BUDGET & BUDGETARY CONTROL

Q1. Write is brief note on Performance Budgeting describing its main concepts. **[Dec 18 - 5 Marks]**

Answer: Performance Budgeting:

Performance Budgeting is synonymous with Responsibility Accounting which means the responsibility of various levels of Management is predetermined in terms of output or result keeping in view the authority vested with them.

The main concepts of such a system are enumerated below:

(a) It is based on a classification of managerial level for the purpose of establishing a budget for each level. Individual in-charge of that level should be made responsible & held accountable for its performance over a given period of time.

(b) The starting point of the performance budgeting system rests with the organisation chart in which the spheres of jurisdiction have been determined. Authority leads to the responsibility for certain costs and expenses which are forecasted or present in the budget with the knowledge of the manager concerned.

(c) The cost in each individual's or department's budget should be limited to the cost controllable by him.

(d) The person concerned should have the authority to bear the responsibility.

Q2. Write a brief note on Master Budget. **[June 19 - 5 Marks]**

Answer: Master Budget is the budget prepared to cover all the functions of the business organization. It can be taken as the integrated budget of business concern, that means, it shows the profit or loss and financial position of the business concern such as Budgeted Profit and Loss Account, Budgeted Balance Sheet etc. Master budget, also known as summary budget or finalized profit plan, combines all the budgets for a period into one harmonious unit and thus, it shows the overall budget plan.

The master budget incorporates all the subsidiary functional budgets and the Budgeted Profit and Loss Account and Budgeted Balance Sheet. Before the budget plan is put into operation, the master budget is considered by the management and revised if the position of profit disclosed therein is not found to be satisfactory. After suitable revision made, the Master Budget is finally approved and put into action.

Q3. Write Short Notes on Advantages of Budget Manual: **[Dec 21 - 3 Marks]**

Answer:

The methods and procedures of budgetary control are standardized. It is a formal record defining the functions and responsibilities of each executive. There is synchronization of the efforts of all which result in maximization of the profits of the organization. Ambiguity is avoided.

Q4. Write short note on Zero-based Budgeting. **[Dec 22 - 5 Marks]**

Answer:

Zero-Based Budgeting (ZBB) is a method of budgeting which requires each cost element to be specifically justified, though the activities to which the budget relates are being undertaken for the first time, without approval, the budget allowance is 'zero'. It is an activity-based budgeting system in which a budget is prepared for each activity and the justification in the form of cost-benefits for the activity is necessary to be given.

ZBB involves various stages:

(a) identification of decision packages and their description in detail

(b) evaluation of decision packages

(c) selection of decision packages according to priority

(d) allocation of resources after approval of the budget committee and the top management.

Q5. Explain the concept of Performance Budgeting. **[Dec 13 - 3 Marks]**

Answer:

Performance Budgeting: Performance budgeting may be described as a budgetary system where the input costs are related to the performance i.e. the end results. Performance budgeting is therefore, looked upon as a budget based on functions, activities and projects and linked to the budgetary system on objective, classification of expenditure.

Performance budgeting in terms of responsibility accounting is as follows: Responsibility accounting usually involves the preparation of annual and monthly budgets for each responsibility centre. Then the company's actual transactions are classified by responsibility centre and a monthly report is prepared. The reports will present the actual amounts for each budget line

item and the variance between the budget and actual amounts. Responsibility accounting allows the company and each manager of a responsibility centre to receive monthly feedback on the manager's performance.

(a) Role of different managerial level in achieving the specified objectives are clearly demarcated and financial rules and accounting system are modified to implement the defined activities more effectively.

(b) It is based on a classification of managerial level for the purpose of establishing a budget for each level. The official in charge of that level should be made responsible and accountable for its performance for a given period of time.

(c) The starting point of the performance budgeting system rests with the organisation chart in which the areas of jurisdiction have been determined. Authority leads to the responsibility for certain cost & expenses which are reflected in the budget with the knowledge of the manager concerned.

(d) Each department's budget should be limited to the cost controllable by them.

(e) The person concerned should have the authority to bear the responsibility.

Q6. What do you mean by "Flexible Budgeting"? **[June 15 - 2 Marks]**

Answer:

According to CIMA "A flexible budget is a budget which, by recognizing different cost behaviour patterns, is designed to change as volume of output changes." It is designed to change in relation to the level of activity actually attained. It is considered as realistic budget since this provides room for change in output. The prerequisite for flexible budget is separation of fixed and variable costs. It helps both in profit planning and operating cost control.

A flexible budget constitutes a series of fixed budget i.e. one fixed budget for each level of activity. In depth cost analysis and cost identification is required for preparation of flexible budget. This cost analysis and cost identification will involve categorizing the expenses as fixed, variable and semi-variable. Fixed expenditure will remain same for all level of activity.

Q7. What is Principal Budget Factor? Explain your answer with suitable example. **[Dec 18 & Dec 19 - 5 Marks]**

Answer:

Principal Budget Factor:

Budgets cover all the functional areas of the organisation. For the effective implementation of the budgetary system, all the functional areas are to be considered which are inter linked. Because of these inter links, certain factors have the ability to affect all other budgets. Such factor is known as principal budget factor.

Principal budget factor is the factor the extent of influence of which must first be assessed in order to ensure that the functional budgets are reasonably capable of fulfilment. A principal budget factor may be lack of demand, scarcity of raw material, non-availability of skilled labour, inadequate working capital etc. For example, an organisation has the capacity to produce 2,500 units per annum. But the production department is able to produce only 1,800 units due to non-availability of raw materials. In this case, non-availability of raw materials is the principal budget factor (limiting factor). If the sales manager estimates that he can sell only 1,500 units due to lack of demand, then lack of demand is the principal budget factor. This concept is also known as key factor, or governing factor. This factor highlights the constraints within which the organization functions.

Q8. DEFALI LTD. wishesh to Prepare cash budget for the period of December, 2014 to March, 2015. The Budgeted/Estimated Revenue and Expenses for the said period extracted from the records of the Company are as follows: (Amount in Lakh)

Months	Total Sales (Rs.)	Purchases (Materials) (Rs.)	Wages (Rs.)	Expenses (Overheads) (Rs.)
September, 2014	80	45	20	4
October, 2014	80	50	22	5
November, 2014	75	52	18	6
December, 2014	90	60	20	6
January, 2015	85	40	18	8
February, 2015	80	35	15	9
March, 2015	95	46	24	9.5

You are further informed that:

(a) 20% of purchases and the 30% of sales are for cash;

(b) Realisation is made from debtors 30% in the month of sale, 50% in the month of following that and the balance in the month after that

(c) The credit purchases are paid of regularly after one month;

(d) Wages are paid half monthly;

(e) Rent of Rs.50,000 per month included in expenses is paid monthly and remaining expenses are paid half monthly;

(f) Cash and bank balance as on 1st December, 2014 was Rs.10,00,000 and the company wants to keep it at the end of every month below Rs.10,00,000 but not less than Rs.9,00,000, the excess cash being put in fixed deposit in multiples of Rs.1,00,000.

Required: Prepare A CASH BUDGET for the four months ending March 31, 2015. **[Dec 14 - 12 Marks]**

Answer: **Cash budget for the period December 2014 to March, 2015**

Particulars	December 2014	January 2015	February 2015	March 2015
Opening balance (A)	10	9.75	9.1	9.25
Add: Receipts (B)				
Cash sales	27.00	25.5	24.00	28.5
Collection from Debtors	56.35	59.85	59.15	59.85
Total (A + B)	93.35	95.1	92.25	97.6
Payments (C)				
Cash Purchases	12	8	7	9.2
Creditors	41.6	48	32	28
Wages	19	19	16.5	19.5
Rent	0.5	0.5	0.5	0.5
Overheads	5.5	6.5	8	8.75
Total (C)	78.6	82	64	65.95
Balance (A+B-C = D)	14.75	13.1	28.25	31.65
Fix Deposit (E)	5	4	19	22
Closing cash balance (D-E)	**9.75**	**9.1**	**9.25**	**9.65**

Statement of collection from debtors

Particulars	December 2014	January 2015	February 2015	March 2015
October 2014	11.2			
November 2014	26.25	10.5		
December 2015	18.9	31.5	12.6	
January 2015		17.85	29.75	11.9
February 2015			16.8	28
March 2015				19.95
Total	**56.35**	**59.85**	**59.15**	**59.85**

Q9. ADAMAS LTD.; a newly established manufacturing company has an installed capacity to produce 1,00,000 units of a consumer product annually. However, its practical capacity is only 90%. The actual capacity utilisation may be substantially lower, as the firm is new to the market and demand is uncertain. The following budget has been prepared for 90% capacity utilisation:

Cost per unit	Rs.
Direct Materials	12
Direct Labour	8
Direct Expense	5
Production Overheads	10 (40% variable)
Administration Overheads	5 (100% fixed)
Selling and Distribution	6 (50% variable)

You are required to prepare Flexible Budgets of a Consumer product at 70% and 80% levels of capacity utilization giving clearly the Variable Cost, Fixed Cost and the Total Costs under various heads at all stated levels. **[June 15 - 8 Marks]**

Answer:

Installed capacity 1,00,000 units per annum

Practical capacity 90% i.e. 90,000 units per annum

Cost of 90% capacity utilization:

Direct Material	Rs. 12/unit
Direct Labour	Rs. 8/unit
Direct Expense	Rs. 5/unit
Production Overhead	Rs. 4/unit
Fixed Production Overhead (6 × 90,000)	Rs. 5,40,000
Administration Overhead (fixed) (5 × 90,000)	Rs. 4,50,000
Selling & Distribution Overhead	Rs. 3 per unit
Fixed Selling & Distribution Overhead	Rs. 2,70,000

Flexible Budget

Particulars	Capacity		
	90%	80%	70%
Variable Cost:			
Direct Material @ Rs.12/unit	10,80,000	9,60,000	8,40,000
Direct Labour @ Rs.8/unit	7,20,000	6,40,000	5,60,000
Direct Expense @ Rs.5/unit	4,50,000	4,00,000	3,50,000
Selling & Distribution @ Rs.3 per unit	2,70,000	2,40,000	2,10,000
Production overhead @ Rs.4/unit	3,60,000	3,20,000	2,80,000
Total Variable Cost (A)	**28,80,000**	**25,60,000**	**22,40,000**
Fixed Cost:			
Production overhead	5,40,000	5,40,000	5,40,000
Administration overhead	4,50,000	4,50,000	4,50,000
Selling & Distribution overhead	2,70,000	2,70,000	2,70,000
Total Fixed Cost (B)	12,60,000	12,60,000	12,60,000
Total Cost (A + B)	**41,40,000**	**38,20,000**	**35,00,000**

Q10. From the following data, prepare a Production Budget for ABC Co. Ltd., for six months period ending on 30 June, 2015.

Stocks for the budgeted period: **[Dec 15- 6 Marks]**

Product	As on 01 January, 2015	As on 30 June, 2015
A	6,000	10,000
B	9,000	8,000
C	12,000	17,500

Other relevant data:

Product	Normal loss in production	Requirement to fulfill sales programmer (units)
A	4%	60,000
B	2%	50,000
C	5%	80,000

Answer: **Production Budget for ABC Co. Ltd.**

Particulars	Product A	Product B	Product C
Sales	60,000	50,000	80,000
Add: Closing Stock	10,000	8,000	17,500
	70,000	58,000	97,500
Less: Opening Stock	6,000	9,000	12,000
Production	64,000	49,000	85,500
Adjustment for Normal loss	2,667	1,000	4500
Production Required	66,667	50,000	90,000

Q11. The budgeted annual sales of a firm are Rs. 80 lakhs and 25% of the sales are cash sales. If the average amount of debtors of the firm is Rs. 5 lakhs, what will be the average collection period of credit sales? **[June 16 - 2 Marks]**

Answer:

Budgeted sales = Rs. 80 Lakhs

Cash sales = Rs. 80 × 25% = Rs. 20 Lakhs

Credit sales = (Rs. 80 - Rs. 20) Lakhs = Rs. 60 Lakhs

Average collection period = Account Receivable/Credit sales × 12

= 5,00,000/60,00,000 × 12

= 1 month or 30 days

Q12. A glass manufacturing company requires you to calculate and present the Master Budget for the year 2017-18 from the following information:

Annual Sales:	
Toughened glasses A	Rs. 30,00,000
Toughened glasses B	Rs. 50,00,000
Direct material cost	60% of sales
Direct wages	20 workers @ Rs. 1,500
	p.m.
Factory overheads & indirect labour:	
Works manager	Rs. 5,000 p.m.
Foreman	Rs. 4,000 p.m.
Stores and spares	2.50% of sales
Depreciation on machinery	Rs. 1,26,000
Light and power	Rs. 50,000
Repairs and maintenance	Rs. 80,000
Other sundries	10% of direct wages
Administration, selling & distribution expenses	Rs. 1,40,000 p.a.
(Present the fixed and variable overheads separately showing item wise breakup)	**[June 17 - 7 Marks]**

Answer: **Master Budget for the year 2017-18**

Sales:			**Rs.**
Toughened Glass			30,00,000
Bent Glass			50,00,000
Total Sales			80,00,000

Less: Cost of production:			
Direct materials (60% of Rs. 80,00,000)		48,00,000	
Direct wages (20 workers × Rs. 1,500 × 12 months)		3,60,000	
Prime Cost		51,60,000	
Fixed Factory Overhead:			
Works manager's salary (5,000 × 12)	60,000		
Foreman's Salary (4,000 × 12)	48,000		
Depreciation	1,26,000		
Light and power (assumed fixed)	50,000	2,84,000	
Variable Factory Overhead:			
Stores and spares	2,00,000		
Repairs and maintenance	80,000		
Sundry expenses	36,000	3,16,000	
Works Cost			57,60,000
Gross Profit (Sales – Works Cost)			22,40,000
Less: Adm., selling and distribution expenses			1,40,000
Net Profit			**21,00,000**

Q13. Three Articles X, Y and Z are produced in a factory. They pass through two cost centers A and B. From the data furnished, compile a statement for budgeted machine utilization in both the centers.

(a) Sales budget for the year:

Product	Annual Budgeted Sales (units)	Opening stock of finished products (units)	Closing stock
X	4800	600	Equivalent to 2 months sales
Y	2400	300	- Do -
Z	2400	800	- Do -

(b) Machine hours per unit of product:

Product	Cost centers	
	A	B
X	30	70
Y	200	100
Z	30	20

(c) Total number of machines:

Cost Center	
A	338
B	305
Total	**643**

(d) Total working hours during the year: Estimated 2100 hours per machine **[Dec 17 - 7 Marks]**

Answer: Calculation of Units of Production of Different Products:

Particulars	Product X	Product Y	Product Z
Sales	4800	2400	2400
Add: Closing Stock	800	400	400

	5,600	2,800	2,800
Less: Opening Stock	600	300	800
Production	5,000	2,500	2,000

Machine Utilisation Budget

Cost Centres →	**A**				**B**			
Product →	**X**	**Y**	**Z**	**Total**	**X**	**Y**	**Z**	**Total**
Particulars								
(a) Production (units)	5,000	2,500	2,000		5,000	2,500	2,000	
(b) Hours per unit	30	200	30		70	100	20	
(c) Total Machine Hours	1,50,000	5,00,000	60,000	7,10,000	3,50,000	2,50,000	40,000	6,40,000
(d) Utilisation of Number of Machines	71	238	29	338	167	119	19	305

Q14. Summarised below are the revenue and expenditure figures of AB Ltd. for the month of March to August, 2017:

Month	Sales	Purchases	Wages	Expenses
March	6,50,000	4,00,000	1,20,000	50,000
April	7,00,000	4,80,000	1,50,000	50,000
May	7,50,000	4,50,000	1,50,000	60,000
June	8,00,000	4,80,000	1,80,000	60,000
July	8,20,000	4,00,000	1,80,000	60,000
August	8,90,000	5,00,000	2,00,000	80,000

The following further information is available:

(a) 10% Purchases and sales are on cash basis.

(b) Advance payment of income tax in August, 2017 Rs. 50,000.

(c) Plant purchased and price to be paid in June, 2017 Rs. 1,00,000.

(d) Time lag:

Credit sales	2 months
Credit purchases	1 month
Wages	½ month
Expenses	½ month

Required: Prepare a Cash Budget for 3 months starting on 1st June, 2017 when cash balance is Rs. 2,00,000 **[June 18 - 7 Marks]**

Answer:

Working Notes:

(a) Collection from Debtors:

	June	July	August
Sales for April, May and June respectively	7,00,000	7,50,000	8,00,000
Less: 10% for Cash Sales	70,000	75,000	80,000
Credit Sales (Collection from Debtors)	6,30,000	6,75,000	7,20,000

(b) Payment to Creditors:

	June	July	August
Purchases for the preceding month	4,50,000	4,80,000	4,00,000
Less: 10% for Cash Purchases	45,000	48,000	40,000

Credit Purchases (Payment to Creditors)	4,05,000	4,32,000	3,60,000

Cash Budget (for June to August, 2017)

Particulars	June	July	August
Cash Balance	2,00,000	1,32,000	1,67,000
Receipts:			
Cash Sales	80,000	82,000	89,000
Collection from Debtors	6,30,000	6,75,000	7,20,000
Total Receipts (A)	9,10,000	8,89,000	9,76,000
Payments:			
Cash Purchases	48,000	40,000	50,000
Payment to Creditors	4,05,000	4,32,000	3,60,000
Wages	1,65,000	1,80,000	1,90,000
Expenses	60,000	70,000	80,000
Plant	1,00,000	-	-
Advance Income Tax	-	-	50,000
Total Payments (B)	7,78,000	7,22,000	7,30,000
Cash Balance (A – B)	1,32,000	1,67,000	2,46,000

Q15. NP LTD produces a standard product. The estimated costs are given below:

Particular	Rs.
Raw Materials	10
Direct Wages	8
Direct Expenses	2
Variable Overheads	3
	23

Semi-variable overheads at 100% capacity level (10,000 units) are expected to be Rs. 40,000 and these overheads vary in steps of Rs. 2,000 for each change in output of 1,000 units. Fixed overheads are estimated at Rs. 50,000. Selling price per unit is expected to be Rs. 40.

Required:

Prepare a Flexible Budget at 50%, 70% and 90% level of activity on marginal cost basis. **[Dec 18 - 7 marks]**

Answer: **Flexible Budget**

Particulars	Capacity Levels		
	50%	**70%**	**90%**
Output in Units	5,000	7,000	9,000
Prime Cost:	**Rs.**	**Rs.**	**Rs.**
Materials	50,000	70,000	90,000
Direct Wages	40,000	56,000	72,000
Direct Expenses	10,000	14,000	18,000
	1,00,000	**1,40,000**	**1,80,000**
Variable Overheads	25,000	35,000	45,000
Marginal Cost (1 + 2)	1,25,000	1,75,000	2,25,000
Sales	2,00,000	2,80,000	3,60,000

Contribution (4 - 3)	75,000	1,05,000	1,35,000
Fixed Costs	70,000	70,000	70,000
Profit (5-6)	5,000	35,000	65,000

Working Note:

Semi - variable Expenses have been classified into Fixed and Variable elements as under:

Per Unit Variable Cost $= \text{Rs. } 2000 \div 1{,}000 = \text{Rs. } 2$

Fixed Costs $= \text{Rs. } 40{,}000 - \text{Rs. } (10{,}000 \times 2) = \text{Rs. } 20{,}000$

Total Variable Overheads per Unit $= \text{Rs. } 3 + \text{Rs. } 2 = \text{Rs. } 5$

Total Fixed Overhead $= \text{Rs. } 50{,}000 + \text{Rs. } 20{,}000 = \text{Rs. } 70{,}000$

Q16. ANKRITI LTD. manufactures product X and product Y during the year ending on 31st March, 2019. It is expected to sell 7500 kg of product X and 37500 kg of product Y @ Rs. 60 and Rs. 32 per kg respectively.

The direct materials A, B and C are mixed in the proportion of 4: 4: 2 in the manufacture of Product X and in the proportion of 3: 5: 2 in the manufacture of product Y. The actual and budget inventories for the year are as follows:

Particulars	Opening Stock (kg)	Expected Closing Stock (kg)	Anticipated Cost per kg (Rs.)
Material A	3,000	2,400	10
Material B	2,500	5,800	8
Material C	16,000	17,300	6
Product X	1,500	2,000	-
Product Y	3,000	3,500	-

Required:

Prepare the Production Budget and Materials Budget showing the purchase cost of materials for the year ending 31 March, 2019. **[June 19 - 7 Marks]**

Answer:

Production Budget for the Year ending 31 March 2019

Particulars	Product -X (kgs.)	Product - Y (kgs.)
Sales	7,500	37,500
Add: Closing Stock	2,000	3,500
Sub-total	9,500	41,000
Less: Opening stock	1,500	3,000
Production	8,000	38,000

Materials Purchase Budget

(for the year ending 31 March 2019)

Particulars	A	B	C	Total
Materials required for product-X in the ratio of 4:4:2	3,200	3,200	1,600	8,000
Materials required for product-Y in the ratio of 3:5:2	11,400	19,000	7,600	38,000
Total requirement	14,600	22,200	9,200	
Add: Closing Stock	2,400	5,800	17,300	
	17,000	28,000	26,500	
Less: Opening Stock	3,000	2,500	16,000	
Purchases (Kgs)	14,000	25,500	10,500	
Cost per Kg (Rs.)	10	8	6	

Total Purchase Cost (Rs.)	**1,40,000**	**2,04,000**	**63,000**	**4,07,000**

Q17. The monthly (September 2019) budgets for Production overhead Costs of TANISHA LTD for two levels of Activity were as follows:

Particulars	**Capacity Level**	
	60%	**100%**
Budgeted Production (Units)	15,000	25,000
	Rs.	**Rs.**
Wages	60,000	1,00,000
Consumable Stores	45,000	75,000
Maintenance	55,000	75,000
Power and Fuel	80,000	1,00,000
Depreciation	2,00,000	2,00,000
Insurance	50,000	50,000
	4,90,000	6,00,000

Required:

(a) Prepare Production overhead Costs Budget of 80% and 90% Capacity level for September, 2019 and

(b) Compute the total Cost, both fixed and variable overheads per unit of output at 80% and 90% Capacity level.

[Dec 19 - 7 Marks]

Answer:

Production Overhead Costs Budget:

(For September 2019)

	Capacity level			
Particulars	**80%**		**90%**	
Production (Units)'	**20,000**		**22,500**	
	Rs.	**Per Unit Rs.**	**Rs.**	**Per Unit Rs.**
Variable Overhead Costs: [A]				
Wages @ Rs.4	80,000		90,000	
Consumable Stores @ Rs.3	60,000		67,500	
Maintenance @ Rs.2	40,000		45,000	
Power and Fuel @ Rs.2	40,000		45,000	
Total [A]	(**2,20,000**)	**11.00**	**2,47,500**	**11.00**
Fixed Overhead Costs: [B]				
Maintenance	25,000		25,000	
Power and Fuel	50,000		50,000	
Depreciation	2,00,000		2,00,000	
Insurance	50,000		50,000	
Total [B]	**3,25,000**	**16.25**	**3,25,000**	**14.44**
Grand Total [A + B]	**5,45,000**	**27.25**	**5,72,500**	**25.44**

Working Notes:

(a) Maintenance Costs:

Variable = (Rs. 75,000 - Rs.55,000)/(25,000 Units - 15,000 Units) = Rs.2

Fixed = (Rs. 55,000) - (15,000 Units × Rs. 2) = Rs.25,000

(b) Power and Fuel:

Variable = (Rs.1,00,000 - Rs.80,000)/(25,000 Units -15,000 Units) = Rs.2

Fixed = (Rs.80,000) - (15,000 Units × Rs.2) =Rs.50,000

Q18. QBZ Limited produces and sells a single product. Sales budget for calendar year 2020 by a quarter is as under:

Quarters	I	II	III	IV
No. of units to be sold	36,000	44,000	50,000	54,000

The year is expected to open with an inventory of 12,000 units of finished products and close with inventory of 16,000 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. 80. The standard cost details for one unit of the product are as follows:

Variable Cost Rs. 69.00 per unit

Fixed Overheads @ Rs. 4 per hour based on a budgeted production volume of 2,20,000 direct labour hours for the year.

Fixed overheads are evenly distributed through-out the year.

(a) What is the Budgeted Total Production (in unit) for the year 2020?

(b) In which quarter of the year, company expected to achieve break-even point? **[Dec 21 - 6 Marks]**

Answer:

(a) Budgeted Total Production for the year 2020 = 1,88,000 units

(b) The company will break even in the end of Second Quarter

The total sales by the end of Quarter 2 will be 80,000 units i.e. (36,000 + 44,000). Hence the Company will break-even in the end of Second Quarter.

Q19. SWASTY Ltd. furnishes the following information for the month of November, 2021.

Particulars	Budget Details	Static Budget	Actual
Units produced and sold		4,000	3,200
		(Rs.)	(Rs.)
Direct Material	3 kg p.u @ Rs.30 per kg.	3,60,000	3,10,000
Direct Labour	1 hr. p.u @ Rs.72 per hr.	2,88,000	2,25,600
Variable Overhead	1 hr. p.u @ Rs. 44 per hr.	1,76,000	1,47,200
Fixed overhead		1,80,000	1,68,000
Total Cost		10,04,000	8,50,800
Sales		12,00,000	8,96,000
Profit		1,96,000	45,200

During the month 10,000 kg. of materials and 3,100 direct labour hours were utilized.

(a) What is the amount of Direct Labour cost for flexible Budgeted Production and sold?

(b) What is the amount of flexible budgeted profit for the month of November 2021?

(c) Calculate the material usage variance for the actual vs the flexible budget

(d) The direct labour rate variance for the actual vs the flexible budget is_____

(e) The material price variance for the actual vs the flexible budget would be how much? **[Dec 21 - 12 Marks]**

Answer:

(a) 3,100 × 72 = Rs. 2,30,400

(b) Material = 3,200 × 3 × 30 = 2,88,000

Labour = 2,30,400

Variable OH = 3,200 × 1 × 44 = 1,40,800

Fixed OH = 1,80,000

Sales = 12,00,000 × $\frac{3,200}{4,000}$ = 9,60,000

Profit = 9,60,000 - 2,88,000 - 2,30,400 - 1,40,800 - 1,80,000 = Rs.1,20,800

(c) (3,200 × 3 - 10,000) × 30 = Rs.12,000 (A)

(d) 3,100 × 72 - 2,25,600 = Rs. 2,400(A)

(e) 10,000 × 30 - 3,10,000 = Rs. 10,000(A)

Q20. ASHREEN, a manufacturing company estimated its sales for the year 2022-23 quarter-wise as under:

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

The opening 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 material at the beginning of the year is 10,000kgs and the closing stock at the end of the year is required to be maintained at 5,000kgs. Each unit of finished output requires 2 kgs of Raw materials.

You are required to prepare the following for the year 2022-23 quarter-wise:

(a) Production Budget (in units)

(b) Raw material consumption budget (in quantity)

(c) Raw material purchase budget (in quantity) for the year 2022-23 **[Dec 22 - 7 Marks]**

Answer: Production Budget for the year

Particulars	Quarter-1	Quarter-2	Quarter-3	Quarter-4
Sales	30,000	37,500	41,250	45,000
Add: Closing stock	11,500	12,250	13,000	16,250
Less: Opening Stock	10,000	11,500	12,250	13,000
Production	31,500	(30,000 + 8250) = 38,250	(33,000 + 9,000) = 42,000	= 48,250

Year 2022-23 Quarter					
	I Units	II Units	III Units	IV Units	Total Units
(a) Production Budget (in units)	31500	38250	42000	48250	160000
(b) Raw Material consumption budget (in quantity)	63000	76500	84000	96500	320000
(c) Raw Material purchase budget (in quantity) for the year 2022-23 = 315000 Kg					

Q21. M/s Jolly Ltd. manufactures product X and product Y during the year ending on 31 March 2023. It is expected to sell 7,500 kg. of product X & 37,500 kg. of product Y @Rs. 60 and Rs.32 per kg. respectively.

The direct materials A, B & C are mixed in the proportion of 4:4:2 in the manufacture of Product X & in the proportion of 3:5:2 in the manufacture of product Y. The actual & budget inventories for the year are as follows:

Particulars	Opening Stock (kg.)	Expected closing stock (kg.)	Anticipated Cost per kg. (Rs.)
Material A	3,000	2,400	10
Material B	2,500	5,800	8
Material C	16,000	17,300	6
Product X	1,500	2,000	-
Product Y	3,000	3,500	-

Required: Prepare the Production Budget and Materials Budget showing the purchase cost of materials for the year ending 31 March, 2023. **[June 23 - 8 marks)**

Answer:

Sales Forecast	
Product X	7,500 kg
Product Y	37,500 kg

Desired Closing Stock

Product X	2,000 kg
Product Y	3,500 kg

Opening Stock

Product X	1,500 kg
Product Y	3,000 kg

Production Required: Production Required = Sales Forecast + Desired Closing Stock – Opening Stock

Product	Sales Forecast	Desired Closing Stock	Opening Stock	Production Required
Product X	7,500	2,000	1,500	(7,500 + 2,000 – 1,500) = 8,000
Product Y	37,500	3,500	3,000	(37,500 + 3,500 – 3,000) = 38,000

Material Requirements for Production

Proportion of Materials in Product

Product X	4:4:2 for A, B, and C
Product Y	3:5:2 for A, B, and C

Material Required per kg of Product

Product X:	
Material A	4 out of 10
Material B	4 out of 10
Material C	2 out of 10
Product Y:	
Material A	3 out of 10
Material B	5 out of 10
Material C	2 out of 10

Total Material Required = Production Required × Material Proportion

Material	Product X (kg)	Product Y (kg)	Total Required (kg)
A	8,000 × 4/10 = 3,200	38,000 × 3/10 = 11,400	3,200 + 11,400 = 14,600
B	8,000 × 4/10 = 3,200	38,000 × 5/10 = 19,000	3,200 + 19,000 = 22,200
C	8,000 × 2/10 = 1,600	38,000 × 2/10 = 7,600	1,600 + 7,600 = 9,200

Material Purchases: Material to be Purchased = Total Required + Desired Closing Stock – Opening Stock

Material	Total Required (kg)	Desired Closing Stock (kg)	Opening Stock (kg)	To be Purchased (kg)
A	14,600	2,400	3,000	14,600 + 2,400 – 3,000 = 14,000
B	22,200	5,800	2,500	22,200 + 5,800 – 2,500 = 25,500
C	9,200	17,300	16,000	9,200 + 17,300 – 16,000 = 10,500

Purchase Cost of Materials:

Material	To be Purchased (kg)	Cost per kg (Rs.)	Purchase Cost (Rs.)
A	14,000	10	14,000 × 10 = 1,40,000
B	25,500	8	25,500 × 8 = 2,04,000
C	10,500	6	10,500 × 6 = 63,000

Total Purchase Cost = 1,40,000 + 2,04,000 + 63,000 = Rs. 4,07,000

Summary:

1. Production Budget:

Product X	8,000 kg
Product Y	38,000 kg

2. Materials Budget:

Material A	14,000 kg (1,40,000)
Material B	25,500 kg (2,04,000)
Material C	10,500 kg (63,000)
Total Purchase Cost	**4,07,000**

Q22. Easy Walk Ltd. produces and sells a single product. Sales budget for calendar year 2022 by quarters is as under:

Quarters	First	Second	Third	Fourth
No. of units to be sold	40,000	48,000	60,000	72,000

The year is expected to open with an inventory of 12,000 units of finished products and close with inventory of 16,000 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 and variable cost per unit is Rs. 35.

Fixed Overheads are Rs. 4,40,000 which are evenly distributed throughout the year.

Required:

(a) Prepare Quarterly Production Budget for the year.

(b) Calculate in which quarter of the year company is expected to achieve Break Even Point (BEP). **[Dec 23 - 7 marks]**

Answer:

Particulars	First	Second	Third	Fourth
Sales	40,000.00	48,000.00	60,000.00	72,000.00
Closing Stock	14,400.00	18,000.00	21,600.00	16,000.00
Opening Stock	12,000.00	14,400.00	18,000.00	21,600.00
Production	42,400.00	51,600.00	63,600.00	66,400.00

ii) BEP = Fixed Cost/Contribution per unit = 4,40,000/5 = 88,000 units

Therefore, The company will achieve its breakeven in the second quarter.

Q23. Jack & Jones Ltd. submits the following budgeted figures of revenue and expenditures for the month of July to December, 2023:

Month	Sales	Purchases	Wages	Expenses
July	13,00,000	8,00,000	2,40,000	1,00,000
August	14,00,000	9,60,000	3,00,000	1,00,000
September	15,00,000	9,00,000	3,00,000	1,20,000
October	16,00,000	9,60,000	3,60,000	1,20,000
November	16,40,000	8,00,000	3,60,000	1,60,000
December	17,80,000	10,00,000	4,00,000	1,60,000

The following further information is available:

(a) 10% of purchases and sales are on cash basis.

(b) Advance payment of income tax in December, 2023 is Rs. 2,00,000.

(c) Plant purchased and price to be paid in October, 2023 is Rs. 80,000.

(d) Time lag:

Credit sales	2 months
Credit purchases	1 month
Wages	1/2 month
Expenses	1/2 month

Required:

Prepare a Cash Budget for 3 months starting on 1 Oct 2023 when the cash balance is Rs. 2,70,000. **[June 24 - 7 Marks]**

Answer: **Cash Budget (For October to December, 2023)**

Particulars	Oct	Nov	Dec
Cash Balance	2,70,000	2,54,000	3,24,000
Receipts:			
Cash sales	1,60,000	1,64,000	1,78,000
Collection from debtors	12,60,000	13,50,000	14,40,000
Total Receipts	16,90,000	17,68,000	19,42,000
Payments:			
Cash purchases	96,000	80,000	1,00,000
Payment to Creditors	8,10,000	8,64,000	7,20,000
Wages	3,30,000	3,60,000	3,80,000
Expenses	1,20,000	1,40,000	1,60,000
Advance income tax	–	–	2,00,000
Plant	80,000	–	–
Total Payments	14,36,000	14,44,000	15,60,000
Cash Balance	2,54,000	3,24,000	3,82,000