerned.

(c) Components: There are two components of this ratio which are as under:

(i) Net profits before interest and taxes;

(ii) Interest on long-term debts.

(d) Computation: This ratio is computed by dividing the net profits before interest and taxes by interest on long-term debt. This ratio is usually expressed as 'x' number of times. In the form of a formula, this ratio may be expressed as under:

$$\text{Interest Coverage Ratio} = \frac{\text{Net Profit before interest and taxes}}{\text{Interest on Long-term debt}}$$

(e) Interpretation:

Interest coverage ratio shows the number of times the interest charges are covered by the profits out of which they will be paid. It indicates the limit beyond which the ability of the firm to service its debt would be adversely affected. For instance, an interest coverage of five times would imply that even if the firm's net profits before interest and tax were to decline to 20% of the present level, the firm will still be able to pay interest out of profits. Higher the ratio, greater the firm's ability to pay interest but very high ratio may imply lesser use of debt and/or very efficient operations.

ACTIVITY RATIOS

These ratios measure the effectiveness with which a firm uses its available resources. These ratios are also called 'Turnover Ratios' since they indicate the speed with which the resources are being turned (or converted) into sales.

Usually the following turnover ratios are calculated:

- I. Capital Turnover Ratio
- II. Fixed Assets Turnover Ratio,
- III. Net Working Capital Turnover Ratio
- IV. Stock Turnover Ratio
- V. Debtors Turnover Ratio.
- VI. Creditors Turnover Ratio.

Capital Turnover Ratio

(a) Meaning: This ratio establishes a relationship between net sales and capital employed.

(b) Objective: The objective of computing this ratio is to determine the efficiency with which the capital employed is utilized.

(c) Components: There are two components of this ratio which are as under:

(i) Net Sales which mean gross sales minus sales returns; and

(ii) Capital Employed which means Long-term Debt plus Shareholders' Funds.

(d) Computation: This ratio is computed by dividing the net sales by the capital employed. This ratio is usually expressed as 'x' number of times. In the form of a formula this ratio may be expressed as under:

$$\text{Capital Turnover Ratio} = \frac{\text{Net Sales}}{\text{Capital Employed}}$$

(e) Interpretation: It indicates the firm's ability to generate sales per rupee of capital employed. In general, the higher the ratio the more efficient the management and utilization of capital employed. A too high ratio may indicate the situation of an over-trading (or under capitalization) if current ratio is lower than that required reasonably and vice versa.

Fixed Assets Turnover Ratio

(a) Meaning: This ratio establishes a relationship between net sales and fixed assets.

(b) Objective: The objective of computing this ratio is to determine the efficiency with which the fixed assets are utilized.

(c) Components: There are two components of this ratio which are as under:

- (i) Net Sales which means gross sales minus sales returns;
- (ii) Net Fixed (operating) Assets which mean gross fixed assets minus depreciation thereon.

(d) Computation This ratio is computed by dividing the net sales by the net fixed assets. This ratio is usually expressed as 'x' number of times. In the form of a formula, this ratio may be expressed as under:

$$\text{Fixed Assets Turnover Ratio} = \frac{\text{Net Sales}}{\text{Net Fixed Assets}}$$

(e) Interpretation: It indicates the firm's ability to generate sales per rupee of investment in fixed assets. In general, higher the ratio, the more efficient the management and utilization of fixed assets, and vice versa. It may be noted that there is no direct relationship between sales and fixed assets since the sales are influenced by other factors as well (e.g., quality of product, delivery terms, credit terms, after sales service, advertisement and publicities.)

Working Capital Turnover Ratio

a) Meaning: This ratio establishes a relationship between net sales and working capital.

b) Objective: The objective of computing this ratio is to determine the efficiency with which the working capital is utilized.

c) Components: There are two components of this ratio which are as under:

- (i) Net Sales which mean gross sales minus sales returns; and
- (ii) Working Capital which means current assets minus current liabilities.

(d) Computation: This ratio is computed by dividing the net sales by the working capital. This ratio is usually expressed as 'x' number of times. In the form

of a formula, this ratio may be expressed as under:

$$\text{Working Capital Turnover Ratio} = \frac{\text{Net Sales}}{\text{Working Capital}}$$

(e) Interpretation: It indicates the firm's ability to generate sales per rupee of working capital. In general, higher the ratio, the more efficient the management and utilization of working capital and vice versa.

Stock Turnover Ratio

(a) Meaning: This ratio establishes a relationship between costs of goods sold and average inventory.

(b) Objective: The objective of computing this ratio is to determine the efficiency with which the inventory is utilized.

(c) Components: There are two components of this ratio which are as under: (i)

Cost of Goods Sold, this is calculated as under.

$$\begin{aligned} \text{Cost of Goods Sold} &= \text{Opening Inventory} + \text{Net Purchases} + \text{Direct Expenses} - \\ &\text{Closing Inventory} = \text{Net Sales} - \text{Gross Profit} \end{aligned}$$

(ii) Average Inventory which is calculated as under:

$$\text{Average Inventory} = (\text{Opening Inventory} + \text{Closing Inventory}) / 2$$

(d) Computation: This ratio is computed by dividing the cost of goods sold by the average inventory. This ratio is usually expressed as 'x' number of times. In the form of a formula, this ratio may be expressed as under: -

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

(e) Interpretation:

It indicates the speed with which the inventory is converted into sales. In general, a high ratio indicates efficient performance since an improvement in

the ratio shows that either the same volume of sales has been maintained with a lower investment in stocks, or the volume of sales has increased without any increase in the amount of stocks. However, too high ratio and too low ratio calls for further investigation. A too high ratio may be the result of a very low inventory levels which may result in frequent stock-outs and thus the firm may incur high stock-out costs. On the other hand, a too low ratio may be the result of excessive inventory levels, slow-moving or obsolete inventory and thus, the firm may incur high carrying costs. Thus, a firm should have neither a very high nor a very low stock turnover ratio, it should have satisfactory level. To judge whether the ratio is satisfactory or not, it should be compared with its own past ratios or with the ratio of similar firms in the same industry or with industry average.

(f) Stock Velocity- This velocity indicates the period for which sales can be generated with the help of an average stock maintained and is usually expressed in days. This velocity may be calculated as follows:

$$\text{Stock Velocity} = \frac{\text{Average stock}}{\text{Average Daily cost of Goods Sold}}$$

$$\text{Or } \frac{12 \text{ months } / 52 \text{ weeks } / 365 \text{ days}}{\text{Stock Turnover Ratio}}$$

With the help of above illustration Calculate Stock Velocity ratio.

$$\text{Stock Velocity} = 12/2 = 5$$

PROFITABILITY RATIOS

The capacity of a business concern to earn profit can be termed as profitability. Thus, profit earning can be ascertained on the basis of the volume of profit margin of any activity and is calculated by subtracting costs from the total Revenue accruing to a firm during a particular period. The overall efficiency or performance of a business can be ascertained with the help of profitability ratios

The important profitability ratios are discussed below:

- Gross Profit Ratio
- Operating Ratio
- Operating Profit Ratio
- Net Profit Ratio
- Return on Investment Ratio
- Return on Capital Employed Ratio
- Earnings Per Share Ratio
- Dividend Payout Ratio
- Dividend Yield Ratio
- Price Earnings Ratio
- Net Profit to Net worth Ratio

1. Gross Profit Ratio

Gross Profit Ratio is the formative component in relationship between gross profit and net sales. Higher Gross Profit Ratio is a precursor to the business concern that the firm has higher profitability. It is also reflective of the standard of performance of firm's business apropos to its effectiveness.

Gross Profit Ratio = $\frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$

2. Operating Ratio:

Operating Ratio measures the relationship between total operating expenses and sales. The total operating expenses is the sum total of cost of goods sold, office and

administrative expenses and selling and distribution expenses. This ratio equips the firm with the ability to cover total operating expenses.

$$\text{Operating Ratio} = \text{Operating Cost} / \text{Net Sales} \times 100$$

3. Operating Profit Ratio:

It indicates the operational efficiency of the firm and is a measure of the firm's ability to cover the total operating expenses.

$$\text{Operating Profit Ratio} = \text{Operating Profit} / \text{Net Sales} \times 100$$

4. Net Profit Ratio

This ratio tells us the overall efficiency in operating the business. It is used to measure the relationship between net profit and sales. It includes non-operating incomes and profits.

$$\text{Net Profit Ratio} = \text{Net Profit after Tax} / \text{Net Sales} \times 100$$

5. Return on Investment Ratio

This ratio measures a return on owner's or shareholders' investment. It establishes the relationship between net profit after interest and taxes and the owner investment.

$$\text{Return on Investment Ratio} = \text{Net Profit after Interest \& Taxes} / \text{Shareholder fund or Investment} \times 100$$

6. Return on Capital Employed Ratio

It measures the relationship between profit and capital employed. Return means profits or net profits. Capital employed means total investment made in the business.

$$\text{Return on Capital Employed} = \text{Net Profit after Taxes} / \text{Gross Capital Employed} \times 100$$

7. Earning Per Ratio

It measures the earning capacity of the firm from the owners view and helps in determining the price of the equity share in the market.

Earning Per Ratio = Net Profit after Tax and Preference Dividend / No of Equity Share

8. Dividend Payout Ratio

It is the relationship between payment of dividend on equity share capital and the profits available after meeting tax and preference dividend. Indication of the dividend policy, as incorporated by the top management is underlined by this ratio. It highlights the utilization of divisible profit to pay dividend or pertaining to the retention of both.

Dividend Payout Ratio = Equity Dividend / Net Profit after Tax & Preference Dividend
X 100

9. Dividend Yield Ratio

It is the relationship is established between dividend per share and market value per share. This ratio is a major factor that determines the dividend income from the investor point of view.

Dividend Yield Ratio = Dividend Per Share / Market Value Per Share X 100

10. Price Earnings Ratio:

It highlights the earning per share reflected by market share. It establishes the relationship between the market price of an equity share and the earning per equity share. It helps to find out whether the equity shares of a company are undervalued or not. It is also useful in financial forecasting.

Price Earnings Ratio = Market Price per Equity Share / Earning Per Share

11. Net Profit to Net Worth Ratio:

It measures the profit return on investment. It indicates the established relationship between net profit and shareholders net worth.

Net Profit to Net Worth Ratio = Net Profit After Taxes / Shareholders Net Worth
X 100

Advantage of Ratio Analysis

Ratio analysis is very useful tool of management accounting. With this, we can analyze business's financial position. We also check company's short term and long term solvency with ratio analysis. Following are the main advantages of ratio analysis.

1. Helpful in Decision Making

All our financial statements are made for providing information. But this information is not helpful for decision making because financial statements provide only raw information. When we calculate different ratios in ratio analysis, at that time, we get useful information. I can explain it with simple example. Suppose, we calculate our interest coverage ratio which is 10times but our competitor company's interest coverage ratio is 15 times. It means capacity of the profit of our competitor company is more than us. By seeing this, we can take decisions for increasing our profitability.

2. Helpful in Financial Forecasting and Planning

Every year we calculate lots of accounting ratios. When we make trend of all these ratios, we can get useful information for our future forecasting and planning. For example, we can tell five year collection period with following way 2007 = 90 days, 2008 = 70 days, 2009 = 60 days, 2010 = 50 days, 2011 = 30 days. From this trend, we know that we are decreasing the days for collection money from our debtors. With this information, we can make two plans. One is effective use of money which we are getting from our debtors more fastly and second we can also check the behavior of our debtors by comparing this with sales trend. Like this, there are lots of ratios which are also useful for better planning.

3. Helpful in Communication

Ratio analysis is more important from communication point of view. Suppose, we have to appoint new sales agents for our company. At that time, we can communicate them by using our company's sales and profit related ratios. There is no need of hi-tech for understanding the meaning of any specific ratio. For example, our gross profit in 2010 is 26.6% and in 2011, it is 28.55%. By just telling this ratio, we can understand whether our company is growing or falling.

4. Helpful in Co-ordination

No company has all the strength points. Company's financial results shows some strength points and some weak points. Ratio analysis can create co-ordination between strength points and weak points.

5. Helps in Control

Ratio analysis can also use for controlling our business. We can easily create the standard of each financial item of our balance sheet and profit and loss account. On this basis, we can also calculate standard ratios. By comparing standard ratios with actual accounting ratios, we can find variance. These variance may be favorable and unfavorable. On this basis, we can control our business from financial point of view.

6. Helpful for Shareholder's decisions

For example, I am a shareholder. I want to invest in any company's shares. Before buying any company's shares, I will be interested to know company's long term solvency. So, I have to calculate long term solvency ratios. In which, I have to calculate fixed assets to net worth ratio, fixed assets to long term debt ratio. On this basis, I can know the level of fixed assets and its main resource. After checking my money's security, I will be interested to know my return on this investment. ROI, EPS and DPS are most useful ratios which I can calculate for knowing this.

7. Helpful for Creditors' decisions

Creditors are those persons who provide goods on credit to company or provides short period loan to company. All the creditors are interested to know whether company will repay their debt or not. For this, they calculate current ratio and quick liquid ratio and average payment period. On this basis, they take decisions.

8. Helpful for employees' decisions

Every employee wants to increase his salary. He also wants to get more and more incentives from company. For this, he takes help from company's profitability ratios. Profitability ratios will be helpful for employees to pressure on the company for increasing their salary.

9. Helpful for Govt. decisions

Different companies analyze their accounting ratios and publish on the net and print newspapers. Govt. collects all these information. On this basis, Govt. makes policies. If ratios will wrong, Govt. policies will become wrong. For example, Govt.

collects income data of all companies in different industries for calculation the national income.

Limitations of Financial Ratios

There are some important limitations of financial ratios that analysts should be conscious of:

- Many large firms operate different divisions in different industries. For these companies it is difficult to find a meaningful set of industry-average ratios.
- Inflation may have badly distorted a company's balance sheet. In this case, profits will also be affected. Thus a ratio analysis of one company over time or a comparative analysis of companies of different ages must be interpreted with judgment.
- Seasonal factors can also distort ratio analysis. Understanding seasonal factors that affect a business can reduce the chance of misinterpretation. For example, a retailer's inventory may be high in the summer in preparation for the back-to-school season. As a result, the company's accounts payable will be high and its ROA low.
- Different accounting practices can distort comparisons even within the same company (leasing versus buying equipment, LIFO versus FIFO, etc.).
- It is difficult to generalize about whether a ratio is good or not. A high cash ratio in a historically classified growth company may be interpreted as a good sign, but could also be seen as a sign that the company is no longer a growth company and should command lower valuations.
- A company may have some good and some bad ratios, making it difficult to tell if it's a good or weak company.

In general, ratio analysis conducted in a mechanical, unthinking manner is dangerous. On the other hand, if used intelligently, ratio analysis can provide insightful information.

Illustration: 1

The following are the income statements of Jeeva Ltd. For the year ending 31st December 1999 and 1998. You are required to prepare a comparative and common size income statement for the two years.

II Mcom (CA) – FINANCIAL STATEMENT ANALYSIS

Particulars	31.12.98	31.12.99
Net sales	10,00,000	12,00,000
Cost of goods sold	5,50,000	6,05,000
Operating expenses		
Administration	80,000	1,00,000
Selling	60,000	80,000
Non operating expenses		
Interest	40,000	50,000
Income tax	50,000	80,000

Solution

Jeeva Ltd comparative income statement for the years ended 31st December 1998 and
1999

Particulars	1998	1999	In/ De Rs.	In /De %
Net sales	10,00,000	12,00,000	+2,00,000	+20
Less: Cost of goods sold	5,50,000	6,05,000	+55,000	+10
Gross Profit(A)	4,50,000	5,95,000	+1,45,000	+32.22
Operating expenses:				
Administration	80,000	1,00,000	+20,000	+25
Selling	60,000	80,000	+20,000	+33.33
Total Operating Expenses(B)	1,40,000	1,80,000	+40,000	+28.57
Operating profit(A-B)=C	3,10,000	4,15,000	+1,05,000	+33.87
Non operating expenses				
Interest	40,000	50,000	+10,000	+25
Income tax	50,000	80,000	+30,000	+65
Total Non operating expenses (D)	90,000	1,30,000	+40,000	+44.44
Net Profit(C-D)	2,20,000	2,85,000	+65,000	+29.55

Illustration:2

From the following data relating to the assets side of the Balance Sheet of Kamdhenu Ltd., for the period 31st Dec., 1995 to 31st December, 1998, you are required to calculate the trend percentage taking 1995 as the base year.

(Rupees in thousands)

Assets	1995	1996	1997	1998
Cash	100	120	80	140
Debtors	200	250	325	400
Stock-in-trade	300	400	350	500
Other Current Assets	50	75	125	150
Land	400	500	500	500
Building	800	1,000	1,200	1,500
Plant	<u>1,000</u>	<u>1,000</u>	<u>1,200</u>	<u>1,500</u>
	<u>2,850</u>	<u>3,345</u>	<u>3,780</u>	<u>4,690</u>

Solution

TREND ANALYSIS

Assets	December 31				Trend Percentage			
	(Rs. in thousands)				Base year 1995			
	1995	1996	1997	1998	1995	1996	1997	1998
Current Assets:								
Cash	100	120	80	140	100	120	80	140
Debtors	200	250	325	400	100	125	163	200
Stock-in-trade	300	400	350	500	100	133	117	167
Other Current Assets	50	75	125	150	100	150	250	300
Total Current Assets	650	845	880	1,190	100	129	135	183

II Mcom (CA) – FINANCIAL STATEMENT ANALYSIS

	400	500	500	500	100	125	125	125
	800	1,000	1,200	1,500	100	125	150	175
	1,000	1,000	1,200	1,500	100	100	120	150
	2,200	2,500	2,900	3,500	100	114	132	159

Illustration: 3

The Balance Sheet of Tulsian Ltd. as at 31 st March 1991 is as under:

Liabilities	Rs.	Assets	Rs.
Equity Share Capital	1,00,000	Land & Building	6,00,000
18% Pref. Share capital	1,00,000	Plant & Machinery	5,00,000
Reserves	60,000	Furniture &	1,00,000
Profit & Loss A/c	2,40,000		12,00,000
15% Debentures	8,00,000	Less: Depreciation	2 00000
Trade Creditors	40,000		10,00,000
Bills Payable	30,000	Trade Investment	1,00,000
Outstanding Expenses	20,000	Stock	95,000
Bank overdraft	10,000	Debtors	3,40,000
Provision for Tax	2,40,000	Less: Provision	3,10,000
		30,000	
		Marketable Securities	10,000
		Cash	10,000
		Bills receivables	10,000

Prepaid Expenses 5,000

II Mcom (CA) – FINANCIAL STATEMENT ANALYSIS

		Preliminary Expenses	60,000
		Underwriting Commission	40,000
	16,40,000		16,40,000

Net Sales for the year 1991 -1992 amounted to Rs. 20,00,000. Calculate Current Ratio.

Current Assets=Stock + Debtors - Provision on Debtors +Marketable Securities
+ Cash + B/R + Prepaid Expenses

$$= \text{Rs. } 95,000 + \text{Rs. } 3,40,000 - \text{Rs. } 30,000 + \text{Rs. } 10,000 + \text{Rs. } 10,000 + \text{Rs. } 10,000 + \text{Rs. } 5,000 = \text{Rs. } 4,40,000$$

Current Liabilities= Trade Creditors + B/P + O/s Exp + Bank O/D + Provision
for Tax = Rs. 40,000 + Rs. 30,000 + Rs. 20,000 + Rs. 10,000 + Rs. 2,40,000 =
Rs. 3,40,000

$$\text{Current Ratio} = \text{Rs. } 4,40,000 / 3,40,000 = 1.29:1$$

Illustration: 4

Current Assets Rs.2,00,000, Inventory Rs.40,000, Working Capital Rs.1,20,000. Calculate the Quick Ratio.

Solution:

$$\begin{aligned} \text{Current Liabilities} &= \text{Current Assets} - \text{Working Capital} \\ &= \text{Rs. } 2,00,000 - \text{Rs. } 1,20,000 = \text{Rs. } 80,000 \end{aligned}$$

$$\begin{aligned} \text{Quick Asset} &= \text{Current Assets} - \text{Inventory} \\ &= \text{Rs. } 2,00,000 - \text{Rs. } 40,000 = \text{Rs. } 1,60,000 \end{aligned}$$

Quick Assets Rs.1,60,000

Quick Ratio = 2:1

Current Liabilities Rs. 80000

Illustration: 5

Capital Employed Rs. 24, 00,000, Long-term Debt Rs. 16, 00,000

Calculate the Debt-Equity Ratio.

Solution: Shareholders' Funds = Capital Employed - Long-term Debt

$$= \text{Rs. } 24,00,000 - \text{Rs. } 16,00,000 = \text{Rs. } 8,00,000$$

Long-term Debts	Rs. 16, 00,000
-----------------	----------------

Debt-Equity Ratio = 2 :1

Shareholders ' Funds	Rs8, 00,000
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Illustration: 6

Capital Employed Rs. 8, 00,000, Shareholders' Funds Rs. 2, 00,000. Calculate the Debt Equity Ratio.

Solution:

Long-term Debt= Capital Employed - Shareholders' Funds

$$= \text{Rs. } 8,00,000 - \text{Rs. } 2,00,000 = \text{Rs. } 6,00,000$$

Long-term Debts	Rs. 6,00,000
-----------------	--------------

Debt equity Ratio = ----- = ----- = 3:1

Shareholders' Funds	Rs. 2,00,000
---------------------	--------------

Illustration: 7

Net Profit before Interest and Tax Rs. 3,20,000, Interest on long term debt Rs. 40,000. Calculate Interest Coverage Ratio.

Solution:

Net Profit before Interest and Taxes

Interest Coverage Ratio = -----

Interest on Long-term Debt

$$= \text{Rs.} 3,20,000 / \text{Rs.} 40,000 = 8 \text{ times}$$

Illustration: 8

Fixed Assets(at cost) Rs.7,00,000, Accumulated Depreciation till date Rs. 1,00,000, Credit Sales Rs. 17,00,000, Cash Sales Rs., 1,50,000, Sales Returns Rs. 50,000. Calculate Fixed Assets Turnover Ratio.

Solution:

$$\begin{aligned} \text{Net Sales} &= \text{Cash Sales} + \text{Credit Sales} - \text{Sales Returns} \\ &= \text{Rs. } 1,50,000 + \text{Rs. } 17,00,000 - \text{Rs. } 50,000 \\ &= \text{Rs. } 18,00,000 \end{aligned}$$

$$\begin{aligned} \text{Net Fixed Assets} &= \text{Fixed Assets (at cost)} - \text{Depreciation} \\ &= \text{Rs. } 7,00,000 - \text{Rs. } 1,00,000 = \text{Rs. } 6,00,000 \end{aligned}$$

$$\text{Fixed Assets Turnover Ratio} = \frac{\text{Net Sales}}{\text{Fixed Assets}} = \frac{18,00,000}{6,00,000} = 3 \text{ times}$$

Illustration: 9

Current Assets Rs. 6,00,000, Current Liabilities Rs. 1,20,000, Credit Sales Rs. 12,00,000, Cash Sales Rs. 2,60,000, Sales Returns Rs. 20,000. Calculate Working Capital Turnover Ratio.

Solution:

$$\begin{aligned} \text{Net Sales} &= \text{Cash Sales} + \text{Credit Sales} - \text{Sales Returns} \\ &= \text{Rs. } 2,60,000 + \text{Rs. } 12,00,000 - \text{Rs. } 20,000 \\ &= \text{Rs. } 14,40,000 \end{aligned}$$

$$\begin{aligned} \text{Working Capital} &= \text{Current Assets} - \text{Current Liabilities} \\ &= \text{Rs. } 6,00,000 - \text{Rs. } 1,20,000 = \text{Rs. } 4,80,000 \end{aligned}$$

$$\text{Net Sales} \quad \text{Rs. } 14,40,000$$

$$\text{Working Capital Turnover Ratio} = \frac{\text{Net Sales}}{\text{Working Capital}} = \frac{14,40,000}{4,80,000} = 3 \text{ Times}$$

Working Capital Rs. 4,80,000

Illustration: 10

Sales= 17, 00,000, Gross profit= 7, 00,000, Closing stock=5,00,000

Cost of Goods Sold

Stock Turnover Ratio =

Average Inventory

$$= 17, 00,000 - 7, 00,000 / 5, 00,000 = 2$$

Illustration: 11

From the following information make out a statement of Proprietors funds with as many details as possible

- a. Current Ratio 2.5
- b. Liquidity ratio 1.5
- c. Proprietary ratio(fixed assets/proprietary fund) 0.75
- d. Working capital Rs.60,000
- e. Reserves and Surplus Rs.40,000
- f. Bank overdraft Rs.10,000
- g. There is no long term loan or fictitious asset.

Solution

Statement of Proprietors funds

Particulars	Rs.	Rs.
Proprietors funds:		
Share Capital	2,00,000	
Reserves and surplus	40,000	2,40,000
Proprietors funds represented by	1,80,000	
Current Assets		

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Stock	40,000		
Other current Assets	60,000	1,00,000	
Less: Current Liabilities			
Bank overdraft	10,000		
Other Current Liabilities	30,000	40,000	
Working Capital		60,000	
Total (Fixed assets and Working Capital)			2,40,000

Working Notes:

1. Calculation of current assets and current liabilities

Working Capital= Current Assets- Current Liabilities

$$= 2.5-1=1.5$$

Current Assets= $60,000 \times 2.5 / 1.5 = \text{Rs. } 1,00,000$ Current Liabilities= $60,000 \times 1 / 1.5 = \text{Rs. } 40,000$

2. Calculation of liquid assets and stock

Liquid Assets= $40,000 \times 1.5 = \text{Rs. } 60,000$ Stock= $\text{Rs. } 1,00,000 - 60,000 = \text{Rs. } 40,000$

3. Calculations of Fixed assets and Capital

Proprietary ratio given = 0.75 Proprietary ratio= Fixed Assets/ Proprietors funds

$X + \text{Current Liabilities} = 0.75x + \text{current assets}$ $X + \text{Current Liabilities} = 0.75x + 1,00,000$

$$= 1,00,000 - 40,000 = \text{Rs. } 60,000$$

$X = 60,000 / 25 = \text{Rs. } 2,40,000$

Proprietors funds = Rs. 2,40,000

Less: Reserve and Surplus = Rs. 40,000

Capital Rs. 2,00,000

Fixed Assets= $2,40,000 \times 0.75 = \text{Rs. } 1,80,000$

Possible Questions

PART - A

1. What are financial statements?
2. What is financial statement Analysis?
3. List out the tools of financial statement analysis
4. What is vertical Analysis of financial statements?
5. Explain the meaning of Horizontal Analysis?
6. What are the types of financial analysis?
7. What is a Comparative Financial Statement?
8. Explain the meaning of common-size statement.
9. What is trend analysis?
10. What is ratio analysis
11. What is current ratio?
12. State any two objectives of ratio analysis.
13. Explain the meaning of ROI
14. What are the profitability ratios
15. Explain the implication of Debt Equity Ratio
16. Write the formula for (a) Return on capital employed,(b)Return on shareholders' funds.

Sakthi ltd submit the following data regarding sales and cost

Particulars	2005 (Rs.)
Sales	1,00,0000
Sales returns	20,000

Cost of sales	50,000
---------------	--------

Find out the gross profit ratio. [Ans: GP 37.5%]

17. Calculate Average collection period from the following

Credit sales for the year	Rs.30, 000	
Debtors	Rs. 2,500	
Bills receivable	Rs. 3,000	[Ans: 67 days]

18. Compute inventory Turnover ratio for three years shown below:

Particulars	1992 (Rs.)	1993 (Rs.)	1994 (Rs.)
Cost of goods sold	7,60,417	8,54,413	9,55,817
Average inventory	3,36,420	3,08,243	3,10,412

[Ans: 2.26, 2.77 and 3.08]

19. Current ratio 2.5, working capital Rs.60, 000. Calculate the amount of current assets and current liabilities. [Ans: 1, 00,000 and 40,000]

20. If inventory turnover ratio is 5 times, GP ratio 30% and sales Rs.10, 00,000 find out the Average stock. [Ans: Rs.1, 60,000]

PART - C

1. What are Financial Statements? Discuss the nature of financial statements
2. What do you mean by financial statements? State the Limitation of Financial Statements.
3. Describe the different types of Financial Statement Analysis
4. Briefly describe the steps for financial statement Analysis
5. Explain the techniques of Financial Statements
6. What is ratio analysis? Discuss its uses
7. Bring out limitation of Ratio Analysis

8. “Ratio Analysis is a Tool of Management for measuring efficiency and guiding business policies”- Discuss.
9. State and Explain how Accounting Ratio are Classified
10. What are Liquidity and Long term solvency Ratios? Discuss their significance
11. What are Turnover ratios? Explain their importance
12. “Liquidity and Profitability are the irreconcilable goals of a firm” Do you agree?
13. Kuberan & Co. makes both cash and credit sales. From the following information calculate average collection period

Total Sales	Rs.2, 00,000
Cash Sales	Rs. 40,000
Sales return	Rs. 14,000
Debtors (31.12.05)	Rs. 18,000
Creditors (31.12.05)	Rs. 20,000
Provisions for bad debts (31.12.05)	Rs. 2,000
Bills receivable (31.12.05)	Rs. 4,000

[Ans: 55 days, Rs.1, 46,000, 22,000, 6.636]

14. From the following Balance sheet calculate
 - a. Current ratio
 - b. liquid ratio
 - c. Debt equity ratio
 - d. proprietary ratio
- Balance Sheet

Particulars	Rs.	Particulars	Rs.
Share Capital	5,00,000	Fixed assets	14,00,000
Reserves	3,00,000	Stock	5,00,000
6% Debentures	11,00,000	Debtors	2,00,000
Bank overdraft	1,00,000	cash	1,00,000
creditors	2,00,000		
	22,00,000		22,00,000

[Ans: 2.67, 1.375 and 0.36]

15. From the following details, make out a statement of proprietary funds

- | | |
|--------------------------------------------------|-----------|
| a. Long term loans | Rs.50,000 |
| b. working capital | Rs.80,000 |
| c. Reserves to capital | 1:2 |
| d. Current ratio | 2 times |
| e. Liquid ratio | 1.4 times |
| f. Fixed assets to proprietors funds | 0.6 |
| g. There are no fictitious or intangible assets. | |

[Ans: PF= Rs. 75,000, capital Rs.50,000, current assets Rs.1,60,000, fixed assets Rs.45,000]

16. Using the information and the form given below compute the balance sheet items for a firm having a sale of Rs.36 lakhs

Sales/Total Assets	3
Sales/fixed assets	5
Sales/current assets	7.5
Sales/investments	20
Sales/debtors	15
Current ratio	2
Total assets/net worth	2.5
Debt/equity	1

[fixed assets: Rs.7,20,000, inventories Rs.1,80,000, Debtors Rs.2,40,000, other liquid assets Rs.60,000, Net worth Rs.4,80,000, long term debt Rs.4,80,000 and current liabilities Rs.2,40,000]

17. Big Ltd. And Small ltd furnish you the following balance sheet and you are requested to prepare comparative and common size statement as on 31st March 2000.

Balance Sheet

Liabilities	Big ltd	Small ltd	Assets	Big ltd	Small ltd
Share Capital	50,00,000	25,000	Fixed Assets	60,00,000	10,000
Reserves	5,00,000	20,000	Inventories	25,00,000	5,000
Term loans	20,00,000	-	Debtors	10,00,000	20,000
Current liabilities	25,00,000	5,000	Cash	5,00,000	15,000
	1,00,00,000	50,000		1,00,00,000	50,000

18. From the following profit and loss account Gowri ltd for the year ended 31st Dec 2007 and 2008, you are required to prepare a comparative and common size income statement for the years 2007 and 2008.

Profit and loss Account(Rs. In Lakhs)

Particulars	2007	2008	Particulars	2007	2008
To Cost of Goods sold	600	750	By Net Sales	800	1,000
To Administrative exp	20	20			
To selling expenses	30	40			
To Net profit	150	190			
	800	1,000		800	1,000

Comment

19. Calculate the trend percentages form the following figures of Z ltd taking 2006 as the base.

[Figure in Lakhs]

Year	Sales	Stock	Profit before tax
2006	1,881	709	321
2007	2,340	781	435
2008	2,655	816	458
2009	3,021	944	527
2010	3,768	1,154	672

[Ans: 2007= Sales=124, Stock=110, Profit before tax= 136, 2008= Sales=141, Stock=115, Profit before tax= 143, 2009= Sales=161, Stock=133, Profit before tax= 164, 2010= Sales=200, Stock=163, Profit before tax= 209.]



Karpagam Academy of Higher Education
(Deemed University Established Under Section 3 of UGC Act, 1956)

Coimbatore - 641 021.

UNIT III

Fund Flow Analysis – Cash Flow Analysis – Working Capital Statements – Funds from Operations

Definition of fund flow

Flow of fund is just like circulation of blood. Like circulation of blood, fund flow should come in business and go from business.

Flow of fund here means conversation of one asset to be use to purchase of another asset or use to deduction in liabilities

Definition of fund flow statement

Fund flow statement is a statement which shows source and use of fund in particular time. This period may be two years or more years'.Basis of making fund flow statement is two years or more than two years balance sheet.

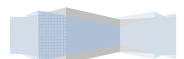
Funds Flow Statement is a statement prepared to analyse the reasons for changes in the Financial Position of a Company between two Balance Sheets. It shows the inflow and outflow of funds i.e. Sources and Applications of funds for a particular period.

In other words, a **Funds Flow Statement** is prepared to explain the changes in the Working Capital Position of a Company.

There are 2 types of Inflows of Funds:-

1. Long Term Funds raised by Issue of Shares, Debentures or Sale of Fixed Assets
2. Funds generated from Operations

If the Long Term Fund requirements of a company are met just out of the Long Term Sources of Funds, then the whole fund generated from operations will be represented by increase in Working Capital. However, if the Funds generated from Operations are not sufficient to bridge a gap of Long Term Fund Requirements, then there will be a decline in *Working Capital*.



Advantages of Fund Flow Statements

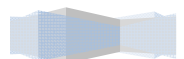
A Funds flow statement is prepared to show changes in the assets, liabilities and equity between two balance sheet dates, it is also called statement of sources and uses of funds. The advantages of such a financial statement are many fold.

Some of these are:

1. Funds flow statement reveals the net result of Business operations done by the company during the year.
2. In addition to the balance sheet, it serves as an additional reference for many interested parties like analysts, creditors, suppliers, government to look into financial position of the company.
3. The Fund Flow Statement shows how the funds were raised from various sources and also how those funds were deployed by a company, therefore it is a great tool for management when it wants to know about where and from what sources funds were raised and also how those funds got utilized into the business.
4. It reveals the causes for the changes in liabilities and assets between the two balance sheet dates therefore providing a detailed analysis of the balance sheet of the company.
5. Funds flow statement helps the management in deciding its future course of plans and also it acts as a control tool for the management.
6. Funds flow statement should not be looked alone rather it should be used along with balance sheet in order judge the financial position of the company in a better way.

Disadvantages of Fund Flow Statements

Funds flow statement has many advantages; however it has some disadvantages or limitations also.



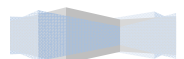
Let's look at some of the limitations of funds flow statement.

1. Funds Flow statement has to be used along with balance sheet and profit and loss account for inference of financial strengths and weakness of a company it cannot be used alone.
2. Fund Flow Statement does not reveal the cash position of the company, and that is why company has to prepare cash flow statement in addition to funds flow statement.
3. Funds flow statement only rearranges the data which is there in the books of account and therefore it lacks originality. In simple words it presents the data in the financial statements in systematic way and therefore many companies tend to avoid preparing funds flow statements.
4. Funds flow statement is basically historic in nature, that is it indicates what happened in the past and it does not communicate anything about the future, only estimates can be made based on the past data and therefore it cannot be used the management for taking decision related to future.

Benefits of Funds Flow Statement

Funds Flow Statement is useful for Long Term Analysis. It is a very useful tool in the hands of the management for judging the financial and operating performance of the Company. The Balance Sheet and the Profit and Loss A/c (Income Statement) fail to provide the information which is provided by the *Funds Flow Statement* i.e. Changes in Financial Position of an enterprise. Such an analysis is of great help to the management, shareholders, creditors etc

1. The Funds Flow Statement helps in answering the following questions:-
 - Where have the profits gone?
 - Why is there an imbalance existing between liquidity position and profitability position of an enterprise?
 - Why is the concern financially solid in spite of losses?



2. The Funds Flow Statement analysis helps the management to test whether the working capital has been effectively used or not and the working capital level is adequate or inadequate for the requirements of the business. The Working Capital Position helps the management in taking policy decisions regarding payment of dividend etc.

3. The Funds Flow Statement Analysis helps the investors to decide whether the company has managed the funds properly. It also indicates the Credit Worthiness of a company which helps the lenders to decide whether to lend money to the company or not.

It helps the management to take policy decisions and to decide about the financing policies and Capital Expenditure for the future.

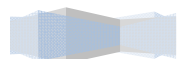
Limitations of Fund Flow Statement

The fund flow statement suffers from the following limitations:

- The fund flow statement is prepared with the help of balance sheet and profit and loss account of the current period and these statements are based on historical cost. So a realistic comparison of profitability and the funds position is not possible as the current cost is not considered for the purpose of Preparation of fund flow statement.
- The cash position of the firm is not revealed by fund flow statement. To know the cash position a cash flow statement has to be prepared.
- The various activities are not classified as operating activities, investing activities and financing activities while preparing fund flow statement.

Uses of Fund Flow Statement

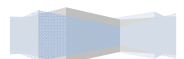
- The users of fund flow statement, such as investors, creditors, bankers, government, etc., can understand the managerial decisions regarding dividend distribution, utilization of funds and earning capacity with the help of fund flow statement.



- The quantum of working capital is revealed by the schedule of working capital changes, which is a part of fund flow statement.
- The fund flow statement is the best and first source for judging the repaying capacity of an enterprise.
- The management will be able to detect surplus/shortage of fund balance.
- The fund from operation is not mentioned in the profit and loss account and balance sheet but it is separately calculated for the purpose of fund flow statement.

Difference between Funds Flow Statement and Cash Flow Statement

Basis of Difference	Funds Flow Statement	Cash Flow Statement
Basis of Analysis	Funds flow statement is based on broader concept i.e. working capital.	Cash flow statement is based on narrow concept i.e. cash, which is only one of the elements of working capital.
Source	Funds flow statement tells about the various sources from where the funds generated with various uses to which they are put.	Cash flow statement starts with the opening balance of cash and reaches to the closing balance of cash by proceeding through sources and uses.
Usage	Funds flow statement is more useful in assessing the long-range financial strategy.	Cash flow statement is useful in understanding the short-term phenomena affecting the liquidity of the business.
Schedule of Changes in Working Capital	In funds flow statement changes in current assets and current liabilities are shown through the schedule of	In cash flow statement changes in current assets and current liabilities are shown in the cash flow statement itself.



	changes in \working capital.	
End Result	Funds flow statement shows the causes of changes in net working capital.	Cash flow statement shows the causes the changes in cash.
Principal of Accounting	Funds flow statement is in alignment with the accrual basis of accounting.	In cash flow statement data obtained on accrual basis are converted into cash basis.

Procedure for preparing fund flow statement

For making fund flow statement, we took three steps

1st step: Making schedule or statement of change working capital

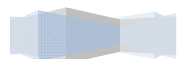
2nd step: Making adjusted profit and loss account or statement showing fund from operation or lost in operation

3rd Step: Fund flow statement

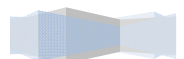
First Step

Making of statement of Changes of Working Capital:

For making of fund flow statement. It is very necessary to make statement of changes of working capital. Because net increase in working capital is use of fund and net decrease in working capital is source of fund. So, it is duty of accountant to make statement of changes of working capital.	previous year	Current year	Effect on working capital



<p>Making of statement of changes working capital is very easy and simple.</p> <p>We take two balance sheets, one is current year balance sheet and other is previous year balance sheet. Then we separate current assets and current liabilities. If current assets are more than previous year current assets, it means increase in working capital.</p> <p>If current assets are less than previous year current assets, it means decrease in working capital. Because, relationship between current assets and working capital is positive and if any changes in current assets, working capital will change in same direction.</p> <p>If current liabilities are more than previous year current liabilities, it means decrease in working capital.</p> <p>If current liabilities are less than previous year current liabilities, it means increase in working capital. Relationship between working capital and current liabilities are inverse.</p> <p>Statement or schedule of changes in working</p>			
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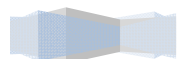


capital Particular				
			Increase	Decrease
Current Assets				
Cash in hand				
Bills receivable				
Sundry debtors				
Temporary investments				
Stocks / inventories				
Prepaid expenses				
Accrued incomes				
Total current assets	xxxx	Xxxx		
Current liabilities				
Bills payables				
Sundry creditors				
Bank overdraft				
Short term advances				
Dividends payables				
Provision for taxation				
Total current Liabilities	xxxx	xxxx		
Working capital CA- CL	xxxx	xxxx		
Net increase or decrease in working capital	xxxx	xxxx	xxxx	Xxxx

2nd Step**Statement showing the fund from operation**

It is the source of fund and will show in fund flow statement's source side. So before making fund flow statement, we must make statement showing the fund from operation.

Operation means business activity and fund from operation means profit from



business activity. So, you will easy understand that profit from business activity between two accounting period must be the source of fund.

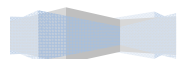
Statement of fund from operations

Closing balance of profit and loss account or retained earning as given in the Balance sheet

Add non –fund and non operating items which have been already

Debited to profit and loss account

1. Depreciation
 2. Amortization of fictitious and intangible assets
 - goodwill
 - patents
 - trade marks
 - preliminary expenses
 - discount on issue of shares
 3. Appropriation of retained earning such as
 - Transfer to general reserve
 - Dividend equalization fund
 - Transfer to sinking fund
 - Contingency reserve etc.
 4. Loss on sale of any non current or fixed assets such as
 - Loss on sale of land and building
 - Loss on sale of machinery
 - Loss on sale of furniture
 - Loss on sale of long term investments
 5. Dividends including
 - Interim dividend
 - Proposed dividend
- (If it is an appropriation of profit and not taken as current liability)
6. Provision for taxation (if it is not taken as current liability)
 7. Any other non fund / non operating items which have been debited to P/L account



Total (A)-----> ↓ XXXXX ↓

Less : Non –Fund or non operating items which have already been credited to profit and loss account

1. Profit or gain from the sale of non current / fixed assets such as
 - Profit on sale of land and building
 - Profit on sale of plant and machinery
 - Profit on sale of long term investment etc.
2. Appreciation in the value of fixed assets such as increase in the value of land if it has been credited to profit and loss account
3. Dividends received
4. Excess provision retransferred to profit and loss account or written back .
5. Any other non operating item which has been credited to profit and loss account
6. opening balance of profit and loss account or retained earnings as given in the balance sheet

Total (B)-----> ↓ XXXXX ↓

Funds received from operation or business activities = total (A) – Total (B)

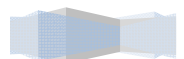
(You can make also above statement in t shape adjusted profit and loss account form) .

3rd Step

Fund flow statement

A) Source of funds

1. fund from operation (balance of second step)
2. issue of shares capital
3. issue of debentures
4. raising of long term loans
5. receipts from partly paid shares , called up
6. amount received from sales of non current or fixed assets
7. non trading receipts such as dividend received
8. sale of investments (Long term)



9. Decrease in working capital as per schedule of changes in working capital

total -----> ↓ XXXXX ↓

B) Applications or uses of funds

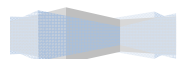
1. Funds lost in operations (Balance negative in second step)
2. Redemption of preference share capital
3. Redemption of debentures
4. Repayment of long term loans
5. purchase of long term loans
6. purchase of long term investments

7. Non trading payments
8. Payment of tax
9. payment of dividends
10. increase in working capital (As per positive balance of ist step)

total -----> ↓ XXXXX ↓

The first two statements measure one aspect of performance of the business over a period of time. Cash flow statements signify the changes in the cash and cash equivalents of the business due to the business operations in one time period. Funds flow statements report changes in a business's working capital from its operations in a single time period, but have largely been superseded by cash flow statements.

A Cash Flow Statement is a statement showing changes in cash position of the firm from one period to another. It explains the inflows (receipts) and outflows (disbursements) of cash over a period of time. The inflows of cash may occur from sale of goods, sale of assets, receipts from debtors, interest, dividend, rent, issue of new shares and debentures, raising of loans, short-term borrowing, etc. The cash outflows may occur on account of purchase of goods, purchase of assets, payment of loans loss on operations, payment of tax and dividend, etc.



A cash flow statement is different from a cash budget. A cash flow statement shows the cash inflows and outflows which have already taken place during a past time period. On the other hand a cash budget shows cash inflows and outflows which are expected to take place during a future time period. In other words, *a cash budget is a projected cash flow statement.*

Definition of Cash

A statement of cash flow doesn't necessarily only include cash. Certain business assets that operate in much the same manner as cash may be included as well. For instance, a cash flow statement may include bank deposits that the business has the right to demand immediately. It may also include any assets that are sufficiently liquid and anticipate minimal changes in value, such that a cash value can be placed on those instruments. The statement can also include expected or realized returns on investments.

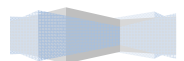
Definition of Cash flow

An accounting statement called the "statement of cash flows", which shows the amount of cash generated and used by a company in a given period. It is calculated by adding non cash charges (such as depreciation) to net income after taxes. Cash flow can be attributed to a specific project, or to a business as a whole. Cash flow can be used as an indication of a company's financial strength.

Cash flow refers to the amount of cash moving in or out of a business. A cash flow statement, also known as the statement of cash flows, describes the cash flow during a given period covered by the statement. The cash flow statement is one of several core financial documents in any business enterprise.

Definition of 'Cash Flow Statement'

One of the quarterly financial reports any publicly traded company is required to disclose to the SEC and the public. The document provides aggregate data regarding all cash inflows a company receives from both its ongoing operations and external



investment sources, as well as all cash outflows that pay for business activities and investments during a given quarter.

Purpose of Statement

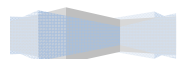
A cash flow statement is designed to give a more complete financial picture of a company. Rather than analyzing long-term financial prospects, as some other financial documents do, a cash flow statement focuses on a company's access to liquid assets in the short term. Essentially, a cash flow statement shows how much real money a company has.

Importance of Cash Flow Statement

The cash flow statement provides information regarding inflows and outflows of cash of a firm for a period of one year. Therefore cash flow statement is important on the following grounds.

1. Cash flow statement helps to identify the sources from where cash inflows have arisen within a particular period and also shows the various activities where in the cash was utilized.
2. Cash flow statement is significant to management for proper cash planning and maintaining a proper matching between cash inflows and outflows.
3. Cash flow statement shows efficiency of a firm in generating cash inflows from its regular operations.
4. Cash flow statement reports the amount of cash used during the period in various long-term investing activities, such as purchase of fixed assets.
5. Cash flow statement reports the amount of cash received during the period through various financing activities, such as issue of shares, debentures and raising long-term loan.
6. Cash flow statement helps for appraisal of various capital investment programmes to determine their profitability and viability.

Cash flow statement is a statement which shows how the operations of the company affects the cash position of the company during a financial year and therefore



companies usually make both cash and funds flow statement. Given below are some of the advantages and disadvantages of cash flow statement

Advantages

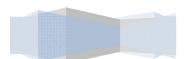
- Cash position shows the actual cash position available with the company between the two balance sheet dates which funds flow and profit and loss account are unable to show and therefore it is important to make a cash flow report if you want to know about the liquidity position of the company.
- It helps the company in making accurate projections regarding the future liquidity position of the company and hence arrange for any shortfall in money by making arrangements in advance and if there is excess than it can help the company in earning extra return out of idle funds.
- It acts like a filter and is used by many analyst and investors to judge whether company has prepared the financial statements properly or not because if there is any discrepancy in the as shown by balance sheet with cash flow statement than it means that statements are incorrect.

Disadvantages

- Since it shows only cash position, it is not possible to arrive at actual profit and loss of the company by just looking at this statement alone.
- In isolation this is of no use and it requires other financial statements like balance sheet, profit and loss etc..., and therefore limiting its use

Objectives of Cash Flow Statement

1. To provide information about the cash inflows and cash outflows from operating, financing and investing activities of the firm.
2. To show the impact of the operating, financing and investing activities on cash resources.
3. To tell how much cash came in during the period, how much cash went out and what the net cash flow was during the period.
4. To explain the causes for changes in cash balance.



5. To identify the financial needs and help in forecasting future cash flows.

UTILITY OF CASH FLOW ANALYSIS

A Cash Flow Statement is useful for short-term planning. A business enterprise needs sufficient cash to meet its various obligations in the near future such as payment for purchase of fixed assets, payment of debts maturing in the near future, expenses of the business, etc. A historical analysis of the different sources and applications of cash will enable the management to make reliable cash flow projections for the immediate future. It may then plan out for investment of surplus or meeting the deficit, if any. Thus, a cash flow analysis is an important financial tool for the management. Its chief advantages are as follows:

1. Helps in Efficient Cash Management

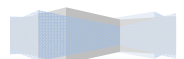
Cash flow analysis helps in evaluating financial policies and cash position. Cash is the basis for all operations and hence a projected cash flow statement will enable management to plan and co-ordinate the financial operations properly. The management can know how much cash is needed, from which source it will be derived, how much can be generated internally and how much could be obtained from outside.

2. Helps in Internal Financial Management

Cash flow analysis provides information about funds which will be available from operations. This will help the management in determining policies regarding internal financial management, *e.g.*, possibility of repayment of long-term debt, dividend policies, planning replacement of plant and machinery, *etc.*

3. Discloses the Movements of Cash

Cash flow statement discloses the complete story of cash movement. The increase in or decrease of, cash and the reason therefore can be known. It discloses the reasons for low cash balance in spite of heavy operating profits or for heavy cash balance in spite of low profits. However, comparison of original forecast with the actual results highlights the trends of movement of cash which



may otherwise go undetected.

4. Discloses Success or Failure of Cash Planning

The extent of success or failure of cash planning can be known by comparing the projected cash flow statement with the actual cash flow statement and necessary remedial measures can be taken.

Illustration: 1

Prepare a funds flow statement

Balance Sheet of M/s ____

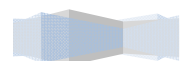
Liabilities	As on 31st December		Assets	As on 31st December	
	2004	2005		2004	2005
Share Capital	10,000	15,000	Cash	5,000	8,000
Profit and Loss			Debtors	10,000	15,000
Appropriation account	5,000	8,000	Stock	10,000	12,000
Long Term Loan	4,000	6,000	Machinery	3,000	5,000
Sundry Creditors	8,000	12,000	Land	4,000	4,000
Bills Payable	5,000	3,000			
	32,000	44,000		32,000	44,000

From the information relating to the non-current area from the balance sheet figures on 31st Dec 2004 and 31st Dec 2005, we would be able to prepare a funds flow statement for the period between 31st December 2004 and 31st December 2005 i.e. for the year 2005.

Balance Sheet of M/s ____

Schedule/Statement of Changes in Working Capital for the period from __ to __

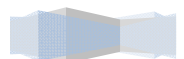
Particulars/Account	Balance as on 31 st December		Working Capital Change	
	2004	2005	Increase	Decrease



a) CURRENT ASSETS				
1)Cash	5,000	8,000		3,000
2)SundryDebtors	10,000	15,000		5,000
3) Stock	10,000	12,000		2,000
TOTAL	25,000	35,000		10,000
b) CURRENT LIABILITIES				
1)SundryCreditors	8,000	12,000	4,000	
2) Bills Payable	5,000	3,000		2,000
TOTAL	13,000	15,000	4,000	2,000
Working Capital [(a) - (b)]	12,000	20,000		
TOTAL			4,000	12,000
Net Change in Working Capital				8,000

Funds Flow Statement for the period from __ to __

Particulars	Amount	Amount
a) Sources (Inflow) of Funds		
1) Share Capital	5,000	
2) Funds from Operations [P/L appropriation account]	3,000	8,000
b) Applications (Outflow) of Funds		
	2,000	



1) General Reserve	2,000	4,000
2) Machinery		
Change in Working Capital [a - b]		+ 4,000

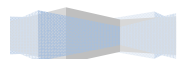
Illustration: 2

From the following information prepare

- i) A Schedule of Changes in Working Capital
- ii) A Funds Flow Statement

Balance Sheet of M/s _____

Liabilities	as on 31 st March		Assets	as on 31 st March	
	2006	2007		2006	2007
Capital	18,50,000	21,00,000	Goodwill (at Cost)	6,00,000	6,00,000
Profit/Loss	14,78,000	17,64,000	Land and Buildings	18,50,000	22,00,000
Appropriation	12,00,000	9,00,000	Plant and Machinery	4,74,000	
Bank Loan	4,00,000	6,80,000	Furniture and Fittings	1,94,000	5,24,000
Bills Payable	14,00,000	12,20,000	Stock/Inventories	8,26,000	1,94,000
Sundry Creditors	2,00,000	1,80,000	Sundry Debtors	12,00,000	7,24,000
Reserve for Taxation			Bills Receivable	8,00,000	12,80,000
			Bank	5,00,000	
			Cash	84,000	7,21,000
					4,83,000
					1,18,000
TOTAL	65,28,000	68,44,000	TOTAL	65,28,000	68,44,000

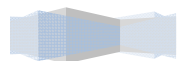


Working Notes

SOLUTION

Schedule/Statement of Changes in Working Capital for the period from 31/03/06 to 31/03/07

Particulars/Account	Balance as on 31 st March		Working Capital Change	
	2006	2007	Increase	Decrease
a) CURRENT ASSETS				
1) Stock/Inventories	8,26,000	7,24,000		1,02,000
2) Sundry Debtors	12,00,000	12,80,000	80,000	
3) Bills Receivable	8,00,000	7,21,000		79,000
4) Bank	5,00,000	4,83,000		17,000
5) Cash	84,000	1,18,000	34,000	
TOTAL	34,10,000	33,26,000	1,14,000	1,98,000
b) CURRENT LIABILITIES				
1) Bills Payable	4,00,000	6,80,000		2,80,000
2) Sundry Creditors	14,00,000	12,20,000	1,80,000	
3) Provision for Taxation	2,00,000	1,80,000	20,000	
TOTAL	20,00,000	20,80,000	2,00,000	2,80,000
Working Capital [(a) - (b)]	14,10,000	12,46,000		
TOTAL			3,14,000	4,78,000
Net Change in Working Capital				1,64,000



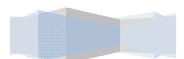
Make up the ledgers for all the non-current accounts.

Dr			Capital a/c			Cr		
Date	Particulars	Amount	Date	Particulars	Amount			
31/03/07	To Balance c/d	21,00,000	01/04/06	By Balance b/d	18,50,000			
				By Bank a/c (?)	2,50,000			
		21,00,000						21,00,000
			01/04/07	By Balance b/d	21,00,000			

Assumption :

Capital has been raised during the period for cash.

Dr			Bank Loan a/c			Cr		
Date	Particulars	Amount	Date	Particulars	Amount			
—	To Bank a/c (?)	3,00,000	01/04/06	By Balance b/d	12,00,000			
31/03/07	To Balance c/d	9,00,000						
		12,00,000						12,00,000
			01/04/07	By Balance b/d	9,00,000			



Assumption :

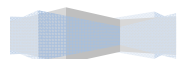
Bank loan has been repaid during the period through a cheque.

Dr			Land and Buildings a/c			Cr		
Date	Particulars	Amount	Date	Particulars	Amount			
01/04/06	To Balance b/d	18,50,000	31/03/07	By Balance c/d	22,00,000			
—	To Bank a/c (?)	3,50,000						
		22,00,000			22,00,000			
01/04/07	To Balance b/d	22,00,000						

Assumption :

Additional assets have been purchased during the period for cash.

Dr			Plant and Machinery a/c			Cr		
Date	Particulars	Amount	Date	Particulars	Amount			
01/04/06	To Balance b/d	4,74,000	31/03/07	By Balance c/d	5,24,000			
—	To Bank a/c (?)	50,000						
		5,24,000			5,24,000			
01/04/07	To Balance b/d	5,24,000						



Assumption :

Additional assets have been purchased during the period for cash.

Posting by name Bank on the credit side indicates an inflow and on the debit side indicates an outflow

Dr			Profit and Loss Appropriation			Cr		
Date	Particulars	Amount	Date	Particulars	Amount			
31/03/07	To Balance c/d	17,64,000	01/04/06	By Balance b/d	14,78,000			
			31/03/07	By Funds From				
				Operations (?)	2,86,000			
		17,64,000			17,64,000			
			01/04/07	By Balance b/d	17,64,000			

Assumption :

Funds have been generated through operations during the period.

Treat the Funds from operations posting as if it is a posting by name bank.

Funds Flow Statement

Funds Flow Statement for the period from 31/03/06 to 31/03/07

Particulars	Amount	Amount
a) Sources (Inflow) of Funds		
1) Share Capital	2,50,000	
2) Funds from Operations [P/L appropriation account]	2,86,000	5,36,000
b) Applications (Outflow) of Funds		
1) Land and Buildings	3,50,000	
2) Plant and Machinery	50,000	
3) Bank Loan	3,00,000	7,00,000

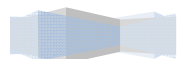
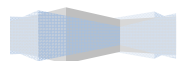


Illustration: 3

Following are the Balance Sheets of BROYHILL Industries Ltd, as on 31.12.2005 and 31.12.2006

Balance Sheet of M/s BROYHILL Industries Ltd,

Liabilities	As on 31st December		Assets	As on 31st December	
	2005	2006		2005	2006
Share capital	12,00,000	16,00,000	Goodwill (at Cost)	6,00,000	5,50,000
Debentures	4,00,000	6,00,000	Plant and Machinery	8,00,000	14,90,000
Reserve	3,00,000	3,50,000	(Cost)	2,00,000	2,00,000
Profit & Loss a/c	2,50,000	5,00,000	Furniture	6,00,000	10,00,000
Creditors	4,50,000	3,80,000	Buildings	2,20,000	-
Bank Loan	8,00,000	13,00,000	Investments	3,50,000	4,70,000
Fixed Deposits	2,00,000	-	Land	3,38,000	3,72,000
Provision for			Debtors	6,00,000	8,00,000
Depreciation	12,000	6,000	Stock	40,000	80,000
on Buildings	40,000	48,000	Bank	14,000	12,000
on Plant &			Preliminary expenses		
Machinery	60,000	70,000			
	50,000	1,20,000			
Provision for:					
Bad & Doubtful					
Debts					
Taxation					
	37,62,000	49,74,000		37,62,000	49,74,000

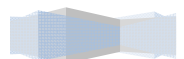


You are required to analyze the Funds Flow and the Changes in working Capital in as much detail as possible, using the following additional details available.

M/S BROYHILL Industries Ltd

Schedule/Statement of Changes in Working Capital for the period from 31/12/05 to 31/12/06

Particulars/Account	Balance as on 31 st March		Working Capital Change	
	2005	2006	Increase	Decrease
a) CURRENT ASSETS				
1) Debtors	3,38,000	3,72,000	34,000	-
2) Stock	6,00,000	8,00,000	2,00,000	-
3) Bank	40,000	80,000	40,000	-
TOTAL	9,78,000	12,52,000	2,74,000	-
b) CURRENT LIABILITIES				
1) Creditors	4,50,000	3,80,000	70,000	
2) Provision for Bad Debts	60,000	70,000		10,000
2) Provision for Taxation	50,000	1,20,000		70,000
TOTAL	5,60,000	5,70,000	70,000	80,000
Working Capital [(a) - (b)]	4,18,000	6,82,000		
TOTAL			3,14,000	4,78,000

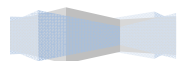


Net Change in Working Capital	2,64,000	
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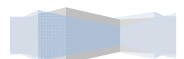
Dr Profit and Loss Appropriation a/c

Cr

Particulars	Amount	Particulars	Amount
To Reserve a/c	30,000	By Building Sale a/c	20,000
To Profit and Loss a/c	2,50,000	By Investments a/c	24,000
To Goodwill a/c	50,000	By Funds From Operations	3,64,000
To Reserve for Depreciation on Plant and Machinery	20,000	(?)	
To Machine Sale a/c	8,000		
To Depreciation on Furniture	44,000		
To Reserve for Depreciation on Building	4,000 2,000		
To Preliminary Expenses			
	4,08,000		4,08,000



Statement for Calculation of Funds from Operations		
Particulars	Amount	Amount
Current Period Profit Capitalised		2,50,000
Add: Losses/Appropriations debited to Profit/Loss a/c		
1) Reserve created	30,000	
2) Goodwill written off	50,000	
3) Reserve for Depreciation on Plant and Machinery	20,000	
4) Loss on Sale of Machine	8,000	
5) Depreciation on Furniture	44,000	
6) Depreciation on Furniture	4,000	
7) Reserve for Depreciation on Building	2,000	1,58,000
7) Preliminary Expenses Written off		
Less: Gains and Adjustments credited to Profit/Loss a/c		4,08,000
1) Profit on Sale of Building	20,000	
1) Profit on Sale of Investments	24,000	44,000

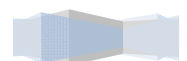


Sources/Inflows of Funds	Amount	Applications/Outflows of Funds	Amount
Share Capital (Stock)	50,000	Purchase of Plant and Machinery	8,30,000
Share Capital	3,00,000	Purchase of Furniture	44,000
(Cash/Bank)	2,00,000	Purchase of Buildings	4,50,000
Debentures	5,00,000	Fixed Deposits Cleared	2,00,000
Bank Loan	1,20,000	Purchase of Land	2,70,000
Plant Sale	1,10,000		
Building Sale	2,44,000		
Investments Sale	1,70,000		
Land Sale	3,88,000		
Funds from Operations			
	20,58,000		17,94,000
		Change in Fund (Working Capital)	2,64,000

Illustration: 4

From the following data you are to calculate the cash from operations. Funds from operation for the year 2007 Rs.84, 000. Current assets and liabilities as on 1.1.2007 and 31.12.2007 were as follows:

Particulars	1.1.2007	31.12.2007
Trade Creditors	1,82,000	1,94,000
Trade Debtors	2,75,000	3,15,000
Bills Receivable	40,000	35,000
Bills payable	27,000	31,000
Inventories	1,85,000	1,70,000



Trade Investments	40,000	70,000
Outstanding Expenses	20,000	25,000
Prepaid expenses	5,000	8,000

Solution

Particulars	Rs.	Rs.
Funds from operations		84,000
Add: Increase in current liabilities		
Trade creditors	12,000	
Bills payable	4,000	
Outstanding expenses	5,000	
Decrease in current assets		
Bills receivable	5,000	
Inventories	15,000	41,000
Less: Decrease in Current liabilities		1,25,000
Increase in Current assets		
Trade debtors	40,000	
Trade investments	30,000	
Prepaid expenses	3,000	73,000
Cash from operations		52,000

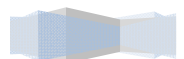


Illustration: 5

Malar Ltd. Furnish you the following Balance sheets for the years ending 31st Dec 1985-86. You are required to prepare a cash flow statement for the year ended 31.12.1986.

Liabilities	1985	1986	Assets	1985	1986
Equity share Capital	20,000	20,000	Goodwill	2,400	2,400
General reserve	2,800	3,600	Land	8,000	7,200
Profit and loss A/c	3,200	2,600	Building	7,400	7,200
Sundry Crs	1,600	1,080	Investments	2,000	2,200
Outstanding Expenses	240	160	Inventories	6,000	4,680
Provision for tax	3,200	3,600	A/cs receivable	4,000	4,440
Provision for bad debts	80	120	Bank balance	1,320	3,040
	31,120	31,160		31,120	31,160

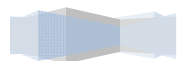
Following additional information has been supplied

1. A piece of land has also been sold for Rs.800
2. Depreciation amounting to Rs.1,400 has been charged on building
3. Provision for taxation has been made for Rs.3,800 during the year

Solution

Malar ltd cash flow statement for the year ended 31.12. 1986

Particulars	Rs.	Rs.
Opening bank balance		1,320
Add: Sources of cash		
Cash from operations	5,720	
Sale of land	800	6,520
Total Sources		7,840



Less: Applications of Cash		
Building purchased	1,200	
Investments purchased	200	
Tax paid	3,400	4800
Closing bank balance		3,040

Adjusted Profit and loss Account

Particulars	Rs.	Particulars	Rs.
To Transfer to General reserve	800	By balance b/d	3,200
To Depreciation on building	1,400	By Funds from operations	5,400
To Provision for Tax	3,800		
To Balance c/d	2,600		
	8,600		8,600

Statement of Cash From operations

Particulars	Rs.	Rs.
Funds from operations		5,400
Add: Increase in provision for doubtful debts	40	
Decrease in inventories	1,320	1,360
		6,760
Less: Decrease in Creditors	520	
Decrease in outstanding expenses	80	
Increase in accounts receivable	440	1,040
Cash from operations		5,720

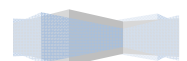


Illustration: 6

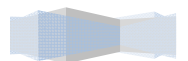
Calculate funds from operations from the following Profit and Loss A/c

Profit and loss Account

Particulars	Rs.	Particulars	Rs.
To Expenses paid	3,00,000	By Gross Profit	4,50,000
To Depreciation	70,000	By Gain on sale of land	60,000
To Loss on sale of machine	4,000		
To Discount	200		
To Goodwill	20,000		
To Net profit	1,15,800		
	5,10,000		5,10,000

Solution

Particulars	Rs.	Rs.
Net profit as per Profit & Loss A/c		1,15,800
Add: Depreciation	70,000	
Loss on sale of Machine	4,000	
Goodwill written off	20,000	94,000
		2,09,800
Less: Gain on sale of land		60,000
Funds from operations		1,49,800



Possible Questions**PART - B**

1. What do you mean by fund?
2. What is working capital?
3. Explain the concept of flow of funds
4. What are funds from operations?
5. List out benefits of a fund flow statement
6. What are the non fund sources?
7. What are the non fund applications?
8. Give two examples of current assets.
9. List out any two difference between fund flow and cash flow statement.
10. Explain the meaning of Cash flow
11. What is a Cash Flow Statement
12. Enumerate the different sources and uses of cash
13. What do you understand by Cash from operations?
14. Ascertain the change in working capital from the following

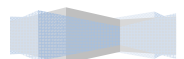
a. Increase in some items of current assets	Rs.12,000
b. Decrease in some items of current assets	Rs. 9,000
c. Increase in some items of current liabilities	Rs.10,000
d. Decrease in some items of current liabilities	Rs.12,000

[Ans: Rs.5,000]

15. Calculate funds from operation from the following particulars.

a. Net profit for the year ended 31.3.2000	Rs.6,50,000
b. Profit on sale of building	Rs. 40,000
c. Goodwill written off during the year	Rs. 10,000
d. old machinery worth Rs.8,000 has been sold for	Rs. 6,500
e. Depreciation has been provided on plant at 20% per year. The value of plant is Rs.5,00,000	

[Ans: funds from operations: Rs.7,21,500]



16. Find out the amount of depreciation charged on Fixed assets during 2003.

Provisions for depreciation on 1.1.2003	Rs. 90,000
Provisions for depreciation on 31.12.2003	Rs.1,00,000
Depreciation relating fixed assets sold	Rs. 25,000

[Ans: Rs.35,000]

17. Compute cash from operations from the following

a. Net profit for the year ended 2003-04	Rs. 80,000
b. Profit on sale of building	Rs. 22,000
c. Loss on sale of machine	Rs. 13,000
d. Increase in current assets (except cash)	Rs. 46,000
e. Depreciation has been provided on plant	Rs. 11,000
f. Increase in current liabilities	Rs. 29,000

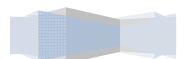
18. Ascertain provision made for tax during 2002-2003

Provision for tax as on 1-4-2002	Rs. 80,000
Provision for tax as on 31.3.2003	Rs.1,00,000
Tax paid during the year	Rs. 60,000

[Ans: Provision Made Rs.80,000]

PART - C

1. What is Funds flow statement? Explain its various uses
2. What are the limitations of Funds flow statement?
3. Distinguish between Funds Flow Statement and Cash Flow Statement
4. What are the procedures for preparing Funds Flow Statement?
5. What is a Cash flow statement? what are its uses ?
6. What are the significant uses of Cash flow statement?
7. Explain the advantages and disadvantages of Cash flow statement?
8. Describe the steps in the preparation of Cash Flow Statement?



9. The following is the comparative Balance sheet of A ltd. Prepare a Funds Flow statement.

Balance Sheet

Liabilities	31.12.86	31.12.87	Assets	31.12.86	31.12.87
Share Capital	8,000	8,500	Land	5,000	5,000
P&L Appn A/c	1,450	2,450	Plant	2,400	3,400
Creditors	900	500	Debtors	1,650	1,950
Mortgage loan	-	500	Stock	900	700
			Cash at Bank	400	900
	10,350	11,950		10,350	11,950

[Ans: Increase in working capital: Rs.1,000, Total Sources: Rs.2,000, Application: Rs.1,000, Fund from operations]

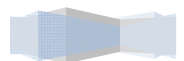
10. From the following Balance sheets of Ram ltd. Prepare a statement of sources and application of funds and schedule of changes in working capital for 1986

Balance Sheet

Liabilities	1985	1986	Assets	31.12.86	31.12.87
Share Capital	1,00,000	1,25,000	Land & building	1,00,000	95,000
General reserve	25,000	30,000	Plant and Machinery	75,000	84,500
P&L A/c	15,250	15,300	Inventories	50,000	37,500
Creditors	75,000	67,500	Debtors	40,000	32,000
Bank loan	35,000	-	Cash	250	300
Provision for taxation	15,000	17,500	Bank	-	4,000
			Goodwill	-	2,000
	2,65,250	2,55,300		2,65,250	2,55,300

Additional Information

- a. Dividend of Rs.11,000 was paid during 1986



b. Depreciation on plant written off in the 1986 was Rs.7,000

c. A provision for income tax Rs.16,500 was made during the year.

[Ans: Decrease in WC= Rs.8,950, Total sources of funds= Rs.69,550, Application of funds= Rs. 78,500, Funds from operations=Rs.44,550)

11. The Balance sheets of Raja and Rani as on 1.1.92 and 31.12.92 were as follows:

Balance Sheet

Liabilities	1.1.92	31.12.92	Assets	1.1.92	31.12.92
Creditors	40,000	44,000	Cash	10,000	7,000
Rani loan	25,000	-	Debtors	30,000	50,000
Loan from IOB	40,000	50,000	Stock	35,000	25,000
Capital	1,25,000	1,53,000	Machinery	80,000	55,000
			Land	40,000	50,000
			Buildings	35,000	60,000

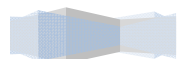
During the year a machine costing Rs.10, 000 (accumulated depreciation Rs.3,000) was sold for Rs.5,000. The provision for depreciation against machinery as on 1.1.92 was Rs.25, 000 and 31.12.92 was Rs.40,000. Net profit for the year 1992 amounted to Rs.45, 000. Prepare the funds flow statement.

[Ans: Increase in working capital: Rs.3,000, Sources of funds: Rs.80,000, uses of funds : Rs.77,000)

12. Prepare cash flow statement for the year ended 31.12.91

Financial position of Thiru babu

Liabilities	1.1.91	31.12.91	Assets	1.1.91	31.12.91
Bills payable	29,000	25,000	Cash	40,000	30,000
Capital	7,39,000	6,15,000	Debtors	20,000	17,000
			Stock	8,000	13,000
			Buildings	7,00,000	5,80,000
	7,68,000	6,40,000		7,68,000	6,40,000



Additional Data

a. There were no drawings

b. There was no purchase or sale of buildings

[Ans: Net decrease in cash and cash equivalent Rs.10, 000, Cash used operating activities Rs. 10,000, Cash flows from investing and Financing activities: NIL, Net loss]

13. ABC Ltd furnishes you the following Balance Sheet as 31.12.10 and 31.12.11. You are required to prepare a Cash flow statement for the year ended 31.12.11.

Balance Sheet

Liabilities	2010	2011	Assets	2010	2011
Share Capital	10,000	10,000	Land	1,200	1,000
General reserve	1,400	1,400	Building	4,000	3,600
P&L A/c	1,600	1,300	Inventories	3,700	3,600
Creditors	800	540	Investments	1,000	1,300
Outstanding exp	120	80	Accounts receivable	3,000	2,340
Provision for taxation	1,600	1,800	Bank balance	2,000	2,220
Provision for bad debts	40	60	Goodwill	660	1,520
	15,560	15,580		15,560	15,580

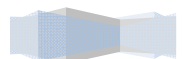
Additional Information

a. A piece of land has been sold for Rs.400

b. Depreciation amounting to Rs.1,700 has been charged on buildings

c. Provision for taxation has been made for Rs.1,500 during the year

[Ans: Net increase in Cash and Cash equivalents Rs.860,Cash from operating activities Rs.2,360, From financing activities Nil, Cash used in investing activities Rs.1500]





Karpagam Academy of Higher Education
(Deemed University Established Under Section 3 of UGC Act, 1956)

Coimbatore - 641 021.

Unit – IV

Budgetary Control – Flexible Budget – Sales Budget – Cash Budget – Production Budget – Purchase Budget

BUDGETORY CONTROL

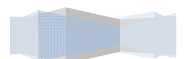
Introduction

To achieve the organizational objectives, an enterprise should be managed effectively and efficiently. It is facilitated by chalking out the course of action in advance. Planning, the primary function of management helps to chalk out the course of actions in advance. But planning is to be followed by continuous comparison of the actual performance with the planned performance, i. e., controlling. One systematic approach in effective follow up process is budgeting. Different budgets are prepared by the enterprise for different purposes. Thus, budgeting is an integral part of management.

Definition of Budget

„A budget is a predetermined detailed plan of action developed and distributed as a guide to current operations and as a partial basis for the subsequent evaluation of performance. **Gordon and Shill in glaw**

„A budget is a financial and/or quantitative statement, prepared prior to a defined period of time, of the policy to be pursued during the period for the purpose of attaining a given objective



The Chartered Institute of Management Accountants, London

Elements of Budget

The basic elements of a budget are as follows:-

- It is a comprehensive and coordinated plan of action.
- It is a plan for the firms operations and resources.
- It is based on objectives to be attained.
- It is related to specific future period.
- It is expressed in financial and/or physical units.

Budgeting

Budgeting is the process of preparing and using budgets to achieve management objectives. It is the systematic approach for accomplishing the planning, coordination, and control responsibilities of management by optimally utilizing the given resources.

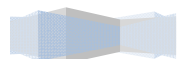
Definition of Budgeting

The entire process of preparing the budgets is known as Budgeting

Budgeting may be said to be the act of building budgets (**Rowland & Harr**)

Elements of Budgeting:

- A good budgeting should state clearly the firm's expectations and facilitate their attainability.
- A good budgeting system should utilize various persons at different levels while preparing the budgets.
- The authority and responsibility should be properly fixed.
- Realistic targets are to be fixed.



- A good system of accounting is also essential.
- Wholehearted support of the top management is necessary.
- Budgeting education is to be imparted among the employees.
- Proper reporting system should be introduced.
- Availability of working capital is to be ensured.

Definition of Budgetary Control:

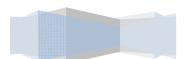
CIMA, London defines budgetary control as, “the establishment of the budgets relating to the responsibility of executives to the requirements of a policy and the continuous comparison of actual with budgeted result either to secure by individual action the objectives of that policy or to provide a firm basis for its revision”

Budgetary Control is a planning in advance of the various functions of a business so that the business as a whole is controlled. **(Wheldon)**

Budgetary Control is a system of controlling costs which includes the preparation of budgets, coordinating the department and establishing responsibilities, comprising actual performance with the budgeted and acting upon results to achieve maximum profitability **(Brown and Howard)**

Elements of budgetary control:

- Establishment of budgets for each function and division of the organization.
- Regular comparison of the actual performance with the budget to know the variations from budget and placing the responsibility of executives to achieve the desired result as estimated in the budget.
- Taking necessary remedial action to achieve the desired objectives, if there is a variation of the actual performance from the budgeted performance.



- Revision of budgets when the circumstances change.
- Elimination of wastes and increasing the profitability.

Budget, Budgeting and Budgetary Control - For Rememberness

A budget is a blue print of a plan expressed in quantitative terms.

Budgeting is a technique for formulating budgets.

Budgetary Control refers to the principles, procedures and practices of achieving given objectives through budgets.

Objectives of Budgetary Control

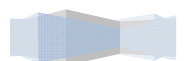
Budgetary Control assists the management in the allocation of responsibilities and is a useful device to estimate and plan the future course of action. The general objectives of budgetary control are as follows:

1.Planning:

- A budget is an action plan as it is prepared after a careful study and research.
- A budget operates as a mechanism through which objectives and policies are carried out.
- It is a communication channel among various levels of management.
- It is helpful in selecting a most profitable alternative.
- It is a complete formulation of the policy of the concern to be pursued for attaining given objectives.

2.Co-ordination:

It coordinates various activities of the business to achieve its common objectives. It induces the executives to think and operate as a group.



3. Control:

Control is necessary to judge that the performance of the organization confirms to the plans of business. It compares the actual performance with that of the budgeted performance, ascertains the deviations, if any, and takes corrective action at once.

Installation of Budgetary Control:

There are certain steps necessary to install a good budgetary control system in an organization. They are as follows:

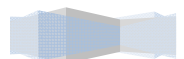
1. Determination of the Objectives
2. Organization for Budgeting
3. Budget Centre
4. Budget Officer
5. Budget Manual
6. Budget Committee
7. Budget Period
8. Determination of Key Factor

1.Determination of Objectives:

It is very clear that the installation of a budgetary control system presupposes the determination of objectives sought to be achieved by the organization in clear terms.

2.Organization for Budgeting:

Having determined the objectives clearly, proper organization is essential for the successful preparation, maintenance and administration of budgets. The responsibility of each executive must be clearly defined. There should be no uncertainty regarding the jurisdiction of executives.



3. Budget Centre:

It is that part of the organization for which the budget is prepared. It may be a department or any other part of the department. It is essential for the appraisal of performance of different departments so as to make them responsible for their budgets.

4. Budget Officer:

A Budget Officer is a convener of the budget committee. He coordinates the budgets of various departments. The managers of different departments are made responsible for their department performance.

5. Budget Manual:

It is a document which defines the objectives of budgetary control system. It spells out the duties and responsibilities of budget officers regarding the preparation and execution of budgets. It also specifies the relations among various functionaries.

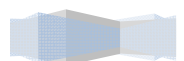
6. Budget Committee:

The heads of all important departments are made members of this committee. It is responsible for preparation and execution of budgets. The members of this committee may sometimes take collective decisions, if necessary. In small concerns, the accountant is made responsible for the same work.

7. Budget Period:

It is the period for which a budget is prepared. It depends upon a number of factors. It may be different for different concerns/functions.

The following are the factors that may be taken into consideration while determining budget period:



- The type of budget,
- The nature of demand for the products,
- The availability of finance,
- The economic situation of the cycle and
- The length of trade cycle

8. Determination of Key Factor:

Generally, the budgets are prepared for all functional areas of the business. They are inter related and inter dependent. Therefore, a proper coordination is necessary. There may be many factors that influence the preparation of a budget. For example, plant capacity, demand position, availability of raw materials, etc. Some factors may have an impact on other budgets also. A factor which influences all other budgets is known as Key factor. The key factor may not remain the same. Therefore, the organization must pay due attention on the key factor in the preparation and execution of budgets.

Types of Budget:

Budget can be classified into three categories from different points of view.

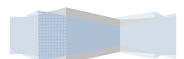
They are:

1. According to Function
2. According to Flexibility
3. According to Time

I. According to Function:

(a) Sales Budget:

The budget which estimates total sales in terms of items, quantity, value, periods, areas, etc is called Sales Budget.



(b) Production Budget:

It estimates quantity of production in terms of items, periods, areas, etc. It is prepared on the basis of Sales Budget.

(c) Cost of Production Budget:

This budget forecasts the cost of production. Separate budgets may also be prepared for each element of costs such as direct materials budgets, direct labour budget, factory materials budgets, office overheads budget, selling and distribution overheads budget, etc.

(d) Purchase Budget:

This budget forecasts the quantity and value of purchase required for production. It gives quantity wise, money wise and period wise particulars about the materials to be purchased.

(e) Personnel Budget:

The budget that anticipates the quantity of personnel required during a period for production activity is known as Personnel Budget.

(f) Research Budget:

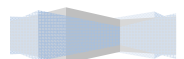
The budget relates to the research work to be done for improvement in quality of the products or research for new products.

(g) Capital Expenditure Budget:

The budget provides a guidance regarding the amount of capital that may be required for procurement of capital assets during the budget period.

(h) Cash Budget:

This budget is a forecast of the cash position by time period for a specific duration of time. It states the estimated amount of cash receipts and estimation of cash payments and the likely balance of cash in hand at the end of different periods.



(i) Master Budget:

It is a summary budget incorporating all functional budgets in a capsule form. It interprets different functional budgets and covers within its range the preparation of projected income statement and projected balance sheet.

II. According to Flexibility:

On the basis of flexibility, budgets can be divided into two categories. They are:

1. Fixed Budget
2. Flexible Budget

1.Fixed Budget:

Fixed Budget is one which is prepared on the basis of a standard or a fixed level of activity. It does not change with the change in the level of activity.

2.Flexible Budget:

A budget prepared to give the budgeted cost of any level of activity is termed as a flexible budget. According to CIMA, London, a Flexible Budget is a budget designed to change in accordance with level of activity attained. It is prepared by taking into account the fixed and variable elements of cost.

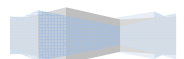
III. According to Time:

On the basis of time, the budget can be classified as follows:

1. Long term budget
2. Short term budget
3. Current budget
4. Rolling budget

1.Long-term Budget:

A budget prepared for considerably long period of time, viz., 5 to 10 years is called Long-term Budget. It is concerned with the planning of operations of the firm. It is generally prepared in terms of physical quantities.



2.Short-term Budget:

A budget prepared generally for a period not exceeding 5 years is called Short-term Budget. It is generally prepared in terms of physical quantities and in monetary units.

3.Current Budget:

It is a budget for a very short period, say, a month or a quarter. It is adjusted to current conditions. Therefore, it is called current budget.

4.Rolling Budget:

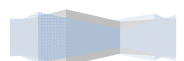
It is also known as Progressive Budget. Under this method, a budget for a year in advance is prepared. A new budget is prepared after the end of each month/quarter for a full year ahead. The figures for the month/quarter which has rolled down are dropped and the figures for the next month/quarter are added. This practice continues whenever a month/quarter ends and a new month/quarter begins

PREPARATION OF BUDGETS:

I. SALES BUDGET:

Sales budget is the basis for the preparation of other budgets. It is the forecast of sales to be achieved in a budget period. The sales manager is directly responsible for the preparation of this budget. The following factors taken into consideration:

- Past sales figures and trend
- Salesmen's estimates
- Plant capacity
- General trade position
- Orders in hand
- Proposed expansion
- Seasonal fluctuations
- Market demand



- Availability of raw materials and other supplies
- Financial position
- Nature of competition
- Cost of distribution
- Government controls and regulations
- Political situation.

II. PRODUCTION BUDGET:

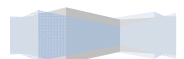
Production = Sales + Closing Stock – Opening Stock

[This budget is based on sales budget, unless production itself is the key factor. It shows the budgeted quantity of output to be produced during a specific period. It has two parts on showing the output for the period and the other showing production costs. The following key elements are considered while preparing the production budget.

- Production Planning
- Volume or Quantity of Output
- Quantities of stock
- Coordination with sales budget

III. CASH BUDGET:

It is an estimate of cash receipts and disbursements during a future period of time. “The Cash Budget is an analysis of flow of cash in a business over a future, short or long period of time. It is a forecast of expected cash intake and outlay” (Soleman, Ezra – H and book of Business administration).

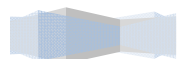


Procedure for preparation of Cash Budget:

1. First take into account the opening cash balance, if any, for the beginning of the period for which the cash budget is to be prepared.
2. Then Cash receipts from various sources are estimated. It may be from cash sales, cash collections from debtors/bills receivables, dividends, interest on investments, sale of assets, etc.
3. The Cash payments for various disbursements are also estimated. It may be for cash purchases, payment to creditors/bills payables, payment to revenue and capital expenditure, creditors for expenses, etc.
4. The estimated cash receipts are added to the opening cash balance, if any.
5. The estimated cash payments are deducted from the above proceeds.
6. The balance, if any, is the closing cash balance of the month concerned.
7. The closing cash balance is taken as the opening cash balance of the following month.
8. Then the process is repeatedly performed.
9. If the closing balance of any month is negative i.e the estimated cash payments exceed estimated cash receipts, then overdraft facility may also be arranged suitably.

IV. FLEXIBLE BUDGET:

A flexible budget consists of a series of budgets for different level of activity. Therefore, it varies with the level of activity attained. According to CIMA, London, A Flexible Budget is, „a budget designed to change in accordance with level of activity attained. It is prepared by taking into account the fixed and variable elements of cost. This budget is more suitable when the forecasting of demand is uncertain.



Points to be remembered while preparing a flexible budget:

1. Cost can be classified into fixed and variable cost.
2. Total fixed cost remains constant at any level of activity.
3. Total Variable cost varies in the same proportion at which the level of Activity varies.
4. Fixed and variable portion of Semi-variable cost is to be segregated.

ZERO BASE BUDGETING (ZBB)

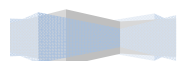
It is a management technique aimed at cost reduction. It was introduced by the U. S. Department of Agriculture in 1961. Peter A. Phyrr popularized it. In 1979, President Jimmy Carte issued a mandate asking for the use of ZBB by the Government.

ZBB - Definition:

“It is a planning and budgeting process which requires each manager to justify his entire budget request in detail from scratch (Zero Base) and shifts the burden of proof to each manager to justify why he should spend money at all. The approach requires that all activities be analyzed in decision packages, which are evaluated by systematic analysis and ranked in the order of importance”. – Peter A. Phyrr.

It implies that-

- Every budget starts with a zero base
- No previous figure is to be taken as a base for adjustments
- Every activity is to be carefully examined afresh
- Each budget allocation is to be justified on the basis of anticipated Circumstances



Advantages of ZBB:

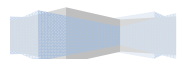
1. Effective cost control can be achieved
2. Facilitates careful planning
3. Management by Objectives becomes a reality
4. Identifies uneconomical activities
5. Controls inefficiencies
6. Scarce resources are used beneficially
7. Examines each activity thoroughly
8. Controls wasteful expenditure
9. Integrates the management functions of planning and control
10. Reviews activities before allowing funds for them.

MASTER BUDGET

Master budget is a comprehensive plan which is prepared from and summarizes the functional budgets. The master budget embraces both operating decisions and financial decisions. When all budgets are ready, they can finally produce budgeted profit and loss account or income statement and budgeted balance sheet. Such results can be projected monthly, quarterly, half-yearly and at year end. When the budgeted profit falls short of target it may be reviewed and all budgets may be reworked to reach the target or to achieve a revised target approved by the budget committee.

Illustration: 1

The Royal Industries has prepared its annual sales forecast, expecting to achieve sales of Rs.30,00,000 next year. The Controller is uncertain about the pattern of sales to be expected by month and asks you to prepare a monthly budget of sales. The following sales data pertained to the year, which is considered to be representative of a normal year:



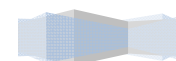
Month	Sales (Rs.)	Month	Sales (Rs.)
January	1,10,000	July	2,60,000
February	1,15,000	August	3,30,000
March	1,00,000	September	3,40,000
April	1,40,000	October	3,50,000
May	1,80,000	November	2,00,000
June	2,25,000	December	1,50,000

Prepare a monthly sales budget for the coming year on the basis of the above data.

Solution

Sales Budget

Month	Sales (given)	Sales estimation based on cash sales ratio
January	1,10,000	$(1,10,000/25,00,000) \times 30,00,000 = 1,32,000$
February	1,15,000	$(1,15,000/25,00,000) \times 30,00,000 = 1,38,000$
March	1,00,000	$(1,00,000/25,00,000) \times 30,00,000 = 1,20,000$
April	1,40,000	$(1,40,000/25,00,000) \times 30,00,000 = 1,68,000$
May	1,80,000	$(1,80,000/25,00,000) \times 30,00,000 = 2,16,000$
June	2,25,000	$(2,25,000/25,00,000) \times 30,00,000 = 2,70,000$
July	2,60,000	$(2,60,000/25,00,000) \times 30,00,000 = 3,12,000$
August	3,30,000	$(3,30,000/25,00,000) \times 30,00,000 = 3,96,000$
September	3,40,000	$(3,40,000/25,00,000) \times 30,00,000 = 4,08,000$



October	3,50,000	$(3,50,000/25,00,000) \times 30,00,000 = 4,20,000$
November	2,00,000	$(2,00,000/25,00,000) \times 30,00,000 = 2,40,000$
December	1,50,000	$(1,50,000/25,00,000) \times 30,00,000 = 1,80,000$
Total	25,00,000	30,00,000

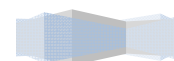
Note: Sales budget is prepared based on last year's month-wise sales ratio.

Illustration: 2

M/s. Alpha Manufacturing Company produces two types of products, viz., Raja and Rani and sells them in Chennai and Mumbai markets. The following information is made available for the current year:

Market	Product	Budgeted Sales	Actual Sales
Chennai	Raja	400 units @ Rs.9 each	500 units @ Rs.9 each
„	Rani	300 units @ Rs.21 each	200 units @ Rs.21 each
Mumbai	Raja	600 units @ Rs.9 each	700 units @ Rs.9 each
	Rani	500 units @ Rs.21 each	400 units @ Rs.21 each

Market studies reveal that Raja is popular as it is under priced. It is observed that if its price is increased by Re.1 it will find a readymade market. On the other hand, Rani is over priced and market could absorb more sales if its price is reduced to Rs.20. The management has agreed to give effect to the above price changes. On the above basis, the following estimates have been prepared by Sales Manager:



Product	% increase in sales over current	
	Chennai	Mumbai
Raja	+10%	+ 5%
Rani	+ 20%	+ 10%

With the help of an intensive advertisement campaign, the following additional sales above the estimated sales of sales manager are possible:

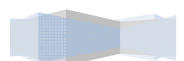
Product	Chennai	Mumbai
Raja	60 units	70 units
Rani	40 units	50 units

You are required to prepare a budget for sales incorporating the above estimates.

Solution

Sales Budget

Area	Product	Budget for current year			Actual sales			Budget for future period		
		Units	Price	Value	Units	Price	Value	Units	Price	Value
Chennai	Raja	400	9	3600	500	9	4500	500	10	5000
	Rani	300	21	6300	200	21	4200	400	20	8000



	Total	700		9900	700		8700	900		13000
Mumbai	Raja	600	9	5400	700	9	6300	700	10	7000
	Rani	500	21	10500	400	21	8400	600	20	12000
	Total	1100		15900	1100		14700	1300		19000
	Raja	1000	9	9000	1200	9	10800	1200	10	12000
	Rani	800	21	16800	600	21	12600	1000	20	20000
Total		1800		25800	1800		23400	2200		32000

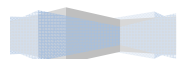
Workings:

1. Budgeted sales for Chennai:

	Raja	Rani
Budgeted Sales	400	300
Add: Increase	(10%) 40	(20%) 60
	440	360
Increase due to advertisement	60	40
Total	500	400

2. Budgeted sales for Mumbai:

	Raja	Rani
Budgeted Sales	600	500
Add: Increase	(5%) 30	(10%) 50
	630	550



Increase due to advertisement	70	50
Total	700	600

Illustration: 3

The sales of a concern for the next year are estimated at 50,000 units. Each unit of the product requires 2 units of Material „A" and 3 units of Material „B". The estimated opening balances at the commencement of the next year are:

Finished Product : 10,000 units
 Raw Material „A" : 12,000 units
 Raw Material „B" : 15,000 units

The desirable closing balances at the end of the next year are:

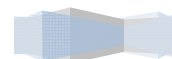
Finished Product : 14,000
 units Raw Material „A" : 13,000
 units Raw Material „B" : 16,000
 units

Prepare the materials purchase budget for the next year.

Solution

**Production
Budget**

Estimated Sales	50,000 units
Add: Estimated Closing Finished Goods	14,000 „



Less: Estimated Opening Finished Goods	
Production	54,000 „

**Materials Purchase
Budget**

Material Consumption	1,08,000 units	1,62,000 units
Add: Closing stock of materials	13,000 „	16,000 „
	1,21,000 „	1,78,000 „
Less: Opening stock of materials	12,000 „	15,000 „
Materials to be purchased	1,09,000 „	1,63,000 „

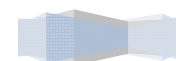
Workings:

Materials consumption:	Material „A“	Material „B“
Material required per unit of production	2 units	3 units
For production of 54,000 units	1,08,000	1,62,000

Illustration: 4

From the following budgeted figures prepare a Cash Budget in respect of three months to June 30, 2006.

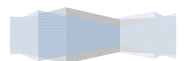
Month	Sales	Materials	Wages	Overheads
January	60,000	40,000	11,000	6,200



February	56,000	48,000	11,600	6,600
March	64,000	50,000	12,000	6,800
April	80,000	56,000	12,400	7,200
May	84,000	62,000	13,000	8,600
June	76,000	50,000	14,000	8,000

Additional information:

1. Expected Cash balance on 1st April, 2006 – Rs. 20,000
2. Materials and overheads are to be paid during the month following the month of supply.
3. Wages are to be paid during the month in which they are incurred.
4. All sales are on credit basis.
5. The terms of credits are payment by the end of the month following the month of sales: Half of credit sales are paid when due the other half to be paid within the month following actual sales.
6. 5% sales commission is to be paid within in the month following sales
7. Preference Dividends for Rs. 30,000 is to be paid on 1st May.8. Share call money of Rs. 25,000 is due on 1st April and 1st June.
9. Plant and machinery worth Rs. 10,000 is to be installed in the month of January and the payment is to be made in the month of June.



Solution

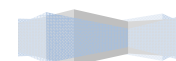
Cash Budget for three months from April to June, 2006

Particulars	April	May	June
Opening Cash Balance	20,000	32,000	(-) 5,600
Add: Estimated Cash Receipts:			
Sales Collection from debtors			
Share call money	60,000	72,000	82,000
	1,05,000	1,04,600	1,01,400
Less: Estimated Cash Payments:			
Materials			
Wages	50,000	56,000	62,000
Overheads	12,400	13,000	14,000
Sales Commission	6,800	7,200	8,600
Preference Dividend			
Plant and Machinery	72,400	1,10,200	98,800
Closing Cash Balance	32,600	(-) 5,600	2,600

Workings:

1. Sales Collection:

Payment is due at the month following the sales. Half is paid on due and other half is paid during the next month. Therefore, February sales Rs. 50,000 is due at the end of March. Half is given at the end of March and other



half is given in the next month i.e., in the month of April. Hence, the sales collection for the month of April will be as follows:

For April – Half of February Sales $(56,000 \times \frac{1}{2}) = 28,000$

- Half of March Sales $(64,000 \times \frac{1}{2}) = 32,000$

Total Collection for April = 60,000

Similarly, the sales collection for the months of May and June may be calculated.

2. Materials and overheads:

These are paid in the following month. That is March is paid in April, April is paid in May and May is paid in June.

3. Sales Commission:

It is paid in the following month. Therefore,

For April – 5% of March Sales $(64,000 \times \frac{5}{100}) = 3,200$

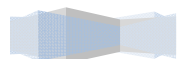
For May – 5% of March Sales $(80,000 \times \frac{5}{100}) = 4,000$

For April – 5% of March Sales $(84,000 \times \frac{5}{100}) = 4,200$

Illustration: 5

The following information at 50% capacity is given. Prepare a flexible budget and forecast the profit or loss at 60%, 70% and 90% capacity.

Fixed expenses:	Expenses at 50% capacity (Rs.)
Salaries	5,000
Rent and taxes	4,000
Depreciation	6,000
Administrative expenses	7,000



Variable expenses:	
Materials	20,000
Labour	25,000
Others	4,000
Semi-variable expenses:	
Repairs	10,000
Indirect Labour	15,000
Others	9,000

It is estimated that fixed expenses will remain constant at all capacities. Semi- variable expenses will not change between 45% and 60% capacity, will rise by 10% between 60% and 75% capacity, a further increase of 5% when capacity crosses 75%.

Estimated sales at various levels of capacity are:

Capacity	Sales (Rs.)
100	1000
200	2000
300	3000
400	4000
500	5000
600	6000
700	7000
800	8000
900	9000
1000	10000

60%	1,10,000
70%	1,30,000
90%	1,50,000

Solution

FLEXIBLE BUDGET

(Showing Profit & Loss at various capacities)

Particulars	Capacities			
	50%	60%	70%	90%
	Rs.	Rs.	Rs.	Rs.

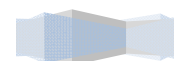
Fixed Expenses:				
Salaries	5,000	5,000	5,000	5,000
Rent and taxes	4,000	4,000	4,000	4,000
Depreciation	6,000	6,000	6,000	6,000
Administrative expenses	7,000	7,000	7,000	7,000
Variable expenses:				
Materials	20,000	24,000	28,000	36,000
Labour	25,000	30,000	35,000	45,000
Others	4,000	4,800	5,600	7,200
Semi-variable expenses:				
Repairs	10,000	10,000	11,000	11,500

Indirect Labour	15,000	15,000	16,500	17,250
Others	9,000	9,000	9,900	10,350
Total Cost	1,05,000	1,14,800	1,28,000	1,49,300
Profit (+) or Loss (-)		(-) 4,800	(+) 2,000	(+) 700
Estimated Sales		1,10,000	1,30,000	1,50,000

Illustration: 6

The following information relates to a flexible budget at 60% capacity. Find out the overhead costs at 50% and 70% capacity and also determine the overhead rates:

Particulars	Expenses at 60% capacity
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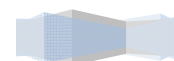


Variable overheads:	Rs.
Indirect Labour	10,500
Indirect Materials	8,400
Semi-variable overheads:	
Repair and Maintenance	7,000
Electricity	25,200
Fixed overheads:	
Office expenses including salaries	70,000
Insurance	4,000
Depreciation	20,000
Estimated direct labour hours	1,20,000 hours

Solution

FLEXIBLE BUDGET

	50 % Capacity	60%	70% Capacity
	Rs.	R	Rs.
Variable overheads:			
Indirect Labour	8,750	10,500	12,250
Indirect Materials	7,000	8,400	
Semi-variable overheads:			

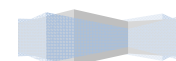


Repair and Maintenance	6,650	7,000	
Electricity	23,100	25,200	
Fixed overheads:			
Office expenses including	70,000	70,000	70,000
Insurance	4,000	4,000	4,000
Depreciation	20,000	20,000	20,000
Total overheads	1,39,500	1,45,100	1,50,700
Estimated direct labour hours	1,00,000	1,20,000	1,50,000
Overhead rate per hour (Rs.)	1.395	1.2	1.077

Workings:

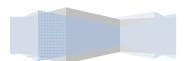
1. The amount of Repairs and maintenance at 60% Capacity is Rs. 7,000. Out of this, 70% (i.e Rs. 4,900) is fixed and remaining 30% (i.e Rs.2,100) is variable. The fixed portion remains constant at all levels of capacities. Only the variable portion will change according to change in the level of activity. Therefore, the total amount of repairs and maintenance for 50% and 70% capacities are calculated as follows:

Repairs and maintenance	50%	60%	70%
Fixed (70%)		4,900	4,900
Variable (30%)	4,900		
Total	6,650	7,000	7,350



2. Similarly, electricity expenses at different levels of capacity are calculated as follows:

Electricity	50%	60%	70%
Fixed (50%)	12,600	12,600	12,600
Variable (50%)	10,500	12,600	14,700
Total	23,100	25,200	27,300



Possible Questions

PART - B

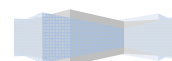
1. What is Budget?
2. What is meant by Budgeting?
3. Define Budgetary Control
4. Explain the objectives of budgetary control
5. What are the elements of Budgetary Control?
6. List out Installation of Budgetary control
7. List out Classification of Budgets
8. What is production budget?
9. What is flexible budget?
10. What is Zero Base Budgeting?
11. What is Sale budget?
12. Give format for Cash budget
13. From the following figures prepare Raw Materials Purchase Budget Materials (in Units)

Particulars	A	B	C	D
Estimated Opening Stock	16,000	6,000	24,000	2,000
Estimated Closing Stock	20,000	8,000	28,000	4,000
Estimated Consumption	1,20,000	44,000	1,32,000	36,000
Standard Price per unit	0.25 p	0.05 p	0.15 p	0.10 p

(Answer: Material A– Rs. 31,000; Material B – Rs. 2,300; Material „C– Rs.20,400 and Material „D – Rs. 3,800)

14. From the following particulars, prepare production cost budget for June,2006.

Particulars	Opening Stock (1-6-2006)	Closing stock (30-6-2006)
Finished Goods	1200 units	1600 units



Raw Material A	5,000 kgs.	4,800 kgs.
Raw Material B	2,000 kgs.	3,100 kgs.
Raw Material required (per unit)	4 kgs. @ Rs.8 per kg.	2 kgs. @ Rs.25 per kg.

Budgeted sales for the month – 7,000 units.

(Answer: Raw Material „A– Rs. 2,35,200; Raw Material „B – Rs. 3,97,500)

15. With the following data for 60% activity, prepare a budget for 80% activity:

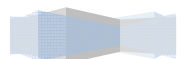
Materials	Rs.10 per unit
Wages	Rs.6
Factory overheads	Rs.6,000 (20% fixed)
Administration overheads	Rs.2,400 (10% variable)

Assume that production at 60% activity is 240 units.

[Ans: Total cost: Rs.15,200 and per unit Rs.47.5]

PART - C

1. What is budgetary Control? What are its objectives?
2. Define budget and budgetary control. What are its advantages and limitations?
3. Compare budget, budgeting and budgetary control
4. What are the essentials of a good budgetary control system?
5. Discuss the steps in the installation of budgetary control system
6. What are the different classifications of budget?
7. What is sales budget? How is it prepared?
8. What is Zero base budgeting? Explain the process of ZBB and its advantages
9. Write short notes on a. ZBB B. Master Budget c. Flexible budget
10. What do you understand by budget and budgetary control? How is budgetary control a tool in the hands of Management?



11. Bajaj Co. wishes to arrange overdraft facilities with its bankers during the period from April to June 2006 when it will be manufacturing mostly for stock. Prepare a Cash Budget for the above period from the following data, indicating the extent of the band overdraft facilities the company will require at the end of each month.

(a)

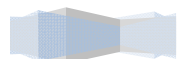
Month	Sales Rs.	Purchases Rs.	Wages Rs.
Februar	90,000	62,400	6,000
March	96,000	72,000	7,000
April	54,000	1,21,000	5,500
May	87,000	1,23,000	5,000
June	63,000	1,34,000	7,500

- (b) 50% of Credit sales are realized in the month following the sales and the remaining 50% in the second month following.
- (c) Creditors are paid in the month following the month of purchase.
- (d) Lag in payment of wages – one month.
- (e) Cash at bank on 1st April, 2006 estimated at Rs. 12,500.

[Ans: Closing balance for April – Rs. 26,500; May Rs. (25,500) and June Rs. (83,000)]

12. From the following budget date, forecast the cash position at the end of April, May and June 2006.

Months	Sales(Rs)	Purchases(Rs.)	Wages(Rs.)	Mis Expen ses(Rs)
Februar	1,20,000	84,000	10,000	7,000
March	1,30,000	1,00,000	12,000	8,000
April	80,000	1,04,000	8,000	6,000
May	1,16,000	1,06,000	10,000	12,000



June	88,000	80,000	8,000	6,000
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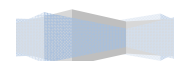
Additional information:

1. Sales: 20% realized in the month of sale; discount allowed 2%. Balance realized equally in two subsequent months.
2. Purchases: These are paid in the month following the month of supply.
3. Wages: 25% paid in arrears following month.
4. Miscellaneous expenses: Paid a month in arrears.
5. Rent: Rs. 1,000 per month paid quarterly in advance due in April.
6. Income Tax: First installment of advance tax Rs. 25,000 due on or before 15th June.
7. Income from investments: Rs. 5,000 received quarterly in April, July, etc.
8. Cash in hand: Rs. 5,000 on 1st April, 2006.

[Answer: April – Rs. 5,680; May – Rs. (-) 7,084 and June – Rs. (-) 62,936]

13. The Expenses for the production of 5,000 units in a factory are given as follows:

Particulars	Per unit (Rs.)
Materials	50
Labour	20
Variable Overheads	15
Fixed Overheads (Rs. 50,000)	10
Administrative Overheads (5% variable)	10
Selling expenses (20% fixed)	6
Distribution expenses (10% fixed)	5



Total cost of sales per unit	Rs. 110
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You are required to prepare a budget for the production of 7,000 units.

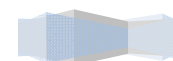
[Answer Total cost of sales Rs. 7, 69,000; Total cost of sales per unit Rs. 109.94]

14. Draw up a flexible budget for the overhead expenses on the basis of the following data and determine the overhead rate at 70%, 80% and 90% plant capacity.

Particulars	70%capacity	80%capacity	90% capacity
Variable overheads:		Rs.	
Indirect Labour	-	12,000	-
Stores including spares	-	4,000	-
Semi-variable overheads:			
Power (30% fixed; 70% variable)	-	20,000	-
Repairs (60% fixed; 40%)	-	2,000	-
Fixed overheads:			
Depreciation	-	11,000	-
Insurance	-	3,000	-
Salaries	-	10,000	-
Total Overheads	-	62,000	-
Estimated direct labour hours	-	124000 hrs	-

[Answer: Overhead rate at 70%- Rs. 0.536; at 80% - Rs. 0.50 and at 90% - Rs. 0.472]

15. The expenses of budgeted production of 20,000 units in a factory are furnished below:



Particulars	Per unit (Rs.)
Materials	140
Labour	50
Variable overheads	40
Fixed overheads	20
Variable expenses (direct)	10
Selling expenses (10% fixed)	26
Distribution expenses (20% fixed)	14
Administrative expenses	10

Prepare a Flexible Budget for the production of 16,000 units and 12,000 units.

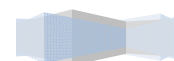
Indicate cost per unit at both the levels.

[Answer: Cost per unit at 16,000 units – Rs.318.85; at 12,000 units – Rs.333.60]

16. The cost of an article at a capacity level of 5,000 units is given under „A below. For a variation of 25% in capacity above or below this level, the individual expenses as indicated under A,B below:

Cost per unit Rs. 12.55. Find out the cost per unit and total cost for production levels of 4,000 units and 6,000 units. Also show the total cost and unit cost for 5,000 units

Particulars	A Rs.	B Rs.
Material cost	25,000	(100% varying)
Labour cost	15,000	(100% varying)
Power	1,250	(80% varying)
Repairs and maintenance	2,000	(75% varying)
Stores	1,000	(100% varying)



Inspection	500	(20% varying)
Depreciation	10,000	(100% varying)
Administration overheads	5,000	(25% varying)
Selling overheads	3,000	(25% varying)
Total	62,750	

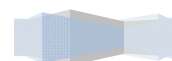
[Answer: Total Cost at 4,000 units – Rs. 51,630; at 5,000 units – Rs. 62,750 and at 6,000 units – Rs. 73,870. Cost per unit is Rs.12.908; Rs.12.55 and Rs. 12.31 respectively]

17. Parker Ltd. manufactures two brands of pen Hero and Zero. The sales department of the company has three departments in different areas of the country.

The sales budget for the year ending 31st December 1999 was:Hero – Department I 3,00,000; Department II 5,62,500; Department III 1,80,000 and Zero – Department I 4,00,000; Department II 6,00,000; Department III 20,000. Sales prices are Rs. 3 and Rs.1.20 in all departments.

It is estimated that by forced sales promotion the sale of Zero in department I will increase by 1, 75,000. It is also expected that by increasing production and arranging extensive advertisement, Department III will be enabled to increase the sale of Zero by 50,000. It is recognized that the estimated sales by department II represent an unsatisfactory target. It is agreed to increase both estimates by 20%. Prepare a Sales Budget for the year 2000.

[Answer: Hero – Rs.34, 65,000 and Zero – Rs.16, 38,000]





Karpagam Academy of Higher Education
(Deemed University Established Under Section 3 of UGC Act, 1956)

Coimbatore - 641 021.

UNIT - 5

MARGINAL COSTING

Marginal Costing: Marginal Costing – Break Even Analysis – Applications of Marginal Costing Techniques – Determination of Sales Mix – Key factor – Make or Buy Decision (Simple Problems Only)

Introduction

By analyzing the Behavior of costs in relation to changes in volume of output it becomes evident that there are some items of costs which tend to vary directly with the volume of output, whereas there are others which tend to vary with volume of output, are called variable cost and those remain unaffected by change in volume of output are fixed cost or period costs.

Marginal costing is a study where the effect on profit of changes in the volume and type of output is analyzed. It is not a method of cost ascertainment like job costing or contract costing. It is a technique of costing oriented towards managerial decision making and control.

Marginal costing, being a technique can be used in combination with other technique such as budgeting and standard costing. It is helpful in determining the profitability of products, departments, processes, and cost centres. While analyzing the profitability, marginal costing interprets the cost on the basis of nature of cost. The emphasis is on Behaviour of costs and their impact on profitability

Definition

Marginal costing is defined by the ICWA, India as “the ascertainment of marginal costs and of the effect on profit of changes in volume or type of output by differentiating between fixed costs, and variable costs”

Batty defined Marginal Costing as, “a technique of cost accounting which

pays special attention to the Behaviour of costs with changes in the volume of output”

Features of Marginal Costing

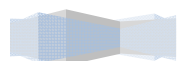
The following are the special features of Marginal Costing

- Marginal costing is a technique of working of costing which is used in conjunction with other methods of costing (Process or job)
- Fixed and variable costs are kept separate at every stage. Semi – Variable costs are also separated into fixed and variable.
- As fixed costs are period costs, they are excluded from product cost or cost of production or cost of sales. Only variable costs are considered as the cost of the product.
- As fixed cost is period cost, they are charged to profit and loss account during the period in which they incurred. They are not carried forward to the next year's income.
- Marginal income or marginal contribution is known as the income or profit.
- The difference between the contribution and fixed costs is the net profit or loss.
- Fixed costs remains constant irrespective of the level of activity.
- Sales price and variable cost per unit remains the same.
- Cost volume profit relationship is fully employed to reveal the state of profitability at various levels activity.

Assumptions in Marginal Costing

The technique of marginal costing is based on the following assumptions:

1. All elements of costs can be divided into fixed and variable.
2. The selling price per unit remains unchanged at all levels of activity.
3. Variable cost per unit remains constant irrespective of level of output and fluctuates directly in proportion to changes in the volume of output.
4. Fixed costs remain unchanged or constant for the entire volume



of production.

5. Volume of product is the only factor which influences the costs.

Characteristics of Marginal Costing

The essential characteristics and mechanism of marginal costing technique may be summed up as follows:

1. **Segregation of cost into fixed and variable elements:** In marginal costing, all costs are segregated into fixed and variable elements.
2. **Marginal cost as product cost:** Only marginal (variable) costs are charged to products.
3. **Fixed costs are period costs:** Fixed cost are treated as period costs and are charged to costing profit and loss account of the period in which they are incurred.
4. **Valuation of inventory:** The work – in – progress and finished stocks are valued at marginal cost only.
5. **Contribution is the difference between sales and marginal cost:** The relative profitability of the products or departments is based on a study of “contribution” made by each of the products or departments.

Advantages of Marginal Costing

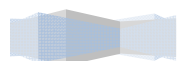
Marginal costing is an important technique of managerial decision making. It is a tool for cost control and profit planning. The following are the advantages of marginal costing technique:

1. Simplicity

The statement propounded under marginal costing can be easily followed as it breaks up the cost as variable and fixed.

2. Stock Valuation

Stock valuation can be easily done and understood as it includes only the variable cost.



3. Meaningful Reporting

Marginal costing serves as a good basis for reporting to management. The profits are analyzed from the point of view of sales rather than production.

4. Effect on Fixed Cost

The fixed costs are treated as period costs and are charged to Profit and Loss Account directly. Thus, they have practically no effect on decision making.

5. Profit Planning

The Cost – Volume Profit relationship is perfectly analysed to reveal efficiency of products, processes, and departments. Break – even Point and Margin of Safety are the two important concepts helpful in profit planning.

6. Cost Control and Cost Reduction

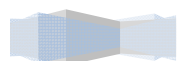
Marginal costing technique is helpful in preparation of flexible budgets as the costs are classified into fixed and variable. The emphasis is laid on variable cost for control. The constant focus is on cost and volume and their effect on profit pave the way for cost reduction.

7. Pricing Policy

Marginal costing is immensely helpful in determination of selling prices under different situations like recession, depression, introduction of new product, etc. Correct pricing can be developed under the marginal costs technique with the help of the cost information revealed therein.

8. Helpful to Management

Marginal costing is helpful to the management in exercising decisions regarding make or buy, exporting, key factor and numerous other aspects of business operations.



Limitations of Marginal Costing

Following are the limitations of marginal costing:

1. Classification of Cost

Break up of cost into fixed and variable portion is a difficult problem. More over clear cost division of semi – variable or semi – fixed cost is complicated and cannot be accurate.

2. Not Suitable for External Reporting

Since fixed cost is not included in total cost, full cost is not available to outsiders to judge the efficiency.

3. Lack of Long – term Perspective

Marginal costing is most suitable for decision making in a short term. It assumes that costs are classified into fixed and variable. In the long term all the cost are variable. Therefore it ignores time element and is not suitable for long term decisions.

4. Under Valuation of Stock

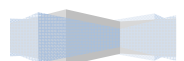
Under marginal costing only variable costs are considered and the output as well as stock are undervalued and profit is distorted. When there is loss of stock the insurance cover will not meet the total cost.

5. Automation

In these days of automation and technical advancement, huge investments are made in heavy machinery which results in heavy amount of fixed costs. Ignoring fixed cost in this context for decision making is irrational.

6. Production Aspect is Ignored

Marginal costing lays too much emphasis on selling function and as such production aspect has been considered to be less significant. But from the business point of view, both the functions are equally important.



7. Not Applicable in all Types of Business

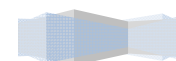
In contract type and job order type of businesses, full cost of the job or the contract is to be charged. Therefore it is difficult to apply marginal costing in all these types of businesses.

Difference between Absorption and Marginal Costing

Absorption costing charges all the costs i.e., both the fixed and variable fixed to the products, jobs, processes, and operations. Marginal costing technique charges variable cost. Absorption is not any specific method of costing. It is common name for all the methods where the total cost is charged to the output.

Distinction between Absorption Costing and Marginal Costing

Absorption Costing	Marginal Costing
<ol style="list-style-type: none"> 1. Total cost technique is the practice of charging all cost, both variable and fixed to operations, process or products. 2. It values stock at the cost which includes fixed cost also. 3. It is guided by profit which is the excess of sales over the total costs in solving managerial problems 4. In total cost technique, there is a problem of apportionment of fixed Costs which may result in under or over recovery of expenses. 	<ol style="list-style-type: none"> 1. Marginal costing charges only variable cost to products, process, or operations and excludes fixed cost entirely. 2. It values stock at total variable cost only. This results in higher value of stock under absorption costing than in marginal costing. 3. It focuses its attention on Contribution which is excess of sales over variable cost. 4. It excludes fixed cost. Therefore, there is no question of arbitrary apportionment.



Marginal Cost

Marginal cost is the cost of producing one additional unit of output. It is the amount by which total cost increases when one extra unit is produced or the amount of cost which can be avoided by producing one unit less.

The ICMA, England defines marginal cost as, *“the amount of any given volume of output by which the aggregate cost are charged if the volume of output is increased or decreased by one unit”*.

In practice, this is measured by the total cost attributable to one unit. In this context, a unit may be single article, a batch of articles, an order, a stage of production, a process etc., often managerial costs, variable costs are used to mean the same.

Features of Marginal Cost

- It is usually expressed in terms of one unit.
- It is charged to operation, processes, or products.
- It is the total of prime cost plus variable overheads of one unit.

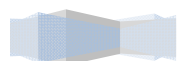
Marginal Cost Statement

In marginal costing, a statement of marginal cost and contribution is prepared to ascertain contribution and profit. In this statement, contribution is separately calculated for each of the product or department. These contributions are totaled up to arrive at the total contribution. Fixed cost is deducted from the total contribution to arrive at the profit figure. No attempt is made to apportion fixed cost to various products or departments.

Marginal Cost Equation

For convenience the element of cost statement can be written in the form of an equation as given below:

$$\text{Sales} - \text{Variable Cost} = \text{Fixed Cost plus or minus Profit or Loss. Or}$$



$\text{Sales} - \text{Variable Cost} = \text{Fixed Cost plus or minus Profit or Loss}$

In order to make profit, contribution must be more than fixed cost and to avoid loss, contribution should be equal to fixed cost.

COST VOLUME PROFIT ANALYSIS

Cost Volume Profit Analysis (C V P) is a systematic method of examining the relationship between changes in the volume of output and changes in total sales revenue, expenses (costs) and net profit. In other words, it is the analysis of the relationship existing amongst costs, sales revenues, output and the resultant profit.

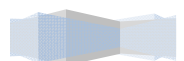
To know the cost, volume and profit relationship, a study of the following is essential :

- (1) Marginal Cost Formula
- (2) Break-Even Analysis
- (3) Profit Volume Ratio (or) PN Ratio
- (4) Profit Graph
- (5) Key Factors and
- (6) Sales Mix

Objectives of Cost Volume Profit Analysis

The following are the important objectives of cost volume profit analysis:

- (1) Cost volume is a powerful tool for decision making.
- (2) It makes use of the principles of Marginal Costing.
- (3) It enables the management to establish what will happen to the financial results if a specified level of activity or volume fluctuates.
- (4) It helps in the determination of break-even point and the level of output required to earn a desired profit.
- (5) The PN ratio serves as a measure of efficiency of each product, factory, sales area etc. and thus helps the management to choose a most profitable line of business.
- (6) It helps us to forecast the level of sales required to maintain a given amount of profit at different levels of prices.



Contribution:

Contribution is the difference between selling price and variable cost of one unit. The greater contribution from the selling unit indicates that the variable cost is less compared to selling price. Total contribution is the number of units Multiplied by contribution per unit. Contribution will be equal to the total fixed costs at breakeven point where profit is zero.

Profit / Volume Ratio

This is the ratio of contribution to sales. It is an important ratio analyzing the relationship between sales and contribution. A high p/v ratio indicates high profitability and low p/v ratio indicates low profitability. This ratio helps in comparison of profitability of various products. Since high p/v ratio indicate as high profits, the objective of every organization should be to improve or increase the p/v ratio.

$$P / V \text{ Ratio} = \text{Contribution} / \text{Sales} \times 100 \text{ or } C / S \times 100$$

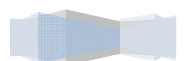
When profits and sales for two consecutive periods are given, the following formula can be applied:

$$\frac{\text{Change in Profit}}{\text{Change in Sales}}$$

P / V ratio is also used in making the following type of calculations:

- a) Calculation of Breakeven point.
- b) Calculation of profit at a given level of sales.
- c) Calculation of the volume of sales required to earn a given profit.
- d) Calculation of profit when margin of safety (discussed below) is given.
- e) Calculation of the volume of sales required to maintain the present level of profit if selling price is reduced.

Volume or activity can be expressed in any one of the following ways:



1. Sales capacity expressed as a percentage of maximum sales.
2. Sales value in terms of money.
3. Units sold.
4. Production capacity expressed in percentages.
5. Value of cost of production.
6. Direct labour hours.
7. Direct labour value.
8. Machine hours.

The factors which are usually involved in this analysis are:

- a) Selling price b) Sales volume c) Sales mix
- d) Variable cost per unit e) Total fixed cost

Break even Analysis

Break-Even Analysis is also called Cost Volume Profit Analysis. The term Break-Even Analysis is used to measure inter relationship between costs, volume and profit at various level of activity. A concern is said to break-even when its total sales are equal to its total costs. It is a point of no profit no loss. This is a point where contribution is equal to fixed cost. In other words, the break-even point where income is equal to expenditure {or} total sales equal to total cost.

The break-even point can be calculated by the following formula:

$$\text{Break-Even Point} = \text{Fixed cost} / \text{PV Ratio}$$

Margin of safety:

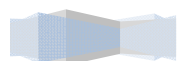
The excess of actual or budgeted sales over the break-even sales is known as the margin of safety.

$$\text{Margin of safety} = \text{actual sales} - \text{break-even sales}$$

So this shows the sales volume which gives profit. Larger the margin of safety greater is the profit.

$$\text{Marginal safety} = \text{Budget sales} - \text{break-even sales}$$

When margin of safety is not satisfactory, the following steps may be taken into account:



- a) Increase the volume of sales.
- b) Increase the selling price.
- c) Reduce fixed cost.
- d) Reduce variable cost.
- e) Improve sales mix by increasing the sale of products with P/V ratio.

The effect of a price reduction will always reduce the P / V ratio, raise the break– even point shorten the margin of safety.

Angle of incidence:

This is obtained from the graphical representation of sales and cost. When sales and output in units are plotted against cost and revenue the angle formed between the total sales line and the total cost line at the break-even point is called the angle of incidence. Large angle indicates a high rate of profit while a narrow angle would show a relatively low rate of profit.

Profit goal:

To earn a desired amount of profit i.e., a profit goal can be reached by the formula given below

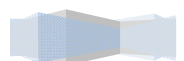
$$\text{Sales volume to reach profit goal} = \frac{\text{Fixed cost} + \text{Desired profitability}}{\text{Contribution ratio}}$$

Break Even Chart

These depict the interplay of three elements viz., cost, volume, and profits. The charts are graphs which at a glance provide information of fixed costs, variable costs, production / sales achieved profits etc., and

From the above break-even chart, we can understand the following points:

- (1) Cost and sales revenue are represented on vertical axis, i.e., Y-axis.
- (2) Volume of production or output in units are plotted on horizontal axis, i.e., X-axis.
- (3) Fixed cost line is drawn parallel to X-axis.



(4) Variable costs are drawn above the fixed cost line at different level of activity. The variable

cost line is joined to fixed cost line at zero level of activity.

(5) The sales line is plotted from the zero level, it represents sales revenue.

(6) The point of intersection of total cost line and sales line is called the break-even point which

means no profit no loss.

(7) The margin of safety is the distance between the break-even point and total output produced.

(8) The area below the break-even point represents the loss area as the total sales and less than the total cost.

(9) The area above the break-even point represents profit area as the total sales more than the cost.

(10) The sales line intersects the total cost line represents the angle of incidence. The large angle of incidence indicates a high rate of profit and vice versa.

Cash Break-Even Point

In cash break-even chart, only cash fixed costs are considered. Non-cash items like depreciation etc. are excluded from the fixed costs for computation of break-even point. Cash Break-Even Chart depicts the level of output or sales at which the sales revenue will be equal to total cash outflow. It is computed as under:

Cash Break-Even Point = Cash Fixed Costs/Contribution per unit

Advantages of Break-Even Chart

(1) It enables to determine the profit or loss at different levels of activities.

(2) It is useful to measure the relationship between cost volume and profit.

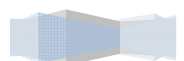
(3) It helps to determine the break-even units, i.e., output and sales volume.

(4) It helps to measure the profitability of various products.

(5) It facilitates most profitable product mix to be adopted.

(6) It assists future planning and forecasting.

(7) It enables to determine total cost, fixed cost and variable cost at different levels of activity.



(8) This chart is very useful for effective cost control.

Limitations of Break-Even Chart

- (1) It is based on number of assumptions which may not hold good.
- (2) Break-even charts are rarely of value in a multi-product situation.
- (3) A break-even chart does not take into consideration semi-variable cost, valuation of opening stock and closing stock.
- (4) Determination of selling price is based on many factors which will affect the constant selling price.
- (5) Capital employed, Government policy, Market environment etc. are the important aspects for managerial decisions. These aspects are not considered in break-even chart.

III. Profit Volume Graph

Profit volume graph is a pictorial representation of the profit volume relationship. It shows profit and loss account at different volumes of sales. It is simplified form of break even chart as it clearly represents the relationship of profit to volume of sales. It is possible to construct a profit volume graph for any data relating to a business firm where a break even chart can be drawn. A profit volume graph may be preferred to a break even chart as profit or losses can be directly read at different levels of activity.

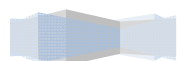
The construction of profit volume graph involves the following steps:

1. Scale of sale is selected on horizontal axis and that for profit or loss are selected on vertical axis. The area below the horizontal axis is the loss area and that above it is the profit area.
2. Points of profits of corresponding sales are plotted and joined. The resultant line is profit / loss line

Application of marginal Costing

1. Fixation of Selling Price:

Price is one of the most significant factor that determines the market for the products as well as the volume of profit for the organization. Under normal



circumstances, the price of a product must cover the total cost of that product plus a margin of profit. However under certain special circumstances, price has to be fixed even below the total cost

2. Accepting bulk orders:

Some bulk orders may be received from local dealers or foreign dealers asking for a price which is below the market price. This calls for a decision to accept or reject the order. The order from a local dealer should not be accepted at price below the market price because it will affect the normal market and goodwill of the company.

3. Make or buy Decision:

In a make or buy decision the price quoted by the outside suppliers should be compared with the marginal cost of producing the component parts. If the outside price of the component is lower than the marginal cost of producing it, it is worth buying.

4. Selection of suitable product Mix:

When a factory manufactures more than one product a problem is faced by the management as to which product will give maximum profits. The solution is the products which give the maximum contribution are to be retained and their production should be increased.

5. Key factor

It is also known as limiting factor. A key factor is one which restricts production and profit of a business. It may arise due to the shortage of material, labour, capital and sales. Normally where there is no limiting factor the selection of the product will be on the basis of the highest.

6. Maintaining a desired level of profit:

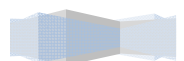
Management may be interested in maintaining a desired level of profits. The sales required to earn a desired level of profits can be ascertained by the marginal techniques.

7. Alternative methods of production

Marginal costing is helpful in comparing the alternative methods of production.

8. Determination of optimum level of activity:

The technique of marginal costing helps the management in determining the optimum level of activity. To make such a decision, contribution at different levels of activity can be found. The level of activity which gives the highest contribution will be the optimum level.



9. Evaluation of performance:

Evaluation performance efficiency of various department or products lines can be made with the help of marginal cost. The management has to discontinue the production of non profitable products so as to maximize the profits. In such cases, decision to discontinue will be on the basis of the lowest contribution.

10. Decision Making:

Decision making is a process of selecting the best course of action from a number of available alternatives. Problems like selection of the method of manufacture, using the production capacity for different products, continuing, dropping of a product showing a loss, expansion or change in market call for a decision.

Illustration:1

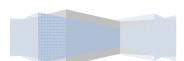
A company is manufacturing three products X, Y and Z. It supplies you the following information:

Products

	X	Y	Z
	(Rs)	(Rs)	(Rs)
Direct Materials	2,500	10,000	1,000
Direct Labour	3,000	3,000	500
Variable Overheads	2,000	5,000	2,500
Sales	10,000	20,000	5,000

Total fixed overheads Rs. 3,000/-

Prepare a marginal cost statement and determine profit and loss.



Solution:

Marginal Cost Statement					
	(Rs)	Products			Total
		X	Y	Z	
		(Rs)	(Rs)	(Rs)	
Sales (A)		10,000	20,000	5,000	35,000

D.materials		2,500	10,000	1,000	13,500
Direct Labour		3,000	3,000	500	6,500
Variable Overheads		2,000	5,000	2,500	9,500

Marginal Cost (B)		7,500	18,000	4,000	29,500

Marginal Contribution (A – B)		2,500	2,000	1,000	5,500
Less: Fixed Cost					3,000
Net Profit					2500

Illustration :2

Calculate contribution and profit from the following details:

Sales **Rs. 12000**

Variable Cost **Rs. 7000**

Fixed Cost **Rs. 4000**

Solution:

Contribution= Sales – Variable cost

Contribution = Rs. 12000 – Rs. 7000 = **Rs. 5000**

Profit = Contribution – Fixed Cost

Profit = Rs. 5000 – Rs. 4000 = **Rs. 1000**

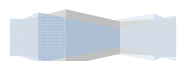


Illustration:3

Sales Rs. 2,00,000 and Variable Cost Rs.100000. You are required to calculate P / V Ratio

Solution

$$\begin{aligned}\text{Contribution} &= \text{Selling Price} - \text{Variable Cost} \\ &= \text{Rs. } 2,00,000 - 1,00,000 = \text{Rs. } 1,00,000 \\ \text{P/V Ratio} &= \text{Contribution/Sales} \times 100 = 1,00,000/2,00,000 \times 100 = 50\%\end{aligned}$$

Illustration: 4

From the following particulars find out break-even point:

Fixed Expenses Rs. 1,00,000

Selling price per unit Rs. 20

Variable cost per unit Rs. 15

Solution:

$$\begin{aligned}\text{Contribution per unit} &= \text{Selling Price per unit} - \text{Variable Cost per unit} \\ &= \text{Rs. } 20 - \text{Rs. } 15 = \text{Rs. } 5 \\ &= \text{Rs. } 1,00,000/5 = 20,000 \text{ units} = 20,000 \times \text{Rs. } 20 \\ &= \text{Rs. } 4,00,000\end{aligned}$$

Illustration: 5

From the following particulars, calculate Margin of safety :

Fixed cost Rs. 1,00,000

Variable cost Rs. 1,50,000

Total Sales Rs. 3,00,000

Solution:

$$\begin{aligned}\text{Margin of Safety} &= \text{Sales} - \text{Variable Cost} \\ &= \text{Rs. } 3,00,000 - 1,50,000 = \text{Rs. } 1,50,000\end{aligned}$$

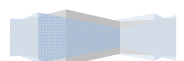


Illustration: 7

Assuming that the cost structure and selling prices remain the same in periods I and II find out

1. P/v Ratio
2. BE Sales
3. Profit when sales are Rs.100000
4. Sales required to earn a profit of Rs.20000

Period	Sales (Rs.)	Profit (Rs.)
I	120000	9000
II	140000	13000

1. P/V Ratio = Contribution /sales *100

$$= \frac{13000-9000}{140000-120000} \times 100 = 20\%$$

2. Break Even Sales = Contribution- Fixed Cost=24000=15000= Rs.9000

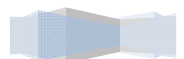
$$\text{BE Sales} = \text{Fixed expenses} / \text{PV Ratio} = 15000 / 20\% = \text{Rs.75000}$$

3. Profit when sales Rs.100000

$$100000 = 15000 + \text{profit} / 20\% \Rightarrow \text{Profit} = \text{Rs. 5000}$$

4. Sales required to earn a profit of Rs.20000

$$\text{Sales} = 15000 + 20000 / 20\% = \text{Rs.175000}$$



Possible Questions

Short Answer Questions

1. Define Marginal Cost
2. Define Marginal Costing
3. What do you understand by Contribution?
4. What is P/v Ratio?
5. Compare Marginal Costing and Absorption Costing
6. Explain the meaning of Break even point
7. What is margin of safety
8. What is key factor
9. Write a brief note on Cost Volume Profit analysis
10. List out types of Break even Chart
11. Find out the Marginal Cost from the following:

Direct Material	Rs.10, 000
Direct wages	Rs.12, 000
Direct expenses	Rs.13, 000
Variable overheads	Rs. 8,000
Fixed overheads	Rs.13, 000

[Ans: Rs.43,000]

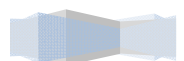
12. Sales	Rs.4,00,000
Variable Cost	Rs.3,00,000
Fixed Cost	Rs. 40,000. What is the P/v ratio ?

[Ans: 25%]

13. Calculate P/v ratio from the data given below

2009: Sales Rs.6,00,000	Profit: Rs.1,00,000
2010: Sales Rs.10,00,000	Profit: Rs.1,80,000

[Ans: 20%]



14. Find out Margin of safety:

Sales Rs. 13,00,000

P/v Ratio : 40% [Ans: Rs.5,62,500]

15. Calculate breakeven point from the following particulars:

Fixed expenses Rs. 1,50,000

Variable cost per unit Rs.10

Selling price per unit Rs.15

[Ans: Rs.4,50,000]

PART - C

1. Define Marginal Costing. How does it differ from absorption costing?
2. What is marginal Costing? State its features
3. Explain the advantages and limitation of Marginal Costing?
4. “Marginal costing is a valuable aid for managerial decisions.” Discuss
5. What is breakeven point? What are its assumptions?
6. Briefly explain the different kinds of Break even charts
7. Write short notes on a. P/v ratio b. Variable cost c. BEP d. Fixed cost
8. Explain the applications of Marginal Costing
9. From the following information relating to Quick Standards Ltd., you are required to find out (a) P.V ratio (b) Break – even point (c) Profit (d) Margin of safety.

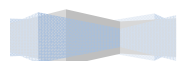
Total Fixed Cost Rs. 4, 500

Total Variable Cost Rs. 7, 500

Total Sales Rs.15, 000

(e) Also Calculate the Volume of sales to earn profit of Rs. 6,000

[Ans: P/v ratio 50%, BEP: Rs.3,000, Profit: Rs.3,000, Margin of Safety: Rs.6,000, Rs.21,000]



10. Assuming that the cost structure and selling prices remain the same in periods I and II find out:

- i) P/V ratio
- ii) Break Even Sales
- iii) Profit when sales are Rs.1,20,000
- iv) Sales required to earn a profit of Rs. 40,000
- v) Fixed expenses

Period	Sales Rs.	Profit Rs.
I	1,40,000	15,000
II	1,60,000	20,000

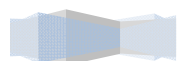
[Ans: P/v ratio: 25%, BEP: Rs.80,000, Rs.10,000,Rs.2,40,000,Fixed Expenses: Rs.20,000]

11. Zee Ltd has prepared the following budget estimates for the year 2011-2012

Sales	Rs.2, 00,000
Fixed Expenses	Rs. 30,000
Variable costs	Rs.1, 50,000

You are required to

- (i) Find the P/V ratio, break-even point and margin of safety.
- (ii) Calculate the revised P/V ratio, break-even point and margin of safety in each of the following cases:
 - (a) Decrease of 10% in selling price
 - (b) Increase of 10% in variable costs
 - (c) 25% increase in Selling price



(d) 10% increase in selling price accompanied by 10% decrease in variable cost.

[Ans: a. 25%,Rs.1,20,000 and Rs.80,000. B. Rs.0,Rs.28,571, Rs.1,75,000 and Rs.1,42,352]

12. Find the particulars given below calculate:

- i) Break Even Point
- iii) Profit or loss when sales are Rs.12, 000
- iv) Sales required to earn a profit of Rs. 5,000
- v) Fixed expenses

Period	Sales Rs.	Profit Rs.
I	10,000	-500
II	14,000	1,500

[Ans: BEP: Rs.11,000, Rs.500, Rs.21,000]

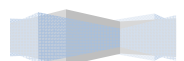
13. PGP Ltd. furnished you the following related to the year 2003

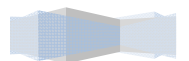
Particulars	First half of the year Rs.	Second half of the year Rs.
Sales	45,000	50,000
Total cost	45,000	43,000

Assuming that there is no change in prices and variable cost and that the fixe expenses are incurred equally in the 2 half year periods, calculate for the year 2003

- a. The Profit volume ratio
- b. Fixed expenses
- c. Break even sales and
- d. % of margin of safety

[Ans: P/v ratio: 40%, Fixed expenses: Rs.26,000, BE sales: Rs.65,000, % MOS: 31.58%]





Reg. No.....

[09CCP201]

KARPAGAM UNIVERSITY

(Under Section 3 of UGC Act 1956)

COIMBATORE – 641 021

(For the candidates admitted from 2009 onwards)

M.Com. DEGREE EXAMINATION, APRIL 2010

Second Semester

COMMERCE (COMPUTER APPLICATIONS)

MANAGEMENT ACCOUNTING

Time : 3 hours

Maximum : 60 marks

PART – A (20 x $\frac{1}{2}$ = 10 Marks) (30 Minutes)
(Question Nos. 1 to 20 Online Examinations)

PART B (5 X 4 = 20 Marks) (2 $\frac{1}{2}$ Hours)
Answer ALL the Questions

21. a. Define Management Accounting. What are its functions?

Or

b. What are the advantages of Management Accounting?

22. a. From the following Balance Sheets of Penta Systems for 2008 and 2009. Prepare a common size statement.

Liabilities	Rs. In Lakhs		Assets	Rs. In Lakhs	
	2008 Rs.	2009 Rs.		2008 Rs.	2009 Rs.
Equity Capital	400	400	Land of Buildings	400	370
Preference share capital	400	450	Plant & Equipments	400	410
Reserves	200	245	Stock	200	300
Sundry Creditors	250	350	Debtors	200	300
Bills payable	50	75	Cash	100	140
Total	1300	1520	Total	1300	1520

Or

b. From the Trading A/c Calculate. a. Gross Profit Ratio and b. Stock Turnover Ratio

Dr	Particulars	Amount Rs.	Particulars	Amount Rs.
	To Opening Stock	1,00,000	By Sales	5,60,000
	To Purchases	3,50,000	By closing stock	1,00,000
	To wages	9,000		
	To Gross Profit	2,01,000		
	Total	6,60,000	Total	6,60,000

23. a. From the following Balance sheets prepare a schedule of changes in working capital

	2008 Rs.	2009 Rs.	Assets	2008 Rs.	2009 Rs.
Liabilities					
Capital	22,000	18,000	Land	3,600	2,000
Retained Earnings	5,300	3,000	Building	3,000	3,000
Creditors	3,000	4,000	Stock	9,000	8,000
A/c's Payable	1,500	3,000	A/c's Receivable	11,500	12,000
			Cash	4,700	3,000
Total	31,800	28,000	Total	31,800	28,000

Or

b. How does cash flow statement differ from Fund Flow statement?

24. a. From the following information, find out the amount of Profit earned during the year, using marginal costing technique:

Fixed Cost	Rs. 5,00,000
Variable Cost	Rs. 10 per unit
Selling Price	Rs. 15 per unit
Output level	1,50,000 units

Or

b. From the following particulars calculate:

- a. Material cost Variance and b. Material price variance
- | | | |
|----------|------------------|----------------|
| Material | Standard | Actual |
| X | - 40kg at Rs.11 | 50kg at Rs.12 |
| Y | - 60 kg at Rs.12 | 80kg at Rs. 14 |

25. a. Write short notes on (a) Budget centre and (b) Budget Manual

Or

b. Siva Enterprises manufacture 21,200 units of X and 27,400 units of Y. Prepare a production budget for 6 months from the following data

Particulars	Product	
	X (Rs.)	Y (Rs.)
Direct Materials per unit	6.00	10.00
Direct Wages per unit	3.00	4.00
Factory over heads	42400.00	54800.00

Dr		Cr	
Particulars	Amount Rs.	Particulars	Amount Rs.
To Opening Stock	1,00,000	By Sales	5,60,000
To Purchases	3,50,000	By closing stock	1,00,000
To wages	9,000		
To Gross Profit	2,01,000		
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Direct Wages per unit	3.00	4.00
Factory over heads	42400.00	54800.00

11. From the following Balance Sheet as on 31st December 2004 & 2005. You are required to prepare statement of changes in working capital & Fund Flow Statement

LIABILITIES	2004	2005
Share Capital	40,000	45,000
Creditors	10,000	23,000
Profit & Loss A/C	2,30,000	2,50,000
	2,80,000	3,18,000
ASSETS		
Cash	30,000	47,000
Debtors	1,20,000	1,15,000
Stock	80,000	90,000
Land	50,000	66,000
	2,80,000	3,18,000

12. Marginal costing is a valuable aid for managerial decisions". - Discuss

13. Prepare a flexible budget for overheads on the basis of the following data. Ascertain the overhead rates at 50% 60% and 70% capacity. At 60% Capacity

	Rs.
Variable overheads:	Indirect material 6,000
	Indirect labour 18,000
Semi variable overheads:	Electricity 30,000
	Repairs (80% fixed 20% variable) 3,000
Fixed overheads:	Depreciation 16,500
	Insurance 4,500
	Salaries 15,000
	Total overheads 93,000
	Estimated direct labour hours 1,86,000

Reg. No.....

[10SDCCP202/11SDCCP202/12SDCCP202]

KARPAGAM UNIVERSITY

(Under Section 3 of UGC Act 1956)
COIMBATORE - 641 021

(For the candidates admitted from 2010 onwards)

SCHOOL OF DISTANCE EDUCATION

M.Com DEGREE EXAMINATION MAY 2014

COMMERCE (COMPUTER APPLICATIONS)

MANAGEMENT ACCOUNTING

Maximum : 100 marks

PART - A (5 x 8 = 40 Marks)

(Answer Any FIVE of the Following Questions)

1. Define management accounting. What are its objectives?

2. State the nature and scope of management accounting.

3. What are the limitations of ratio analysis?

4. Current Ratio 2.5

Working Capital Rs.63,000

Calculate current assets and current liabilities?

5. From the following data prepare statement showing changes in working capital

LIABILITIES	2005 Rs.	2006 Rs.
Share Capital	5,00,000	6,00,000
Reserves	1,50,000	1,80,000
Profit & Loss A/c	40,000	65,000
Debenture	3,00,000	2,50,000
Creditors	1,70,000	1,60,000
Provision for taxation	60,000	80,000
	12,20,000	13,35,000

ASSETS	6,30,000	6,60,000
Fixed Asset	2,40,000	3,70,000
Stock	2,50,000	2,30,000
Debtors	80,000	60,000
Cash Balance	20,000	15,000
Preliminary Expenses		
	12,20,000	13,35,000

6. Define marginal costing and explain its features?

7. Calculate Break Even Point
Sales Rs. 5,00,000
Fixed Cost Rs. 1,80,000
Variable Cost Rs. 2,50,000

8. Prepare production budget for three months ending 31st March 2006 for a factory products four product on the basis of the following information

Type of Product	Estimated Stock on Jan 1, 2006 (Units)	Estimated Sales during Jan - Mar 2006 (Units)	Desired closing stock 31 Mar 2006 (Units)
A	2,000	10,000	5,000
B	3,000	15,000	4,000
C	4,000	13,000	3,000
D	5,000	12,000	2,000

PART - B (3 x 20 = 60 Marks)

(Answer Any THREE of the Following Questions)

9. Explain the relationship between financial accounting and management accounting?

10. From the following information prepare Balance Sheet Show the workings.
Working Capital Rs. 78,000 Reserves & surplus Rs. 1,00,000
Bank Overdraft Rs. 60,000 Current Ratio 1.75
Liquid Ratio 1.15 Fixed Asset to Proprietors Fund 0.75
Long Term Liabilities Nil

KARPAGAM ACADEMY OF HIGHER EDUCATION

(Established Under Section 3 of UGC Act 1956)

COIMBATORE- 641 021

(For the candidates admitted from 2016 onwards)

UG DEGREE EXAMINATION, NOVEMBER-2017

II M.COM CA

UNIT 1

S.NO	QUESTION	OPTION1	OPTION2	OPTION3	OPTION4		ANSWER
1	The chief objective of management accounting is to serve.	Public at large	Employees	Management	Government		Manage
2	The term management accounting was first coined by the British team of accountants that visited the.	USA	China	India	Japan		USA
3	Management accounting involves	Recording of costs	Recording of	Preparation of accounts	Analysis and		Analysis
4	Management accounting is also known as	Cost accounting	Financial	Corporate accounting	Decision accounting.		Decision
5	Management accounting functions are	Complementary in	Contradictory	Neutral in effect	None of the above		Comple
6	Management accounting provides valuable services to management in performing.	Planning functions	Controlling	Co-ordinating functions	All managerial functions.		All
7	Management accounting is	An extension of	An extension of	A blend of these two and	all the above		An
8	Management accounting is concerned with formulation of _____ to meet enterprise objectives.	Plans	Cost	Both a and b	decision		Plans
9	Installation of management accounting is purely.	Compulsory	Optional	Both a and b	not necessary		Optional
10	The term of appointment of financial controller may be fixed by the	Board of Directors	Articles of	Both a and b	Prospectus		Both a
11	Financial accounting deals with	Determination of costs	Determination of	Determination of prices	Determination of		Determin
12	The term management accountancy was first used in	1910	1939	1950	1970		1950
13	Preparation of financial accounts is compulsory for	Sole trader business	Partnership firm	Join stock companies	Hindu Undivided Family		Join
14	A financial statement is outcome of _____ accounting	Cost	Management	Financial	Accounting		Financial
15	Provision of accounting information is known as	Reporting	Budgeting	Planning	Controlling		Reportin
16	_____ is the oldest branch of accounting.	Management	Cost accounting	Financial accounting	Corporate accounting.		Financial
17	Management accounting also comprises the preparation of financial reports for non-management groups	Share holders	Creditors	Tax authorities	All of the above		All of the
18	Information conveyed by the management accountant to the different levels of management groups should	Reliable	Valuable to the	Relevant	All of the above		All of the
19	Management accounting and cost accounting are	Supplementary to each	Complementary to	Independent to each	Opposite to each other		Comple
20	_____ is also known as Management oriented accounting.	Management	Cost accounting	Financial accounting	Corporate accounting		Manage
21	_____ Is concerned with accounting information which is useful to management in maximizing profits or	Management	Cost accounting	Financial accounting	Corporate accounting		Manage
22	_____ Is concern with future.	Forecasting	Supply information	Increase in efficiency	Planning		Forecasti
23	_____ Provides information to the management and not decisions.	Forecasting	Supply information	Increase in efficiency	Receiving Information		Supply
24	_____ Is basically concerned with "the problem of choice".	Forecasting	Supply information	Increase in efficiency	Receiving Information		Increase
25	_____ To makes accounting data more useful.	Techniques and	Cause and effect	No fixed norms	Assists management		Techniqu
26	_____ Attempts to examine the 'cause' and 'effect' of different variables.	Techniques and	Cause and effect	No fixed norms	Assist management		Cause
27	_____ has no set of rules and formats like double entry system of book keeping.	Techniques and	Cause and effect	No fixed norms	Assist management.		No fixed
28	_____ in several ways in its functions but does not replace it.	Cause and effect	No fixed norms	Assist management	Achieving of objectives		Assist
29	_____ is the general accounting which relates to the recording of business transactions in the books of	Financial accounting	Cost accounting	Management accounting	Budgeting.		Financial
30	_____ is the process and techniques of ascertaining costs.	Management	Financial	Cost accounting	Budgeting		Cost
31	_____ Means expressing the plans, policies and goals of the enterprise for a definite period in future.	Budgeting	Forecasting	Statistical methods	Inventory control		Budgetin
32	_____ tools such as graphs, charts, diagrams, pictorial presentation, index number etc...	Budgeting	Forecasting	statistical	inventory control		statistical
33	_____ on the other hand, is a predication of what will happen, as a result of a given set of	Budgeting	Forecasting	Statistical	Inventory control		Forecasti
34	_____ Includes control over inventory from the time it is acquired till its final disposal	Budgeting	Forecasting	Statistical	Inventory control		Inventory
35	_____ is important part of management accounting	Budgeting	Statistical	Inventory control	Interpretation of data		Interpreta
36	_____ May be sent monthly quarterly half yearly etc.	Report	Internal audit	Tax accounting	Methods and procedure		Report
37	_____ Needs devising a system of internal control by establishing internal audit coverage for all	Report	Internal audit	Tax accounting report	Methods and procedure		Internal
38	_____ includes the computation of taxable income as per tax law filling of returns etc....	Report	Internal audit	Tax accounting report	Internal audit		Tax
39	_____ provides statistical data to the various departments of the organization	Report	Internal audit	Tax accounting	Methods and procedure		Methods
40	The primary objective of-_____ is to enable the management to maximize or minimize losses	Cost accounting	financial accounting	management accounting	Corporate Accounting		managem
41	_____ is one of the primary function s of management	Planning	budgeting	Forecasting	Controlling		Planning
42	The main objective of management accounting is to present-_____ information to the	Cost	Financial	Management	Accounting		Financial
43	Management accounting makes-_____ process more modern and scientific by providing	Forecasting	Planning	Decision making	Budgeting		Decision
44	Management accounting is a useful advice of managerial _____	Planning	Control	Motivation	Forecasting		Control
45	_____ Presents the different alternative plans before the management _____ in a comparative manner	Reporting	Motivating	Controlling	Forecasting		Reportin
46	_____ Increases the job satisfaction of employees and encourage them to look forward	Delegation	Motivation	Report	Directing		Delegatio
47	_____ provides tools which are helpful in co ordination the activities of different section or	Planning	Forecasting	co- ordination	Budgeting		co-
48	Increase the effectives of the organization and _____the workers	Delegation	Motivation	Report	Directing		Motivati
49	Return on capital employed is one of the tools of _____	Financial accounting	Cost accounting	Corporate accounting	Management accounting		Manage
50	Budget are important means of _____	Motivation	Delegation	co- ordination	Directing		co-
51	_____ is a part of accounting	Management	Financial	cost accounting	corporate accounting		Manage
52	The-_____ in similar groups make the data more useful and understandable	Modification of data	Planning and	Financial analysis and	Communication		Modifica

53	----- are essential for achieving business objectives	Modification of data	Planning and	Communication	Decision Making			Planning
54	The is most important function of management accounting.	Motivation	Delegation	Co-ordination	Interpretation			Interpreta
55	of data are considered as back bone of management accounting.	modification of data	analysis and	communication	co-ordination			analysis
56	Management accounting is an important medium of	Motivation	Co-ordination	Communication	Delegation			Commun
57	Mere financial data and its analysis and interpretation are not sufficient for purposes	Planning	Forecasting	Controlling	Decision-making			Decision-
58	supplies analytical information regarding various alternatives and the choice of management is	financial accounting	management	cost accounting	corporate accounting			managem
59	is the essence of managerial activity.	Co-ordination	Control	Motivation	Decision making			Co-
60	has more or less become compulsory or statutory for every business.	financial accounting	cost accounting	management accounting	none of the above			financial

KARPAGAM ACADEMY OF HIGHER EDUCATION

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COIMBATORE- 641 021

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UG DEGREE EXAMINATION, NOVEMBER-2017

II M.COM CA

UNIT II

S.NO	QUESTION	OPTION1	OPTION2	OPTION3	OPTION4		ANSWER
1	The indicated quotient of two mathematical expression is known as-----	Ratio	Analysis	Working capital	Statements		Ratio
2	Current ratio is an example for ratio.	Balance sheet	Income statement	Inter statement	Intra Statement		Balance
3	ratio is an example for long term solvency ratio.	Gross profit	Dealt equity	Net profit	Price earning		Dealt
4	The relationship between current assets and current liabilities is known as ratio.	Gross profit	Net profit	current	Stock turnover		current
5	The ideal current ratio is	2:1	3:1	4:1	3:2		2:1
6	Liquid ratio is also known as ratio.	current	Acid test	Velocity	Quick		Acid test
7	Operating cost net sales X 100=	Gross profit ratio	Net profit ratio	Operating ratio	Current ratio		Operatin
8	The ideal liquid ratio is	1:1	1:2	1:4	1:5		1:1
9	Total sales / debtors =	Debtors	Debtors turnover	Current ratio	Liquid ratio		Debtors
10	The excess of current assets over current liabilities is known as	Current ratio	Liquid ratio	Working capital	Debt-Equity Ratio		Working
11	To measure the overall performance and 3effectiven3ess of the firm.	Profitability	Activity	Liquidity	Leverage		Profitabil
12	A current ratio represents that the firms liquidity position.	High	Low	Both a and b	Medium		Low
13	Efficiency ratio are also called as ratios	Turnover	Profitability	Liquidity	Leverage		Turnover
14	A inventory ration indicates an inefficient management of inventory.	Low	High	Both a and b	Medium		Low
15	Profit and loss account is also called as the statement.	Balance sheet	Income statement	Asset account	Common Statement		Income
16	Proprietary ratio is also known as	Equity	Debt equity	current	Dect		Equity
17	With the help of current assets and current liabilities, one can calculate.	Current ratio	Gross profit ratio	Net profit ratio	Operating ratio		Current
18	Current ration 2.5 ; current liabilities Rs 1,00,000 current assets=	40,000	2,50,000	1,50,000	2,00,000		2,50,000
19	Average of gross profit Rs. 40,000 ; rate of gross profit 25% sales=	10,000	1,00,000	1,60,000	50,000		1,00,000
20	Average stock= rs. 40,000; closing stock RS 5000 in excess of opening stock. Then the closing stock is	42,500	80,000	40,000	85,000		42,500
21	The mathematical yardstick, which provides a measure of the relationship between two accounting, figure	Accounting ratio	Property ratio	Current ratio	Gross profit ratio		Accounti
22	Ratios help to management in evaluating the performance.	Solvency	Activity	Liquidity	Profitability		Activity
23	Solvency is indicated by debt equity ratio.	Long term	Short term	Both a and b	Medium Term		Long
24	The primary objective of ratio is to measure the liquidity.	Gross profit	Net profit	Current ratio	Operating Profit		Current
25	Average receivable period is 2.4 months, hence debtors turnover will be	6 months	10 months	5 months	4 months		5 months
26	If the operating ratio is 75% ; the net operating profit ratio will be	25%	100%	66%	10%		25%
27	ratio establishes the relationship between total operating expenses and sales.	Current ratio	Operating ratio	Liquid ratio	Stock turnover ratio		Operatin
28	Total assets minus total liabilities is equal to	Network	Owner's fund	Share holder's fund	All of the above		All of the
29	ratio indicates the number of times earning per share is covered by its market price.	Earning per share	Price earning ratio	Dividend per share	Yield Per Share		Price
30	ratio I s also known as rate of dividend to net profit	Payout	Price earning ratio	Gross profit ratio	Net profit ratio		Payout
31	The reciprocal of payout ratio is	Interest cover	Dividend covers	Earning per share	Price earning ratio		Dividend
32	Activity ratios are also known as	Performance ratios	Turnover ratios	Both a and b	Profitability Ratios		Turnover
33	indicates the number of times the payable rotate in a year.	Creditors velocity	Debtors turnover	Stock turnover	Debtors velocity		Creditors
34	ratio attempts to measure the utilization and effectiveness of the use of current assets.	Current assets turn	Current ratio	Net current assets	Liquid ratio		Current
35	Financial ratio include	Fixed assets ratio	Current ratio	Quick ratio	All of the above		All of the
36	Common statement is also known as	Component percentage	100 percent	Both a and b	50 percent statement		Both a
37	analysis refers to the comparison financial data of a company for several years.	vertical	Horizontal	Both a and b	axis		Horizont
38	analysis refers to the study of relationship of the various items in the financial statements of one	vertical	Horizontal	Both a and b	axis		vertical
39	liabilities are those liabilities which are intended to be paid in the ordinary course of business	Fixed	Long term	Short term	current		current
40	Current ratio is 2. Current assets = Rs 40,000 then current liabilities=	Rs.5,000	Rs10,000	Rs1,20,000	Rs1, 40,000		Rs1,20,0
41	Financial statements are	Estimates of facts	Anticipated facts	Recorded facts	Historical Facts		Recorded
42	Current liability of company is Rs. 3,00,000 if current ratio is 3:1 and quick ratio is1:1 then the value of	1,00,000	2,00,000	3,00,000	6,00,000		6,00,000
43	Current ratio= 2:5; liquid ratio=1:5 working capital= 60,000 then liquid assets =	20,000	60,000	40,000	1,00,000		60,000
44	Current assets of a concern = Rs. 3,00,000 current liabilities = 1,00,000 then current ratio =	3	2	1	4		3
45	If current ratio is 1:5:1 and current liability is 50,000 then the current assets could be	1,00,000	1,25,000	75,000	70,000		75,000
46	Higher the ratio, the lower the profitability is applicable to	Gross profit ratio	Net profit ratio	Operation ratio	Return on investment		Operatio
47	Which of the following transaction with results in change in current ratio	paid 90 day bank loan	liquidated long term	purchased merchandise	received payment of an		liquidaate
48	Financial statement records only	Monetary facts	No monetary facts	Both a and b	Non Monetary		Monetary
49	Network of business means	Equity capital	Total assets	Total assets- total	Fixed assets- current		Total
50	An in debt collection period indicates blockage of funds in debtors.	Increase	Decrease	Both a and b	Neither Increase nor		Increase
51	ratio denotes the relationship between stock and sales.	stock turn over ratio	fixed assets	working capital ratio	gross profit ratio		stock
52	ratio gives an idea about adequate investments or over investment or under investment in fixed	fixed assets turn over	fixed assets to	fixed assets to capital	Turnover Ratio		fixed

53	is the between sales or cost of sales and share holder's fund.	Debt equity ratio	Owned capital	Fixed assets ratio	Operation ratio			Owned
54	Total sales – sales return =	Net sales	Cash sales	Credit sales	Average sales			Net sales
55	Cash sales + credit sales +	Net sales	Sales return	Total sales	Average Sales			Total
56	Cost of goods sold + closing stock – opening stock=	Purchase	Sales	Purchase return	Sales return			Purchase
57	Opening stock + closing stock/2 =	Total stock	Average stock	Total liabilities	Total Assets			Average
58	Working capital = proprietary funds	Total asset	Current asset	Fixed asset	Contingent Assets			Fixed
59	Opening stock + purchase – closing stock	Sales	Purchase	Cost of goods sold	Working capital			Cost of
60	Opening debtors + closing debtors /2	Total creditors	Average creditors	Total debtors	Average debtors			Average

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UG DEGREE EXAMINATION, NOVEMBER-2017

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UNIT III

S.NO	QUESTION	OPTION1	OPTION2	OPTION3	OPTION4		ANSWER
1	May be regarded as the life blood of a business	Working capital	Current asset	Fixed asset	Current liability		Working
2	There are concepts of working capital	One	Two	Three	Four		Two
3	The concepts of working capital	Gross concept	Net concept	Both a and b	Working capital		Both a
4	The term represent the difference between current assets and current liabilities	Gross working capital	Net working capital	Both a and b	Working capital		Net
5	The networking capital can be	positive	Negative	positive or negative	positive and negative		positive
6	As indicated concepts of working capital have functional significance	Net	Gross	Net or gross	Net and gross		Net and
7	At the beginning of a business venture cash is provided by	Owners	Leaders	Owners and leaders	Owners or leader		Owners
8	is essentially circulating capital	Fixed assets	Working capital	Stock	Liabilities		Working
9	The classification of working capital into components	One	Two	Three	Four		Two
10	component represents the value of the current assets required on a continuing basis over the entire	Fixed working capital	Permanent working	Both a and b	Fluctuating Working		Both a
11	working capital can further e classified as regular working capital and reserve working capital	permanent	Temporary	Variable	Adequate		permane
12	represents a certain amount of fluctuations in current assets during a short period.	Fixed working capital	permanent working	Temporary working	Fluctuating Working		Tempora
13	A business firm must maintain an of working in order to run its business smoothly.	permanent	Fixed	Temporary	Adequate		Adequate
14	Adequate working capital will lead inefficiency in costs and reduction in profits.	Increase	Decrease	Both a and b	Negative		Increase
15	The amount of reduces the cost of purchases.	Cash discount	Goodwill	Credit worthiness	Ability to face cris		Cash
16	enables a business to without stand periods of depression smoothly.	Cash discount	Good will	Credit worthiness	Ability to face		Ability to
17	Making prompt payment is a base to create and maintain	Cash discount	Good will	Ability to face crisis	Credit		Good
18	of the firm can not work without adequate working capital.	Current assets	Total assets	Fixed assets	Fluctuating Assets		Fixed
19	A sound system of enables a concern to pay regular dividends to its investors.	Assets	Liabilities	Working capital	Stock		Working
20	The manager is always interested in obtaining the working capital at the right time, at a cost and the	Financial	Marketing	Sales	Purchase		Financial
21	The level cannot be expected to reduce at any time.	Minimum	Maximum	Medium	Equal		Minimu
22	Working capital should be provided in such a manner that the enterprise may have its	Long term	Short term	Internal	External		Long
23	is the most important source for raising the permanent working capital	Floating of debentures	Issue of share	Pouching back of profits	Loans		Issue of
24	Shares are of types	One	Two	Three	Four		Two
25	amount of permanent capital should be raised by the issue of shares	Minimum	Maximum	Medium	Equal		Maximu
26	is also an important source of long term working capital.	Floating of debentures	Issue of shares	Public deposit	Loans		Floating
27	means the reinvestment by a concern of its surplus earning in its business.	Ploughing back of	Floating of	Long term loans	public deposit		Ploughin
28	Provide types of loans long term, medium term short term loans.	One	Two	Three	All		All
29	type of finance is ordinary repayable in installments	Ploughing back of	Floating of	long term loans	Public deposits		long term
30	covers the need of working capital financing day to day business requirement.	Long term fund	Short term fund	Internal	External		Short
31	covers the need of working capital financing day to day business requirement.	Long term fund	Short term fund	Internal	External		Short
32	Short term working capital are of types.	One	Two	Three	Four		One
33	The reserve provides a good source of for working capital.	Depreciation fund	Provision for tax	Accrued expenses	Revenue Reserve		Provision
34	Constitute as a source of working.	Depreciation	Provision for tax	Accrued expenses	Revenue Reserve		Accrued
35	The firm can post pone the payment of expenses for period.	Short	Long	Maximum	Minimum		Short
36	The extended by one business enterprise on another on the purchase and sale of goods.	Credit papers	Trade credit	Bank credit	Customer's credit		Trade
37	can be discounted with a bank.	Credit papers	Trade credit	Bank credit	Customer's credit		Credit
38	provides working capital in the forum of over drafts, cash credit, short term, loans etc.	Credit papers	Trade credit	Bank credit	Customer's credit		Bank
39	governments, sometimes, provide, short term finance on easy terms.	Central	State	central & state	None of the above		central &
40	is often obtained at low rate interest.	customer's credit	Government	Loans from directors	Security of employee		Loans
41	is required to make deposits their employer companies.	Customers credit	Government	Loans from directors	Security of employee		Security
42	is the life blood of a business.	Assets	Liabilities	Working capital	Loan		Working
43	Working capital =	Current assets –	Current liabilities -	Current assets + current	fixed assets + current		Current
44	Average cost per month =	Cost of raw material /	Cost of raw material X	Cost of raw material - 12			Cost of
45	Accounts are collected from debtor's cash into firm.	Payable	Receivables	Both a and b	Acceptable		Receivab
46	is not a method of cost ascertainment like job costing or contract costing.	Standard costing	Marginal costing	Working capital	Budgetary control		Marginal
47	For marginal costing is more helpful to the management.	Planning	co-ordinating	Decision making	Staffing		Staffing
48	In costing, only variable items of costs are taken into account.	Standard	Marginal	Working capital	Budgetary control		Marginal
49	is not allocated to cost unit	Fixed costs	Variable	Both a and b	Semi - variable Cost		Variable
50	Marginal cost means the thing as variable cost.	Same	Different	Variable	Fixed		Same
51	The accountant's concept of different from economist's concept of marginal cost.	Total cost	Average cost	Additional cost	Marginal cost		Marginal
52	Economists define marginal cost as the producing one additional unit.	Total cost	Average cost	Additional cost	Marginal cost		Addition

53	Additional unit shall include an element of also	Fixed cost	Variable cost	Total cost	Semi - variable Cost			Fixed
54	Marginal cost =	prime cost – total	Total variable cost –	Prime cost + total	Prime cost + total fixed			Prime
55	Marginal cost =	Total cost – fixed cost	Total cost – variable	Total cost + fixed cost	Total cost + variable cost			Total
56	Total cost 400, fixed cost Rs. 200 marginal cost =	600	200	500	100			200
57	Marginal cost =	Increase in total cost /	Decrease in total	Increase in total cost X	Neither Increase nor			Increase
58	Total cost Rs. 600 fixed cost Rs. 200 marginal cost	100	200	800	400			400
59	Total cost Rs.800 fixed cost Rs. 200 marginal cost =	600	800	1000	200			600
60	is one which tends to be unaffected by variation in volume of output.	Total cost	Average cost	Marginal cost	Fixed cost			Fixed

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UG DEGREE EXAMINATION, NOVEMBER-2017

II M.COM. CA

UNIT 4

S.NO	QUESTION	OPTION1	OPTION2	OPTION3	OPTION4	ANSWER
1	Budgetary control is a _____ of costing.	Mental	Technique	Kind	Analysis	Technique
2	The process of preparing a budget is known as _____.	Budget	Budgeting	Budgetary control	Budget Cost	Budgeting
3	The explanation of MBE is _____.	Management by	Management,	Master of business	Management by	Management
4	MBO means _____.	Management by	Management by	Master of business	Master of business	Management
5	Budgetary control and budgets are the _____.	same	Different	Variable	Equal	same
6	Budgetary control relates to _____.	Persons	A product	Both a and b	Producer	Persons
7	Both budgetary control and _____ systems are interrelated.	Marginal costing	Standard costing	Budgeting	Break Even	Standard
8	The _____ is the document which lays down the details of the budgeting organization and procedures.	Budget manual	Budget committee	Budget procedure	Budget Cost	Budget
9	The period covered by a budget is known as _____.	Budget committee	Budget period	Budget manual	Budget Cost	Budget
10	Generally the budget period is _____.	two years	three years	one year	five years	one year
11	In most of the companies, the key factor _____.	Production	Finance	Sales	Cost	Sales
12	_____ budget is one among the functional budgets.	Sales	Capital	Fixed	Responsibility	Sales
13	_____ budget is concerned with estimating the probable Output of each product in the forth coming _____.	Sales	Production	Cash	Advertising	Product
14	_____ refers to the quantity of work that can be performed in one hour.	Standard quantity	Standard hour	Actual hour	Machine Hour	Standard
15	Zero base budgeting overcomes the weakness of _____.	Conventional	Sales budget	Production budget	Cash Budget	Conventional
16	A master budget is also known as _____ all functional budgets.	Summary	Production	Sales	Finance	Summary
17	A fixed budget is useful only when the actual level of activity corresponds to the _____ levels of activity.	Actual	Budgeted	Manual	Financial	Budgeted
18	A _____ is a department or section of the organisation defined for the purpose of budgetary control.	Budget committee	Budget centre	Budget manual	Budgeting	Budget
19	_____ is a factor whose influence effects all other budgets.	Key factor	Production	Sales	Finance	Key
20	A _____ budget is one which is established for use unaltered over a long period of time	Basic	Current	Sales	Production budget	Basic
21	_____ is a plan of estimated receipts and payment of cash for the budget period	Cash budget	Sales budget	Production budget	Conventional Budget	Cash
22	_____ budget is one which incorporate all functional budgets.	Master	Flexible	Sales	Finance	Master
23	_____ budget is a budget which is designed to change in accordance with the level of activity actually _____.	Master	Flexible	Fixed	Variable	Flexible
24	_____ budget is a budget which is designed to remain unchanged irrespective of the level of activity	Master	Flexible	Fixed	Variable	Fixed
25	The difference between the budgeted figures and actual figures is _____.	Variance	Profit	Sales	Cost	Variance
26	_____ ration gives the percentage of actual hours worked to the budgeted hours.	Capacity	Efficiency	Activity	Effect	Capacity
27	Sales budget is _____ a functional budget	a functional budget	Expenditure budget	Master budget	Production budget	a
28	The difference in fixed cost and variable cost is a special significance in the preparation of _____.	Cash budget	Static budget	Flexible budget	Production budget	Flexible
29	The budget which is prepared first of all is _____.	Budget for key factor	Cash budget	Master budget	Flexible budget	Budget
30	A budget manual contains a summary of _____.	All financial budgets	Ratios	The responsibility of the	Statements	The
31	Key factor is also known as _____ factor	principal	Limiting	Governing	normal	principal
32	The budgets are proper for a given level of activity, the budget is prepared before the beginning of a _____.	Flexible	Fixed	Sales	Master	Flexible
33	A factor which influences all other budget _____.	Limiting factor	Production factor	Master budget	Production budget	Limiting
34	_____ budget is a plan of estimated receipts and payments of cash for the budget period.	Cash	Sales	Production	Raw material	Product
35	Before the implementation of the master budget it must be approved by the _____.	Budget committee	Board of directors	Share holders	Government	Budget
36	Both budgetary control and _____ systems are inter related .	Marginal costing	Budgeting	Standard costing	Process costing	Budgeting
37	_____ is based on prospective approach	Performance budgeting	Flexible budgeting	Zero base budgeting	Master Budget	Performance
38	Zero base budgeting technique was first used in America in _____.	1960	1962	1968	1970	1962
39	Zero base budgeting was originally developed by _____.	Peter a. pyre	Brown & Howard	ICMA	ICWA	Peter a.
40	Ratios which are used to compare, to control and to appraise the operations of the management are known as _____.	Control ratios	Current ratios	p/v ratio	Profitability Ratios	Control ratios
41	Budgetary control is a system which uses budget as a means of _____ and controlling.	Planning	Staffing	Co-Ordination	Organizing	Planning
42	A budget is a plan of action for a _____ period.	Previous	Future	Both a and b	Present	Future
43	A budget guides every manager in the process. _____.	Planning	Staffing	Organizing	Decision making	Decision
44	In budgetary control _____ costs are recorded	Actual	Variable	Fixed	Semi - variable Cost	Actual
45	Budgeted costs are compared with _____.	Actual costs	Variable costs	Fixed costs	Semi - variable Cost	Actual
46	Activities of various departments are _____.	Planned	Organized	Co-Ordination	Decision	Co-
47	The _____ of a business must be defined clearly	Objectives	Delegation	Co-Operation	Flexibility	Objective
48	Budgeting must have the complete _____ of the top management.	Objectives	Delegation	Co-Operation	Flexibility.	Co-
49	Employee should be educated about the merits of _____ systems.	Budgeting	Budgetary control	Budget	Budget Cost	Budgetary
50	The employees must be _____ to improve their efficiency.	Motivation	Reporting	Follow up action	Cost of operation	Motivation

51	A good budgetary control system should include	Motivation	Reporting	Follow up action	Cost of operation			Follow
52	The of budgetary control system should be considered	Motivation	Reporting	Follow up action	Cost of operation			Cost of
53	A good organization must be developed in order to achieve benefits.	Maximum	Minimum	Both a and b	Average			Maximu
54	The must should not be an expensive one.	Motivation	Reporting	Follow up action	Cost of operation			Cost of
55	A may be a department or section of a department or any other part of the department.	Budgetary control	Budges centers	Budget manual	Budget Cost			None of
56	Budgets centers is also necessary for purpose	Control	Co-ordinate	Motivate	Organize			Control
57	The head or a budgetary control organisation is designed as the	Budgetary control	Budges centers	Budget officer	Budget manual			Budget
58	is a written record.	Budgetary control	Budges centers	Budget officer	Budget manual			Budget
59	The budget officer is assisted by a	Budgetary control	Budges centers	Budget committee	Budget period			Budget
60	The may be short term or long term.	Budgetary control	Budget centers	Budget committee	Budget period			Budget

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UG DEGREE EXAMINATION, NOVEMBER-2017

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UNIT 5

S.NO	QUESTION	OPTION1	OPTION2	OPTION3	OPTION4		ANSWER
1	Fixed cost does not change with the n production with a certain range.	Increase	Decrease	Increase or decrease	Both a and b		Increase
2	is one which tends to vary does with the volume of output.	Fixed cost	Variable cost	Total cost	Marginal cost		Variable
3	is a technique or working costing, which is used in conjunction with other methods of costing.	Job costing	Standard costing	Marginal costing	Standard costing		Marginal
4	are kept separate at every stage	Fixed costs	variable costs	Fixed and variable costs	Semi - variable Cost		Fixed
5	As fixed costs are costs	Total	Variable	Average	Period		Period
6	Period costs are from product cost or cost of production or cost of sales.	Included	Excluded	Included or excluded	Included and Excluded		Excluded
7	Only are considered as the cost of the product.	Fixed cost	Variable cost	Total cost	Marginal cost		Variable
8	Period costs are not carried forward to next years	Income	Expenses	Profit	Loss		Income
9	Marginal income or marginal contribution known as the	Income or expenses	Income or profit	Income or loss	Expenses or profit		Income
10	The difference between the contribution and fixed costs is the	Net profit or loss	Net profit	Gross profit	Net loss		Net
11	Fixed costs remain constant of level of activity.	Respective	Irrespective	Contribution	Variable		Irrespective
12	Sales price and variation cost per unit remain the	same	Different	Equal	Similar		same
13	Cost volume profit relationship is fully employed to reveal the state of at various level of activity.	Assets	Liability	Profitability	Liquidity		Profitability
14	fluctuates from time to time but in the long run marginal cost are stable.	Fixed cost	Variable cost	Total cost	Fixed Cost		Variable
15	remains the same, irrespective of the volume of production.	Total costs	Average costs	Marginal costs	Standard cost		Marginal
16	Fixed cost is from product.	Included	Excluded	Both a and b	Included and Excluded		Excluded
17	The management can take decision regarding to and tendering.	Pricing	Planning	co-ordinating	Controlling		Pricing
18	expenses remain unchanged at any level of operation	Fixed	Variable	semi- variable	Fixed and Variable		Fixed
19	expenses are those expenses which vary according to the units of production.	Fixed	Variable	semi- variable	Fixed and Variable		Variable
20	expenses are those which are partly constant and partly variable.	Fixed	Variable	semi- variable	Fixed and Variable		semi-
21	The difference between sales value and variable cost is known as	Profit	Contribution	BEP	Fixed cost		Contribution
22	Contribution=	Sales – variable cost	Sales – fixed cost	Sales + variable cost	Sales + variable cost		Sales –
23	Marginal cost is also known as	Period cost	Fixed cost	Volume cost	Prime cost		Volume
24	Fixed cost is also known as	Period cost	Fixed cost	Volume cost	Prime cost		Period
25	indicates the relation ship of contribution to sales	p/v ratio	Contribution	Profit	Sales.		p/v ratio
26	P/v ratio can be improved by	Increase sales once	Decreasing selling	Increasing the variable	Increasing the value of		Increase
27	= sales X p/v ratio.	Sales	Profit	Contribution	Fixed cost		Contribution
28	Contribution minus profit is equal to	Sales	Loss	Variable	Fixed cost		Fixed
29	p/v ratio=	Profit volume ratio	Profit variable ratio	Production volume ratio	price volume ratio		Profit
30	Limiting factor is also known as	Key factor	Production factors	price factor	decision factor		Key
31	The criteria to select a suitable limited factor is	Highest contribution	Highest profit	Highest reduction	lowest reduction		Highest
32	is the point at which sales revenue is equal to total cost.	Margin of safety	Break even	Fixed cost	BEP		Break
33	Break even point in unit can be ascertaining by dividing the break even sales value by	Profit	p/v ratio	Selling price	Marginal cost		Selling
34	Increase in fixed cost =	No effect in bep	Higher BEP	No effect in p/v ratio	Lower profit		No effect
35	Decrease in sales volume =	No effect in BEP	Higher BEP	No effect in p/v ratio	Lower profit		Lower
36	Increase in variable cost =	No effect in bep	Higher BEP	No effect in p/v ratio	Lower profit		No effect
37	Decrease in selling price =	No effect in BEP	Higher BEP	No effect in p/v ratio	Lower profit		Higher
38	Decrease in sales volume =	No effect in BEP	Higher BEP	No effect in p/v ratio	Lower profit		No effect
39	Is the angle at which sales line cuts the total cost line	BEP	Angle of incidence	Contribution	Variable cost		Angle of
40	If the angle of incidence is at indicates that the profits are being made at higher rate	Large	Small	Neither large nor small	Medium		Large
41	is the difference between the total sales revenue and the sales at breakeven point.	Actual sales	margin of safety	Reducing the fixed costs	all the above		margin
42	Margin of safety can be improved by	Increasing the volume	Decreasing the	Reducing he fixed costs	All the above		Reducing
43	margin safety indicates a favorable position of the business.	Large	Neither large nor	Small	Medium		Large
44	Cost volume profit analysis may be applied for	Profit planning	Cost control	Decision making	All of these		All of
45	Marginal cost is the sum of prime cost plus	Fixed cost	Variable cost	Variable overhead	Total cost		Variable
46	At BEP contribution is equal to	Profit	Variable	Fixed cost	Sales		Fixed
47	At BEP, profit will be	High	Low	Zero	Medium		Zero
48	Total fixed cost of a company is Rs 21,000 per share ; variable cost per unit is Rs.7 and its selling price	3000	2100	7000	10,000		7000
49	p/v ratio of company A is 40% and company B is 50% state which company is likely to earn greater profits	Company A	Company B	Can be determined	Company C		Company
50	Margin of safety ratio=	Margin of safety/	Margin of safety X	Margin of safety	Marginn of Safety Y		Margin
51	What will be the selling price per unit, when variable cost per unit Rs.5.60 p/v ratio 60%?	6	8	14	10		14
52	Changes in profit between the two period Rs.10,000 changes in sales for the above periods rs.40,000 p/v	25%	40%	10%	50%		25%

53	is the difference between the sales and marginal cost.	Fixed cost	Contribution	Profit	Sales			Contribut
54	p/v ratio shows the relationship between.	Contribution and sales	Profit and sales	Profit and contribution	Contribution			Contribut
55	Sales Rs. 5,00,000 ; fixed cost Rs.1,50,000; profit Rs.1,00,000 p/v ratio is equal to	25%	75%	50%	80%			50%
56	Sales Rs. 1, 00,000; variable cost Rs.60, 000 p/v ratio is equal to	40%	75%	10%	100%			40%
57	Sales rs. 1, 00,000 break even sales Rs.40,000 margin of safety is equal to	60,000	40,000	1, 00,000	75,000			40,000
58	Sales are Rs.40, 000; variable cost Rs. 30,000 and fixed cost Rs. 15,000 here there will be	Profit of Rs 500	Loss of Rs. 5,000	Contribution of Rs	Profit of Rs 25,000			Loss of
59	If fixed cost is Rs 20,000 p/v ratio is 40% the BEP will be	20,000	50,000	8,000	10,000			50,000
60	When fixed cost is Rs 10,000 and p/v ratio is 50% the break even point will be	20,000	40,000	50,000	90,000			20,000