CHAPTER-15

BUDGET & BUDGETORY CONTROL

Flexible Budget

Q1 (SMN1) A factory which expects to operate 7,000 hours i.e., at 70% level of activity, furnishes details of expenses as under:

Variable expenses	Rs. 1,260
Semi-variable expenses	Rs. 1,200
Fixed expenses	Rs. 1,800

The semi- variable expenses go up by 10% between 85% and 95% activity and by 20% above 95% activity. Construct a flexible budget for 80, 90 and 100 per cent activities.

Q2(SMN2). A department of Company X attains sale of Rs. 6,00,000 at 80 per cent of its normal capacity and its expenses are given below:

Administration costs:

	(Rs.)
Office salaries	90,000
General expenses	2 per cent of sales
Depreciation	7,500
Rates and taxes	8,750
Selling Costs:	
Salaries	8 per cent of sales
Travelling expenses	2 per cent of sales
Sales office expenses	1 per cent of sales
General expenses	1 per cent of sales
Distribution costs :	
Wages	15,000
Rent	1 per cent of sales
Other expenses	4 per cent of sales

Draw up flexible administration, selling and distribution costs budget, operating at 90 per cent, 100 per cent and 110 per cent of normal capacity.

Q3(SMN3). Action Plan Manufacturers normally produce 8,000 units of their product in a month, in their Machine Shop. For Inc month of January, they had planned for a production of 10 000 units. Owing to a sudden cancellation of a contract in the middle of January, they could only produce 6,000 units in January.

Indirect manufacturing costs are carefully planned and monitored in the Machine Shop and the Foreman Of the shop is paid a 10% of the savings as bonus when in any month the indirect manufacturing cost incurred is less than the budgeted provision.

The Forman has put in a claim that he should be paid a bonus of Rs. 88.50 for the month of January. The Work Manager wonders how anyone can claim a bonus when the Company has lost sizeable contract.

The relevant figures are as under:

Indirect manufacturing Expenses	for a normal month	Planned for January	Actual in cost January
	(Rs.)	(Rs.)	(Rs.)
Salary of foreman	1,000	1,000	1,000
Indirect labour	720	900	600
Indirect material	800	1,000	700
Repairs and maintenance	600	650	600
Power	800	875	740
Tools consumed	320	400	300
Rates and taxes	150	150	150
Depreciation	800	800	800
Insurance	100	100	100
	5,290	5,875	4,990

Do you agree with the Works Manager? Is the Foreman entitled to any bonus for the performance in January? Substantiate your answer with facts and figures.

Q4. **(SMP1).** ABC Ltd. is currently operating at 75% of its capacity. In the past two years the level of operations were 55% and 65% respectively. Presently, the production is 75000 units. The company is planning for 85% capacity level during 2013-2014. The cost details are as follows:

	55% (Rs.)	65% (Rs.)	75% (Rs.)
Direct Materials	11,00,000	13,00,000	15,00,000
Direct Labour	5,50,000	6,50,000	7,50,000
Factory Overheads	3,10,000	3,30,000	3,50,000
Selling Overheads	3,20,000	3,60,000	4,00,000
Administrative Overheads	1,60,000	1,60,000	1,60,000
	24,40,000	28,00,000	31,60,000

Profit is estimated @ 20% on sales.

The following increases in costs are expected during the year:

	In percentage
Direct Materials	8
Direct Labour	5
Variable Factory Overheads	5
Variable Selling Overheads	8
Fixed Factory Overheads	10
Fixed Selling Overheads	15
Administrative Overheads	10

Prepare flexible budget for the period 2013-2014 at 85% level of capacity. Also ascertain profit and contribution.

Q5.(PM) S Ltd. has prepared budget for the coming year for its two products A and B.

	Product A (Rs.)	Product B (Rs.)
Production & Sales unit	6,000 units	9,000 units
Raw Material cost per unit	60.00	42.00
Direct labour cost per unit	30.00	18.00
Variable overhead per unit	12.00	6.00
Fixed overhead per unit	8.00	4.00
Selling price per unit	120.00	78.00

After some marketing efforts, the sales quantity of the Product A & B can be increased by 1,500 units and 500 units respectively but for this purpose the variable overhead and fixed overhead will be increased by 10% and 5% respectively for the both products.

You are required to prepare flexible budget for both for products :

(a) Before marketing efforts

(b) After marketing efforts. **[R-M-15/9][R-M19/13][MTP-MAR19/5(B)]**

Q6. You are given the following data of a manufacturing concern:

	Rs.
Variable Expenses (at 50% capacity):	
Materials	48,00,000
Labour	51,20,000
Others	7,60,000
Semi variable expenses (at 50% capacity):	
Maintenance and Repairs	5,00,000
Indirect Labour	19,80,000
Sales Dept. Salaries	5,80,000
Sundry Administrative Expenses	5,20,000
Fixed Expenses:	
Wages & Salaries	16,80,000
Rent, Rates and Taxes	11,20,000
Depreciation	14,00,000
Sundry Administrative Exp.	17,80,000

The fixed expenses remain constant for all levels of production. Semi variable expenses remain constant between 45% and 65% of capacity whereas it increases by 10% between 65% and 80% capacity and 20% between 80% and 100 % capacity.

Sales at various levels are as under:

Capacity	Sales (Rs.)
75%	2,40,00,000
100%	3,20,00,000

Prepare flexible budget at 75% and 100% capacity. **[ICAI-M17/6(A)]**

Material Purchase Budget and Wages Budget

Q7. **[SMP5]** Concorde Ltd. manufactures two products using two types of materials and one grade of labour. Shown below is an extract from the company's working papers for the next month's budget:

	Product - A	Product - B
Budgeted sales (in units)	2,400	3,600
Budgeted material consumption per unit (in kg):		
Material-X	5	3
Material-Y	4	6
Standard labour hours allowed per unit of product	3	5

Material-X and Material-Y cost Rs.4 and Rs.6 per kg and labours are paid Rs.25 per hour. Overtime premium is 50% and is payable, if a worker works for more than 40 hours a week. There are 180 direct workers.

The target productivity ratio (or efficiency ratio) for the productive hours worked by the direct workers in actually manufacturing the products is 80%. In addition the non-productive down-time is budgeted at 20% of the productive hours worked.

There are four 5-days weeks in the budgeted period and it is anticipated that sales and production will occur evenly throughout the whole period.

It is anticipated that stock at the beginning of the period will be:

Product-A	400 units
Product-B	200 units
Material-X	1,000 kg.
Material-Y	500 kg.

The anticipated closing stocks for budget period are as below

Product-A	4 days sales
Product-B	5 days sales
Material-X	10 days consumption
Material-Y	6 days consumption

Required:

Calculate the Material Purchase Budget and the Wages Budget for the direct workers, showing the quantities and values, for the next month. **[MTP-OCT18/5(A)]**

Production Budget

Q8. **(SMP4/PM)**Jigyasa Ltd. is drawing a production plan for its two products Minimax (MM) and Heavyhigh (HH) for the year 2013-14. The company's policy is to hold closing stock of finished goods at 25% of the anticipated volume of sales of the succeeding month. The following are the estimated data for two products:

	Minimax (MM)	Heavyhigh (HH)
Budgeted Production units	1,80,000	1,20,000
Direct material cost per unit	220	280
Direct labour cost per unit	130	120
Manufacturing overhead	4,00,000	5,00,000

The estimated units to be sold in the first four months of the year 2013-14 are as under

	April	May	June	Juy
Minimax	8,000	10,000	12,000	16,000
Heavyhigh	6,000	8,000	9,000	14,000

Prepare production budget for the first quarter in month wise. **[R-N-13/9][R-N18/14]**

Q9. **(PM)** A Light Motor Vehicle manufacturer has prepared sales budget for the next few months, and the following draft figures are available :

Month	No. of Vehicles
October	4,000
November	3,500
December	4,500
January	6,000
February	6,500

To manufacture a vehicle a standard cost of Rs. 2,85,700 is incurred and sold through dealers at an uniform selling price of Rs. 3,95,600 to customers. Dealers are paid 12.5% commission on selling price on sale of a vehicle.

Apart from other materials four units of Part-X are required to manufacture a vehicle. It is a policy of the company to hold stocks of Part-X at the end of the each month to cover 40% of next month's production. 4,800 units of Part-X are in stock as on 1st October.

There are 950 nos. of completed vehicles are in stock as on 1st October and it is policy to have stocks at the end of each month to cover 20% of the next month's sales.

You are required to :

(a) Prepare Production budget (in nos.) for the month of October, November, December and January.

(b) Prepare a Purchase budget for Part-X (in units) for the months of October, November and December.

(c) Calculate the budgeted gross profit for the quarter October to December.

[MTP-APR 19/4(A)-Similar]

Q10. X Y Z Limited is drawing a production plan for its two products - Product 'xml' and 'Product 'yml' for the year 2015-16. The company's policy is to maintain closing stock of finished goods at 25% of the anticipated volume of sales of the succeeding month.

The following are the estimated data for the two products:

	xml	yml
Budgeted Production (in units)	2,00,000	1,50,000
Direct Material (per unit)	Rs. 220	Rs. 280
Direct Labour (per unit)	Rs. 130	Rs. 120
Direct Manufacturing Expenses	Rs. 4,00,000	Rs. 5,00,000

The estimated units to be sold in the first four months of the year 2015-16 are as under:

	April	May	June	July
xml	8,000	10,000	12,000	16,000
yml	6,000	8,000	9,000	14,000

Prepare:

(i) Production Budget (Month wise)

(ii) Production cost Budget (for first quarter of the year) **[ICAI-M15/1(B)]**

Q11. **(SMN4/C9).** A single product company estimated its sales for the next year quarterwise as under:

Quarter	**Sales Units**
I	30,000
II	37,500
III	41,250
IV	45,000

The opening stock of finished goods is 10,000 units and the company expects to maintain the closing stock of finished goods at 16,250 units at the end of the year. The production pattern in each quarter is based on 80% of the sales of the current quarter and 20% of the sales of the next quarter. The opening stock of raw materials in the beginning of the year is 10,000 kg and the closing stock at the end of the year is required to be maintained at 5,000 kg. Each unit of finished output requires 2 kg of raw materials.

The company proposes to purchase the entire annual requirement of raw materials in the first three quarters in the proportion and that the prices given below:

Quarter	Purchase of raw materials % to total annual requirement in quantity	Price per kg Rs.
I	30%	2
II	50%	3
III	20%	4

The value of the opening stock of raw materials in the beginning of the year is Rs. 20,000.

Required: Present the following for the next year, quarter wise: (i) Production budget in units; (ii) Raw material consumption budget in quantity; (iii) Raw material purchase budget in quantity and value; and (iv) Priced Stores Ledger card of the raw material using First in First out Method.

Sales Budget

Q12. XY Co. Ltd manufactures two products viz., X and Y and sells them through two divisions, East and West. For the purpose of Sales Budget to the Budget Committee, following information has been made available for the year 2014-15:

Product	Budgeted Sales		Actual Sales	
	East Division	West Division	East Division	West Division
X	400 units at Rs. 9	600 units at Rs. 9	500 units at Rs. 9	700 units at Rs. 9
Y	300 units atRs. 21	500 units at Rs. 21	200 units at Rs. 21	400 units at Rs. 21

Adequate market studies reveal that product X is popular but under priced. It is expected that if the price of X is increased by Rs. 1, it will, find a ready market. On the other hand, Y is overpriced and if the price of Y is reduced by Rs. 1 it will have more demand in the market. The company management has agreed for the aforesaid price changes. On the basis of these price changes and the reports of salesmen, following estimates have been prepared by the Divisional Managers:
Percentage increase in sales over budgeted sales.

Product	East Division	West Division
X	+ 10%	+ 5%
Y	+ 20%	+ 10%

With the help of intensive advertisement campaign, following additional sales (over and above the above mentioned estimated sales by Divisional Mangers) are possible:

Product	East Division	West Division
X	60 units	70 units
Y	40 units	50 units

You are required to prepare Sales Budget for 2015-16 after incorporating above estimates and also show the Budgeted Sales and Actual Sales of 2014-15. **[ICAI-N15/3(A)]**

Budget comparison of two periods

Q13. **(SMP2):** The cost accountant of manufacturing company provides you the following details for year 2012.

	(Rs.)		(Rs.)
Direct materials	1,75,000	Other variable costs	80,000
Direct Wages	1,00,000	Other fixed costs	80,000
Fixed factory overheads	1,00,000	Profit	1,15,000
Variable factory overheads	1,00,000	Sales	7,50,000

During the year the company manufactured two products A and B and the output and costs were :

	A	B
Output (units)	2,00,000	1,00,000
Selling price per unit	Rs. 2.00	Rs. 3.50
Direct materials per unit	Rs. 0.50	Rs. 0.75
Direct wages per unit	Rs. 0.25	Rs. 0.50

Variable factory overhead are absorbed as a percentage of direct wages. Other variable costs have been computed as : Product A Rs. 0.25 per unit; and B Rs. 0.30 per unit.

During 2013, it is expected that the demand for product A will fall by 25% and for B by 50%. It is Decided to manufacture a further product C. the cost for which are estimated as follows:

	Product C
Output (units)	2,00,000
Selling price per unit	Rs. 1.75
Direct materials per unit	Rs. 0.40
Direct wages per unit	Rs. 0.25

It is anticipated that the other variables cost per unit will be the same as for product A.

Prepare a budget to present to the management, showing the current position and the position for 2013. Comment on the comparative results.

Q14. **(SMN5) :**A company is engaged in the manufacture of specialised sub-assemblies required for certain electronic equipments, The company envisages that in the forthcoming month, December, 2012 the sales will take a pattern in the ratio of 3 : 4 : 2 respectively of sub-assemblies, ACB, MCB and DP.

The following is the schedule components required for manufacture:

Sub-assembly	Selling price	Base board	Component requirements		
			IC08	IC12	IC26
ACB	520	1	8	4	2
MCB	500	1	2	10	6
DP	350	1	2	4	8
Purchase price (Rs.)		60	20	12	8

The direct labour time and variable overheads required for each of the sub-assemblies are:

	Labour hours per sub-assembly		
	Grade A	Grade B	Variable overheads per sub-assembly (Rs.)
ACB	8	16	36
MCB	6	12	24
DP	4	8	24
Direct wage rate per hour (Rs.)	5	4	--

The labourers work 8 hours a day for 25 days a month.

The opening stocks of sub-assemblies and components for December, 2012 are as under:

sub-assemblies		Components	
ACB	800	Base Board	1,600
MCB	1,200	IC08	1,200
DP	2,800	IC12	6,000
		IC26	4,000

Fixed overheads amount to Rs. 7,57,200 for the month and a monthly profit target of Rs. 12 lacs has been set.

The company is eager for a reduction of closing inventories for December, 2012 of sub-assemblies and components by 10% of quantity as compared to the opening stock Prepare the following budgets for December 2012 :

(i) Sales budget in quantity and value.

(ii) Production budget in quantity

(iii) Component usage budget in quantity.

(iv) Component purchase budget in quantity and value.

(v) Manpower budget showing the number of workers and the amount of wages payable.

Q15. **(PM).** AK Limited produces and sells a single product. Sales budget for calendar year 2013 by a quarters is as under:

Quarters I	I	II	III	IV
No. of units to be sold	18,000	22,000	25,000	27,000

The year is expected to open with an inventory of 6,000 units of finished products and close wilh inventory of 8,000 units. Production is customarily scheduled to provide for 70% of the current quarter's sales demand plus 30% of the following quarter demand. The budgeted selling price per unit is Rs. 40. The standard cost details for one unit of the product areas follows:

Variable Cost Rs. 34.50 per unit

Fixed Overheads Rs. 2 per hour based on a budgeted production volume of 1,10,000 direct labour hours for the year. Fixed overheads are evenly distributed through-out the year.

You are required to:

(1) Prepare Quarterly Production Budget for the year.

(ii) In which quarter of the year, company expected to achieve break-even point.

Expenses Budget

Q16. (PM). Pentax Limited has prepared its expense budget for 20,000 units in its factory for the year 2013 as detailed below:

Particulars	**(Rs. per unit)**
Direct Materials	50
Direct Labour	20
Variable Overhead	15
Direct Expenses	6
Selling Expenses (20% fixed)	15
Factory Expenses (100% fixed)	7
Administration expenses (100% fixed)	4
Distribution expenses (85% variable)	12
Total	129

Prepare an expense budget for the production of 15,000 units and 18,000 units. **[R-N19/14-Similar]**

Q17. (PM) RST, Limited is presently operating at 50% capacity and producing 30000 units. The entire output is sold at a price of Rs. 200 per unit. The cost structure at the 50% level of activity is as under :

	Rs.
Direct Material	75 per unit
Direct Wages	25 per unit
Variable Overheads	25 per unit
Direct Expenses	15 per unit
Factory Expenses (25% fixed)	20 per unit
Selling and Distribution Exp. (80% variable)	10 per unit
Office and Administrative Exp. (100% fixed)	5 per unit

The company anticipates that the variable costs will go up by 10% and fixed costs will go up by 15%.

You are required to prepare an Expense budget, on the basis of marginal cost for the company at 50% and 60% level of activity and find out the profits at respective levels.**[MTP-MAR-18/3(B)]**

Master Budget

Q18. (SMN6): Float glass Manufacturing Company requires you to present the Master budget for the next year from the following information:

Sales:	
Toughened Glass	Rs. 6,00,000
Bent Glass	Rs. 2,00,000
Direct material cost	60% of sales
Direct wages	20 workers @ Rs. 150 per month
Factory overheads :	
Indirect labour –	
Works manager	Rs. 500 per month
Foreman	Rs. 400 per month
Stores and spares	2.5% on sales
Depreciation on machinery	Rs. 12,600
Light and power	Rs. 3,000
Repairs and maintenance	Rs. 8,000
Others sundries	10% on direct wages
Administration, selling and distribution expenses	Rs. 36,000 per year

ADDITIONAL QUESTIONS FOR PRACTICE

Q19. **(PM).** M/s NNSG Ltd. specialized in manufacturing of piston rings for motor vehicle It has prepared budget for Rs. 8,000 units perannum at budgeted cost of Rs. 21,64,400 as detailed below:

	(Rs.)	(Rs.)
Fixed cost Manufacturing)		2,28,000
Variable costs:		
Power	18,000	
Repairs, etc.	16,000	
Other variable cost	6,400	
Direct material	6,16,000	
Direct labour	12,80,000	19,36,400
		21,64,400

Considering the possible impact on sales turnover by market trends, the company decides to prepare flexible budget with a production target of 4,000 and 6,000 units. On behalf of the company you are required to prepare a flexible budget for production levels at 50% and 75%.

Assuming the selling price per unit is maintained at Rs. 400 as at present, indicate the effect on net profit. Administration, selling and distribution overheads continue at Rs. 72,000.

Q20. The following data are available in a manufacturing company for a half - yearly period:

	Rs.(lakhs)	Rs. (Lakhs)
Fixed expenses:		
Wages and salaries	8.4	
Rent , rates and taxes	5.6	
Depreciation	7.0	
Sundry administration expenses	8.9	29.9
Semi –variable expenses: (at 50% of capacity)		
Maintenance and repairs	2.5	
Indirect labour	9.9	
Sales deptt. Salaries etc.	2.9	
Sundry administrative expenses	2.6	17.9
Variable expenses: (at 50% of capacity)		
Materials	24.0	
Labour	25.6	
Other expenses	3.8	53.4

Assume that the fixed expenses remain constant for all levels of production , semi – variable expenses remain constant between 45% and 65% of capacity increasing by 10% between 65% and 80% capacity, and by 20% between 80% and 100% capacity.

Sales at the various levels are :

	(Rs. Lakhs)
60% capacity	100.00
75% capacity	120.00
90% capacity	150.00
100% capacity	170.00

Prepare a flexible budget for the half year and forecast the profits at 60% , 75% , 90% and 100% of capacity.

Q21. From the following data , prepare a production budget for the ABC Co. Ltd.

Stock for the budgeted period:		
Product	As on 1st January	As on 30th June
A	8,000	10,000
B	9,000	8,000
C	12,000	14,000

Products	**Normal loss in production**	**Requirements to fulfil sales programme**
A	4%	A 60,000 units
B	2%	B 50,000 units
C	6%	C 80,000 units

Production & Purchase Budget.

Man Power Budget

Q22. **(C10).**X Ltd. manufacturing three products, has the following direct labour requirements for the products:

Direct labour hours per unit (in minutes)

Operation	**Products**		
	1	2	3
I	18	42	30
II	--	12	24
III	9	6	--

The factory works 8 hours per day, 6 days in a week. Each budget quarter has 13 weeks and in terms of leave, holidays and other causes, 124 hours are lost in each quarter. Operations I, II and III have the budgeted hourly rates for workers at Rs 16, Rs 20 and Rs. 24 respectively. The budgeted sales of the products during the quarter are :

Product 1	9,000 units
Product 2	15,000 units
Product 3	12,000 units

There were opening stocks of 5,000 units of Product 2 and 4,000 units of Product 3 and it is proposed to have closing stock at the end of the budget quarter as follows

Product 1	1,000 units
Product 3	2,000 units

Required: Prepare a Man Power Budget for the quarter, showing for each operation: (i) Direct labour hours (ii) Direct labour cost, and (iii) Number of workers.

Production Budget , Material Purchase Budget and Direct Labour Budget

Q23. Aditya Ltd. manufactures two products K and H. The sales director has anticipated to sale 8,000 units of Product K and 4,200 units of Product H. The Standard cost data for the products for next year are as follows:

	Product- K Per unit	Product- H Per unit
Direct materials:		
-Material X @ Rs.15 per kg.	12 kg.	15 kg.
-Material Y @ Rs.16 per kg.	15 kg.	6 kg.
-Material Z @ Rs.5 per ltr.	8 ltr.	14 ltr.
Direct wages:		
-Unskilled @ Rs.40 per hour	12 hour	10 hour
-Skilled @ Rs.75 per hour	8 hour	5 hour

Budgeted stocks for next year are as follows:

		Product- K Per unit	Product- H Per unit
1st April, 2016		800	1,600
31st March, 2017		1,000	2,100
	Material-X (kg)	**Material-Y (kg)**	**Material-Z (kg)**
1st April, 2016	25,000	30,000	14,000
31st March, 2017	30,000	18,000	7,500

Prepare the following budgets for next year:

(a) Production budget, in units;

(b) Material purchase budget, in quantity and in value;

(c) Direct labour budget, in hours and in value. **(R-N-16/10)**

Q24. Little Angel School has a total of 150 students consisting of 5 sections with 30 students per section. The school plans for a picnic around the city during the week — end to places such as the zoo, the amusement park, the planetarium etc. A private transport operator has come forward to lease out the buses for taking the students. Each bus will have a maximum capacity of 50 (excluding 2 seats reserved for the teachers accompanying the students. The school will employ two teachers for each bus, paying them an allowance of Rs. 50 per teacher. It will also lease out the required number of buses. The following are the other cost estimates:

	Cost per student
Breakfast	Rs. 5
Lunch	10
Tea	3
Entrance fee at zoo	2

Rent Rs. 650 per bus.

Special permit fee Rs. 50 per bus

Block entrance fee at the planetarium Rs. 250.

Prizes to students for games Rs. 250.

No costs are incurred in respect of the accompanying teachers (except the allowance of Rs. 50 per teacher).

You are required to prepare:

(a) A flexible budget estimating the total cost for the levels of 30, 60, 90, 120 and 150 students. Each item of cost is to be indicated separately.

(b) Compare the average cost per student at these levels.

(c) What will be your conclusions regarding the break-been level of student if the school proposes to collect Rs. 45 per student? **[R-M-11/12][R-M-17/1-Similar]**

Budget and Economic Order Quantity

Q25. G Ltd. manufactures two products called 'M' and 'N'. Both products use a common raw material Z. The raw material Z is purchased @ Rs. 36 per kg from the market. The company has decided to review inventory management policies for the forthcoming year.
The following forecast information has been extracted from departmental estimates for the year ended 31st March 2016 (the budget period):

	Product M	Product N
Sales (units)	28,000	13,000
Finished goods stock increase by year end	320	160
Post-production rejection rate (%)	4	6
Material Z usage (per completed unit net of wastage)	5 kg.	6 kg.
Material Z wastage (%)	10	5

Additional information:

- Usage of raw material Z is expected to be at a constant rate over the period.
- Annual cost of holding one unit of raw material in stock is 11% of the material cost.
- The cost of placing an orders is Rs. 320 per order.
- The management of G Ltd. has decided that there should not be more than 40 orders in a year for the raw material Z.

Required:

(a) Prepare functional budgets for the year ended 31st March 2016 under the following headings:
  (i) Production budget for Products M and N (in units).
  (ii) Purchases budget for Material Z (in kgs and value).
(b) Calculate the Economic Order Quantity for Material Z (in kgs).
(c) If there is a sole supplier for the raw material Z in the market and the supplier do not sale more than 4,000 kg. of material Z at a time. Keeping the management purchase policy and production quantity mix into consideration, calculate the maximum number of units of Product M and N that could be produced.

[R-N-15/9][R-N-17/9][R-M18/14, IPC/N18/4(A)-Similar]

Q26. **(PM)**A factory incurred the following expenditure during the year 2007:

		Rs.
Direct material consumed		12,00,000
Manufacturing Wages		7,00,000
Manufacturing overhead:		
Fixed	3,60,000	
Variable	2,50,000	6,10,000
		25,10,000

In the year 2008, following changes are expected in production and cost of production.

(i) Production will increase due to recruitment of 60% more workers in the factory.
(ii) Overall efficiency will decline by 10% on account of recruitment of new workers.
(iii) There will be an increase of 20% in Fixed overhead and 60% in Variable overhead.
(iv) The cost of direct material will be decreased by 6%
(v) The company desire to earn a profit of 10% on selling price.

Ascertain the cost of production and selling price.

Q27. V Ltd. produces and markets a very popular called 'X'. The company is interested in presenting its budget for the second quarter of 2019.

The following information are made available for this purpose :

(i) It expects to sell 50,000 bags of 'X' during the second quarter of 2019 at the selling price of Rs. 900 per bag.

(ii) Each bag of 'X' requires 2.5 kgs. of a raw – material called 'Y' and 7.5 kgs. of raw – material called 'Z'.

(iii) Stock levels are planned as follows :

Particulars	Beginning of Quarters	End of Quarter
Finished Bags of 'X' (Nos.)	15,000	11,000
Raw – Material 'Y' (Kgs.)	32,000	26,000
Raw – Material 'Z' (Kgs.)	57,000	47,000
Empty Bag (Nos.)	37,000	28,000

(iv) 'Y' cost Rs. 120 per kg., and 'Empty Bag' costs Rs. 80 each.

(v) It requires 9 minutes of direct labour to produce and fill one bag of 'X'. Labour cost is Rs. 50 per hour.

(vi) Variable manufacturing costs are Rs. 45 per bag. Fixed manufacturing costs Rs. 30,00,000 per quarter.

(vii) Variable selling and administration expenses are 5% of sales and fixed administration and selling expenses are Rs. 20,50,000 per quarter.

Required

(i) PREPARE a production budget for the said quarter.

(ii) PREPARE a raw – material purchase budget for 'Y', 'Z' and 'Empty Bags' for the said quarter in quantity as well as in rupees.

(iii) COMPUTE the budgeted variable cost to produce one bag of 'X'.

(iv) PREPARE a statement of budgeted net income for the said quarter and show both per unit and total cost data. **[MTP-OCT19/3(A)]**

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