Grade 10 | **ACCOUNTING** | **Term 4: Week 1-2 (2020 Revised ATP)**

Topic: Manufacturing (Cost accounting) - basic concepts and calculations

You already know about ...	The lesson will enable you to...

• Cost of sales of a sole trader
• Operating expenses, e.g.consumable stores, rent, deprecition, salaries, etc.
• Applying the principles of internal control
• Ethical behaviour related to a trading business
	• Understand the basic concepts of manufacturing/cost accounting
	• Calculating basic cost components in a manufacturing environment:
	  ○ direct & indirect costs
	  ○ variable and fixed costs
	  ○ total & unit costs

Use your TEXT BOOK to read about: Manufacturing (Cost Accounting)	Alternative digital resources:
Pay attention to cost concepts, calculations and the accounting cycle in a factory (manufacturing business) to understand the meaning of each cost component and how it is calculated.	**Lucem Gr 10 Text book &Teacher Guide** **https://wcedeportal.co.za/eresource/117641** **Ch 11: Pg. 194-205**
	Study& Master Gr 10 PPT (Ch 18) **Cost Accounting** **https://wcedeportal.co.za/eresource/157441**

BASIC COST CONCEPTS

All cost items in a manufacturing business (factory) are divided into THREE TYPES of costs:

1. **Production costs (the '*Cost of Sales'* in a factory)**
2. **Administrative costs;**
3. **Sales & Distribution costs**

[We will only focus on Production costs in Gr 10]

TOTAL PRODUCTION COST (ALL units completed)...

- is the **<u>total</u> of ALL production cost items** for a factory
- equals **Direct Cost + Indirect Cost**
  - **Direct Cost = Prime Cost**
    = Direct Material Cost + Direct Labour Cost
  - **Indirect Cost** = Factory Overheads

TOTAL PRODUCTION COST per <u>unit</u> (for <u>one item</u> produced)

= TOTAL production cost ÷ the number of finished items

e.g.: <u>R1000</u> (total cost)
20 (no. of units produced)

= R5 per item

COST COMPONENTS

Direct Material Cost

- ALL *raw materials* used in the manufacturing process. (it become part of the final product)
- *Example:* leather used in leather boots

Direct Labour Cost

- Employees' wages who are directly involved in the manufacturing process
- *Example:* The cutters (workers) shaping the leather for the leather boots

Prime Cost is the basic costs necessary for production. Without it no manufacturing can take place.

It is sometimes referred to as 'DIRECT COSTS".

- Direct material cost + Direct labour cost

Check your understanding:

1. Study this image and list TWO raw materials needed to manufacture sneakers.
2. List one pre-produced item that can be regarded as 'raw materials' for sneakers.

1.	
2.	

Indirect material cost

- Any other materials not directly linked to a final product, but necessary in the manufacturing process
- *Example*: Cleaning materials for the factory

Indirect labour cost

- Employees not directly involved in the manufacturing process
- *Example*: Remuneration for Factory supervisor / cleaners

Factory Overheads

- All costs to keep the manufacturing section of the factory in operation.
- It cannot be directly linked to the manufacturing of the items.

Examples – indirect materials, indirect labour, depreciation on factory equipment, factory water & lights, etc.

Fixed Costs

- All cost items that **HAVE to be paid** to keep the factory running. It will not change, no matter the number of units produced.
- **Factory overheads + Administration costs**
- *Examples* - Salary of factory manager, factory rent, etc.

Variable Costs

- All cost items that vary in direct proportion to the number of products produced
- **Direct costs + Selling & distribution costs**
- *Examples* - raw materials, factory wages, etc.

Unit costs

The TOTAL cost of production divided by the number of units COMPLETED in the same period in which costs were incurred

$$\frac{\text{TOT Cost of production}}{\text{Number of items produced}}$$

Fixed Cost per unit

$$\frac{\text{(Factory overheads + Administration costs)}}{\text{Number of items produced}}$$

Variable Cost per unit

$$\frac{\text{(Dir Material+ Dir Labour + Selling \& Distribution costs)}}{\text{Number of items produced}}$$

ACTIVITY 1

Lungi bakes cakes for special occasions and sells it at a mark-up of 60% on cost.

Choose the correct answer for each statement. Write (a)-(d) in the Answer sheet for Activity 1.

1.1 Which of the following reflects only direct materials:
- (a) Flour, milk, sugar, cleaning materials
- (b) Flour, milk, sugar, eggs
- (c) Baking tin, spoon, bowl, mixer
- (d) Flour, baking tin ,electricity, eggs

1.2 Which of the following labour is regarded as direct labour:
- (a) Supervisor
- (b) Salesman
- (c) Baker
- (d) Cleaner

1.3 Which of the following examples are all factory overheads:
- (a) Electricity, cleaning materials, rent, manager's salary
- (b) Cleaning materials, depreciation, manager's salary, cooking oil
- (c) Sundry expenses, supervisor salary, cleaning materials, bad debts
- (d) Flour, milk, icing sugar, eggs

1.4 Which of the following is NOT an example of a variable cost
- (a) Cooking oil
- (b) Rent
- (c) Icing sugar
- (d) Eggs

1.5 The total cost of production is R80 per cake. The selling price of one cake will be:
- (a) R130
- (b) R140
- (c) R48
- (d) R128

ACTIVITY 1: ANSWER SHEET

1.1	
1.2	
1.3	
1.4	
1.5	

ACTIVITY 2

Rita and Thembi are the owners of blinGblinG that produces earrings and sells them to various accessory shops. They produced 5 000 earrings during February 2020. Earrings are sold at a mark-up of 60%.

They provide the following cost detail:

Cost Items	R
Beads, wire and stoppers	10 000
Wages for the earrings makers	12 000
Rent of flea market stall (per month)	3 500
Transport to and from the flea market	800
Rent of cutting machine per month	700
Salary: sales person	6 000

ANSWER THE FOLLOWING QUESTIONS based on the information available. Show calculations clearly, where applicable.

2.1 List TWO fixed cost items. (from the list above)	
2.2 List TWO variable cost items (from the list above)	
CALCULATE the following:	
2.3.1 Total fixed cost	**Answer**
2.3.2 Fixed cost per unit	
2.3.3 Total variable costs	
2.3.4 Variable cost per unit	

2.3.5 Total production cost	
2.3.6 Total production cost per unit	
2.3.7 Selling price per unit	
2.3.8 IF they sell ALL the earrings produced, how much will they earn.	
2.3.9 Did they make a profit or loss? **Calculate the amount and indicate whether a profit or loss was realised.**	

Lesson Solutions:

https://wcedeportal.co.za/eresource/157451