Product	Department		
	1	2	3
A	0.4 Direct labour hour	0.6 Direct labour hour	—
B	0.6 Direct labour hour	—	1.2 Direct labour hour

Besides, Maintenance and Electricity Departments have to provide their services to production departments. The standard service rate of Maintenance Department and Electricity Department are as follows:

Receiving Dept.	Service Departments	
	Maintenance	Electricity
Electricity	1 Direct repair hour for 1 direct kilowatt hour	——
Prod. Dept. 1	5 Direct repair hour for 100 direct labour hours	5 direct kilowatt hour for 500 direct labour hours
Prod. Dept. 2	20 Direct repairs hours for 500 litres	0.06 direct kilowatt hour for 10 units
Prod. Dept. 3	6 Direct repair hours for 800 units	0.775 direct kilowatt hours for 100 litres

The budgeted overhead expenses for each department are as follows:

Departments	Maintenance	Electricity	Prod. 1	Prod. 2	Prod. 3
Overhead expenses (Rs.)	1,14,000	96,000	1,02,000	47,500	1,04,500

Required:

1. Compute overhead rate of all departments.
2. Compute cost of goods manufactured of each product. [20]

Ans: (1) Rs. 6; Rs. 6.67; Rs. 3.33 (2) Rs. 6.4/unit; Rs. 7.61/hrs

28. 2051 Q.No. 4(a)

The finished product of XYZ Company passes through two departments, namely Dept. A and Dept. B. The direct labour hour requirements for the product are 2 hours and 3 hours in dept-A and dept-B respectively. Besides, the production processes the product needs the help of other departments such as Repairs, Power and General Administration. All overhead allocations are based on the direct labour hour consumed in the departments and for other departments are according to the direct labour consumed in dept-A. The total overhead cost budgeted for the year are given below:

Dept. A	Dept. B	Repairs Dep.	Power Dept.	Gen. Adm Dev.
Rs. 50,000	Rs. 75,000	Rs. 30,000	Rs. 30,000	Rs. 50,000

Annual production target is 10,000 units.

Required: Overhead cost budget and overhead cost per unit. [10]

Ans: Overhead rate = Rs. 23.5 per unit

29. 2045 Q.No. 8

A certain company which manufactures two products C and D has two producing departments (Departments A and B) and one service department (Repair). Department A works only one products. C while department B works no both products. The company approves the activity based and annual departmental overhead budgets as indicated below:

Department	Activity base	Annual planned overhead
A	Units of product C	Rs. 25,000
B	Direct machine hours (DMH)	Rs. 15,000
Repair	Direct repair hours (DRH)	Rs. 4,000

The approved production plan of the company shows the number of units to be produced in a year as 5,000 gallons of product C and 3000 pounds of product D.

The company establishes the following standards for planning purposes:

(a) Standard repair hours: for Department A-0.4 DRH for each unit of product C, for Department B-0.2 DRH for each direct machine hour.

(b) Standard direct machine hours in Department B: for product C-3; for product D-2.

Required: Develop the planned cost of goods manufactured for the year for each product. Assume the following direct costs: direct material- product C, Rs. 70,000; product D, Rs. 60,000; direct labour-product C, Rs. 35,000; product D, Rs. 14,000. [20]

Ans: Total cost of goods manufactured: Product C = Rs. 139,654.38; Product D = Rs. 79,345.62

30. 2044 Q.No. 8

The approved production plan of a certain company specifies the following data:

Product	Units to be produced in a years
A	7,000 gallons
B	4,000 pounds

The company has one service department (repair and maintenance) and two producing departments. Departmental-1 works only on product A while department-2 works on both products. The activity bases and annual departmental overhead budgets indicated below have been approved:

Department	Activity base	Annual planned overhead total
1	Units of product A	Rs. 26,000
2	Direct machine hours (DMH)	16,000
R & M	Direct repair hours (DRH)	6,000

In order to translate the requirements specified in the production plan into output or activity in each department, two decisional inputs have been developed as follows:

(a) Standard direct machine hours in Department-2: for product A-4; for product B – 3.

(b) Standard repair hours: for Department 1-0.20 DRH for each unit of product A: for Department 2-0.07 DRH for each machine hour.

Required:

1. Compute the volume of work or activity planned for each department.
2. Compute the overhead rates for the two producing departments. [20]

Ans: (1) 7,000 gallons; 40,000 DMH and 4,200 DRH (2) Rs. 4 /gallon, and Rs. 0.5/DMH

31. 2041 Q.No. 8

A certain company which manufactures two product M and N has two producing departments (Department A and B), and one service department (Repair). Department A works only on product M while department B works on both products. The company approves the activity base and annual departmental overhead budgets as indicated below:

Department	Activity Base	Annual Planned Overhead Total
A	Units of product M	30,000
B	Direct machine hours (DMH)	20,000
Repair	Direct repair hours (DRH)	10,000

The approved production plan of the company shows the number of units to be produced in a year as 10,000 gallons of product M and 5,000 pounds of product N. The company establishes the following standards for planning purposes:

- Standard repair hours: for department A – 0.3 DRH for each unit of product M, for department B – 0.1 DRH for each direct machine hour.
- Standard direct machine hours in department B: for product M-5, for product N-4.

Required:

1. Compute the overhead rates for the two producing departments.
2. Allocate total factory overhead to the two products being manufactured. [20]

Ans: (1) Rs. 3.30 /gallon and Rs. 0.386/DMH
(2) Product M = Rs. 5.23 per unit and Product N = Rs. 1.50 per unit

8. PLANNING AND CONTROLLING CASH FLOWS

MBS

1. 2063 Q.No. 11

The balance sheet of a departmental stores as of Ashwin 31, 2062 is as given below:

Equity capital	Rs. 1,000,000	Fixed assets	Rs. 980,000
Account payable	16,000	Investment in securities	250,000
12% Bank loan	250,0000	Stock of merchandise	40,000
Revenue account	79,000	Account receivable	50,000
		Cash at bank (minimum balance)	25,000
	1,345,000		1,345,000

The projected figures for sales, purchases and expenses of next three months are as follows:

	Sales revenue Rs.	Wages Rs.	Factory overhead Rs.	Other overheads Rs.
Kartik 2062	200,000	72,000	40,000	40,000
Mangshir 2062	250,000	96,000	40,000	40,000
Poush 2062	300,000	104,000	50,000	40,000
Magh 2062	300,000	–	–	–

Additional information required to be incorporated:

a. Merchandise will cost 40% of sales and existing inventory policy to meet 50% of next months; merchandise requirement will continue in next months also.
b. Cash purchase of merchandise will be 80% and rest credit purchase will be payable in next month.
c. Cash sales will be 80% and credit sales will be 20%, which will mature, in next month.
d. Wages and other overhead will be payable in the month of occurrence
e. The Departmental Store has finalized negotiation for sale of a portion of fixed assets with a book value of Rs. 180,000 at a loss of Rs. 20,000 in the beginning of Kartik 1, 2062.
f. 12% Bank loan will expire at the end of Kartik 2062
g. A dividend on investment at 15% will be received on Mangshir, 1 2062
h. The factory overhead includes an amount of depreciation chargeable on fixed assets at 15% p.a.
i. The previous negotiation with a joint venture bank for borrowing in the multiple of Rs. 5,000 in the beginning of the month when required and repayable in the multiple of Rs. 1,000 plus interest at 12% p.a. will remain valid till the end of Poush 2062

Required:

(a) Merchandise purchase budget for Kartik, Mangshir and Poush 2062
(b) Cash receipts and disbursements budget for the period.
(c) Budgeted income statement for the period.
(d) Budgeted balance sheet at the end. [3+6+4+3=16

Ans: (a) Rs. 90,000; Rs. 110,000; Rs. 120,000 (b) Rs. 27,500; Rs. 25,860; Rs. 28,860 (c) RE = –Rs. 60,530 (d) Total Rs. 11,68,860

MBA

2. 2064 Q.No. 5 a

The budgeted sales, purchases and monthly expenses of a company for three different months are:

	January	February	March
Sales	Rs. 400,000	Rs. 500,000	Rs. 600,000
Purchases	Rs. 250,000	Rs. 300,000	Rs. 350,000
Expenses	Rs. 120,000	Rs. 200,000	Rs. 225,000

The actual sales for November and December of last year were Rs. 300,000 and Rs. 400,000 respectively. The actual purchase for December was Rs. 250,000. Of the sales, 50% is on credit and 50% for cash. 50% of credit sales are collected after one month and balance after two months of sales. Margin on sales is 50%. All purchases are paid on the following month of purchase. The monthly expenses are payable on the month of their being due.

The company has been thinking to buy a machine in the month of January at a cost of Rs. 50,000. The company maintains a minimum cash balance of Rs. 25,000. Cash deficiencies are made up by short term loan. The interest rate is 12% per annum and is payable along with the principal to the extent of repayment of the principal. The opening cash balance of January is

Rs. 25,000.

Required:

(a) Cash budget for three months January, February and March

(b) Budgeted income statement for three months ending 31st March. [7+3]

Ans: (a) Ending cash balance: Rs. 25,000 on each month (b) NPAT= Rs. 203,650

3. 2059 Q.No. 2(a)

The sales and the expenditure on salaries of a company for four months are as follows:

Months	Shrawan	Bhadra	Aswin	Kartick
Sales (Rs.)	60,000	104,000	100,000	150,000
Salaries (Rs.)	6,000	7,000	7,000	8,000

Of the sales, 80% is on credit and 20% for cash. 70% of the credit sales are collected in the 1st month and the balance in the second months. The sales of Jestha and Ashadh were of equal amount and the receivable balance from sales on 1st Shrawan was Rs. 52,000 and cash balance on the same date was Rs. 15,400.

Gross margin on sales on an average is 40%. Purchases equal to the next month sales are made every month and they are paid during the month in which they are purchased. The other expenses per month are Rs. 3,000 which do not include the depreciation amounting to Rs. 2,000. A sum of Rs. 6,000 will be received as proceed from sale of old machine in the month of Aswin. The operating expenses and salaries are paid as they are incurred. The firm maintains a minimum cash balance of Rs. 10,000. Cash deficiencies are made up by Bank loan. All borrowing take place at the beginning of a month and all repayment are made at the end of a month. The interest rate is 12 percent per annum.

Required: Cash budget for Shrawan, Bhadra and Aswin showing borrowing and repaying of bank loan (assure that interest are paid for the loan repaid). [10]

Ans: Ending cash balance of Rs. 10,000 on each month

4. 2056 Q.No. 4(a)

The sales of company for the first four months of a year are as follows:

Months	Baishakh	Jestha	Ashadh	Shrawan
Sales amount (Rs.)	10,000	30,000	24,000	18,000
Selling price per unit (Rs.)	10	10	10	10

Of the sales, 60% will be collected during the month of sale, 30% in the following month and 6% in the next following month. The remaining will be uncollective. The beginning balance of cash in the month of Ashadh will be Rs. 6,000.

At the end of each month, it is desired to have an inventory equal in units to 50% of the following month sales. The unit cost of the merchandise purchases is Rs. 6 and it is payable after one month. The other information are:

Variable cost (varies with sales)	Rs. 48,000
Fixed cost (incurred uniformly through the year including) depreciation	Rs. 24,000
Annual depreciation	Rs. 4,800

All expenses other than purchases are paid as incurred.

Required: Cash budget for the month of Ashadh. [10]

Ans: Rs. 8,200

5. 2055 Q.No. 3(a)

The estimated sales, expenses etc. of NECO Pvt. Ltd. are as follows:

Months	Sales (Rs.)	Purchases (Rs.)	Wages & Salaries	Factory Expenses	Interest Received
Poush	10,000	4,000	4,000	3,000	—
Magh	10,000	4,000	4,000	4,000	—
Falgun	12,000	5,000	5,000	4,000	—
Chaitra	14,000	5,600	6,000	4,000	4,000

Additional Information given:

(i) 20% of the sales are on cash and the balance on credit. 10% of the credit sales are returned by the customers. 5% of the total account receivables constitute bad debts losses, 50% of the remaining account receivables are collected in the month of sale and the rest in the next month.

(ii) 80% of the purchases are in cash and balance are payable after one month.

(iii) Wages and salaries are paid in the following month. The factory expenses are paid in the relevant month.

(vi) The factory expenses included depreciation of Rs. 1,000 per month.

(v) The ending balance of cash at the end of Poush was Rs. 5,000.

Required: Cash Budget for Magh, Falgun and Chaitra. [10]

Ans: Rs. 2,840; Rs. 964; Rs. 3,176

6. 2054 Q.No. 7(b)

Welcome Department Stores was preparing cash budget for 1st, quarter of the coming year. The sales manager informed that 60% for the sales will be in cash and 40% on credit. All credits are collectable in the month following the sale. The receivable at the beginning of Baishah, Jestha and Ashadh will be Rs. 1,20,000, Rs. 1,60,000, and Rs. 2,00,000 respectively. The sales of Ashadh will be Rs. 6,00,000.

Required: Prepare a schedule showing cash collection for 3 months, Baisakh, Jestha and Ashadh. [5]

Ans: Rs. 360,000; Rs. 460,000; Rs. 560,000

7. 2053 Q.No. 2(b)

A company has been following a policy of selling 40% in cash and remaining 60% on credit. Experience has shown that 50% of credit sales would be collected in the month of sales and 30% in the following month of sales and remaining 20% in the next following month of sales.

The recent and forecasted sales of the company have been given below:

Baishakh	Rs. 100,000	Shrawan	Rs. 100,000
Jestha	Rs. 150,000	Bhadra	Rs. 200,000
Ashadh	Rs. 150,000	Aswin	Rs. 250,000

Creditors and the expenses would be paid in the month of purchase and the expenses incurred. The forecast for three months would be:

Month	Shrawan	Bhadra	Aswin
Expenses	Rs. 30,000	Rs. 30,000	Rs. 30,000
Purchases	Rs. 40,000	Rs. 80,000	Rs. 100,000

The company would like to purchase a computer at a cost of Rs. 80,000 in the month of Shrawan. The company would also like to maintain an uniform cash balance of Rs. 20,000, which the company has been maintaining in the past. The company could borrow loan and pay back in a multiples of Rs. 10,000 from the commercial bank at an interest rate of 12% p.a. The interest would be paid only for the amount of loan repaid in nearest Rs. 100.

Required: Cash budget for three months starting Shrawan. [10]

Ans: Ending cash balance = Rs. 25,000; Rs. 50,200; Rs. 143,200

8. 2052 Q.No. 7

Prepared a cash budget for Gorkha Manufacturing Company, indicating receipts and payments for May, June and July. The firm wishes to maintain, at all times a minimum cash balance of Rs. 20,000. As of April 30, the firm had a balance of Rs. 20,000 in cash.

Actual Sales		Estimated Sales	
January	Rs. 50,000	May	Rs. 70,000
February	50,000	June	80,000
March	60,000	July	90,000
April	60,000	August	1,00,000

All sales are on credit. 50% of accounts receivable are collected in the month of sales and remaining 50% will be collected equally during next two months. There is no bad debt loss.

Cost of goods sold is 80% which is paid during the month after incurrence.

Sales and administrative expenses are Rs. 10,000 per month plus 10% of sales. All these expenses are paid during the month of incurrence.

Interest payments are paid semi-annually which is Rs. 18,000 and will be due on July.
A dividend of Rs. 10,000 is declared and will be paid during July.
A machine costing Rs. 40,000 was received during March on 30 days credit.
Required: Prepare a cash budget for the month of May, June and July. Determine, whether or not borrowing will be necessary during the period and if it is when and how much. [20]

Ans: Ending cash balance: Rs. 20,000 on each month

9. 2051 Q.No. 3(a)

ABC Company engaged in retail business has a policy of selling its merchandise on credit terms of 60 days. Experience has shown that 50% of sales are realized in the month of sales, 30% on the following month sales and remaining 20% on the next following month of sales.

Nov.	Dec.	Jan.	Feb.	March
Rs. 50,000	Rs. 60,000	Rs. 60,000	Rs. 50,000	Rs. 70,000

The company as a policy of charging 40% on sales as a margin for gross profit. All company's purchases are cash purchase, and paid in the month of purchase.
The regular monthly expenses of the company are:

Salaries and wages	Rs. 6,000
Rent & insurance	Rs. 3,000
Depreciation	Rs. 3,000
Total	12,000

All expenses are paid in the month when they are due. The company has intended to purchase some furniture at a cost of Rs. 25,000 on March.

Required:

1. Account receivable collection budget showing ending balance of account receivable by month.
2. Cash receipt and disbursement budget showing cash surplus and deficiency by month. [10]

Ans: (1) Rs. 25,000; Rs. 40,000; Rs. 42,000 ; Rs. 37,000; Rs. 45,000 (2) Rs. (14,000); Rs. (14,000); Rs. (1,000), Rs. 15,000; Rs. 1,000

9. COMPLETION OF PROFIT PLAN

MBS

1. 2071 Q.No. 10 OR

A manufacturing company have collected the following information to prepare profit planning.

Balance sheet as on 31st Chaitra, 2068

Liabilities	(Rs.)	Assets	(Rs.)
Share capital	200,000	Machinery (Net)	60,000
Account payable	80,000	Inventory of finished goods 8,000 units	128,000
Dividend payable (payable on Baisakh)	20,000	Inventory of raw material 30,000 units	60,000
Net profit	58,000	Account receivable	90,000
		Cash	20,000
Total	358,000	Total	358,000

The sales, production and purchases for coming year are:

Months	Baisakh	Jestha	Ashad	Total
Sales units	8,000	8,000	9,000	25,000
Production units	10,000	8,000	9,000	27,000
Material purchase units	45,000	45,000	30,000	120,000
Material purchase (Rs.)	90,000	90,000	60,000	240,000

Selling price per unit is Rs. 20. All sales are credit sales, 50% sales are collected in the same month and 50% will be collected in the next month.
Purchase will be paid in the following month of purchase. Each unit of finished goods require '4' units of raw material. Selling and administrative expenses will be 20% of sales revenue plus Rs. 10,000 per month. Manufacturing overhead is Rs. 77,000 per month including depreciation

of Rs. 60,000 per year. All other expenses are paid when they will become due. The company issue new share to the public for Rs. 100,000 during the month of Jestha. The company has a policy of maintaining a minimum cash balance of Rs. 20,000 every month. The company has an agreement with bank for a temporary loan to make up cash deficiency of any month's at an interest rate of 12% per annum payable for the month of loan repaid. The borrowing will be in a multiple of Rs. 5,000 and payment in a multiple of Rs. 1,000.

Required:

❶ Cash collection and disbursements budget for Baisakh, Jestha and Ashad, 2069 ❷ Budgeted Income Statement for the same period ❸ Budgeted Balance Sheet for three months ending Ashad. [7+4+4=15]

Ans: ❶ Rs. 21,000; Rs. 31,100; Rs. 23,100❷ (Rs. 126,200) ❸ Total Rs. 390,300

2. 2070 Q.No. 10 OR

A manufacturing company in a process of completion of Profit Planning gathered the following information about its assets, liabilities, further sales, production and purchases:

Balance sheet on 31st Chaitra 2068

Liabilities	Rs.	Assets	Rs.
Share holder equity	340,000	Inventory of finished goods 10,000 units	100,000
Account payable	52,000	Inventory of raw materials 30,000 units	120,000
Loan (payable Rs.15,000 per month with interest @ 12%)	180,000	Account receivable	32,000
		Cash	20,000
		Fixed assets	300,000
Total	572,000	Total	572,000

The sales, production and purchases are:

Months	Baisakh	Jestha	Ashad	Total
Sales units	10,000	12,000	12,000	34,000
Production units	12,000	12,000	15,000	39,000
Wages & manufacturing expenses including depreciation	52,500	62,500	57,500	172,500
Material purchase units	30,000	37,500	30,000	97,500
Material purchase amount (Rs,)	120,000	150,000	120,000	390,000

The selling price per unit is Rs.20. Company's sales are mostly on cash. Experience shows that 80% of sales are in cash and remaining 20% on credit of 30 days. Selling and operating expenses are 10% of sales. All expenditure are paid for at the time when due. Each unit of finished goods need 2.5 units of raw materials. 50% of purchases are on cash and credit purchases are paid after one month. The company has a policy of maintaining a minimum cash balance of Rs.20,000 and it was reached with an agreement with a bank for 12% interest per annum on loan. All the borrowing and repayments are to be made in the multiple of Rs.5,000 and Rs.1,000 respectively. Amount of interest due are paid on loan repaid. Depreciation per year is 10% on fixed assets.

Required: for Baishak, Jestha and Ashad 2069

(a) Cash collection and disbursements budget

(b) Budgeted Income Statement

(c) Budgeted Balance Sheet [7+4+4=15]

Ans: a. Closing cash balance: Baishakh: Rs.24,850; Jestha: Rs.20,510; Ashadh: Rs.22,820; b. Net income: Rs.157,732; c. Balance sheet: Rs.696,782

3. 2070 Old Q.No. 11

A manufacturing company furnishes the following information for preparing Master Budget.

Balance Sheet as on 31st Chaitra. 2068			
Liabilities	Rs	Assets	Rs

Share capital	550,000	Fixed assets (net)		360,000
Account payable	22,400	Account receivable		
Selling expenses due	40,000	Falgun	= 40,000	
Net profit	39,600	Chaitra	= 125,000	165,000
		Inventory		
		Raw materials 36,000 units		72,000
		Finished goods 5,000 units		30,000
		Cash		25,000
	652,000			652,000

Actual and projected sales are as below:

Months	Falgun	Chaitra	Baisakh	Jestha	Ashad	Shrawan
Sales in units	20,000	25,000	30,000	30,000	40,000	35,000

Selling price per unit is Rs.10. All sales are on credit. 50% of credit sales are collected in the month of sales, balance are collected on following two months in the ratio of 60% and 40% respectively. Company has been following uniform inventory policy of finished goods. Inventory of raw material will be 60% of next months production need. To minimize cash shortage, management is planning to have minimum cash balance of Rs.30,000 each month. Each unit of finished goods requires 2 units of raw material at a cost of Rs.4. Manufacturing overhead is Rs.65,000 per month including depreciation of Rs.60,000 per annum. Selling and administrative expenses are expected to be 10% plus Rs.25,000 per month, which are paid in the next month of incurrence.

Post experience shows that creditors are paid for 20% of last and 80% of current month purchase and all other expenses are paid in the month of incurrence. Company is thinking to buy one new machine of Rs.50,000 in the beginning of Baisakh. Company has entered with a bank for soft bank loan @ 12% annual interest. All the borrowing and repayments are to be made in the multiple of Rs.5,000 and Rs.1,000 respectively along with interest on loan repaid.

Required:

(a) Material purchase budget for first quarter, 2069

(b) Cash collection and disbursements budget for the same period.

(c) Budgeted Income Statement for first quarter, 2069

(d) Budgeted Balance Sheet at the end of first quarter, 2069 [3+6+3+4=16]

Ans: (a) Rs. 120,000; Rs. 144,000; Rs. 148,000 (b) Rs. 13,600; Rs. 57,200; Rs. 145,000 (c) Rs. 219,800 (d) Rs. 904,000

4. 2069 Q. No. 10 Or

The balance sheet of a company as at Chaitra 31, 2067 is as follows:

Equities	Rs.	Assets	Rs.
Capital	Rs. 1,500,000	Land and building	749,000
8% Debentures	150,000	Plant	500,000
(matures on Jestha 31, 2068)		Inventory	300,000
Accounts payable	160,000	Investment	300,000
Sales commission payable	32,000	(10% interest due in every month)	
Profit and loss account	80,000	Accounts receivable	48,000
		Cash (minimum balance)	25,000
Total	1,922,000	Total	1,922,000

The company makes monthly regular sales of 20,000 units at a selling price of Rs. 20 per unit in the year 2068.

Sales policy: 60% in cash sales and the rest in credit sales.

Collection from credit sales: 70% needs to be settled in the same month and 30% in the next month.

The production costs per unit of the company are as follows:

Direct material cost is Rs. 8 payable in the next month of purchase.

Direct labour cost is Rs. 5 payable in the same month.

Work overhead of Rs. 3 payable in the same month.

The production of finished goods per month would be 20,000 units since it was scheduled to meet the next month's sales requirement and direct material purchases would be made on month earlier.

The monthly fixed work overhead, administrative and selling and distribution overhead will be Rs. 20,000 payable in the month of expenses.

The depreciation of Re. 0.25 per unit of output based is chargeable on the plant.

The sales commission of 8% should be paid in the next month of sales.

The negotiation with the local commercial bank allows the company to borrow in the multiples of Rs. 5,000 in the beginning of the month of cash shortage and repayment in the multiples of Rs. 1,000. The interest payable on the borrowing is 18% on monthly basis.

Required:

① Cash budget for Baishak, Jestha and Ashadh of 2068

② Budgeted income statement for the three months ended Ashadh 31, 2068.

③ Budgeted balance sheet as on Ashadh 31, 2068. [6+4+5=15]

Ans: (1) Endling cash: Rs. 55,500; Rs. 27,525; Rs. 25,600 (2) NI = Rs. 71,650 (3) B/S Total = Rs. 19,07,650

5. 2068 Q.No. 10 or

A Closing Balance Sheet of a company is given below

Balance Sheet on year end Dec. 31.........			
Liabilities & equities	**Amount (Rs.)**	**Assets**	**Amount (Rs.)**
Share capital	39,00,000	Furniture	500,000
Retained earnings	200,000	Freehold premises	20,00,000
8 % Debentures	800,000	Plant & machinery	1,500,000
Creditors	100,000	Stock	600,000
		Debtors	300,000
		Cash at bank	100,000
Total	**50,00,000**	**Total**	**50,00,000**

Sales during the coming first six months ending on June 30 are projected as under.

Months	January	February	March	April	May	June
Sales	1,400,000	1,500,000	1,900,000	2,500,000	2,600,000	2,800,000

Sales are 25% in cash and balance on credit. 80% of credit sales will be collected in the month of sales and balance in the following month.

Purchasing are 50% on cash and balance on credit. 40% of credit purchased are paid following the month on purchase and balance in the month of purchase.

Gross profit: 20% on sales

Further information are:

i. General Expense:	Rs. 55,000 per month payable at the end of each month
ii. Monthly salary & wages:	Payable on the 1st of next month. Rs. 85,000 for the first 2 months. Rs. 95,000 thereafter.
iii. The stock level through the period is to be same as in the initial period.	
iv. The company is within the tax bracket of 40% of NIBT and has to be declared and paid 20% of divisible profit as dividend at the end of June.	
v. Company need to set aside the 50% of retained earning (closing) in general reserve.	

Required: (a) Projected income statement for six months ending June. (b) Monthly cash budget for six months ending June, and (c) Projected Balance Sheet at the end of June.

Ans: (a) R/E Rs. 398,400; (b) Closing cash: June Rs. 12,19,800 (c) B/S Rs. 62,39,800

6. 2068 Old Q.No. 11

Consumer, Inc., is a small, rapidly growing wholesaler of consumer products. Consumer's general manger believes the company's sales during the first quarter of 20X1 will be Rs. 440,000; Rs. 484,000 and Rs. 532,400. Then, it is expected that sales to remain constant for several months. Projected sales for December 20X0 are Rs. 400,000.

Consumer's projected balance sheet as of December 31, 20X0, is as follows:

	Rs.		Rs.
Cash	29,000	Accounts payable	176,400
Account receivable	276,000	Bond interest payable	12,500
Marketable securities	15,000	Property tax payable	3,600
Inventory	154,000	Bond payable (10%, due 20X6)	300,000
Building equipments	626,000	Common stock	500,000
(Net of depreciation)		Retained earnings	107,500
	11,00,000		11,00,000

The assistant controller is now preparing a monthly budget for the first quarter of 20X1. In the process, the following information has been accumulated:

i. Credit sales are 75% of total sales. Consumer's credit sales experience indicates that 10 percent of the credit sales is collected during the month of sales, and the remainder is collected during the following month.

ii. Consumer's cost of goods sold generally is 70 percent of sales. Inventory is purchased on account, and 40 percent of each month's purchases are paid during the month of purchase. The remainder is paid during the following month. To have adequate stocks of inventory on hand, the firm attempts to have inventory at the end of each month equal to half of the next month's projected cost of goods sold.

iii. The assistant controller has estimated that consumer's other monthly expenses will be as follows:

Sales salaries	Rs. 21,000
Advertising	16,000
Administrative salaries	21,000
Depreciation	25,000
Interest on bond	2,500
Property taxes	900

iv. Consumer's president has indicated that the firm should invest Rs. 125,000 in equipment for cash and marketable securities in the beginning of new year.

v. Consumer needs to keep a minimum cash balance of Rs. 19,000. If necessary, short term credit from a local bank will be used. The minimum period for such a loan is three months. The short term interest rate will be 10 percent per year. If a loan is necessary consumer has decided it should be paid off by the end of the first quarter if possible.

vi. Consumer's BOD has indicated its intention to declare and pay dividend of Rs. 50,000 on the last day of each quarter.

vii. The interest on any short term loan/borrowing will be paid when the loan is repaid. Interest on consumer's bonds is paid semiannually on January 31 and August 1, for the preceding six-month period. And property taxes are paid semiannually on February 28 and August 31 for the preceding six month period.

Required: ❶ Projected income statement for the first quarter end, 20X1 ❷ Monthly cash budget for the first quarter of 20X1 ❸ Projected balance sheet at the end of first quarter, 20X1.

[5+6+5=16]

Ans: ❶ R/E = Rs. 126,226 ❷ Closing cash: Jan Rs. 19,000; Feb Rs. 73,564; Mar RS. 41,524 ❸ B/S Rs. 12,63,234

7. 2067 Q.No. 10 OR

The opening balance sheet and other related information required to prepare master budget are provided below:

Opening Balance Sheet

Liabilities & equities	Amount	Assets		Amount
Share capital	540,000	**Inventories:**		
Accounts payable	100,000	Finished product (20,000 units at Rs. 11)		220,000
		Raw material (50,000 units at Rs. 2)		100,000
		Accounts receivable:		
		of Chaitra sale	160,000	
		of Falgun sale	48,000	208,000
		Fixed assets		102,000
		Cash at bank		10,000
Total	**640,000**	**Total**		**640,000**

Note: Finished product includes raw material and wages only.

Forecasted sales, selling price per unit, Rs. 20

Months	Baisakh	Jestha	Ashad	Shrawan	Bhadra
Sales (units)	20,000	25,000	30,000	35,000	40,000

Manufacturing overhead cost and other expenses.

Months	Baisakh	Jestha	Ashad
Indirect materials & wages (Rs.)	75,000	90,000	105,000
Other expenses	46,000	46,000	46,000
Depreciation	4,000	4,000	4,000
Total	**125,000**	**140,000**	**155,000**

Sales are 20% on cash. 50% of credit sales will be collected in the month of sales 30% in the next month of the sales and 20% in the next following month of sales.

Each unit of finished product will need 2 units of raw material at a cost of Rs. 2 per unit and direct labour hours of 2 at the rate of Rs. 3.50 per direct labour hours. The selling and distribution cost will be 10% of sales revenue. All direct labour cost and overhead cost will be paid when they become due. All the purchase will be paid in the next month of purchase.

Desired ending inventory of finished product and raw material at the end of each month will be sufficient inventory units to meet next month's sales and production need respectively. A minimum cash balance of Rs. 10,000 is to be maintained every month. The company has entered into agreement with Himalayan Bank for the line of credit to meet the deficiency of cash. According to agreement, the borrowing will be initiated at beginning of the month and repayment at the end of the month together with interest. All the borrowing will be in multiple of Rs. 5,000 and repayments in Rs. 1,000 with an interest of 18% per annum.

Required:

a. Cash budget for three months ending Ashad

b. Budgeted income statement for the period of three months ending Ashad

c. Budgeted balance sheet at the end of Ashad. [6+4+5=15]

Ans: (a) Rs. Rs. 13,000; Rs. 12,000; Rs. 10,000 (b) Rs. 1,00,125 (c) Rs. 965,000

8. 2067 (Old) Q.No. 11

The opening balance sheet and other related information necessary to prepare Master budget have been given below:

Opening Balance Sheet

Share capital	Rs. 600,000	Fixed assets	Rs. 510,000
Retained earning	60,000	Finished goods (10,000 units)	240,000
12% Bank loan	300,000	Raw materials (30,000 units)	180,000
Accounts payable	90,000	Account receivable	90,000
		Cash	30,000
Total	**1,050,000**	Total	**1,050,000**

Sales forecast for 4 months ending shrawan:

Months	Baishak	Jestha	Ashad	Shrawan
Sales units	10,000	12,000	12,000	15,000

Sales amount (Rs.)	300,000	360,000	360,000	450,000

Materials purchase budget:

Months	Baishak	Jestha	Ashad
Units purchased	30,000	37,500	30,000
Purchase amounts(Rs.)	180,000	225,000	180,000

Wages and other manufacturing expenses budget:

Months	Baishak	Jestha	Ashad
Wages & other manufacturing expenses (Rs.)	108,000	108,000	135,000

80% of the sales are on cash and the balance on credit. All credits are collected in the month following the sales. The company's policy is to have ending finished goods in each month, which will be sufficient to meet the next month requirement.

Each unit of finished product will need 2.5 units of raw material at a cost of Rs 15. 50% of the purchases are credit purchase and creditors are paid in the following month of purchase.

The company keeps minimum cash balance of Rs. 30,000. Cash deficiencies are made up by bank loan. All borrowings are to be assumed as borrowed on the first day of month and all payments are to be paid on last day of month. The interest rate is 12% per annum and is payable with the principle to the extent of refund of the principle. The company issued additional share of Rs. 100,000 in Ashadh.

Required:

1. Production Budget for 3 month ending Ashadh
2. Cash Budget
3. Budget Income Statement
4. Budgeted Balance Sheet [3+6+3+4=16]

Ans: (1) Rs. 12,000; Rs. 12,000 Rs. 15,000 (2) Rs. 30,000; Rs. 30,480; Rs. 30,410 (3) Rs. 190,870 (4) Rs. 1368,410

9. 2066 Q.No. 11

The balance sheet as of Chaitra 31, of the firm is as follows:

Capital and liabilities	Rs.	Assets	Rs.
Capital	750,000	Fixed assets (at cost)	900,000
Profit and loss account	65,000	Inventory	180,000
12% Debentures	200,000	Receivables	90,000
(maturing on Baishak 31)		Cash	25,000
Accumulated depreciation	180,000		
Total	1,195,000	Total	1,195,000

The firm maintains minimum cash balance of Rs. 25,000. The firm has realized Rs. 300,000 sales revenue during Chaitra and the sales revenues forecasting for the next four months are

Months	Forecasted sales revenues
Baishak	Rs. 300,000
Jestha	Rs. 350,000
Ashad	Rs. 350,000
Shrawan	Rs. 400,000

The firm's monthly expenses needed to be paid in cash in the same month are as follows:

Salaries	Rs. 25,000
General overhead	Rs. 15,000
Selling expenses	8% of sales

The monthly depreciation charges on the fixed assets would be Rs. 7,500. The firm sells 70% of goods in cash and the rest on credit which will mature after one month of sales.

The gross margin of the firm is 40%.

The required material will be procured one month earlier by paying cash.

The firm's negotiation with the commercial bank allows bank loan in the multiple of Rs. 5,000 to meet cash shortage and repayment in the multiple of Rs. 1,000 @ 12% interest due every month.

Required:

a. Cash receipts and disbursement budget for Baishak, Jestha and Ashad.

b. Budgeted income statement for the three months ended Ashad 31.

c. Budgeted balance sheet as on Ashad 31. [8+4+4= 16]

Ans: (a) Rs. 29,000; Rs. 25,400; Rs. 25,170 (b) Rs. 170,670 (c) Rs. 12,70,170

10. 2065 Q.No. 11

The controller of a company is planning to develop Master Budget from the following information:

a. Actual and budgeted sales are as follows:

December (actual)	Rs. 500,000
January (budgeted)	Rs. 500,000
February (budgeted)	Rs. 600,000
March (budgeted)	Rs. 400,000
April (budgeted)	Rs. 500,000

The margin on sales is 40%. All sales are credit sales. The company collects 80% of all sales within the month in which they are realized, the other 20% are collected in the following month. There are no bad debts.

b. There is no beginning inventory of finished goods and the company is planning to maintain sufficient ending goods to meet the following month sales.

c. The company buys inventory on account. Half of the purchases are paid for the month of acquisition and remaining half are paid for in the following month.

d. Operating expenses and distribution expenses are 20% and 30% of the month's sale respectively. Expenses are payable on the month of their being due.

e. The Balance Sheet as on December 31 is as follows:

Liabilities	Rs.	Assets	Rs.
Accounts payable	150,000	Cash	25,000
Share capital	300,000	Accounts receivables	100,000
12% Debentures	200,000	Furniture	75,000
Retained earnings	50,000	Plant and equipment	500,000
Total	700,000	Total	700,000

f. The company will receive Rs. 200,000 from the issue of new shares in March. Company has a policy to keep minimum cash balance of Rs. 20,000 and has reached with an agreement with a bank for loan at 12% interest per annum. Amount of interest on this loan is repaid with the repaid amount.

Required: (a) Material purchase budget (b) Cash budget (c) Budgeted income statement (d) Budgeted balance sheet at the end of March. [3+7+3+3=16]

Ans: (1) Rs. 660,000; Rs. 240,000; Rs. 300,000 (b) Rs. 20,000 for each month (3) (Rs. 110,150) (4) Rs. 10,85,200

11. 2064 Q.No. 11

The finalized balance sheet dated Chaitra 31, 20X1 of a manufacturing firm regulating a policy of minimum cash balance of Rs. 25,000 is as follows:

	Rs.		Rs.
Capital	1,050,000	Business premises	533,100
Profit and loss a/c	170,000	Plant	300,000
Creditors	110,000	Inventory:	
12% Bonds payable	120,000	Raw materials 31,200 kg	62,400
(maturing on Baishak 31, 20X2)		Finished goods: 5,000 units	150,000
		Book debts	379,500
		(due of sale of Chaitra)	
		Cash at bank	25,000
	1,450,000		1,450,000

The sales and production schedule for the next three months along with other particulars are given for necessary reference

	Sales in units	Production in units
Baishak 20X2	25,000	26,000
Jestha 20X2	30,000	30,000
Ashadh 20X2	30,000	30,000
Shrawan 20X2	-	36,000

Raw material consumption per unit will be 6 kg @ Rs. 2 per kg

One unit of output will need 4 direct labour hours (DLH) and wage rate per DLH of Rs. 2.50 will be payable in the same month.

Variable manufacturing overhead per unit will be Rs. 8 due in the same month.

The overall fixed administrative and selling and distribution expenses will be Rs. 720,000 excluding depreciation payable on monthly installments.

The given below are the prevailing inventory, production and sales practices of the firm.

Inventory: Purchase of raw material 20% of the next month's production used as closing inventory of materials on Ashadh 31, 20X2.

Sales: 50% cash sales and 50% credit sales due next month

Purchases: 40% cash purchases and 60% credit purchase due next month.

The firm has finalized to issue 1,000 shares of Rs. 100 each and share capital collection will be made by Jestha 1, 20X2.

The firm has pre-arrangement with a commercial bank for loan facility in the multiples of Rs. 2,000 for meeting cash deficiency and repayment in the multiples of Rs. 1,000 plus interest @ 6% p.a. on repaid amount. Sales price per unit of Rs. 33 will remain unchanged.

Required:

(a) Material purchase budget for Baishak, Jestha and Ashadh

(b) Cash receipts and disbursements budget for Baishak, Jestha and Ashadh.

(c) Budgeted income statement for the three months ended Ashadh 31, 20X2

(d) Budgeted balance sheet on Ashadh 20X2. [3+6+3+4=16]

12. 2063 Q.No. 11

The balance sheet of a Department store as of Ashwin 31, 2062 is as given below:

	Rs.		Rs.
Equity Capital	1,000,000	Fixed assets	980,000
Account payable	16,000	Investment in securities	250,000
12% Bank loan	250,000	Stock of merchandise	40,000
		Account receivable	50,000
Revenue account	79,000	Cash at bank (minimum balance)	25,000
Total	**1,345,000**		**1,345,000**

The projected figures for sales, purchases and expenses of next three months are as follows:

	Sales revenue Rs.	Wages Rs.	Factory overhead Rs.	Other overheads Rs.
Kartik 2062	200,000	72,000	40,000	40,000
Mangsir 2062	250,000	96,000	40,000	40,000
Poush 2062	300,000	104,000	50,000	40,000
Magh 2062	300,000	–	–	–

Additional information required to be incorporated:

a. Merchandise will cost 40% of sales and existing inventory policy to meet 50% of next month's merchandise requirement will continue in next months also.

b. Cash purchase of merchandise will be 80% and rest credit purchase will be payable in next month.

c. Cash sales will be 80% and credit sales will be 20% which will mature in next month.

d. Wages and overhead will be payable in the month of occurrence.

e. The Departmental Store has finalized negotiation for sale of a portion of fixed assets with a book value of Rs. 180,000 at a loss of Rs. 20,000 in the beginning of Kartik 1, 2062.

f. 12% Bank loan will expire at the end of Kartik 2062.
g. A dividend on investment at 15% will be received on Mangsir 1, 2062.
h. The factory overhead includes an amount of depreciation chargeable on fixed assets at 15% p.a.
i. The previous negotiation with a joint venture bank for borrowing in the multiple of Rs. 5,000 in the beginning of the month when required and repayable in the multiple of Rs. 1,000 plus interest at 12% p.a. will remain valid till the end of Poush 2062.

Required:

❶ Merchandise purchase budget for Kartik, Mangsir and Poush 2062.
❷ Cash receipts and disbursements budget for the period.
❸ Budgeted Income Statement for the period.
❹ Budgeted Balance Sheet at the end. [3+6+4+3]

Ans: (1) Rs.90,000; Rs.110,000; Rs.120,000 (2) Rs. 27,500; Rs. 25,860; Rs. 28,860 (3) Rs. (60,530) (4) Rs. 11,68,860

13. 2062 Q.No. 11

The balance sheet of a trading house as on Chaitra 31, 20 × 0 is as follows:

	Rs.		Rs.
Capital	800,000	Land & building	430,000
Bank loan	100,000	Equipment	350,000
Account payable	160,000	Inventory	225,000
Dividend payable	40,000	Account receivable	125,000
Revenue account	60,000	Cash at bank	30,000
	1,160,000		1,160,000

The projected sales and other major transactions for the next four months periods are outlined below:

Projected sales:	
Baishak 20 × 1	Rs. 600,000
Jestha 20 × 1	Rs. 640,000
Ashadh 20 × 1	Rs. 680,000
Shrawan 20 × 1	Rs. 720,000

The customers need to settle, 70% at the time of purchase and the rest in the next month.
The gross profit margin expected is 25% on sales.
The merchandise inventory equal to 50% of the next month's sales needs to be maintained.
The previous payment terms with the supplier of the merchandise requiring 60% payable in the month of purchase and 40% in the next month will still remaining valid for the next three months period.
A portion of the equipment of Rs. 150,000 book value will become useless therefore, expected to realize Rs. 120,000 sales value on Baishak 20 × 1. A new equipment costing Rs. 200,000 will be needed to purchase on the same date for cash. The equipment will depreciate by 20% p.a. on written down value.
The expected annual fixed overhead excluding depreciation will be Rs. 780,000 evenly paid for 12 months. The variable overhead will be 10% of the purchase price of the merchandise. Both the expenses will due on the same month.
Half of the dividend payable will due in Jestha 20 × 1.
Bank loan will mature on Ashadh 31, 20 × 1. The rate of interest payable is 6% p.a.
Minimum bank balance should not fall below Rs. 30,000.
The prevailing line of credit facility with a local commercial bank allows bank loan in the multiples of Rs. 5,000 in the beginning of the month of cash shortage and re-imbursement in the multiple of Rs. 1,000 with 12% p.a. interest.

Required:

1. A merchandise purchase budget for Baishak, Jestha and Ashadh 20 × 1.
2. A cash budget for Baishak, Jestha and Ashadh 20 × 1.

3. A budget income statement for the three months ended Ashadh 31, 20 × 1.
4. A budget balance sheet as on Ashadh 31, 20 × 1. [3+6+3+4]

Ans: (1) Rs. 465,000; Rs. 495,000; Rs. 525,000 (2) Rs. 34,500; Rs. 30,720; Rs. 31,720 (3) Rs. 81,790 (4) Rs. 13,15,750

14. 2061 Q.No. 11

Given below is the balance sheet as of march 31, 2003.

Capital & Liabilities	Rs.	Assets	Rs.
Capital stock	600,000	Machinery	450,000
Revenue account	82,000	Inventory of merchandise	157,500
Property tax payable in the next month	30,000	Bill receivable(maturing in May)	20,500
		Receivable (Rs. 20,000 + 22,000 + Rs. 22,000)	64,000
		Cash	20,000
	7,12,000		7,12,000

Monthly expenses as given below are expected to remain unaltered.

Salaries	Rs. 20,000	Depreciation of machinery	Rs. 7,500
Rent	Rs. 8,000	General overhead	Rs. 12,000

Variable selling expenses will be 5% of sales.

	February	March	April	May	June	July
Sales revenue	Rs. 200,000	Rs. 220,000	Rs. 225,000	Rs. 260,000	Rs. 300,000	Rs. 300,000

80% of sale is expected in cash and the rest in credit. 50% of the credit sale will mature in the next month and the rest in the next two months of sales. Gross margin will be 30% of sales. One month early purchase will be made and payment for the same will be made in the month of purchase. The firm has made arrangements for bank loan in the multiple of Rs. 1,000 to be obtained in the beginning of the month to meet cash deficiency and repayment also in the multiple of Rs. 1,000 with 12% interest due for every month.

Minimum cash balance expected is Rs. 20,000.

Required:

1. Cash receipts and disbursement budget for the three months ending June.
2. Budgeted income statement for the three months ending June.
3. Budgeted balance sheet as on June 30. [7+5+4]

Ans: (1) Rs. 20,750; Rs. 20,910; Rs. 20,080 (2) Rs. 52,580 (3) Rs. 743,580

15. 2060 Q.No. 11

Last Year's balance sheet as of June 30, 2003 is as follows:

Capital & Liabilities	Amount	Assets	Amount
Capital	1,200,000	Premises	440,000
Profit & loss account	59,000	Machinery	600,000
8% Debentures (maturing in July 31, 2003 with interest)	120,000	Inventory of finished goods	150,000
		Investments (10% interest monthly receivable)	240,000
Sales commission	20,000	Book debts	24,000
Outstanding liabilities for merchandise	80,000	Cash at bank (minimum balance)	25,000
	1,479,000		1,479,000

The company has regular customers therefore expects monthly sale of 10,000 units at a sale price of Rs. 20 per unit.

Manufacturing cost per unit comprises of

Merchandise cost – Rs. 8 payable in the next month

Direct labour cost – Rs. 4 payable in the same month

Manufacturing overhead – Rs. 3 payable in the same month

(Excluding depreciation on machinery of Rs. 0.50 per unit)

Productions are scheduled to meet the next month's requirement with purchases of merchandise without holding inventory. Monthly fixed administrative, selling and distribution expenses are Rs. 10,000 payable in the same month.

Sales commission of 10% will become due in the next month.

Sales policy: 60% cash sales and the rest is credit sales.

Collection from credit sales: 70% receivable in the same month and rest 30% in the next month

Negotiation with commercial bank allows the company borrows in the multiple of Rs. 5,000 in the beginning of the month and repayment in the multiple of Rs. 1,000 with 12% interest p.a.

Required:

1. Cash receipts and disbursement budget for July, Aug, and September.
2. Budgeted income statement for the three month ending September 2003.
3. Budgeted Balance Sheet as on September 30, 2003. [7+5+4]

Ans: (1) Rs. 26,200; Rs. 25,760; Rs. 25,100 (2) Rs. 47,420; (3) Rs. 14,64,100

16. 2059 II Q.No. 11

The Balance Sheet as on Chaitra 31st of year II of an industry is given below:

Liabilities	Amount	Assets	Amount
Capital	500,000	Building	200,000
Profit & loss account	60,000	Machine	160,000
Amount due for merchandise	225,000	Investment	40,000
Amount payable to machine supplier (due in Baishakh)	50,000	Inventory: Raw materials	121,000
		Finished goods	86,400
Outstanding wages	124,800	Amount receivable from customers	
		Sales of Falgun	184,000
		Sale of Chaitra	160,000
Tax payable due in Baishakh	16,600	Cash in hand	25,000
	976,400		**976,400**

The actual sales and forecasted sales of the coming year are given for necessary consideration.

Months	Sales in units
Falgun	23,000
Chaitra	20,000
Baishakh	24,000
Jestha	25,000
Ashadh	24,000
Shrawan	25,000
Bhadra	25,000

Sales: Sale price per unit will be Rs. 20, Sales are on credit. 20% realizes in the month of sales on which 2% discount will be allowed. Balance will be collected equally in two installments following month of sales on monthly basis.

Purchases: One unit of finished goods will require 5 kg of merchandise. The merchandise will cost Rs. 2 per kg. Merchandise is procured on credit, payable after the month purchase.

Wage: Wage payment for one unit of finished goods will be Rs. 6 and which will be paid in the following month.

Overhead: Payment will be made in the same month. Variable manufacturing will be Rs. 2 per unit Fixed manufacturing cost for one year will be Rs. 120,000.

Inventory policy: Merchandise - 50% of the subsequent month's requirement.
Finished goods - 20% of the subsequent month's sales.

Minimum cash balance expected will Rs. 25,000.

The industry paid Rs. 50,000 in Baishakh to machine supplier. A commercial bank has given approval to avail loan to the industry in the multiple of Rs. 5,000 @ 12% p.a. The loan provides provision to reimburse in the multiple of Rs. 1,000.

Required:
1. Production Budget for three months ending Ashadh.
2. Merchandise purchase budget for three months ending Ashadh.
3. Cash Budget for three months ending Ashadh.
4. Income statement (consolidated). [3+3+7+3]

Ans: (1) Rs. 24,200; Rs. 24,800, Rs. 24,200 (2) Rs. 245,000; Rs. 245,000; Rs. 246,000 (3) Rs. 28,250; Rs. 28,480; Rs. 25,280 (4) Rs. 104,960

17. 2058 II Q.No. 11

A factory maintaining minimum cash balance of Rs. 20,000 has given the audited balance sheet as on Chaitra 31st of the last year.

	Amount		Amount
Capital	150,000	Fixed assets	200,000
Revenue profit	85,100	Inventory of raw materials	6,250
Outstanding variable overhead	13,800	Finished goods	24,000
Account payable	11,750	Account receivable	
12% bank loan (due on Baishakh 31st)	40,000	Sale of Falgun	24,000
		Sale of Chaitra	26,400
		Cash in hand	20,000
	300,650		300,650

The sales and production volume for 6 months are given below:

	Sales in unit	Ending inventory in unit	Beginning inventory in unit	Production in unit	Material (4 kg per unit)
Falgun	1,000	550	500	1,050	4,200 kg.
Chaitra	1,100	600	550	1,150	4,600 kg.
Baishakh	1,200	650	600	1,250	5,000 kg.
Jestha	1,300	700	650	1,350	5,400 kg.
Ashadh	1,400	625	700	1,325	5,300 kg.
Shrawan	1,250	575	625	1,200	4,800 kg.

Cost per kg of material will be Rs. 5. The factory has a policy of maintaining material inventory equal to 25% of the next month's requirement.

Each unit of finished goods needs 2 direct labour hour (DLH) and wage rate per DLH will be Rs. 4 payable in the same month. Variable factory overhead per unit of output will be Rs. 12 payable in the next month.

Annual fixed overhead will be Rs. 156,000 payable in the same month.

Sales policy: 20% is cash sales and 80% will be credit sales. Credit sales collection will be 60% in the first month following sales and 40% in the second month following sales.

Payment for procurement: 50% in the same month and 50% in the next month

The factory has line of negotiation with a commercial bank for loans. The loan can be obtained in the multiple of Rs. 2,000 with interest of 12% p.a. with repayment facilities in the multiple of Rs. 1,000.

Required:
1. Material purchase budget for Baishakh, Jestha & Ashadh
2. Cash budget for Baishakh, Jestha and Ashadh
3. Income statement in composite form
4. Balance Sheet as on Ashadh 31st [3+7+3+3]

Ans: (1) Rs. 25,500; Rs. 26,875; Rs. 25,875 (2) Rs. 21,740; Rs. 20,833; Rs. 20,358 (3) Rs. 91,250 (4) Rs. 366,558

MBA

18. 2058 II Q.No. 6

The Balance Sheet of a company as of 21st Chaitra last year is given below:

Liabilities	Amount	Assets	Amount
Share capital	600,000	Inventory:	
		Finished goods (5,000 units)	150,000
Profit and loss a/c	60,000	Raw material @ Rs. 5	55,000

Sundry creditors Outstanding expenses	120,000 120,000	Sundry debtors Cash Investment Fixed assets	480,000 21,000 100,000 94,000
	900,000		900,000

The purchases and sales estimated are:

Months	Baishakh	Jestha	Ashadh	Shrawan
Sales in units	10,000	12,000	14,000	12,000
Sales revenue	Rs.400,000	Rs.480,000	Rs.560,000	Rs.480,000
Purchases	Rs.120,000	Rs.130,000	Rs.130,000	—

20% of the sales are on cash and the balance on credit. All credits are collected in the month following the sales. All purchases are paid on the following month of purchase. Time lag on wages and expenses 1/2 month. Non-manufacturing overhead are payable on the month of their being due. The expenses for 3 months are as under:

Months	Baishakh	Jestha	Ashadh
Wages and expenses	Rs. 220,000	Rs. 260,000	Rs. 260,000
Non-manufacturing overhead	Rs. 100,000	Rs. 119,220	Rs. 140,000

The company's policy is to have enough ending finished goods each month to fill 50% of the following month sale. Ending inventory of raw material as on 31st Ashadh is 13000 units. The company has been thinking to buy a machine in the month of Baishakhh at a cost of Rs. 150,000. The company keeps minimum cash balance of Rs. 20,000. Cash deficiencies are made up by bank loan. All borrowings are to be assumed as borrowed on the first day of month and all payments are to be paid on last day of month. The interest rate is 12% per annum and is payable with the principle to the extent of refund of the principle.

The company issued additional share capital of Rs. 100,000 in Jestha and in the same month the company also received interest amounting Rs. 3,000 from investment.

Required:

1. Production budget for 3 months ending Ashadh
2. Cash budget
3. Budgeted balance sheet [20]

Ans: (1) Rs. 11,000; Rs. 13,000; Rs. 13,000 (2) Rs. 20,000; Rs. 20,000 Rs. 20,000

19. 2057 Q.No. 6

The budget officer of a retail firm is preparing different budgets for 3 months commencing from Baishakh. The actual and estimated transactions of the firm are as under.

Particulars	Falgun (actual)	Chaitra (actual)	Baishakh (estimated)	Jestha (estimated)	Ashadh (estimated)
Sales units	3,750	4,500	5,000	6,000	7,000
Sales revenue (Rs.)	150,000	180,000	200,000	240,000	280,000
Purchase units	—	5,000	5,500	6,500	7,500
Purchases amount (Rs.)	—	100,000	110,000	130,000	150,000
Other expenses (Rs.)	—	30,000	25,000	30,000	35,000
Plant purchases (Rs.)	—	—	50,000	—	—
Ending inventory in units	—	2,500	—	—	4,000
Net profit	—	—	—	—	**90,000**

Company's sales are mostly on credit. Experience shows that 10% of total sales are cash sale and 50% of credit sales are collected on the following month of sale and remaining in the next following month. 50% of purchases are paid on the month of purchase and remaining on the following month of purchase. Expenses are also payable on the following month of incurrence.

The company has a policy of maintaining minimum cash balance of Rs. 25,000 and beginning cash balance in Baishakh was also of the same amount. The company arranged a loan from bank at 12% per annum for deficit balance. Loan are received in a multiple of Rs. 5,000 and payments are made in Rs. 1,000. Amount of interest due are paid for the loan repaid with the repayment amount to a nearest of Rs. 100.

Required:

1. Sales budget;
2. Cost of goods sold budget
3. Cash budget;
4. Budgeted balance sheet. [20]

Ans: (1) Rs. 200,000; Rs. 240,000; Rs. 280,000 (2) Rs. 360,000 (3) Rs. 28,500; Rs. 58,100; Rs. 114,100 (3) Rs. 269,800 (4) Rs. 604,100

10. USE OF COST VOLUME AND PROFIT ANALYSIS IN PROFIT PLANNING

MBS

THEORETICAL QUESTIONS

1. 2068 Old Q.No. 8

Write about the importance of cost volume profit analysis to managerial planning and decision making.

2. 2065 Q.No. 7

"The cost volume profit analysis is a useful managerial tool in profit planning." Comment. [6]

3. 2064 Q.No. 7

Write about the relationship between budgeting and cost-volume-profit analysis. Also enumerate the objectives of cost-volume-profit analysis. [3+3=6]

4. 2063 Q.No. 7 OR a

Write short notes on importance of margin of safety to management

5. 2062 Q.No. 7 OR

"The break-even analysis is a useful device of profit planning." Comment on this statement.[3+3]

6. 2061 Q.No. 9

"Various assumptions of CVP analysis have made the study lopsided." Comment

7. 2060 Q.No. 9 (b)

"Margin of safety is the relationship of planned or actual sales to break-even sales." Comment and also write briefly its importance to managerial planning and decision making.'

NUMERICAL PROBLEMS

8. 2071 Q.No. 8

Following data is available for a product:

- Variable cost per unit = Rs. 6
- Margin of safety = 10,000 units
- Fixed cost = Rs. 100,000
- Fixed cost per unit = Rs. 5

Required: ❶ Selling price per unit ❷ Contribution margin ratio ❸ Breakeven point in units ❹ Profit if sales is 20,000 units ❺ Sales if profit is Rs. 120,000. [10]

Ans: ❶ Rs. 16 ❷ 62.5% ❸ 10,000 units ❹ Rs. 100,000 ❺ Rs. 352,000

9. 2070 Q.No. 7 OR

The annual budget data for two similar companies are as follows:

	Company 'X'		Company 'Y'	
Sales (Rs.)		400,000		400,000
Less:				
Variable cost (Rs.)	200,000		100,000	
Fixed cost (Rs.)	100,000	300,000	200,000	300,000
Profit (Rs.)		100,000		100,000

Required:

i. Break even point for each company
ii. Sales volume at which each of the two companies will make a profit of Rs.50,000.
iii. Assess, how their profitability will change with increase in volume.
iv. Comment the economic characteristics of two companies [2.5×4=10]

Ans: i. BEP: X: Rs.200,000; Y : Rs.266,667 ii. Sales : X: Rs.300,000; Y: Rs.333,333