Period I = 300000 x 40/100 = Rs.120000
Fixed cost = Contribution – Profit = 120000- 40000 = Rs.80000
1. BEP = Fixed cost /P/V Ratio = 8000/40 x 100 = 200000
2. Profit when sales are Rs.360000
Contribution = 360000x40/100 = 144000
Profit = Contribution – Fixed cost = 144000-80000=Rs.64000
3.Sales required to earn a profit of Rs.50000
Contribution required = Fixed cost + Profit required = 80000+50000 = 130000
Sales = Contribution requires/ P/V ratio
= 130000/40x100 = Rs.325000

Cost-Volume Profit Analysis [CVP Analysis] (5 marks)

It is the study of the impact of a change in cost , price and volume on profit. Break even analysis is a narrow interpretation of cost volume profit analysis. But it is mainly confined to finding out the Break even point. In CVP analysis the relationship between cost, volume and profit is studied in detail. It helps management in profit planning, decision making and cost control.

Assumptions in CVP analysis

The assumptions in CVP analysis are the same as that under marginal costing.

- Cost can be classified into fixed and variable components.
- Total fixed cost remain constant at all levels of output
- The variable cost change in direct proportion with the volume of output
- The product mix remains constant
- The selling price per unit remains the same at all the levels of sales
- There is synchronization of output and sales, i.e, what ever output is produced , the same is sold during that period.

PROFIT VOLUME CHART OR [P/V CHART]

It shows the amount of profit or loss at different levels of output. When the output is zero, total loss will be equal to fixed costs. The fixed costs are recovered gradually when the volume of output is increased. When the output reaches the Break even point, the whole fixed costs are recovered. The firm incurs no loss or earns no profit. Thereafter, the firm makes a profit and the amount of profit increases with the increase in sales volume.

MANAGERIAL USES OF MARGINAL COSTING AND BREAK EVEN ANALYSIS

Marginal costing and Beak even analysis are very useful to management. The important uses of marginal costing and Break Even analysis are the following

1. Profit Planning

The first step in profit planning is the ascertainment of Break even point. It is the level of operation when there is no profit no loss. Once BEP is found out the management can decide upon the required level of sales to earn a particular amount of profit.

2. Cost control

Cost control is an important function of management. In marginal costing all costs are classified into fixed and variable elements. Fixed costs are generally non controllable in nature. But variable costs can be controlled by managerial actions.Therefore, managerial attention is drawn towards the control of variable costs in marginal costing.

3. Decision making

Marginal costing helps to take important managerial decisions like ;-