

# **This guide will serve as a complete list of all formulas for IGCSE Business Studies.**

## **Revenue:**

Formula:  $\text{Revenue} = \text{Quantity Sold} \times \text{Price}$

Measures the total income generated from selling goods or services, calculated by multiplying the quantity sold by the price per unit.

## **Productivity:**

Formula:  $\text{Productivity} = \text{Output} \div \text{Quantity of Input}$

Shows how efficiently resources are used, found by dividing the total output by the quantity of input used in production.

## **Labor Productivity:**

Formula:  $\text{Labor Productivity} = \text{Output} \div \text{Number of Employees}$

Assesses how efficiently labor is used, calculated by dividing total output by the number of employees.

## **Working Capital:**

Formula:  $\text{Working Capital} = \text{Current Assets} - \text{Current Liabilities}$

Indicates the short-term financial health of a business, showing the difference between current assets and current liabilities.

## **Capital Employed (or Shareholder's funds):**

Formula:  $\text{Capital Employed} = \text{Total Assets} - \text{Total Liabilities}$

Represents the total capital invested in the business, calculated as total assets minus total liabilities.

## **Profit:**

Formula:  $\text{Profit} = \text{Revenue} - \text{Cost of Sales}$

Measures the financial gain from business activities, found by subtracting the cost of sales from total revenue.

## **Profit (from Break-even graph):**

Formula:  $\text{Profit} = \text{Total Revenue} - \text{Total Costs}$

Shows how much profit is made after covering all costs, calculated by subtracting total costs from total revenue.

## **Total Costs:**

Formula:  $\text{Total Costs} = \text{Fixed Costs} + \text{Variable Costs}$

The overall expenses to produce goods or services, determined by adding fixed costs to variable costs.

## **Average Cost:**

Formula:  $\text{Average Cost} = \text{Total Costs} \div \text{Total Units Produced}$

Shows the cost per unit produced, calculated by dividing total costs by the number of units produced.

## **Break-even Point:**

Formula:  $\text{Break-even Point} = \text{Fixed Costs} \div \text{Contribution per Unit}$

The point where a business covers its fixed costs, calculated as fixed costs divided by the contribution per unit.

**Contribution per Unit:**

Formula:  $\text{Contribution per Unit} = \text{Selling Price} - \text{Variable Costs}$

Measures the profit made on each unit sold after deducting variable costs from the selling price.

**Margin of Safety:**

Formula:  $\text{Margin of Safety} = \text{Maximum Output} - \text{Break-even Output}$

Indicates how much actual production exceeds the break-even point, providing a buffer before losses start.

**Gross Profit:**

Formula:  $\text{Gross Profit} = \text{Revenue} - \text{Cost of Sales}$

Shows the profit from sales after deducting the cost of goods sold (direct costs).

**Gross Profit Margin:**

Formula:  $\text{Gross Profit Margin} = (\text{Gross Profit} \div \text{Revenue}) \times 100$

Expresses the gross profit as a percentage of revenue, showing profitability before other expenses.

**Net Profit:**

Formula:  $\text{Net Profit} = \text{Gross Profit} - \text{Expenses}$

Represents the total profit after all expenses, both fixed and variable, are deducted from gross profit.

**Net Profit Margin:**

Formula:  $\text{Net Profit Margin} = (\text{Net Profit} \div \text{Revenue}) \times 100$

Indicates how much of the revenue remains as profit after all expenses, expressed as a percentage.

**Return on Capital Employed (ROCE):**

Formula:  $\text{ROCE} = (\text{Net Profit} \div \text{Capital Employed}) \times 100$

Shows how efficiently the company generates profit from its capital investments.

**Current Ratio:**

Formula:  $\text{Current Ratio} = \text{Current Assets} \div \text{Current Liabilities}$

A liquidity measure that compares current assets to current liabilities to assess the ability to meet short-term obligations.

**Acid Test Ratio (or Quick Ratio):**

Formula:  $\text{Acid Test Ratio} = (\text{Current Assets} - \text{Inventory}) \div \text{Current Liabilities}$

A stricter liquidity measure that excludes inventory from assets to assess whether a company can meet short-term liabilities without selling inventory.