

KUNTHAVAI NAACHIYAR GOVERNMENT ARTS COLLEGE FOR WOMEN (A) THANJAVUR-7
DEPARTMENT OF BUSINESS ADMINISTRATION
Code: 18K3BB05 -FINANCIAL AND MANAGEMENT ACCOUNTING

UNIT – III

Methods of Depreciation:- Straight Line Method, Written Down Value Method and Annuity Method – Final Accounts of sole trader with simple adjustments.

Straight Line Method (SLM):

According to the Straight line method, the cost of the asset is written off equally during its useful life. Therefore, an equal amount of depreciation is charged every year throughout the useful life of an asset. After the useful life of the asset, its value becomes nil or equal to its residual value. Thus, this method is also called Fixed Installment Method or Fixed percentage on original cost method.

Formulae:

Amount of Depreciation = (Cost of Asset – Net Residual Value) / Useful Life

The rate of Depreciation = (Annual Depreciation x 100) / Cost of Asset

Q1. Anil purchased a machine on 1 Apr 2015 for ₹400000. The useful life of the machine is 3 years and its estimated residual value is ₹40000. At the end of its useful life, the machine is sold for 50000. Prepare the necessary ledger accounts in the books of Anil for the year ending 31st December every year. Use SLM.

Ans1: In the books of Anil

Machinery A/c

Date	Particulars	Amount	Date	Particulars	Amount
2015			2015		
1 Apr	To Cash A/c	400000	31 Dec	By Depreciation A/c	90000
			31 Dec	By balance c/d	310000
		<u>400000</u>			<u>400000</u>
2016			2016		
1 Jan	To balance b/d	310000	31 Dec	By Depreciation A/c	120000
			31 Dec	By balance c/d	190000
		<u>310000</u>			<u>310000</u>
2017			2017		
1 Jan	To balance b/d	190000	31 Dec	By Depreciation A/c	120000
			31 Dec	By balance c/d	70000
		<u>190000</u>			<u>190000</u>
2018			2018		
1 Jan	To balance b/d	70000	31 Mar	By Depreciation A/c	30000
			31 Mar	By Cash A/c	40000
		<u>70000</u>			<u>70000</u>

Depreciation A/c

Date	Particulars	Amount	Date	Particulars	Amount
2015			2015		
31 Dec	To Machinery A/c	90000	31 Dec	By Profit & Loss A/c	90000
		<u>90000</u>			<u>90000</u>

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

2016				2016		
31 Dec	To Machinery A/c	120000		31 Dec	By Profit & Loss A/c	120000
		<u>120000</u>				<u>120000</u>
2017				2017		
31 Dec	To Machinery A/c	120000		31 Dec	By Profit & Loss A/c	120000
		<u>120000</u>				<u>120000</u>
2018				2018		
31 Mar	To Machinery A/c	30000		31 Dec	By Profit & Loss A/c	30000
		<u>30000</u>				<u>30000</u>

Working Notes:

Calculation of amount of depreciation

Depreciation = (Cost of Asset – Net Residual Value)/Useful life

= (400000 – 40000)/3 = 120000 p.a.

Diminishing Balance Method

According to the Diminishing Balance Method, depreciation is charged at a fixed percentage on the book value of the asset. As the book value reduces every year, it is also known as the Reducing Balance Method or Written-down Value Method.

Formulae are as follows:

Amount of Depreciation = Book value x Rate of Depreciation / 100

Q.2. M/s. Bharat and sons purchased a machine on 1 Apr 2015 for ₹400000 from ABC & Co. and paid ₹100000 on its installation. The useful life of the machine is 3 years and its estimated residual value is ₹40000. On 31st March 2018, M/s. Bharat and sons sell the machinery for 250000. Charge depreciation as per the W.D.V. method @10 % p. a. Prepare the necessary ledger accounts in the books of Anil for the year ending 31st December every year.

Ans 2: In the books of M/s. Bharat and sons

Machinery A/c

Date	Particulars	Amount		Date	Particulars	Amount
2015				2015		
1 Apr	To ABC & Co. A/c	400000		31 Dec	By Depreciation A/c	37500
	To Cash A/c (installation exp.)	100000		31 Dec	By balance c/d	462500
		-				-
		<u>500000</u>				<u>500000</u>
2016				2016		
1 Jan	To balance b/d	462500		31 Dec	By Depreciation A/c	46250
				31 Dec	By balance c/d	416250
		<u>462500</u>				<u>462500</u>
2017				2017		
1 Jan	To balance b/d	416250		31 Dec	By Depreciation A/c	41625
				31 Dec	By balance c/d	374625
		<u>416250</u>				<u>416250</u>

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

2018				2018		
1 Jan	To balance b/d	374625		31 Mar	By Depreciation A/c	9366
				31 Mar	By Cash A/c	250000
					By Profit & Loss A/c (loss on sale)	115259
		401625				401625

Depreciation A/c

Date	Particulars	Amount		Date	Particulars	Amount
2015				2015		
31 Dec	To Machinery A/c	37500		31 Dec	By Profit & Loss A/c	37500
		-				-
2016				2016		
31 Dec	To Machinery A/c	46250		31 Dec	By Profit & Loss A/c	46250
		-				-
2017				2017		
31 Dec	To Machinery A/c	41625		31 Dec	By Profit & Loss A/c	41625
		-				-
2018				2018		
31 Mar	To Machinery A/c	9366		31 Dec	By Profit & Loss A/c	9366

Working Notes:

Calculation of amount of depreciation

Amount of depreciation = Book Value × Rate of Depreciation / 100

- 2015: Depreciation = $500000 \times \frac{10}{100} \times \frac{9}{12} = 37500$
- 2016: Depreciation = $462500 \times \frac{10}{100} = 46250$
- 2017: Depreciation = $416250 \times \frac{10}{100} = 41625$
- 2018: Depreciation = $374625 \times \frac{10}{100} \times \frac{3}{12} = 9366$

Calculation of loss on sale of machinery:

Loss = Book Value on 1 Jan 2018 – depreciation for 3 months – cash received = $374625 - 9366 - 250000 = 115259$

Annuity Method

This method of depreciation considers the cost of the asset and also the amount of interest lost on the capital expenditure. Thus, it is based on the assumption that if the amount that is spent on the purchase of the asset was invested elsewhere, it would have earned a certain amount of interest.

Q 3. A Ltd. purchased a 5 years lease on 1 April 2013 for ₹500000. It is decided to write off depreciation on lease using the Annuity Method. The rate of interest is presumed to be 6% p.a. The annuity for ₹1 for 5 years at 6% interest is 0.237396. Prepare the Lease A/c and the Profit & Loss A/c for 5 years.

Ans 3 : Amount of depreciation to be written off every year = $0.237396 \times 500000 = ₹118698$

Lease A/c

Date	Particulars	Amount		Date	Particulars	Amount
2013-14				2013-14		
1 Apr	To Bank A/c	500000		31 Mar	By Depreciation A/c	118698

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

31 Mar	To Interest A/c	30000		31 Mar	By balance c/d	411302
	(6% on 500000)	-				-
		<u>530000</u>				<u>530000</u>
2014-15				2014-15		
1 Apr	To Balance b/d	411302		31 Mar	By Depreciation A/c	118698
31 Mar	To Interest A/c	24678		31 Mar	By balance c/d	317282
	(6% on 411302)	-				-
		<u>435980</u>				<u>435980</u>
2015-16				2015-16		
1 Apr	To Balance b/d	317282		31 Mar	By Depreciation A/c	118698
31 Mar	To Interest A/c	19037		31 Mar	By balance c/d	217621
	(6% on 317282)	-				-
		<u>336319</u>				<u>336319</u>
2016-17				2016-17		
1 Apr	To Balance b/d	217621		31 Mar	By Depreciation A/c	118698
31 Mar	To Interest A/c	13057		31 Mar	By balance c/d	111980
	(6% on 217621)	-				-
		<u>230678</u>				<u>230678</u>
2017-18				2017-18		
1 Apr	To Balance b/d	111980		31 Mar	By Depreciation A/c	118698
31 Mar	To Interest A/c	6718				
	(6% on 111980)	-				-
		<u>118698</u>				<u>118698</u>

Profit & Loss A/c

Date	Particulars	Amount		Date	Particulars	Amount
2013-14				2013-14		
31 Mar	To Depreciation A/c	118698		31 Mar	By Interest A/c	30000
2014-15				2014-15		
31 Mar	To Depreciation A/c	118698		31 Mar	By Interest A/c	24678
2015-16				2015-16		
31 Mar	To Depreciation A/c	118698		31 Mar	By Interest A/c	19037
2016-17				2016-17		
31 Mar	To Depreciation A/c	118698		31 Mar	By Interest A/c	13057
2017-18				2017-18		
31 Mar	To Depreciation A/c	118698		31 Mar	By Interest A/c	6718

Final Accounts of sole trader with simple adjustments:

Illustration:1

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

Prepare trading account from the following ledger balances presented by P. Sen as on 31st March, 2016.

Particulars	₹	Particulars	₹
Stock (1-4-2015)	10,000	Sales	3,00,000
Purchases	1,60,000	Returns inward	16,000
Wages	30,000	Returns outward	10,000
Carriage inwards	10,000	Gas and Fuel	8,000
Freight inwards	8,000		

Additional information:

- Stock on 31st March, 2016 Rs. 20,000
- Outstanding wages amounted to Rs. 4,000
- Gas and fuel was paid in advance for Rs. 1,000

Solution: 1

Dr.		Trading account for the year ended 31st March, 2016		Cr.	
Particulars	₹	₹	Particulars	₹	₹
To Opening Stock		10,000	By Sales	3,00,000	
To Purchases	1,60,000		Less: Returns inward	16,000	2,84,000
Less: Returns outward	10,000	1,50,000	By Closing Stock		20,000
To Wages	30,000				
Add: Outstanding	4,000	34,000			
To Carriage inwards		10,000			
To Freight inwards		8,000			
To Gas and fuel	8,000				
Less: Prepaid	1,000	7,000			
To Gross profit c/d		85,000			
		3,04,000			3,04,000

Illustration:2

From the following particulars presented by Thilak for the year ended 31st March, 2017, prepare profit and loss account.

Particulars	₹	Particulars	₹
Gross profit	1,00,000	Interest received	6,000
Rent paid	22,000	Bad debts	2,000
Salaries	10,000	Provision for bad debts (1-4-2016)	4,000
Commission (Cr.)	12,000	Sundry debtors	40,000
Discount received	2,000	Buildings	80,000
Insurance premium paid	8,000		

Adjustments:

- Outstanding salaries amounted to Rs. 4,000
- Rent paid for 11 months
- Interest due but not received amounted to Rs. 2,000
- Prepaid insurance amounted to Rs. 2,000
- Depreciate buildings by 10%
- Further bad debts amounted to Rs. 3,000 and make a provision for bad debts @ 5% on sundry debtors
- Commission received in advance amounted to Rs. 2,000

Solution: 2

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit
2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

Dr. Profit and Loss Account for the year ended 31st March, 2017 Cr.

Particulars	₹	₹	Particulars	₹	₹
To Rent	22,000		By Gross profit b/d	-	1,00,000
Add: Outstanding (22,000x1/11)	2,000	24,000	By Commission	12,000	
To Salaries	4,000		Less: Received in advance	2,000	10,000
Add: Outstanding	8,000	14,000	By Discount received	6,000	2,000
To Insurance premium	2,000		By Interest received	2,000	8,000
Less: Prepaid insurance	1,900	6,000	Add: Accrued		
To Provision for bad and doubtful debts (closing)	2,000				
Add: Bad debts	3,000				
Add: Further bad debts	6,900				
	4,000				
Less: Opening provision for bad and doubtful debts		2,900			
To Depreciation on building (80,000x10%)		8,000			
To Net profit (transferred to capital A/c)		65,100			
		<u>1,20,000</u>			<u>1,20,000</u>

Working Note:

Debtors : 40,000
Less: Further bad debts : 2,000
: 38,000

Provision for bad and doubtful debts at 5% : 38,000 x 5% = Rs. 1,900

Illustration:3

From the following balances obtained from the books of Siva, prepare trading and profit and loss account.

Particulars	₹	Particulars	₹
Stock on 01.01.2016	9,000	Bad debts	1,200
Purchases	22,000	Sundry expenses	1,800
Sales	42,000	Discount allowed	1,700
Expenses on purchases	1,500	Expenses on sale	1,000
Bank charges paid	3,500	Repairs on office furniture	600

Adjustments:

- Closing stock on, 31st December, 2016 was Rs. 4,500
- Manager is entitled to receive commission @ 5% of net profit after providing such commission.

Solution :3

Dr. Trading and Profit and Loss Account for the year ended 31st December, 2016 Cr.

Particulars	₹	Particulars	₹
To Opening stock	9,000	By Sales	42,000
To Purchases	22,000	By Closing stock	4,500
To Expenses on purchases	1,500		
To Gross profit c/d	14,000		
	46,500		46,500
To Bank charges	3,500	By Gross profit b/d	14,000
To Bad debts	1,200		
To Sundry expenses	1,800		
To Discount allowed	1,700		
To Expenses on sale	1,000		
To Repairs on office furniture	600		
To Manager's commission	200		
To Net profit (transferred to capital A/c)	4,000		
	<u>14,000</u>		<u>14,000</u>

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit
2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

Working notes:

$$\text{Commission} = \text{Net profit before charging commission} \times \frac{\text{Rate of commission}}{(100 + \text{Rate of commission})} \times 100$$

$$\text{Net profit} = 14,000 - (3,500 + 1,000 + 1,200 + 1,800 + 1,700 + 600) = ₹ 4,200$$

$$\text{Manager's commission} = 4,200 \times \frac{5}{105} = ₹ 200$$

Illustration: 4

The following balances were extracted from the books of Thomas as on 31st March, 2018

Particulars	₹	Particulars	₹
Purchases	75,000	Capital	60,000
Returns inward	2,000	Creditors	30,000
Opening stock	10,000	Sales	1,20,000
Freight inwards	4,000	Returns outward	1,000
Wages	2,000		
Investments	10,000		
Bank charges	1,000		
Land	30,000		
Machinery	30,000		
Building	25,000		
Cash at bank	18,000		
Cash in hand	4,000		
	<u>2,11,000</u>		<u>2,11,000</u>

Additional information:

- Closing stock Rs. 9,000
- Provide depreciation @ 10% on machinery
- Interest accrued on investment Rs. 2,000

Prepare trading account, profit and loss account and balance sheet.

Solution : 4

In the books of Thomas

Dr. Trading and Profit and Loss Account for the year ended 31st March, 2018 Cr.

Particulars	₹	₹	Particulars	₹	₹
To Opening stock		10,000	By Sales	1,20,000	
To Purchases	75,000		Less: Returns inward	2,000	1,18,000
Less: Returns outward	1,000	74,000			
To Freight inwards		4,000	By Closing stock		9,000
To Wages		2,000			
To Gross profit c/d		37,000			
		<u>1,27,000</u>			<u>1,27,000</u>
To Depreciation on machinery		3,000	By Gross Profit b/d		37,000
To Bank charges		1,000	By Accrued interest on investment		2,000
To Net profit (transferred to capital a/c)		35,000			
		<u>39,000</u>			<u>39,000</u>

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

Balance Sheet as on 31st March, 2018

Particulars	₹	₹	Particulars	₹	₹
Capital	60,000		Land		30,000
Add: Net profit	35,000	95,000	Building		25,000
Creditors		30,000	Machinery	30,000	
			Less: Depreciation	3,000	27,000
			Investment	10,000	
			Add: Accrued interest	2,000	12,000
			Stock-in-trade		9,000
			Cash at bank		18,000
			Cash in hand		4,000
		<u>1,25,000</u>			<u>1,25,000</u>

Illustration: 5

Given below are the balances extracted from the books of Nagarajan as on 31st March, 2016.

Particulars	₹	Particulars	₹
Purchases	10,000	Sales	15,100
Wages	600	Commission received	1,900
Freight inwards	750	Rent received	600
Advertisement	500	Creditors	2,400
Carriage outwards	400	Capital	5,000
Cash	1,200		
Machinery	8,000		
Debtors	2,250		
Bills receivable	300		
Stock on 1st January, 2016	1,000		
	<u>25,000</u>		<u>25,000</u>

Prepare the trading and profit and loss account for the year ended 31st March, 2016 and the balance sheet as on that date after adjusting the following:

- i. Commission received in advance Rs. 400
- ii. Advertisement paid in advance Rs. 150
- iii. Wages outstanding Rs. 200
- Iv. Closing stock on 31st March 2016, Rs. 2,100

Solution: 5

In the books of Nagarajan

Dr. Trading and Profit and Loss Account for the year ended 31st March, 2016 Cr.

Particulars	₹	₹	Particulars	₹	₹
To Opening stock		1,000	By Sales		15,100
To Purchases		10,000	By Closing stock		2,100
To Wages	600				
Add: Outstanding	200	800			
To Freight inwards		750			
To Gross profit c/d		4,650			
		<u>17,200</u>			<u>17,200</u>
To Advertisement	500		By Gross profit b/d		4,650
Less: Prepaid advertisement	150	350	By Commission received	1,900	
To Carriage outwards		400	Less: Received in advance	400	1,500
To Net profit (transferred to capital a/c)		6,000	By Rent received		600
		<u>6,750</u>			<u>6,750</u>

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

Balance Sheet as on 31st March, 2016

Particulars	₹	₹	Particulars	₹	₹
Capital	5,000		Machinery		8,000
Add: Net profit	6,000	11,000	Stock in trade		2,100
Creditors		2,400	Debtors		300
Commission received in advance		400	Bills receivable		2,250
Outstanding wages		200	Advertisement prepaid		150
		14,000	Cash		1,200
					14,000

UNIT – IV

Management Accounting – Definition – Nature – Scope – Objectives – Merits and Limitations – Financial Statement Analysis – Comparative Statements – Common Size Statements – Trend Percentages – Cash flow analysis ,Distinction of cash from funds.

1. Meaning of Management Accounting:

The term Management Accounting consists of two words “Management” and “Accounting”. It is the study of managerial aspects of accounting. It is a tool in the hands of management to exercise decision making. The emphasis of management accounting is to redesign accounting in a manner which is helpful to the management in framing the policies and control of their execution.

2. Nature of Management Accounting:

Though Management Accounting is the latest branch in the accounting arena, it may be regarded partly as a Science and partly as an Art. It is the science of ‘Quantifying and summarising’ and Art of ‘Interpreting’ accounting data.

3. Objectives of Management Accounting:

Main objective of management accounting is to help the management in performing its functions efficiently. The major functions of management are planning, organising, directing and controlling. Management accounting helps the management in performing these functions effectively.

(1) Presentation of Data:

Traditional Profit and Loss Account and the Balance Sheet are not analytical for decision making. Management accounting modifies and rearranges data as per the requirements for decision making through various techniques.

(2) Aid of Planning and Forecasting:

Management accounting is helpful to the management in the process of planning through the techniques of budgetary control and standard costing. Forecasting is extensively used in preparing budgets and setting standards.

(3) Help in Organising:

Organising is concerned with establishment of relationships among different individuals in the firm. It includes delegation of authority and fixing responsibility. Management Accounting aims at aiding the Management in organising through establishment of cost centres, profit centres, responsibility centres, Budget preparation etc. AH these activities are helpful in setting up an effective organisational frame work.

(4) Decision Making:

Management accounting provides comparative data for analysis and interpretation for effective decision making and policy formulation.

(5) Reporting to Management of Different levels:

One of the Major objectives of Management accounting is to keep the Management informed about the performance, adherence to plans and progress of various sections of the organisation.

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

Top Management needs feed-back about implementation of its plans policies and programmes. Middle level Management and even junior executives need data for day to day operating decisions. Periodical and frequent reports are prepared and sent in time by Management Accountant to cater to the needs of all the levels of Management.

(6) Communication of Management Policies:

Management accounting conveys the policies of the management downward to the personal effectively for proper implementation.

(7) Effective Control:

Standard costing and budgetary control are integral part of management accounting. These techniques lay-down targets, compare actuals with standards and budgets to evaluate the performance and control the deviations.

(8) Incorporation of Non-Financial Information:

Management accounting considers both financial and non-financial information for developing alternative courses of action which leads to effective and accurate decisions.

(9) Coordination:

The targets of different departments are communicated to them and their performance is reported to the management from time to time. This continual reporting helps the management in coordinating various activities to improve the overall performance.

(10) Motivating Employees:

Budgets, standards and other programmes are to be implemented in practice by the employees. A major objective of Management accounting is to determine the targets in the form of budgets, standards and programmes in such a way that the employees feel motivated to achieve them. This is usually accomplished by making the targets practicable and offering suitable monetary and Non-Monetary incentives to achieve them.

4. Advantages/ Merits/ Uses of Management Accounting:

Management Accounting is of immense value and utility for the management of any firm and it has been considered as indispensable, particularly in large organisations where the task of Management is complex.

The following can be listed as the benefits or uses of Management Accounting:

(1) Increase in Efficiency:

Management accounting contributes significantly towards increasing efficiency in operations of a firm. Budgets, standards, reports etc., usually elevate the level of performance.

(2) Effective Planning:

Policy formulation and planning of operations become more effective through the 'decision data' provided by Management Accounting.

(3) Performance Evaluation:

Evaluating performance of employees, departments, etc., is facilitated by Management accounting through Variance Analysis, control ratios etc.

(4) Profit Maximisation:

Management accounting is helpful in profit planning to pursue decisions which can optimise profits.

(5) Reliability:

The Tools used by Management accounting usually make the data supplied to Management accurate and reliable.

(6) Elimination of Wastages:

Standard costs, Budgets, cost control techniques, etc., contribute towards elimination of wastages, production of defectives etc.

(7) Effective Communication:

Regular and systematic reporting ensures constant flow of information about operations to various levels of Management.

(8) Employee Morale:

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

Morale of employees can be created and sustained through attainable standards, practical budgets and incentive schemes.

(9) Control and Co-ordination:

Control on costs and coordination in the efforts of different segments of an organisation can be achieved through performance reporting, variance analysis and follow up action etc.

The greatest benefit of Management accounting is its advisory role in making the Management to take the best possible decisions on a day-to-day basis on routine matters and also vital policy matters.

5. Limitations of Management Accounting:

Like any other discipline Management Accounting has its own Limitations. Though it is considered as an indispensable tool for Managerial decision making, its recent origin and several external factors limit its effectiveness.

(1) Dependence for Basic Records:

Management Accounting rarely maintains basic and primary records of operations, expenses and revenues. It derives all of its Primary data from Financial Accounting, cost Accounting and other relevant records. So, the accuracy and reliability of the conclusions derived by Management Accounting is limited to the reliability of its sources of data, so, it suffers from several of the limitations of Finance Accounts and cost Accounts.

(2) Personal Bias:

Analysis and interpretation of financial information depends upon the capability of the analyst and interpreter. Personal Judgement and usage of discretion become necessary in several areas of Management accounting. Personal 'Prejudices' and 'Bias' of individuals can affect the objectivity and effectiveness of the conclusions and recommendations.

(3) Management Accounting is only a Tool:

Management accounting cannot be considered as an alternative or substitute to Management. Management accountant acts as an adviser and facilitator for decision making by management. The actual decisions, their implementation and follow up action are the prerogative of the Management.

(4) Management Accounting provides only Data:

The Main function of Management Accounting is to provide data in the form of 'Alternatives' to the Management. It is for Management to make suitable choice among the alternatives or even discard all of them. So, Management Accounting can 'only Inform and not prescribe'.

(5) Broad Based Scope:

The scope of Management accounting is very wide and broad based. It uses information from varied disciplines like Financial Accounting, economics, Statistics, Cost Accounts, engineering etc. It considers Monetary and Non-Monetary Transaction of the firm. Limitations of the knowledge and experience of the Management Accountant in such diverse fields can make the data unreliable and undependable.

(6) Resistance to Change:

Installation of Management accounting involves basic changes in the organisational set up and Traditional accounting practices. The personnel concerned may resist such change unless they are taken into confidence and convinced of the need for such changes.

(7) Costly to Install:

Installation of Management Accounting involves huge expenditure because of the elaborate organisation needed and the large number of changes in procedures, forms and rules. So, small firms may not be able to afford the cost. Only big organisations can afford to Maintain Management accounting as a department or aid to management.

(8) Evolutionary Stage:

Management accounting is of-recent-origin, as a discipline and it is still in development stage. So, its concepts are fluid, Techniques are still evolving and analytical tools imperfect. There are several experts who are skeptical of the utility of Management accounting because of such an important limitation. Most of above

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

limitations can be overcome with determined efforts on the part of the Management and a skilled Management Accountant.

II :The most commonly used techniques of financial analysis are as follows:

1. Comparative Statements:

These are the statements showing the profitability and financial position of a firm for different periods of time in a comparative form to give an idea about the position of two or more periods. It usually applies to the two important financial statements, namely, balance sheet and statement of profit and loss prepared in a comparative form. The financial data will be comparative only when same accounting principles are used in preparing these statements. If this is not the case, the deviation in the use of accounting principles should be mentioned as a footnote. Comparative figures indicate the trend and direction of financial position and operating results. This analysis is also known as ‘horizontal analyses.

2. Common Size Statements:

These are the statements which indicate the relationship of different items of a financial statement with a common item by expressing each item as a percentage of that common item. The percentage thus calculated can be easily compared with the results of corresponding percentages of the previous year or of some other firms, as the numbers are brought to common base. Such statements also allow an analyst to compare the operating and financing characteristics of two companies of different sizes in the same industry. Thus, common size statements are useful, both, in intra-firm comparisons over different years and also in making inter-firm comparisons for the same year or for several years. This analysis is also known as ‘Vertical analyses.

3. Trend Analysis:

It is a technique of studying the operational results and financial position over a series of years. Using the previous years’ data of a business enterprise, trend analysis can be done to observe the percentage changes over time in the selected data. The trend percentage is the percentage relationship, in which each item of different years bear to the same item in the base year. Trend analysis is important because, with its long run view, it may point to basic changes in the nature of the business. By looking at a trend in a particular ratio, one may find whether the ratio is falling, rising or remaining relatively constant. From this observation, a problem is detected or the sign of good or poor management is detected.

The following steps may be followed to prepare the comparative statements:

Step 1: List out absolute figures in rupees relating to two points of time (as shown in columns 2 and 3

Step 2: Find out change in absolute figures by subtracting the first year (Col.2) from the second year (Col.3) and indicate the change as increase (+) or decrease (–) and put it in column 4.

Step 3: Preferably, also calculate the percentage change as follows and put it in column 5.

Absolute Increase or Decrease (Col.4) / First year absolute figure (Col.2) × 100

Particulars	First Year	Second Year	Absolute Increase (+) or Decrease (–)	Percentage Increase (+)or Decrease (–)
1	2	3	4	5
Rs	Rs	Rs	Rs	Rs

Illustration: 1 Convert the following statement of profit and loss into the comparative statement of profit and loss of BCR Co. Ltd.:

Particulars	2013-14 Rs.	2014-15 Rs.
(i)Revenue from operations	60, 00,000	75, 00,000
(ii)Other incomes	1, 50,000	1, 20,000
(iii)Expenses	44, 00,000	50, 60,000
(iv)Income tax	35%	40%

Solution: 1 Comparative statement of profit and loss for the year ended March 31, 2014and 2015:

Particulars	2013-14 Rs.	2014-15 Rs.	Absolute Ince(+) or Decr (–) Rs.	PercentageIncr(+)or Decr (–) %
I. Revenue from operations	60,00,000	75,00,000	15,00,000	25.00
II.Add: Other incomes	1,50,000	1,20,000	(30,000)	(20.00)
III.Total Revenue I+II	61,50,000	76,20,000	14,70,000	23.90

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

IV. Less: Expenses	44,00,000	50,60,000	6,60,000	15.00
Profit before tax	17,50,000	25,60,000	8,10,000	46.29
V. Less: Tax	6,12,500	10,24,000	4,11,500	67.18
Profit after tax	11,37,500	15,36,000	3,98,500	35.03

Illustration :2 From the following Balance Sheets of Amrit Limited as at March 31, 2014 and 2015, prepare a comparative balance sheet:

Particulars	March 31, 2015 (Rs.)	March 31, 2014 (Rs.)
I. Equity and Liabilities		
1. Shareholders' Funds		
a) Share capital	20,00,000	15,00,000
b) Reserve and surplus	13,00,000	14,00,000
2. Non-current Liabilities	19,00,000	16,00,000
Long-term borrowings		
3. Current liabilities	3,00,000	2,00,000
Trade payables		
Total	55,00,000	47,00,000
II. Assets		
1. Non-current assets		
a) Fixed assets		
- Tangible assets	20,00,000	15,00,000
- Intangible assets	19,00,000	16,00,000
2. Current assets		
- Inventories	13,00,000	14,00,000
- Cash and Cash Equivalents	3,00,000	2,00,000
Total	55,00,000	47,00,000

Solution: 2 Comparative Balance Sheet of Amrit Limited as at March 31st, 2014 and March 31st, 2015

Particulars	March 31, 2014 Rs.	March 31, 2015 Rs.	Absolute Increase (+) Or Decrease (-) Rs.	Percentage Increase (+) Or Decrease (-)%
I. Equity and Liabilities				
1) Shareholders' funds	15	20	5	33.33
a) Share capital	14	13	(1)	(7.14)
2) Non-current liabilities Long-term borrowings	16	19	3	8.75
3) Current liabilities Trade payables	2	3	1	50
Total	47	55	8	17.02
II. Assets				
1) Non-current assets				
Fixed assets				
a) Tangible assets	15	20	5	33.33
b) Intangible assets	16	19	3	18.75
2) Current assets				
a) Inventories	14	13	(1)	(7.14)
b) Cash and Cash Equivalents	2	3	1	50
Total	47	55	8	17.02

The following procedure may be adopted for preparing the common size statements.

- List out absolute figures in rupees at two points of time, say year 1, and year 2 (Column 2 & 4)
 - Choose a common base (as 100). For example, revenue from operations may be taken as base (100) in case of statement of profit and loss and total assets or total liabilities (100) in case of balance sheet.
 - For all items of Col. 2 and 3 work out the percentage of that total. Column 4 and 5 show these percentages.
- Common Size Statement.

Particulars	year 1	year 2	Percentage of year 1	Percentage of year 2
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Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

1	2	3	4	5
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Illustration ;3 From the following information, prepare a Common size Income Statement for the year ended March 31, 2014 and 2015:

Particulars	2014-15 Rs.	2013-14 Rs.
Net sales	18,00,000	25,00,000
Cost of goods sold	10,00,000	12,00,000
Operating expenses	80,000	1,20,000
Non-operating expenses	12,000	15,000
Depreciation	20,000	40,000
Wages	10,000	20,000

Solution:3 Common Size Income Statement for the year ended March 31, 2013 and March 31, 2014

Particulars	Absolute Amounts		Percentage of Net Sales	
	2013-14 Rs.	2014-15 Rs.	2013-14 %	2014-15 %
Net Sales	25,00,000	18,00,000	100	100
(Less) Cost of goods	12,00,000	10,00,000	48	55.56
Gross Profit	13,00,000	8,00,000	52	44.44
(Less) Operating	1,20,000	80,000	4.80	4.44
Operating Income	11,80,000	7,20,000	47.20	40
(Less) Non-Operating expenses	15,000	12,000	0.60	0.67
Profit	11,65,000	7,08,000	46.60	39.33

Procedure for Calculating Trend Percentage:

One year is taken as the base year. Generally, the first year is taken as the base year. The figure of base year is taken as 100. The trend percentages are calculated in relation to this base year. If a figure in other year is less than the figure in base year, the trend percentage will be less than 100 and it will be more than 100 if figure is more than the base year figure. Each year's figure is divided by the base year figure.

Trend Percentage = Present year value / Base year value x 100

Illustration; 4 Calculate the trend percentages from the following figures of sales, stock and profit of X Ltd., taking 2010 as the base year and interpret them. (Rs. in lakhs)

Year	Sales (Rs.)	Stock (Rs.)	Profit before tax (Rs)
2010	1881	709	321
2011	2340	781	435
2012	2655	816	458
2013	3021	944	527
2014	3768	1154	627

Solution: 4

Trend Percentages (base year 2010 = 100)(Rs. in lakhs)

Year	Sales (Rs.)	Trend %	Stock (Rs.)	Trend %	Profit (Rs)	Trend %
2010	1881	100	709	100	321	100
2011	2340	124	781	110	435	136
2012	2655	141	816	115	458	143
2013	3021	161	944	133	527	164
2014	3768	200	1154	163	627	195

Distinction of cash from funds.

1. Funds Flow Statement is based on the Accrual System of Accounting. However, in case of Cash Flow Statement – only the transactions effecting Cash or Cash equivalents are taken into consideration
2. Funds Flow Statement analyses the Sources and Application of Funds of Long Term nature and the Net Increase or Decrease in Long Term Funds will be reflected on the Working Capital of the firm. The

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

Cash Flow Statement only considers the Increase or Decrease in Current Assets or Current Liabilities in calculating the Cash Flow of Funds from Operations

3. Funds Flow Statement is more useful for Long Term Financial Planning. Cash Flow Analysis is more useful for identifying and correcting the liquidity problems of the firm.
4. Funds Flow Statement tallies the funds generated from various sources 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.

UNIT – V

Fund Flow Statement – Uses of Fund Flow Analysis – Construction of Fund Flow Statement. Cash Flow Analysis – Ratio analysis current ratio, quick ratio, operating ratio, expenses ratio, fixed asset turnover ratio, gross profit ratio.

1. What are the uses of preparing fund flow statement?

The basic purpose of a **funds flow statement** is to reveal the changes in the working capital on the two balance sheet dates. It also describes the sources from which additional working capital has been financed and the **uses** to which working capital has been applied.

2. Prepare Statement of Changes in Working Capital

For preparing the Funds Flow Statement, the first step is to prepare the **Statement of Changes in Working Capital**. There may be several reasons for changes in the Working Capital Position of a Company, some of which have been discussed below:-

1. Purchase of Fixed Assets or Long Term Investments without raising Long Term Funds
2. Payments of Dividends in excess of the Profits earned
3. Extension of Credit to the Customers
4. Repayment of a Long Term Liability or Redemption of Preference Shares without raising Long Term Resources

Cash Flow Analysis:

A projection of future flows of cash is called a cash flow budget. ... For example, it may list monthly cash inflows and outflows over a year's time. It not only projects the cash balance remaining at the end of the year but also the cash balance for each month. Working capital is an important part of a cash flow analysis.

Current Ratio:

Current ratio is the proportion of current assets to current liabilities. It is expressed as follows:

Current Ratio = Current Assets : Current Liabilities or Current Assets / Current Liabilities.

Illustration 1 Calculate Current Ratio from the following information:

Particulars	Rs.
Inventories	50,000
Trade receivables	50,000
Advance tax	4,000
Cash and cash equivalents	30,000
Trade payables	1,00,000
Short-term borrowings (bank overdraft)	4,000

1.Solution:

Current Ratio=Current Assets / Current Liabilities

Current Assets=Inventories + Trade receivables + Advance tax +Cash and cash equivalents'

=Rs. 50,000 + Rs. 50,000 + Rs. 4,000 + Rs. 30,000

=Rs. 1,34,000

Current Liabilities=Trade payables + Short-term borrowings

=Rs. 1,00,000 + Rs. 4,000

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

=Rs. 1,04,000

Current Ratio=Rs.1, 34, 000 / 1, 04, 000 = 1.29 : 1

2.Quick Ratio:

It is the ratio of quick (or liquid) asset to current liabilities. It is expressed as

Quick ratio = Quick Assets : Current Liabilities or Quick Assets / Current Liabilities

Illustration ;2

Calculate quick ratio from the information given in illustration:1

Particulars	Rs.
Inventories	50,000
Trade receivables	50,000
Advance tax	4,000
Cash and cash equivalents	30,000
Trade payables	1,00,000
Short-term borrowings (bank overdraft)	4,000

2.Solution:

Quick Ratio=Quick Assets/ Current Liabilities

Quick Assets=Current assets –(Inventories + Advance tax)

=Rs. 1,34,000 –(Rs. 50,000 + Rs. 4,000)

=Rs. 80,000

Current Liabilities=Rs. 1,04,000

Quick Ratio=Rs. 80,000

= 0.77 :1

Rs. 1,04,000

Illustration ; 3

Following information is available for the year 2014-15, calculate gross profit ratio: Rs:

Revenue from Operations

:Cash	25,000
: Credit	75,000

Purchases

: Cash	15,000
: Credit	60,000

Carriage Inwards 2,000

Salaries 25,000

Decrease in Inventory 10,000

Return Outwards 2,000

Wages 5,000

Solution: 3

Revenue from Operations=Cash Revenue from Operations + Credit Revenue from Operation

=Rs.25,000 + Rs.75,000

= Rs. 1,00,000

Net Purchases=Cash Purchases + Credit Purchases – Return Outwards

=Rs.15,000 + Rs.60,000 – Rs.2,000

= Rs. 73,000

Cost of Revenue from=Purchases + (Opening Inventory – Closing Inventory) +operations

Direct Expenses=Purchases + Decrease in inventory + Direct Expenses

=Rs.73,000 + Rs.10,000 + (Rs.2,000 + Rs.5,000)

=Rs.90,000

Gross Profit=Revenue from Operations – Cost of Revenue from Operation

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

=Rs.1,00,000 –Rs.90,000

=Rs. 10,000

Gross Profit Ratio= Gross Profit/Net Revenue from Operations × 100

=Rs.10,000/Rs.1,00,000 × 100

=10%.

Operating Ratio It is computed to analyse cost of operation in relation to revenue from operations. It is calculated as follows:

Operating Ratio= (Cost of Revenue from Operations + Operating Expenses)/Net Revenue from Operations × 100

Illustration : 4

Given the following information:

	Rs.
Revenue from Operations	3,40,000
Cost of Revenue from Operations	1,20,000
Selling expenses	80,000
Administrative Expenses	40,000

Calculate Gross profit ratio and Operating ratio.

Solution:4

Gross Profit = Revenue from Operations – Cost of Revenue from Operations
=Rs. 3,40,000 – Rs. 1,20,000
=Rs. 2,20,000

Gross Profit Ratio = Gross Profit / Revenue from operation x 100
=Rs. 2,20,000 / Rs. 3,40,000 x 100
=64.71%

Operating Cost = Cost of Revenue from Operations + Selling Expenses+ Administrative Expenses
=Rs. 1,20,000 + 80,000 + 40,000
=Rs. 2,40,000

Operating Ratio = Operating Cost / Net Revenue from Operations × 100
=Rs. 2,40,000 / Rs. 3,40,000 x 100
=70.59%

5. Fixed asset turnover ratio:

Fixed Asset Turnover = Net Sales / Average Fixed Assets

Net Sales = Gross sales, less returns, and allowances

Average Fixed Assets = NABB–Ending Balance / 2

NABB = Net fixed assets' beginning balance

6. Expense Ratio:

Expense Ratio = Particular expense / Net sales x 100

The following information has been extracted from the income statement of Beta limited:

- Net sales: 750,000
- Cost of goods sold: 487,500
- Administrative expenses: 30,000
- Sales expenses: 45,000

Required: Compute the cost of goods sold ratio, administrative expenses ratio and sales expenses ratio.

Solution:6

1. Cost of goods sold ratio:

= (Cost of goods sold /Net sales) × 100

= (487,500 / 750,000) × 100

= 65%

The cost of goods sold is 65% of net sales.

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit

2. Administrative expenses ratio:

$$= (\text{Administrative expenses} / \text{Net sales}) \times 100$$

$$= (30,000 / 750,000) \times 100$$

$$= 4\%$$

The administrative expenses are 4% of net sales.

3. Selling expenses ratio:

$$= (\text{Selling expenses} / \text{Net sales}) \times 100$$

$$= (45,000 / 750,000) \times 100$$

$$= 6\%$$

The selling expenses are 6% of net sales.

Source: 1. Financial Accounting – S.MANIKANDAN – 3rd Unit

2. Management Accounting – S.N.MAHESWARI – 4th Unit & 5th Unit