**Short Notes**

**CVP Analysis**

1. **Cost Behavior Analysis**

Cost behavior analysis is the study of how specific costs respond to changes in the level of business activity.

1. **Variable Costs**

Variable costs are costs that vary in total directly and proportionately with changes in the activity level or cost that remains the same per unit at every level of activity. Examples of variable costs include direct materials and direct labor for a manufacturer; cost of goods sold, sales commissions, and freight-out for a merchandiser; and gasoline in airline and trucking companies.

1. **Fixed Costs**

Fixed costs are costs that remain the same in total regardless of changes in the activity level.  
  
Examples include property taxes, insurance, rent, supervisory salaries, and depreciation on buildings and equipment. Because total fixed costs remain constant as activity changes, it follows that fixed costs per unit vary inversely with activity: As volume increases, unit cost declines, and vice versa.

1. **Cost-volume-profit (CVP)**

Cost-volume-profit (CVP) analysis is the study of the effects of changes in costs and volume on a company's profits.

1. **CVP Assumptions**

The following assumptions underlie each CVP analysis.  
  
-The behavior of both costs and revenues is linear throughout the relevant range of the activity index.  
-Costs can be classified accurately as either variable or fixed.  
-Changes in activity are the only factors that affect costs.  
-All units produced are sold.  
-When more than one type of product is sold, the sales mix will remain constant. That is, the percentage that each product represents of total sales will stay the same.

**5. Objectives of CVP Analysis-**

Understand the interaction among Prices of products. Volume or level of activity. Per unit variable cost. Total fixed cost. Mix of product sold

Q1 What is the expected level of profit at a given sales volume?

2. What additional amount of sales is needed to achieve a desired level of profit?

3. What will be the effect on profit of a given increase in sales?

4. What is the required funding level for a governmental agency, given desired service levels?

5. Is the forecast for sales consistent with forecasted profits?

6. What additional profit would be obtained from a given percentage reduction in unit variable costs?

7. What increase in sales is needed to make up a given decrease in price to maintain the present profit level?

8. What sales level is needed to cover all costs in a sales region or product line?

9. What is the required amount of increase in sales to meet the additional fixed charges from a proposed plant expansion?