

## [ English Version]

The figures in the margin indicate full marks.

## Group - A

1. From the following information, calculate Breakeven Sales :

| Year | Sales (₹) | Profit (₹) |
| :---: | :---: | :---: |
| 2020 | $3,00,000$ | 20,000 |
| 2021 | $4,00,000$ | 30,000 |

2. State the advantages of Activity Based Costing.
Or,

Briefly explain any two methods of apportionment of joint costs to joint products.
3. A manufacturing company provides the following information :

Product - A
Cost per unit (₹) :
Direct materials cost 20
Direct labour cost 10

Variable overhead ( $100 \%$ of direct labour)

Fixed overhead - ₹ 10,000 p.a.
Selling price per unit
60
100

You are required to prepare a statement showing the marginal cost of each product and recommend which of the following sales mix should be adopted :
(a) 900 units of Product - A and 600 units of Product - B;
(b) 1800 units of Product - A only;
(c) 1200 units of Product - B only.

## Or,

A manufacturing company finds that while it costs ₹ 12.00 to make a component - ' C ', the same is available in the market at $₹ 11.00$ each, with an assurance of continued supply.

The cost is made up of :

| Materials | $₹ 6.00$ |
| :--- | :--- |
| Labour | $₹ 3.00$ |
| Other variable costs | $₹ 1.00$ |
| Depreciation and other fixed cost | $₹ 2.00$ |
|  | ₹ 12.00 |

(a) Should the company make or buy the component?
(b) What would be your opinion, if the supplier offered the component at ₹ 9.60 each?
4. From the following information calculate :
(a) $\mathrm{P} / \mathrm{V}$ ratio
(b) Break-even sales
(c) Break-even sales if selling price was reduced by $10 \%$ and fixed costs were increased by ₹ 90,000 .

| Sales value | - | $₹ 25,00,000$ |  |
| :--- | :--- | :--- | ---: |
| Variable costs | - | $₹ 53,00,000$ |  |
| Fixed costs | - | $₹$ | $4,00,000$ |

## Group - B

5. Prepare a Cash Budget for three months ended on 30.09.2022.

Expected cash in hand and at Bank ₹ 50,000 on 01.07.2022.
Monthly Salaries and Wages : ₹ 20,000
Interest Payable in August : ₹ 10,000

| Estimated | June | July | August | September |
| :--- | :---: | ---: | ---: | ---: |
| Cash Sales (₹) | $2,40,000$ | $2,80,000$ | $3,04,000$ | $2,42,000$ |
| Credit Sales (₹) | $2,00,000$ | $1,60,000$ | $2,80,000$ | $2,40,000$ |
| Purchases | $3,20,000$ | $3,40,000$ | $4,80,000$ | $3,60,000$ |
| Expenses | 36,000 | 40,000 | 44,000 | 40,000 |

(a) Credit Sales are collected $50 \%$ in the month of Sales and $50 \%$ in the following month.
(b) $10 \%$ of the purchases are in Cash and balance is paid in the next month.
(c) Wages and Salaries and expenses are payable within the month.

## Or,

The following information relating to the Budget prepared for two levels of capacity utilization is given below :

| Capacity | $60 \%$ | $100 \%$ |
| :--- | :---: | :---: |
| Output (units) | 36,000 | 60,000 |
|  | $₹$ | $₹$ |
| Direct materials | $3,60,000$ | $6,00,000$ |
| Direct wages | $2,16,000$ | $3,60,000$ |
| Production overhead | $5,40,000$ | $7,56,000$ |
| Administrative overhead | $1,80,000$ | $1,80,000$ |
| Selling overhead | $1,44,000$ | $1,92,000$ |

Prepare a flexible budget for $80 \%$ and $90 \%$ capacity utilization. ..... 10
6. Write short notes on :
(a) CVP analysis
(b) Variance analysis

## Group - C

7. While manufacturing the main Product $X$, a company produces two $B y$-products $B_{1}$ and $B_{2}$. Using the method of working back from sales value to an estimated cost, you are required to prepare a comparative Profit and Loss Statement of the three products from the following data :
(a) Total costs up to the split-off/separation ₹ $2,72,000$.
(b) Sales (all production)
(c) Costs after separation
(d) Estimated profits percentages to sales values

| $\mathbf{X}$ | $\mathbf{B}_{\mathbf{1}}$ | $\mathbf{B}_{\mathbf{2}}$ |
| :---: | :---: | :---: |
| ₹ $6,56,000$ | $₹ 64,000$ | $₹ 96,000$ |
|  | $₹ 19,200$ | $₹ 28,800$ |
|  | $20 \%$ | $30 \%$ |
| $20 \%$ | $20 \%$ | $20 \%$ |

Or,
An oil refining company obtains 4 products whose costs details are as under :
Joint costs of the 4 products : ₹ $8,29,600$
Output: A $-4,00,000$ Ltr.
B $-8,000$ Ltr.
C $-4,000$ Ltr.
D - 7,200 Ltr.
Further processing costs: $A-₹ 2,10,000$
B - ₹ 46,000
C - NIL
D - ₹ 20,000
The products can be sold as intermediates, i.e. at split-off point without further processing. The sales price are :

As Finished Product
A (per ltr.)
$B$ (per ltr.)
C (per ltr.)
D (per ltr.)
(per

As Intermediate
$₹ 1.50$
$₹ 5.00$
₹ 8.00
₹ 30.00

Calculate the productwise profit allocating joint costs on the basis of sales value at separation and compare the profitability in selling the products with and without further processing.
8. (a) From the following information, determine the
(i) Labour cost variance
(ii) Labour efficiency variance
(iii) Labour rate variance.

- Standard labour cost per unit of production is ₹ 15 .
- Time allowed per unit is 30 hours.
- During the month of March, 3,000 units are produced in 75,000 hours.
- Actual payment of wages for the month is ₹ 45,000 .
(b) Distinguish between Standard Costing and Budgetary Control.

