Accounting and Finance

Flipped class room

Description on classes handled

- Before each class – notes will be provided to the students through g-mail and whatsapp.
- Students have to read the file and attend the class.
- Formats on different topics will be given through padlet.
- Also questions for the next class will be provided in padlet

Description on classes handled

- Assignment questions were given through padlet

- Padlet link: https://padlet.com/MMDEVARAJAN/ECE_AccountingandFinance

Description on classes handled

14EC710	ACCOUNTING AND FINANCE	Category	L	T	P	Credit
		HSS	3	0	0	3

Preamble

Engineering profession involves lots of decision making. The decisions may range from operation to non-operation. For taking decisions of these kinds, an engineer needs among other data about the organization routine operations and non-routine operations. Accounting is a science which provides all the data by recording, classifying, summarizing and interpreting the various transactions taking place in an organization and thereby helps an engineer in taking vital decisions in an effective manner. Finance is an allied but a separate field relying on accounting and enables engineers in taking useful financial and cost related decisions by providing well defined concepts, tools and techniques.

Prerequisite

Nil

Course Outcomes

On the successful completion of the course, students will be able to

CO1	Explain the basic concepts and process of accounting and finance.	Understand
CO2	Develop trail balance and financial statements like Trading, Profit and Loss accounts, Balance sheet and Cost sheet	Apply
CO3	Demonstrate the concepts and operations of budgetary control	Understand
CO4	Apply techniques like breakeven analysis and budgeting for an organization.	Apply
CO5	Select the right sources of finance and mobilize the right quantum of finance and make use of them in most profitable investment avenues.	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1.	M											
CO2.	S	M	M		M	M		M			S	L
CO3.	M					M					M	
CO4.	S	M	M		S	M		M		L	S	L
CO5.	S	M	M			M					S	L

S-Strong; M-Medium; L-Low

Assessment Pattern

Bloom's Category	Continuous Assessment Tests			Terminal Examination
	1	2	3	
Remember	20	20	20	20
Understand	30	30	30	30
Apply	50	50	50	50
Analyze	0	0	0	0
Evaluate	0	0	0	0
Create	0	0	0	0

Course Level Assessment Questions

Course Outcome 1 (CO1):

1. Describe the term Accounting.
2. List the concepts of accounting.
3. Recall the methods of depreciation.
4. Name the factors causing depreciation.
5. Write the classification of cost.
6. Define the term capital budgeting.

Course Outcome 2 (CO2):

1. Prepare trading account from the information given below and calculate the net profit. Gross profit.....Rs.10,000; Office and administrative expenses .....Rs.1000; selling and distribution expenses ....Rs.500; Interest on investment received...Rs.500; commission received....Rs.200
2. Compare Trading and profit and loss account. Compute depreciation for an asset worth Rs.10,000 and having a scrap value of Rs.2,000 and a life time of 4 years under straight line method.
3. Outline the cost classification based on the nature of cost.
4. Apply the net present value method of evaluating investment decision and say whether the following project could be selected for investment.

Year	Cash inflows in Rs.
0	10,000
1	3,000
2	4,000
3	4,000
4	2,000
5	2,000

Course Outcome 3

1. Construct journal entries for the following business transactions.
   - X brings in cash Rs.10,000 as capital
   - Purchases land worth Rs.2000
   - He purchases goods worth Rs.5,000
   - He sells goods for Rs.10,000
   - He incurs travelling expenses of Rs.200.

2. Estimate Gross profit and Net profit and the financial position from the following trial balance extracted from the books of Mr.Kumar as on 31.12.2010.

Debit Balances	**Amount in Rs.**	**Credit Balances**	**Amount in RS.**
Buildings	30,000	Capital	40,000
Machinery	31,400	Purchase returns	2,000
Furniture	2,000	Sales	2,80,000
Motor car	16,000	Sundry creditors	9,600
Purchases	1,88,000	Discounts received	1,000
Sales return	1,000	Provision for bad debts	6,00
Sundry debtors	30,000		
General expenses	1,6000		
Cash at bank	9,400		
Rates and taxes	1,200		
Bad debts	4,00		
Insurance premium	8,00		
Discount allowed	1,400		
Opening stock	20,000		
Total	**3,33,200**	**Total**	**3,33,200**

3. Calculate depreciation for a machinery purchased by senthil for Rs.4,00,000 on 1st April 2010.He also adds an additional machinery for Rs.40,000 on 1st April 2011.Depriciation is to be provided at 10% per annum using straight line method. The firm closes its books on 31st March every year.

4. A factory is currently working at 50% capacity and the product cost is Rs.180 per unit as below:

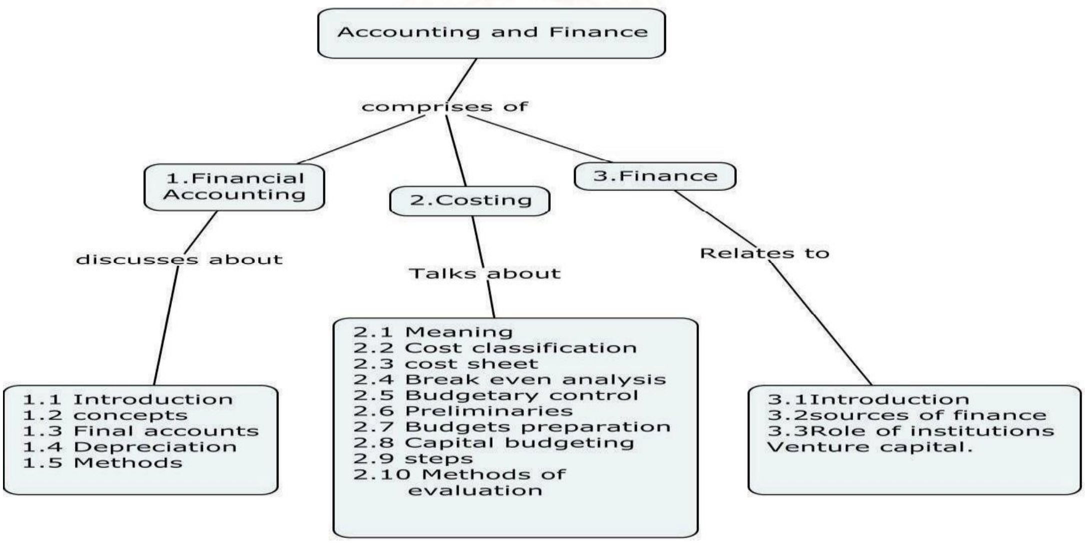
   Material ....Rs.100; Labour.....Rs.30 Factory overheads....Rs.30 (40% fixed) Administration overhead .Rs.20 (50% fixed)

   The product is sold at Rs.200 per unit and the factory produces 10,000 units at 50% capacity. Estimate profit if the factory works to 60% capacity. At 60% working raw material increases by 20% and selling price falls by 20%.

Course Outcome 4

1. From the following information calculate the Breakeven point in terms of units and breakeven point in terms of sales.
   Sales....Rs.10,000; Variable costs Rs.6,000,fixed costs Rs.2000:profit Rs.2,000;No. Of units produced 1,000 units
2. Describe the term ' Breakeven analysis'
3. Calculate the breakeven point and margin of safety from the following information Fixed cost ...Rs.10,000, sales in Rs.25,000,selling price per unit Rs.30; variable cost per unit Rs.10

Concept Map



Syllabus

Accounting: Introduction and Definition- Accounting concepts and conventions-Final Accounts-Preparation of Trading, Profit and Loss Account and Balance Sheet. Depreciation - Meaning-Need and objectives-Basic factors-Methods of providing depreciation.

Cost Accounting: Meaning and Importance-Cost-Elements of cost- Cost classification- Preparation of cost sheet. Break even analysis-Managerial applications. Budget and budgetary control. Meaning- Objectives of budgetary control-Preliminaries

for operation of budgetary control-Budgets-Types of budgets and their preparation. Capital budgeting- Meaning-Importance-steps in capital budgeting-Information needed-Methods of evaluating capital budgeting decisions.
Finance: Introduction-Definition-objectives-functions of finance-sources of finance-Short- term, Medium term, and Long-term-Role of special financial institutions in financing-Venture capital.

Text Books

1. M.C.Shukla,T.S.Grewal,"AdvancedAccounts-Volume-I,2010 Reprint, S. Chand & company Ltd.,2010.
2. Prasanna Chandra, "Financial Management-Theory and practice" seventh Reprint, Tata McGraw-Hill publishing company Limited,2010.

Reference Books

1. A.Ramachandra Aryasri, V.V Ramana Murthy, "Engineering Economics and Financial Accounting, Tata McGraw Hill, 2010.
2. Dr.V.R.Palanivelu, "Accounting for Management" Third Edition, 2013, University Science Press New Delhi.

Course Contents and Lecture Schedule

Module No.	Topic	No. of Lectures
1.	**Financial accounting**	
1.1	Introduction and Definition	1
1.2	Accounting concepts and conventions	2
1.3	Final accounts-Preparation of Trading profit and Loss account and Balance sheet.	4
1.4	Depreciation- Meaning, Need and Objectives	2
1.5	Basic factors-Methods of providing depreciation	3
2.	**Cost Accounting**	
2.1	Meaning and Importance	1
2.2	Cost-Elements of cost-Cost classification	2
2.3	Preparation of cost sheet	2
2.4	Break even analysis-Managerial applications	2
2.5	Budget and budgetary control. Meaning- Objectives of budgetary control	1
2.6	Preliminaries for operation of budgetary control	1
2.7	Types of budgets and their preparation	3
2.8	Capital budgeting-Meaning-Importance	1
2.9	Steps in capital budgeting-Information needed	1
2.10	Methods of evaluating capital budgeting decisions. Payback period-Rate of Return-Net present value-Internal Rate of return method	3
3	**Finance**	
3.1	Introduction-Definition-objectives-functions of finance	2
3.2	sources of finance-Short-term, Medium term, and Long-term	2
3.3	Role of special financial institutions in financing-Venture capital.	3
	Total	**36**

Course Designers:

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Proforma of Trading Account

Dr.		In Rs.	Cr.		In Rs.
To Opening stock		xxx	By Sales		
To Purchases			a) Cash	xxx	
a) Cash	xxx		b) Credit	xxx	
b) Credit	xxx				
Total Purchase	xxx		Total Sales	xxxx	
Less			Less		
Purchase returns	xxx		Sales returns	xxxx	
Net Purchase	xxxx	xxxx	Net Sales	xxxx	xxxx
To wages		xxxx			
To Carriage inwards		xxxx	By Closing stock		xxxx
To Import duty		xxxx	By Gross loss**		xxxx
To Other duty on purchase		xxxx			
To Factory manager's salary		xxxx			
To Coal, Fuel, Power		xxxx			
To other manufacturing expenses		xxxx			
To Gross Profit* (Balancing figure)		xxxx			
		xxxxx			xxxxx

* If the Credit side total (income) is greater we get Gross Profit i.e., income is greater than expenditure and

** If the Debit side total (expenditure) is greater we get Gross Loss. i.e., expenditure is greater than income.

7. Prepare journal from the following transactions

1) Jan. 1. Arun started business with a capital of Rs.10,000.

2) Jan 3. Table purchased for Rs.1,000

3) Jan 5 Typewriter purchased Rs.3,000

4) Jan 10 Goods purchased Rs.5,000

5) Jan 12 Goods sold to Balu Rs.7,000

6) Jan 15 goods returned by Balu Rs.1,500

7) Jan 20 cash received from Balu Rs.5,300

8) Jan 31. salary paid Rs.1,500, rent paid Rs.500

8. Prepare journal from the following transactions

1) Hari started a business on 1st Jan with the following assets cash Rs.7,500, typewriter Rs.2,500, furniture Rs.2,000,

2) Jun 2. - Purchased machinery fór Rs.25,000

3) Jun 5. Purchased goods from Somu for Rs.45,000

4) Jun 7. Goods returned to Somu worth Rs.5,000.

5) Jun 10. Cash paid to Somu Rs.39,500/- in full settlement of his account. (i.e., discount received by us Rs.500/-)

6) Jun 15. Hari withdraw cash Rs.2,000/- and goods worth Rs.500/- for personal use *.

7) Jun 22 Telephone bill paid Rs.850/-

8) Jun 25 Goods distributed as free samples Rs.750/- **

9) Jun.30 Paid for stationery Rs.450/, salary Rs.1,500/-

*	Drawings a/c	Dr.	Rs. 500.
	To Purchases a/c	Cr.	Rs. 500
**	Advertisement a/c	Dr.	Rs. 750
	To Purchases a/c	Cr.	Rs. 750.

Prepare journal, ledger & trial balance from the followings:

Jan.	1.	"A" started business with cash Rs.5,000
	5.	Purchased machinery Rs.2,000
	10	Wages paid Rs.250
	15	Goods sold for Rs.3,500
	20	Stationery purchased Rs.100.
	31	Salary paid Rs.750.

Dr. **Proforma of Trading Account** Cr.

		In Rs.			In Rs.
To Opening stock		xxx	By Sales		
To Purchases			a) Cash	xxx	
a) Cash	xxx		b) Credit	xxx	
b) Credit	xxx				
Total Purchase	xxx		Total Sales	xxxx	
Less			**Less**		
Purchase returns	xxx		Sales returns	xxxx	
Net Purchase	xxxx	xxxx	Net Sales	xxxx	xxxx
To wages		xxxx			
To Carriage inwards		xxxx	By Closing stock		xxxx
To Import duty		xxxx	By Gross loss**		xxxx
To Other duty on purchase		xxxx			
To Factory manager's salary		xxxx			
To Coal, Fuel, Power		xxxx			
To other manufacturing expenses		xxxx			
To Gross Profit* (Balancing figure)		xxxx			
		xxxxx			xxxxx

* If the Credit side total (income) is greater we get Gross Profit i.e., income is greater than expenditure and

** If the Debit side total (expenditure) is greater we get Gross Loss. i.e., expenditure is greater than income.

Profit and Loss Account

After the preparation of Trading a/c, preparation of Profit and Loss a/c becomes necessary, to know the Net profit earned or Net loss suffered during that financial period. Profit and Loss a/c discloses the operational efficiency of the business. It is the summary of all revenues and expenses which may lead to either Net profit or Net loss. From the Gross profit or Gross loss which is transferred from the Trading a/c operating and Non-operating expenses are deducted (entered in the debit side of the P & L a/c) and operating & Non-operating incomes if any are added (entered in the Credit side of the P & L a/c) to find out the net result.

Dr. **Proforma of Profit and Loss Account** Cr.

To Gross loss* (from trading a/c)	xxx	By Gross profit * (from trading a/c)	xxx
Office & Administrative expenses		By Rent received	xxx
To Salaries	xxx	By Commission received	xxx
To Office lighting	xxx	By Discount received	xxx
To Rent, Rates, Taxes	xxx	By Interest received	xxx
To Printing and Stationery	xxx	By Interest on investments	xxx
To Insurance premium	xxx	By Interest on drawings	xxx
To Postage	xxx	By Profit on sale of assets	xxx
To General expenses	xxx		
To Legal expenses	xxx	By Net loss**	xxx
To Trade expenses	xxx		
To Other office expense	xxx		
Selling & Distribution expenses			
To Salesman's salary	xxx		
To Commission paid	xxx		
To Advertising expenses	xxx		
To Carriage outwards	xxx		
To Travelling expenses	xxx		

To Bad debts	xxx		
To Packing expenses	xxx		
Financial expenses:			
To Interest on capital	xxx		
To Interest on loan	xxx		
To Discount allowed	xxx		
Maintenance expenses:			
To Repairs & Maintenance (of van, car & other assets)	xxx		
To Depreciation on assets (Furniture, Machinery etc.,)	xxx		
To loss on Sale of assets	xxx		
Other expenses:			
To Provision for bad debts	xxx		
To Net Profit**	xxx		
Total	xxxx	Total	xxxx

* Either Gross profit or Gross loss only will appear

** Either Net profit or Net loss will appear below:

Proforma of Balance Sheet (in the order of liquidity)

Liabilities		Assets	
Current Liabilities		**Current Assets**	
Sundry creditors	xxx	Cash in Hand	xxx
Bills payable	xxx	Cash at Bank	xxx
Bank overdraft	xxx	Sundry Debtors	xxx
Outstanding expenses	xxx	Short-term Investments	xxx
Long-term liabilities		Bills receivable	xxx
Debentures	xxx	Closing stock	xxx
Loans	xxx	Prepaid expenses	xxx
Share holders Equity		**Fixed Assets**	
Share capital	xxx	Land & Building	xxx
Reserves & Surplus	xxx	Plant & Machinery	xxx
		Furniture & Fittings	xxx
		Motor car	xxx
		Typewriter	xxx
		Intangible Assets	
		Goodwill	xxx
		Patents	xxx
		Copy Kights	xxx
		Fictious Assets	
		Advertisement expenses	xxx
		Preliminary expenses	xxx
		Profit & Loss a/c (Loss)	xxx

* Net loss should be deducted

** **Closing stock** It may be stock of finished goods, work in progress, or stock or raw materials.

Dr. **Proforma of Trading A/c profit & Loss A/c and Balance Sheet.** Cr.

		In Rs.			In Rs.
To Opening stock		xxx			
To Purchases			By Sales		
a) Cash	xxx		a) Cash	xxx	
b) Credit	xxx		b) Credit	xxx	
Total purchase	xxx		Total sales	xxxx	
Less			Less		
Purchase returns	xxx		Sales returns	xxxx	
Net purchase	xxxx	xxxx	Net sales	xxxx	xxxx
To wages		xxxx			
To Carriage inwards		xxxx	By Closing stock		xxxx
To Import duty		xxxx	By Gross loss**		xxxx
To Other duty on purchase		xxxx			
To Factory rent		xxxx			
To Factory manager's salary		xxxx			
To Coal, Fuel, Power		xxxx			
To other manufacturing expenses		xxxx			
To Gross Profit* (Balancing figure)		xxxx			
		xxxxx			xxxxx
To Gross loss** (from trading A/c)		xxx	By Gross profit * (from trading A/c)		xxx
Office & Administrative expenses			By Rent received		xxx
To Salaries		xxx	By Commission received		xxx
To Office lighting		xxx	By Discount received		xxx
To Rent, Rates Taxes		xxx	By Interest received		xxx

To Printing and stationery	xxx	By Interest on investments	xxx
To Insurance premium	xxx	By Interest on drawings	xxx
To Postage	xxx	By Profit on sale of assets	xxx
To General expenses	xxx		
To Legal expenses	xxx	By Net loss**	xxx
To Trade expenses	xxx		
To Other office expense	xxx		
Selling & Distribution expenses			
To Salesman's salary	xxx		
To Commission paid	xxx		
To Advertising expenses	xxx		
To Carriage outwards	xxx		
To Travelling expenses	xxx		
To Bad debts	xxx		
To Packing expenses	xxx		
Financial expenses:			
To Interest on capital	xxx		
To Interest on loan	xxx		
To Discount allowed	xxx		
Maintenance expenses:			
To Repairs & Maintenance (of van, car & other assets)	xxx		
To Depreciation on assets (Furniture, Machinery etc.,)	xxx		
To loss on Sale of assets	xxx		
Other expenses:			
To Provision for bad debts	xxx		
To Net Profit**	xxx		
	xxxx		xxxx

Balance Sheet

Liabilities			Assets	
Capital			Good will	xxxx
Less Drawings	xxxx		Land and Building	xxxx
Less Interest on drawings	xxxx		Plant and Machinery	xxxx
Add Interest on capital	xxxx		Furniture	xxxx
Add Net profit*	xxxx		Closing stock**	xxxx
	xxxx	xxxx	Sundry debtors	xxxx
Long term loans		xxxx	Bills receivable	xxxx
Sundry creditors		xxxx	Prepaid expenses	xxxx
Bills payable		xxxx	Cash at bank	xxxx
Bank overdraft		xxxx	Cash in hand	xxxx
Outstanding expenses (i.e. Salary, Rent etc.)		xxxx		
Total		xxxx	Total	xxxx

Prepare journal ledger & trial balance from the followings:

Jan. 1. "A" started business with cash Rs.5,000

5. Purchased machinery Rs.2,000

10 Wages paid Rs.250

15 Goods sold for Rs.3,500

20 Stationery purchased Rs.100.

31 Salary paid Rs.750.

To Bad debts	xxx		
To Packing expenses	xxx		
Financial expenses:			
To Interest on capital	xxx		
To Interest on loan	xxx		
To Discount allowed	xxx		
Maintenance expenses:			
To Repairs & Maintenance (of van, car & other assets)	xxx		
To Depreciation on assets (Furniture, Machinery etc.,)	xxx		
To loss on Sale of assets	xxx		
Other expenses:			
To Provision for bad debts	xxx		
To Net Profit**	xxx		
Total	xxxx	Total	xxxx

* Either Gross profit or Gross loss only will appear

** Either Net profit or Net loss will appear

3. Prepare Trading, Profit & Loss Account of "X" & Co. for the year ended 31.3.2000.

		in Rs.
1.	Stock on 1.4.99	50,000
2.	Purchases during the year	
	a) Cash	1,50,000
	b) Credit	50,000
3.	Sales during the year	
	a) Cash	2,00,000
	b) Credit	1,00,000
4.	Carriage inwards	2,000
5.	Power	5,000
6.	Sales returns	10,000
7.	Purchase returns	15,000
8.	Wages	3,000
9.	Printing & Stationery	1000
10.	Postage	500
11.	Telephone bill	1,200
12.	Carriage outwards	1,000
13.	Commission received	750
14.	Salary	5,250

Adjustments:

1. Closing Stock Rs.25,000
2. Wages outstanding Rs.1,000
3. Salary outstanding Rs.750

4. From the following Trial balance extracted from the books of XYZ Ltd., prepare Trading and Profit and Loss account for the year ended March 31, 1992 and a Balance sheet as on that date.

Debit	Amount Rs.	Credit	Amount Rs.
Drawings	1,700	Capital	20,000
Plant & Machinery	12,000	Creditors	2,600
Motor Car	2,600	Sales	4,200
Debtors	3,600	Bills payable	2,350
Purchases	2,000		
Wages	800		
Cash at Bank	2,600		
Salaries	800		
Repairs	190		
Stock	1,600		
Rent	450		
Manufacturing exp.	150		
Bad debts	500		
Carriage outwards	160		
	29,150		29,150

The following adjustments are to be made:

1. Closing stock Rs.1,600
2. Depreciate plant and machinery by 10% and motor car by 15%
3. Allow interest on capital 5% p.a.
4. Rs.150 is due as wages
5. Rent paid in advance Rs.50.

[MBA '93]

3. prepare, Trading, P&L & balance sheet for the following

Debit Balances	Rs.	Credit Balances	Rs.
Cash in hand	3,000	Capital	20,000
Purchases	24,000	Bank O/D @ 15%	4,000
Returns	2,000	Sales	30,000
Rent	5,000	Returns	4,000
Taxes and Insurance	1,000	Bad debts reserve	2,000
Bad debts	1,000	Creditors	3,700
Sundry Debtors	10,000	Commission	1,000
Investments	8,000	Bills payable	5,300
Stock 1.1.93	6,000		
Drawings	2,800		
Furniture	1,200		
Bills receivable	6,000		
	70,000		70,000

Adjustments

a) Salary Rs.200 and taxes Rs.800 are outstanding but insurance Rs.1,000 prepaid.

b) Commission amounting to Rs.200 has been received in advance for work to be done next year.

c) Interest accrued on investments Rs.420.

d) Bad debts reserve to be maintained at Rs.2,000

e) Depreciation on furniture is to be charged at 10%.

f) Stock on 31st Dec. 1993 was valued at Rs.9,000.

4.6. From the following Trial balance, prepare Trading, Profit & Loss a/c and Balance sheet as on 31.3.2000.

	Debit		Credit
Cash	10,000	Sales	3,00,000
Purchases	2,00,000	Returns	3,500
Returns	4,000	Bills Payable	7,500
Wages	6,000	Creditors	13,500
Factory rent	4,500	Capital	1,00,000
Opening stock	25,000	Bad debts recovered	950
Land & Building	85,000	Dividend received	1,000
Machinery	40,000		
Salaries	10,000		
Rent	6,000		
Insurance	3,600		
Commission	800		

Debtors Bills Receivable Drawings	15,000 5,000 12,000		
TOTAL	4,26,900	TOTAL	4,26,900

The following adjustments are also to be made:

1. Expenses incurred but not paid

   a) wages - Rs.2,400
   b) salaries - Rs.2,000

2. One fourth of insurance is to be carry forward to the next year.

3. Charge interest on capital and on drawings @ 12%, 15% respectively.

4. Further bad debts of Rs.600 is to be provided.

5. Loss of stock due to fire worth Rs.6,000/-. Insurance company accepted a claim of Rs.5,000 only.

6. Depreciate machinery by 10%

7. Physical stock verification showed a stock worth Rs.15,000/- on 31.3.2000.

Particulars	Debit (in Rs.)	Credit (in Rs.)
Stock on 31.12.1999	12,500	–
Purchases and Sales	78,000	1,82,000
Return inwards	2,500	–
Return outwards	–	3,500
Carriage in	1,350	–
Carriage out	650	–
Stationery	945	–
Salary	14,500	–
Wages	7,250	–
Trade expenses	725	–
Bank O/D	–	17,250
Sundry Debtors	19,500	–
Sundry Creditors	–	23,500
Bills Receivable	7,850	–
Bills Payable	–	9,250
Bad Debts	625	–
Provision for bad debts	–	525
Insurance	600	–
Advertising expenses	2,425	–
Loan @ 15%	–	32,000
Interest on the loan	3,200	–
Discount	–	475
Travelling expenses	975	–
Telephone charges	1,125	–
Capital	–	90,000
Machinery	1,10,000	–
Typewriter	10,000	–
Cash	12,000	–
Premises	68,000	–
Lighting		
a) Factory	300	–
b) Office	700	–
Rent		
a) Factory	555	–
b) Office	1,525	–
Miscellaneous expense	700	–
TOTAL	3,58,500	3,58,500

5. Cont

Adjustments

1. Wages due Rs.250/- and wages spent for the erection of shed Rs.2,000 was included in wages account.
2. 3/4th of the advertising expenses is to be carry forward.
3. Interst on loan and capital is to be charged @ 10% and 8% respectively.
4. During the year private purchases worth Rs.5,000 was also made.
5. Sales includes sale of Typewriter which costs Rs.2,500/-
6. To promote the sales free samples worth Rs.1,000/- were given
7. Stock at the end.

   a) Goods Rs.8,000/-
   b) Stationery Rs.155/-

8. Write off
   a) machinery by 10%
   b) Typewriter by 20%
9. Officer Manager is entitled a commission of 6% of the net profit before charging such commission.

Illustration 11 which includes major and frequently asked adjustment items.

From the following ledger balances prepare Trading, Profit & Loss account and Balance Sheet as on 31.3.2000

S.No.	Particulars	Debit Rs.	Credit Rs.
1.	Capital		45,000
2.	Drawings	10,000	
3.	Loans borrowed		50,000
4.	Stock on 1.4.99	12,000	
5.	Purchases and Sales	1,60,000	2,20,000
6.	Returns	5,000	10,000
7.	Freight	1,000	
8.	Power	2,500	
9.	Lighting (Factory)	1,000	
10.	Wages	15,000	
11.	Carriage inwards	2,000	
12.	Carriage outwards	1,500	
13.	Rent, Rates & Taxes	2,200	
14.	Salaries	18,000	
15.	Insurance	1,500	
16.	Bank charges	1,000	
17.	Printing and Stationery	900	
18.	Income from investments	–	15,000
19.	Commission	500	700
20.	Discount (cr)		1,300
21.	General expenses	550	
22.	Bad debts	2,000	
23.	Sundry debtors & creditors	60,000	8,000
24.	Provision for bad debts		2,000
25.	Provision for discount on debtors		750
26.	Cash in hand	5,000	
27.	Cash at Bank	7,000	

28.	Travelling expenses	1,500	
29.	Advertising expenses	1,800	
30.	Plant & Machinery	20,000	
31.	Furniture & Fitting	7,000	
32.	Bills receivable & payable	16,000	2,200
	Total	3,54,950	3,54,950

Adjustments:

1. Closing stock was valued at Rs.20,000
2. Provide depreciation on a) Machinery 10%
   b) Furniture 5%
3. Provide additional bad debts Rs.1,000 and make the provision for Bad debts as 5% and discount on debtors as 3%.
4. Outstanding expenses a) Salaries Rs.2,000
   b) Wages Rs.1,000
5. Prepaid insurance Rs.200
6. Interest on Capital to be allowed 5%
7. Loss by fire worth Rs.1,000 for which the Insurance company accepted to pay Rs.700 for loss of stock on fire.

Illustration 11 which includes major and frequently asked adjustment items.

From the following ledger balances prepare Trading, Profit & Loss account and Balance Sheet as on 31.3.2000

S.No.	Particulars	Debit Rs.	Credit Rs.
1.	Capital		45,000
2.	Drawings	10,000	
3.	Loans borrowed		50,000
4.	Stock on 1.4.99	12,000	
5.	Purchases and Sales	1,60,000	2,20,000
6.	Returns	5,000	10,000
7.	Freight	1,000	
8.	Power	2,500	
9.	Lighting (Factory)	1,000	
10.	Wages	15,000	
11.	Carriage inwards	2,000	
12.	Carriage outwards	1,500	
13.	Rent, Rates & Taxes	2,200	
14.	Salaries	18,000	
15.	Insurance	1,500	
16.	Bank charges	1,000	
17.	Printing and Stationery	900	
18.	Income from investments	–	15,000
19.	Commission	500	700
20.	Discount (cr)		1,300
21.	General expenses	550	
22.	Bad debts	2,000	
23.	Sundry debtors & creditors	60,000	8,000
24.	Provision for bad debts		2,000
25.	Provision for discount on debtors		750
26.	Cash in hand	5,000	
27.	Cash at Bank	7,000	

28.	Travelling expenses	1,500	
29.	Advertising expenses	1,800	
30.	Plant & Machinery	20,000	
31.	Furniture & Fitting	7,000	
32.	Bills receivable & payable	16,000	2,200
	Total	3,54,950	3,54,950

Adjustments:

1. Closing stock was valued at Rs.20,000
2. Provide depreciation on a) Machinery 10%
   b) Furniture 5%
3. Provide additional bad debts Rs.1,000 and make the provision for Bad debts as 5% and discount on debtors as 3%.
4. Outstanding expenses a) Salaries Rs.2,000
   b) Wages Rs.1,000
5. Prepaid insurance Rs.200
6. Interest on Capital to be allowed 5%
7. Loss by fire worth Rs.1,000 for which the Insurance company accepted to pay Rs.700 for loss of stock on fire.

accepted to pay Rs.700 for loss of stock on fire.

Solution

Make a note on the left hand side of each item in the Trial Balance.

1) B/L* 2) B/L 3) B/L 4) T/D 5) T/D & T/C
6) SR. T/C, PR. T/D 7) T/D 8) T/D 9) T/D
10) T/D* 11) T/D 12) P/D 13) P/D 14) P/D*
15) P/D* 16) P/D 17) P/D 18) P/C 19) P/D & P/C
20) P/C 21) P/D 22) P/D* 23) Dr, B/A Cr. B/L
24) P/D 25) P/D 26) B/A 27) B/A 28) P/D
29) B/D 30) B/A* 31) B/A* 32) B/R. B/A, B/P. B/L
33) Closing stock* T/D & B/A

Dr. Trading, Profit & Loss a/c and Balance Sheet as on 31.3.2000 Cr.

To Opening stock		12,000	By Sales	2,20,000	
To Purchases	1,60,000		**Less**		
Less			Sales Returns	5,000	2,15,000
Purchase returns	10,000		By Loss by fire		1,000
	1,50,000	1,50,000	By Closing stock		20,000

To wages	15,000				
Add outstanding	1,000	16,000			
To Carriage inwards		2,000			
To Freight		1,000			
To Power		2,500			
To Lighting (factroy)		1,000			
To Gross profit c/d (Balancing figure)		51,500			
		2,36,000			2,36,000
To Salaries	18,000		By Gross profit b/d		51,500
Add outstanding	2,000	20,000	By Income from investment		15,000
To Insurance	1,500		By Commission Received		700
Less Prepaid	200	1,300	By Discount received		1,300
To Interest on capital		2,250			
To Rent, Rates, Taxes		2,200			
To Printing & Stationery		900			
To Bank charges		1,000			
To General expenses		550			
To Carriage outwards		1,500			
To Commission		500			
To Travelling expenses		1,500			
To Advertising expenses		1,800			
To Bad debts.	2,000				
Add Additional Bad debts	1,000	3,000			
To New provision for Bad debts	2,950				
Less Old provision for Bad debts	2,000	950			

To New provision for Discount on debtors (56,050x3%)	1,682				
Less Old provision for Discount on debtors	750	932			
To Loss of Stock by fire	1,000				
Less claim accepted by insurance company	700				
Net loss by fire	300	300			
To Depreciation:					
Machinery	2,000				
Furniture	350	2,350			
To Net Profit (Balancing figure)		27,468			
		68,500			68,500

Balance Sheet as on 31.3.2000.

Liabilities			Assets		
Capital	45,000		Plant & Machinery	20,000	
Add Interest on Capital	2,250		**Less** Depreciation 10%	2,000	18,000
	47,250		Furniture & Fitting	7,000	
Less Drawings	10,000		**Less** Depn. 5%	350	6,650
	37,250		Bills receivable		16,000
Add Net Profit	27,468		Sundry debtors	60,000	
	64,718	6,4718			
Loans borrowed		50,000	**Less Additional** Bad debts 5%	1,000	
Bills payable		2,200		59,000	

Sundry creditors		8,000	Less New provision for bad debts 5%	2,950	
				56,050	
Outstanding Exp.:					
Salaries		2,000	Less New provision for Discount on debtors 3%	1,682	54,368
Wages		1,000			
			Closing Stock		20,000
			Cash at Bank		7,000
			Cash in hand		5,000
			Insurance prepaid		200
			Insurance claim for stock		700
Total		1,27,918	Total		1,27,918

PROFORMA OF A SIMPLE COST SHEET

Model 1

Cost sheet for the period of ------ for the production of ----- units.

Particulars	Total cost	Cost per unit*
Direct materials	xxxx	
Direct wages	xxxx	
Direct expenses	xxxx	
Prime Cost	xxxx	
Factory (or) works overheads	xxxx	
Works Cost	xxxx	
Office and Admn. overheads	xxxx	
Cost of Production	xxxx	
Selling and distribution expenses	xxxx	
Total cost (or) Cost of sales	xxxxx	
Profit or Loss	xxxx	
Sales	xxxxxx	

* Cost per unit column is optional.

Model 2: (Cost sheet with opening and closing stock, cost of goods sold)

Opening stock of - raw materials

- work in progress
- finished goods

Closing stock of - raw materials

- work in progress
- finished goods

Opening stock should be added and closing stock should be deducted in the respective places in the cost sheet. It is explained in detail in the next proforma cost sheet.

Cost sheet for the period ------------ for the production of ---------- units.

Particulars		Total cost	cost per unit
Opening stock of raw materials	XXXX		
Add purchases	XXXX		
	XXXX		
Less closing stock of raw materials	XXXX		
Direct materials consumed	XXXX	XXXX	
Direct Labour (or) wages		XXXX	
Direct expenses		XXXX	
Prime cost		XXXXX	
Factory overheads	XXXX		
Add Opening work-in-progress	XXXX		
	XXXX		
Less Closing work-in-progress	XXXX	XXXX	
Works cost		XXXX	
Office and Adminstrative overheads		XXXX	
Cost of Production		XXXX	
Add opening stock of finished goods	XXXX		
Less closing stock of finished goods	XXXX		
	XXXX	XXXX	
Cost of goods sold		XXXXX	
Add Selling and distribution overheads		XXXX	
Cost of Sales		XXXX	
Profit (or) Loss		XXXX	
Sales		XXXX	

Note:

1. Work in progress (W.I.P.) is semi-finished goods which still requires some operation in the production department. So, opening and closing stock of W.I.P. should be adjusted after prime cost, before works cost.

2. Cost of goods sold : It is the cost for the actual number of units sold. For e.g. Opening stock of finished goods is 200 and current production is 1000 units. Closing stock is 300 units. So, the actual units sold is

Model 3

All elements of cost, (Direct & Indirect) are given in detail in this proforma cost sheet.

Particulars	(Rs.)	Total cost Rs.	cost per unit
Opening stock of raw materials	XXXX		
Add purchase of raw materials	XXXX		
	XXXX		
Less Purchase returns	XXXX		
	XXXX		
Less Closing stock of raw materials	XXXX		
Direct materials consumed	XXXX	XXXX	
Carriage inwards		XXXX	
Any other purchase expenses		XXXX	
Direct wages	XXXX		

	XXXX	XXXX
Add Outstanding wages (if any)		
Direct expenses:		
Excise duty	XXXX	
Copy right	XXXX	XXXX
Prime cost	XXXX	XXXX
Factory Overheads:		
Foreman's Salary	XXXX	
Factory Rent, Lighting	XXXX	
Gas, water	XXXX	
Repairs & maintenance (factory)	XXXX	
Depreciation on Plant & machinery	XXXX	
Motive Power	XXXX	
Oil, Grease, Consumables	XXX	
Factory rates and taxes	XXX	
Indirect wages		
Any other expenses relating to manufacturing (or) Factory	XXX	
Factory overheads	XXXX	
Add Opening stock of W.I.P.	XXXX	
Less Closing stock of W.I.P.	XXXX	
	XXXX	XXXX
Works cost		XXXX
Office and Adminstrative overheads:		
Office rent, rates & taxes	XXX	
Office lighting	XXX	
Repairs (office)	XXX	
Depreciation (office) (furniture (or) building etc)	XXX	
Printing and Stationery	XXX	
Postage & Telegrams	XXX	
Telephone charges	XXX	
Insurance (office)	XXX	
Managers salary	XXX	

Directors fees	XXX	XXXXXX
Cost of Production		XXXXX
Add: Opening stock of finished goods		XXXX
		XXXXX
Less Closing stock of finished goods		XXXX
Cost of goods sold		XXXXX
Selling and distribution expenses:		
Carriage outwards	XXXX	
Salesman's salary or commission	XXXX	
Travelling expenses	XXXX	
Advertising & other sales promotion expenses.	XXX	
Bad debts	XXX	
Discount allowed (Qty. discount only)	XXXX	
Warehouse expenses	XXXX	XXXXX
Cost of Sales		XXXXX
Profit or Loss		XXXX
Sales		XXXX

Note: **The following items which should not be included in the cost sheet.**

Items which are charged against profit only should be included and other items which are distribution from profit, pure financial items, items relating to capital. Such items are income tax, dividends, cash discount, abnormal wastages, profit or loss on sales of assets, goodwill or preliminary expenses written off, expenses or loss on issue of capital.

Budget

Budget is an estimate relating to the future. It may be expressed in terms of money and/or in quantitative terms. Budget is essential everywhere i.e., for an Individual, House, State, Nation and Business because it helps for better planning, co-ordination and control.

Meaning

It has been defined by I.C.M.A., London as "a financial and/or quantitative statement, prepared prior to a defined period of time, of the policy to be pursued during that period for the purpose of attaining a given objective".

Budget, Budgeting, Budgetary Control

Budget is a financial and/or a quantitative statement. It gives an objective to be achieved.

Budgeting is the act of preparing the budget.

Budgetary control is the preparation and control over the budget. It involves following steps.

1. Preparation of budgets for the future period
2. Recording the actual performance
3. Comparing the actuals with the budgeted figures.
4. Taking corrective steps if there is any difference between the actual and budgeted figures.
5. Revising the budget, if necessary.

Objectives of budgetary control

Planning, Co-ordination and control are the objectives of Budgetary control.

The main objectives of Budgetary control are planning, co- ordination and control.

1. Planning

Planning is looking forward. Planning spins around where we are, and where we want to go, how we want to go, etc. Here planning should be done regarding all functions such as, purchase, production, sales, cash, raw material, labour requirement etc. Budgets helps the management to proceed in the right direction, to achieve at right time, reduces wastages and increases profitability by proper planning.

2. Co-ordination

The activities of all departments within an organisation are inter-related to each other. No single department can function independently. Budgets prepared by each department is combined and then the master budget is prepared as a whole. Since each department is involved in budget preparation, inter-dependance is created between departments, perfect co-ordination is brought by the budget.

3. Control

Planning is looking forward and control is looking back. Planning fixes the target to be achieved and control checks whether the achievment (actual performance) is upto the expectation or not. Thus budgetary control, plans and controls continuously by comparing actuals with the standards and take suitable steps to control deviations.

It also fixes the responsibility on individuals, departments.

Advantages of Budgetary control

1. It enables for proper planning regarding the requirement of various resources, such as man, machine, material etc. and their effective utilisation.

2. It fixes the target to be achieved and the cieling for expenses. Thus it helps to have control over capital as well as revenue expenditures.

3. Since it fixes the target to be achieved, it encourages each department to achieve the target. If the target is not fixed, people in the departments will be in dark and the achievement level will be lower than the normal standard.

4. Since goals are defined clearly, the path is smooth without any confusions.

5. All departments are involved in the preparation of budget (Master budget is prepared by combining, departmental budgets) for better co-ordination and motivation.

6. Target fixed by the budget also fixes the responsibility for each department.

7. In budgetary control actuals are compared with the estimate/targets and deviations are determined. This helps the management to give more importance on the deviation thereby permitting management to introduce "Management by Exception".

8. Top management can decentralise authority to the lower level management by fixing the targets.

9. It helps to introduce incentive schemes

10. Functions of planning and co-ordination can be better performed by budgetary control.

Limitations of Budgetary Control

1. Budgets are prepared on some assumptions about the future. Future is always uncertain. Some uncontrollable factors like change in Govt. policy, competition may affect the budgets.
2. Budgets prepared for a period should be revised according to the changed situations which is a costly affair.
3. Inter-department conflict will be a very big problem because each department will concentrate on their goals only and they will not bother about other department activities.
4. Achieving co-ordination among the departments is not so easy.
5. Lack of support from the top management will collapse the budgetary control system.
6. Budgetary control should be used by the organisation as a whole.

Classification of Budgets

The following are the budgets which are commonly used.

Budgets

Functions	Flexibility	Time
1. Sales budget	1. Fixed budget	1. Long term budgets
2. Production budget	2. Flexibile budget	2. Short term budgets
3. Material budget		3. Current budgets
4. Labour budget		
5. Manufacturing overhead budget		
6. Selling overheads budget		
7. Cash budget		

Classification according to functions

1. Sales budget

Sales estimate in quantity and in value

Sales budget is very important budget because, preparation of all other budgets like Purchase budget, Labour requirement budget, other expenditure budgets for Manufacturing expenses, Administrative expenses depends on the preparation of Sales budget. It is an estimation of Sales in quantities and in value. The estimation may be Productwise, Areawise, or periodically The following methods are popularly used to estimate the sales. They are,

1. Opinion method:
    a) Opinion of Sales persons
    b) Opinion of Sales Executives
    c) Opinion of Prospective buyers
2. Statistical method:
    a) Trend Analysis
    b) Economic Indicators
    c) Regression Analysis

While estimating the sales, Internal factors (availability of resources) and External factors (competition, Govt. policy, etc.,.) should also be considered.

Illustration 1

The following figures of sales were extracted from a manufacturing company HMM, manufacturing "Tooth Paste" for the year 2000.

Brand	A -	2,50,000 units @ Rs.20
	B -	3,00,000 units @ Rs.22
	C -	5,00,000 units @ Rs.25
	D -	1,50,000 units @ Rs.21

Current estimate shows that the sales in the next year will be more by 10%, 12%, and 15% for brand A, B, C and 5% less for Brand D. You are required to estimate the sales.

a) in quantities for the year 2001.

b) in value if the new selling price will be 5%, 7%, 10% more for brand A, B, C and at the same price for brand D.

Solution

a) Sales budget in quantities

Brand	Current year Sales in Qty.	Expected change in %	Expected increase in Qty.	Estimated Sales in 2001
A	2,50,000	+ 10%	25,000	2,75,000
B	3,00,000	+ 12%	36,000	3,36,000
C	5,00,000	+ 15%	7,500	5,75,000
D	1,50,000	- 5%	- 7,500	1,42,500

b) Sales budget in value

Brand	Estimated Sales in 2001	Estimated Selling price (Rs.)	Sales value (Rs. in lakhs)
A	2,75,000	21.00	57.750
B	3,36,000	23.54	79.0944
C	5,75,000	27.50	158.125
D	1,42,500	21.00	29.925

Estimated Selling price

Brand	A	Rs.20 + 5%	=	Rs.21.00
	B	Rs.22 + 7%	=	Rs.23.54
	C	Rs.25 + 10%	=	Rs.27.50
	D	Rs.21 + 0%	=	Rs.21.00

2. Production budget

Production estimate in units and in value

After the estimation of sales budget, production budget should be prepared The production budget contain what to produce, how much to produce, when to produce. It plans well in advance about when to procure materials, how much labour to be engaged, by considering the requirement and the availability of all required resources. It should also consider how much opening stock is available and how much closing stock should be kept in each item and helps for timely supply of finished goods.

How much to produce in each period (daily, weekly, monthly or quarterly etc.,.)?

Production = [Sales estimated + Closing stock required – Opening stock available]

Example :

Stock of finished goods available on 1.1.2001 was 2,000 units. Sales estimate shows that, sales will be 10,000 and the stock to be maintained at the end of the year as 2,500 units. Estimate the production to be done during that period.

Production budget

Month/ period	Sales estimated	Closing stock	Opening stock	Production required in units
2001	10,000	2,500	2,000	10,500

3. Materials budgets

Estimation of different materials required for production.

After determining the quantity to be produced as per the production budget the quantity to be produced should be multiplied by the material requirement per unit of output. Existing stock of materials, if any, will be deducted. The purchase department will plan 'when' to purchase (re-order level), how much to purchase (EOQ, various stock levels). This budget will show the raw materials requirement in quantities and in values.

Estimation of Material requirement
= (No. of units to be produced as per production budget x Material required per unit of output) + Closing stock of material (that should be maintained) – Opening stock of materials (at the beginning)

= Material required + Closing Stock – Opening Stock.

Example :

As per the production estimate the production should be 10,500 units (refer Illustration 1). If one unit of output requires 5 kgs of material, estimate the material requirement assuming the opening stock of materials as 5,200 kgs and closing stock to be maintained as 7,000 kgs.

Solution

Estimation of material requirement

= Material required + Closing Stock – Opening Stock.

= (10,500 x 5 kgs) + 7,000 – 5,200

= (52,500 + 7,000 – 5,200)

= 54,300 kgs.

4. Labour budget

estimate of different types of labour required

The labour requirement, productwise and gradewise (skilled, semi-skilled, unskilled or men, women, children) and the rate of pay (per hour, per day, etc) should be decided. If incentives are to be given it can be included in this estimate. This helps the personnel department to recruite people whenever required.

Estimation of manufacturing expense

5. Manufacturing overheads budget

Estimation of indirect material, indirect labour, and indirect expenses constitute the manufacturing overheads. The budget can be prepared department-wise, product-wise, by seperating the expenses into fixed and variable. Management should consider the level of activity so as to estimate the manufacturing overheads accurately.

estimation of selling and distribution expenses.

6. Selling and distribution overheads budget

It is prepared by Sales department, since this expenditure is directly related to Sales. This expenditure is estimated based on Sales budget. Expenses are seperated into fixed and variable costs and estimates may be prepared product-wise, territory-wise etc.,. Some of the selling and distribution expenses are Salary, Commission, Advertising, Travelling expenses, etc.,.

7. Cash budget

It is an estimation of cash receipts and payments for a particular period. Estimated cash receipts include receipt by sales, from debtors, bills receivables, from dividends, from sale of investments or assests and/or any other income receivable in cash. Expected payments includes, salary, rent, purchase of assets, payments for materials, any other payment payable in cash (income tax, dividend etc). Therefore, cash budget helps to estimate the future cash position, by comparing the receivables and payables.

Illustration 2

From the following particulars prepare a cash budget for the months of June and July 1998.

Month	Credit Sales (Rs)	Credit Purchase (Rs)	Manufacturing overheads (Rs)	Selling overheads (Rs)
April	40,000	30,000	1,000	1,500
May	42,000	32,000	1,200	1,400
June	45,000	33,000	1,300	1,400
July	42,000	32,000	1,000	1,300

Additional information

1. Advance tax of Rs.2000 is payable in June and in December 1998.
2. Period of credit allowed to debtors (for credit sales) two months.
3. Period of credit allowed by creditors (for purchases) one month
4. Delay in payment of other expenses one month
5. Opening balance of cash on 1st June is estimated as Rs.10,000.

Solution

Cash receipt

Credit sales

Credit allowed to debtors

Credit allowed to customers

Cash budget for the month of June and July 1998.

Particulars	June Rs.	July Rs.
Opening Balance	10,000	13,400
Receipts : Sales	40,000	42,000
Total Receipts (A)	**50,000**	**55,400**
Payments : Purchases	32,000	33,000
Manufacturing overheads	1,200	1,300
Selling overheads	1,400	1,400
Tax payable	2,000	
Total Payments (B)	**36,600**	**35,700**
Balance (A – B)	**13,400**	**19,700**

Note:

Sales (Receipts)

If the sales is for cash that should be entered in the same month. In case of credit sales, cash will be received after some time lag. When the cash is received (irrespective of the month of sale) it should be entered in the month of Receipt. In this problem credit allowed is two months for debtors. For credit sale in April, that amount will be received in June (after two months). For May sales amount will be received in July and so on.

Purchases (Payments)

Cash purchases will be entered in the same month in the purchase side. For credit purchases it may be paid after sometime (one or two months). Whenever cash is paid, it should be entered in the same month. Here period of credit allowed by suppliers is one month. So, for the purchases made in April, payment will be in May. For purchases in May payment will be made in June and so on.

Other expenses

Delay in payment of other expenses is one month. So, April overheads will be paid in May and May overheads in June and so on.

Tax payable

Tax payable in June and in December. Since the preparation of budget is only for June and July, tax of Rs.2,000 for June only have been entered in the payments.

Opening Balance

Opening balance of Rs.10,000 is given for June. But the opening balance for July is not given. Closing balance (A-B) of June (Rs.13,400) is the opening balance for July and the closing balance of July will be the opening balance for August and so on.

Illustration 3

From the forecasts of income and expenditure prepare a cash budget for the months from April to June (Figures in Rs.).

Month	Sales	Purchases	Wages	Office Exp.	Selling exp.
Feb	60,000	40,000	4,000	2,500	1,800
Mar	62,000	38,000	4,200	2,800	2,000
Apr	65,000	39,000	4,400	2,700	2,200
May	61,000	36,000	4,500	2,800	2,100
Jun	60,000	38,000	4,500	2,600	1,900

a) Plant worth Rs.10,000 purchased in June 25% payable immediately and the remaining in two equal instalments in the subsequent months.

b) Advance tax payable in Jan and April Rs.3,000

c) Period of credit allowed
   i) by suppliers 2 months
   ii) to customers 1 month

d) Dividend payable Rs.5,000 in June.

e) Delay in payment of wages and office expenses 1 month and selling expenses 1/2 month. Expected cash balance on 1st April is Rs.20,000.

Solution

Cash budget from April to June

	Particulars	April (Rs)	May (Rs)	June (Rs)
	Opening Balance	20,000	29,900	47,650
Receipts :	Sales	62,000	65,000	61,000

Receipts Sales

Payments Purch Suppliers

	Total Receipts (A)	**82,000**	**94,900**	**1,08,650**
Payments :	Plant purchased (in Jun)	–	–	2,500
	Tax payable	3,000	–	–
	Purchases	40,000	38,000	39,000
	Dividend Payable	–	–	5,000
	Wages	4,200	4,400	4,500
	Office expenses	2,800	2,700	2,800
	Selling expenses	2,100	2,150	2,000
	Total Payments (B)	**52,100**	**47,250**	**55,800**
	Balance (A – B)	**29,900**	**47,650**	**52,850**

Note:

1. Plant purchased for Rs.10,000, 25% payable immediately i.e., Rs.2,500 payable in June. Payment after June is not necessary for our purpose because budget preparation is only upto June.

2. Delay in payment of selling expenses 1/2 month.
Calculation of payment of selling expenses

Month	Total Expenses (Rs)	Received in				
		Feb (Rs)	Mar (Rs)	Apr (Rs)	May (Rs)	Jun (Rs)
Feb	1,800	900	900	–	–	–
Mar	2,000	–	1,000	1,000	–	–
Apr	2,200	–	–	1,100	1,100	–
May	2,100	–	–	–	1,050	1,050
Jun	1,900	–	–	–	–	950
Total		–	–	2,100	2,150	2,000

50% payable in the same month and remaining 50% payable in the next month. Add the amount to be payable in each month, to find out the total amount payable for each month. Since, the budget preparation is for April, May & June, Rs.2,100, Rs.2,150, Rs.2,000 should be entered in the respective months as selling expenses.

Illustration 4

ABC Ltd., has prepared all the functional budget except the cash budget. An analysis of various budgets reveals the following information (in Rs.).

Months	Sales	Purchases	Wages	Office exp.	Selling exp.	R & D exp.
Jan	1,20,000	80,000	1,200	2,500	1,800	1,600
Feb	1,25,000	82,000	1,300	2,600	2,000	1,720
Mar	1,20,000	78,000	1,400	2,750	2,100	1,640
Apr	1,30,000	85,000	1,400	2,750	1,900	1,680
May	1,40,000	90,000	1,300	2,600	2,000	1,760
Jun	1,35,000	86,000	1,350	2,700	2,000	1,800

Additional information

1. Opening balance on March 1st Rs.25,000
2. Second call money on shares to be received in May Rs.20,000
3. Expected income from investments Rs.5,000 in March.
4. Dividends to be received Rs.3000 in April
5. Machinery expected to sell for cash Rs.10,000 in April
6. Dividends to be paid in May Rs.6,000
7. Lag in payment of expenses
   a) wages and office expenses one month
   b) selling expenses 1/4 month
   c) R & D expenses 1/8 month
8. Credit allowed
   a) by suppliers one month
   b) To customers - 20% cash sales, remaining in two equal instalments in the subsequent months.
9. Machinery purchased in May for Rs.2,00,000.

Prepare a cash budget for the month March, April, May and June.

Solution

Cash budgets of ABC Ltd., for the months of March, April, May and June

Particulars	March Rs.	April Rs.	May Rs.	June Rs.
Opening Balance	25,000	62,375	1,13,600	(–31,275)
Receipts :				
Call money on shares	—	—	20,000	—
Income from investments	5,000	—	—	—
Dividends to be received	—	3,000	—	—

Sale of Machinery	—	10,000	—	—
Sales :– Cash	24,000	26,000	28,000	27,000
Credit	98,000	98,000	1,00,000	1,08,000
Total Receipt (A)	**1,52,000**	**1,99,375**	**2,61,600**	**1,03,725**
Payments :				
Dividends paid	—	—	—	6,000
Lag in payment of				
a) wages	1,300	1,400	1,400	1,300
b) Office expenses	2,600	2,750	2,750	2,600
c) Selling expenses	2,075	1,950	1,975	2,000
d) R & D expenses	1,650	1,675	1,750	1,795
Purchases	82,000	78,000	85,000	90,000
Machinery purchased	—	—	2,00,000	—
Total Payments (B)	**89,625**	**85,775**	**2,92,875**	**1,03,695**
Balance (A – B)	**62,375**	**1,13,600**	**(–31,275)**	**30**

***Note* 1:** Net balance in May is (–31275) transfered to the next month June.

***Note* 2:** Calculation of Receipts from sales upto June

Month of Sale	Total Sales (Rs)	Received in					
		Jan (Rs)	Feb (Rs)	Mar (Rs)	Apr (Rs)	May (Rs)	Jun (Rs)
Jan	1,20,000	24,000*	48,000	48,000	–	–	–
Feb	1,25,000	–	25,000*	50,000	50,000	–	–
Mar	1,20,000	–	–	24,000*	48,000	48,000	–
Apr	1,30,000	–	–	–	26,000*	52,000	52,000
May	1,40,000	–	–	–	–	28,000*	56,000
Jun	1,35,000	–	–	–	–	–	27,000*
Total				1,22,000	1,24,000	1,28,000	1,35,000

*20% cash sales received in the same month remaining 80% in two equal monthly instalments.

***Note* 3**: Calculation of payment of selling expenses (Lag in payment 1/4 month).

Month	Total Expenses (Rs)	Received in					
		Jan (Rs)	Feb (Rs)	Mar (Rs)	Apr (Rs)	May (Rs)	Jun (Rs)
Jan	1,800	1,350	450	–	–	–	–
Feb	2,000	–	1,500	500	–	–	–
Mar	2,100	–	–	1,575	525	–	–
Apr	1,900	–	–	–	1,425	475	–
May	2,000	–	–	–	–	1,500	500
Jun	2,000	–	–	–	–	–	1,500
Total				2,075	1,950	1,975	2,000

3/4th of the expenses paid in the same month and the remaining 1/4th in the next month.

Note **4:** Calculation of payment of R & D expenses (Lag 1/8th)

Month of Sale	Total Expenses (Rs)	Received in					
		Jan (Rs)	Feb (Rs)	Mar (Rs)	Apr (Rs)	May (Rs)	Jun (Rs)
Jan	1,600	1,400	200	–	–	–	–
Feb	1,720	–	1,505	215	–	–	–
Mar	1,640	–	–	1,435	205	–	–
Apr	1,680	–	–	–	1,407	210	–
May	1,760	–	–	–	–	1,540	220
Jun	1,800	–	–	–	–	–	1,575
Total				1,650	1,675	1,750	1,795

7/8th paid in the same month. Lag in payment 1/8th

Since the budget is prepared from March to June only, total for four months has been calculated.

Classification according to flexibility

a) Fixed budget

Budget prepared only for a fixed level of activity.

According to I.C.W.A London, "Fixed budget is a budget which is designed to remain unchanged irrespective of the level of activity actually attained." Fixed budget is prepared for a given level of activity, at the begining of the financial year, which will remain unchanged, irrespective of the change in the situations.

b) Flexible budget

Budgets prepared for different levels of activities.

Flexible budget is a budget prepared to show the budgeted cost at different levels of activity. While preparing the flexible budget, all costs are classified as Fixed cost, Variable cost, and Semi-variable costs. The fixed costs remains the same at all levels of activity, whereas variable costs will vary according to the level of output. Because of this character of fixed-cost, cost per unit will be more in case of low capacity utilisation and vice versa. Preparation of flexible budget helps to know the total cost and cost per unit at different levels of output and also helps to make better decisions.

Example :

Assume the 100% production capacity as 1,000 units, the fixed cost (Salary, Rent, etc.,.) as Rs.10,000 and the variable cost as Rs.10 per unit. Prepare a flexible budget at 70%, 80%, 90%, 100% level of activity.

Particulars	at 70%	at 80%	at 90%	at 100%
1. Variable cost @ Rs.10	7,000	8,000	9,000	10,000
2. Fixed cost	10,000	10,000	10,000	10,000
Total cost	17,000	18,000	19,000	20,000
Cost per unit	17,000/700 = 24.29	18,000/800 = 22.50	19,000/900 = 21.11	20,000/1,000 = 20.00

At 70% = 700 units and so on.

Note:

1. Variable cost varies according to the level of output. = No. of units x Rate/unit.

2. Fixed cost remains same at all levels of output.

Normally, the business concerns may not prefer low capacity utilisation but, due to shortage of power, materials, labour or due to low demand or due to some other uncontrollable factors, they may be forced to attain low capacity.

Illustration 5 (Fixed, semi-variable expenses given in total)

The following details are given at 70% production capacity. Prepare a flexible budget for 60% and 90% production capacity. If the output at full capacity is 10,000 units, calculate the total cost, and cost per unit.

Table A.4 **Present Value Interest Factor for an Annuity** $PVIFA\ (r,\ n) = 1 - \frac{1/(1+r)^n}{r}$

Period *n*	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517
6	5.795	5.601	5.417	5.242	5.076	4.917	4.766	4.623	4.486	4.355	4.231	4.111	3.998
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868	4.712	4.564	4.423
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759	5.537	5.328	5.132
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	6.207	5.938	5.687
12	11.255	10.575	9.945	9.385	8.863	8.384	7.943	7.536	7.161	6.814	6.492	6.194	5.918
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103	6.750	6.424	6.122
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367	6.982	6.628	6.302
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.060	7.606	7.191	6.811	6.462
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.312	7.824	7.379	6.974	6.604
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022	7.549	7.120	6.729
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201	7.702	7.250	6.840
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365	7.839	7.366	6.938
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.128	8.514	7.963	7.469	7.025
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.823	9.077	8.422	7.843	7.330
30	25.808	22.397	19.600	17.292	15.373	13.765	12.409	11.258	10.274	9.427	8.694	8.055	7.496

(Contd)

Table A.4 *(Contd)*

Period *n*	*14%*	*15%*	*16%*	*17%*	*18%*	*19%*	*20%*	*24%*	*28%*	*32%*	*36%*	**40%**
0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1	0.877	0.870	0.862	0.855	0.847	0.840	0.833	0.806	0.781	0.758	0.735	0.714
2	1.647	1.626	1.605	1.585	1.566	1.547	1.528	1.457	1.392	1.332	1.276	1.224
3	2.322	2.283	2.246	2.210	2.174	2.140	2.106	1.981	1.868	1.766	1.674	1.589
4	2.914	2.855	2.798	2.743	2.690	2.639	2.589	2.404	2.241	2.096	1.966	1.849
5	3.433	3.352	3.274	3.199	3.127	3.058	2.991	2.745	2.532	2.345	2.181	2.035
6	3.889	3.784	3.685	3.589	3.498	3.410	3.326	3.020	2.759	2.534	2.339	2.168
7	4.288	4.160	4.039	3.922	3.812	3.706	3.605	3.242	2.937	2.678	2.455	2.263
8	4.639	4.487	4.344	4.207	4.078	3.954	3.837	3.421	3.076	2.786	2.540	2.331
9	4.946	4.772	4.607	4.451	4.303	4.163	4.031	3.566	3.184	2.868	2.603	2.379
10	5.216	5.019	4.883	4.659	4.494	4.339	4.193	3.682	3.269	2.930	2.650	2.414
11	5.453	5.234	5.029	4.836	4.656	4.486	4.327	3.776	3.335	2.978	2.683	2.438
12	5.660	5.421	5.197	4.988	4.793	4.611	4.439	3.851	3.387	3.013	2.708	2.456
13	5.842	5.583	5.342	5.118	4.910	4.715	4.533	3.912	3.427	3.040	2.727	2.469
14	6.002	5.724	5.468	5.229	5.008	4.802	4.611	3.962	3.459	3.061	2.740	2.478
15	6.142	5.847	5.575	5.324	5.092	4.876	4.675	4.001	3.483	3.076	2.750	2.484
16	6.265	5.954	5.669	5.405	5.162	4.938	4.730	4.033	3.503	3.088	2.758	2.489
17	6.373	6.047	5.749	5.475	5.222	4.990	4.775	4.059	3.518	3.097	2.763	2.492
18	6.647	6.128	5.818	5.534	5.273	5.033	4.812	4.080	3.529	3.104	2.767	2.494
19	6.550	6.198	5.877	5.584	5.316	5.970	4.844	4.097	3.539	3.109	2.770	2.496
20	6.623	6.259	5.929	5.628	5.353	5.101	4.870	4.110	3.546	3.113	2.772	2.497
25	6.873	6.464	6.097	5.766	5.467	5.195	4.948	4.147	3.564	3.122	2.776	2.499
30	7.003	6.566	6.177	5.829	5.517	5.235	4.979	4.160	3.569	3.124	2.778	2.500

14IT610 & 14EC710 – ACCOUNTING AND FINANCE

RAPID QUIZ PROGRAM

PARTICIPANTS

- 69 MEMBERS IN A CLASS
- SUB DIVIDED INTO 3 TEAMS
- EACH TEAM HAS SEPARATE NAMES AND TEAM LEADER

QUESTIONS

- ONE WORD QUESTION
- IN A TEAM – EACH MEMBER HAS TO PREPARE 5 OBJECTIVE QUESTIONS ON THE SYLLABUS COVERED IN CONTINUOUS ASSESSMENT TEST 1, 2 respectively.
- CONSOLIDATED FIVE QUESTIONS WILL BE ASKED BY A TEAM TO OTHER TWO TEAMS

TIMING

- EACH QUESTIONS WILL BE PROVIDED WITH 10 SECONDS OF TIME TO ANSWER THE ONE WORD QUESTION
- FIVE QUESTIONS WILL BE ASKED TO EACH TEAM BY OTHER TEAM
- Time is the deciding factor in this evaluation process

MARKS

- EACH ANSWER CARRIES ONE MARK
- NO PENALTY
- TEAM HAVING MAXIMUM MARKS WILL BE THE **WINNER** (if two teams have same marks, three questions will be asked by the subject handler – team answering most will be the winner)

OUTCOMES

- At the end of the quiz program, students were able to revise the syllabus and able to arise new ideas and concepts in accounting and finance.
- Students who were actively engaged are able to understand and recall the concepts in accounting and finance.
- Peer to peer interaction improves.