

MECH 2315: Finance and Human Resource

Topic 3:Cost accounting

Definition of Cost

- **Cost** is the expenditure incurred on resources that are used to achieve a particular objective. Resources may be tangible (materials or machinery) or intangible (labor, patent, copyright etc.)
- It is the amount of money required to produce a product or perform a service.

Classification of costs

1. Fixed and Variable costs

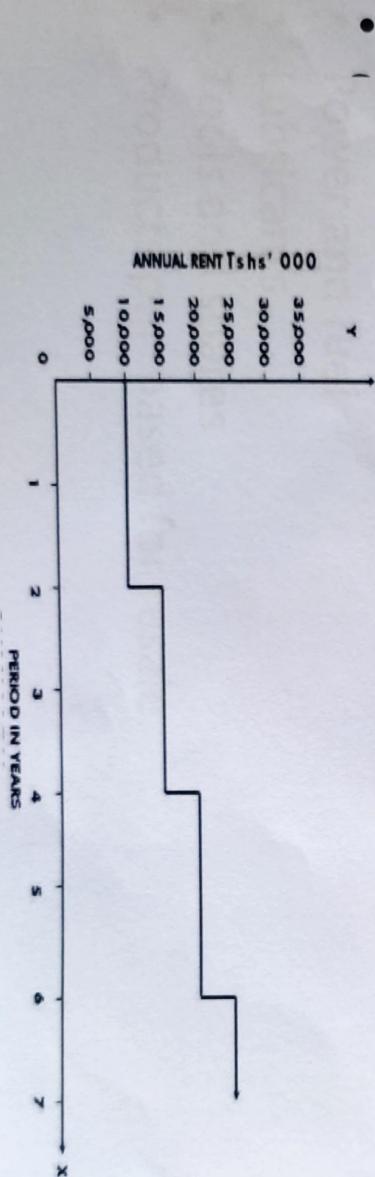
Fixed costs: A cost that remains constant in total, within the current budget period, irrespective of changes in volume of activity.

Fixed costs are the expenses which do not change in proportion to the activity of a business, within the relevant period of time

Example: A retailer must pay rent and utility bills irrespective of the volume of sales he makes. Other examples are;
Rent of office building, factory premises ;Depreciation of building, plant and machinery ;Pay and allowances of managers, secretary and accountants Legal or audit fees

Classification of costs

- **Stepped fixed Cost** these are fixed for a given level of activity but in due course changes by a constant amount at some point.
- **A stepped fixed cost** remains the same up to a certain level of activity or a certain period of time, then changes and again remains constant up to a new activity level or a period of time. E.g Depreciation on company owned vehicles



Classification of costs

Variable Cost

The portion of total cost that varies with a change in the volume of activity

It varies in total but its value per unit cost remains constant.

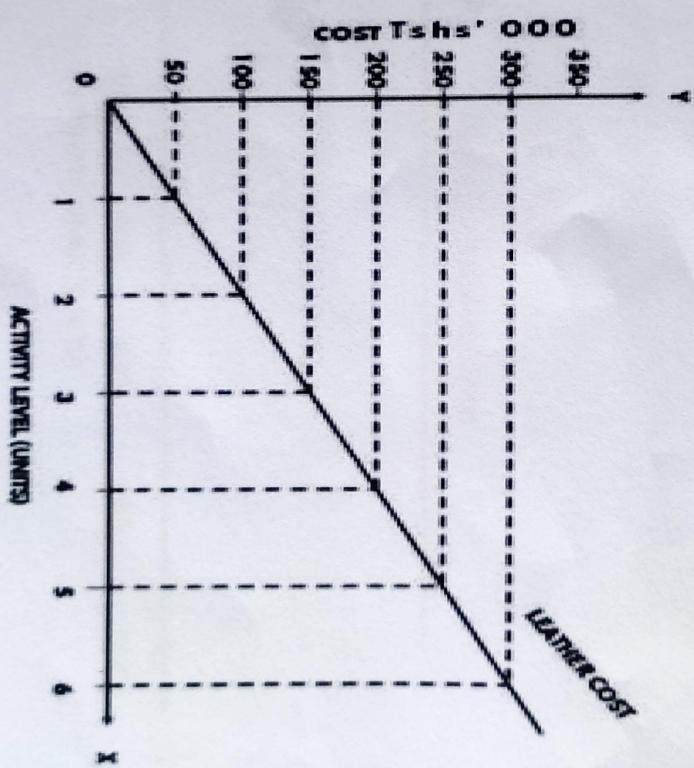
Variable costs are expenses that change in direct proportion to the activity of a business.

Examples

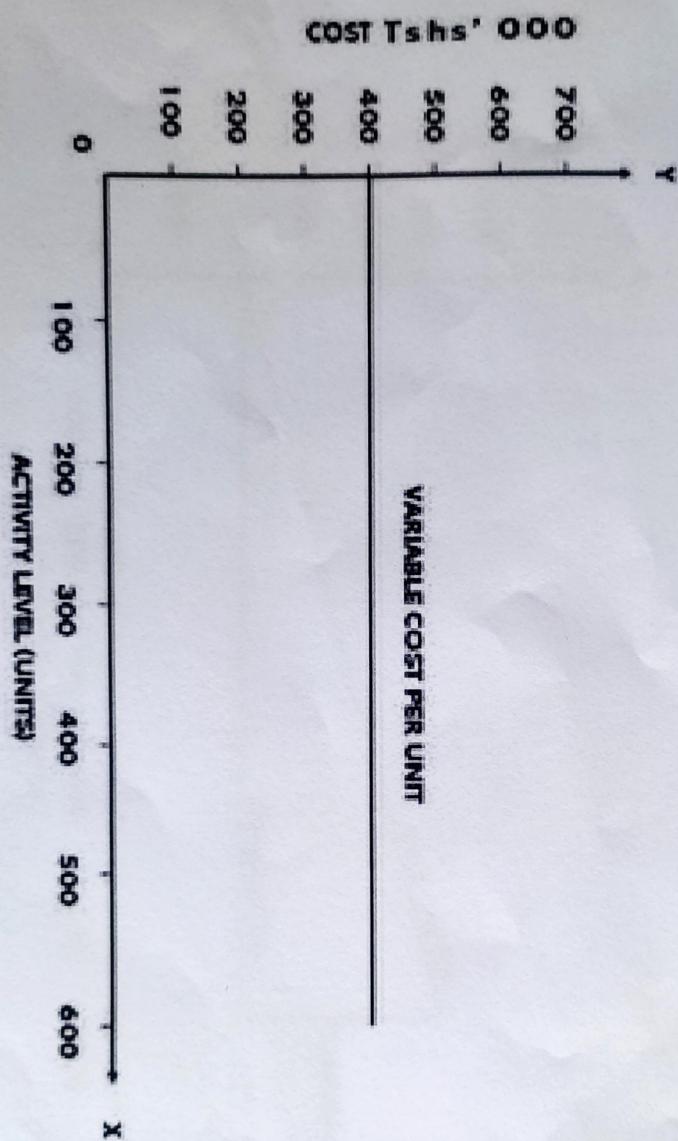
Direct material and labour cost

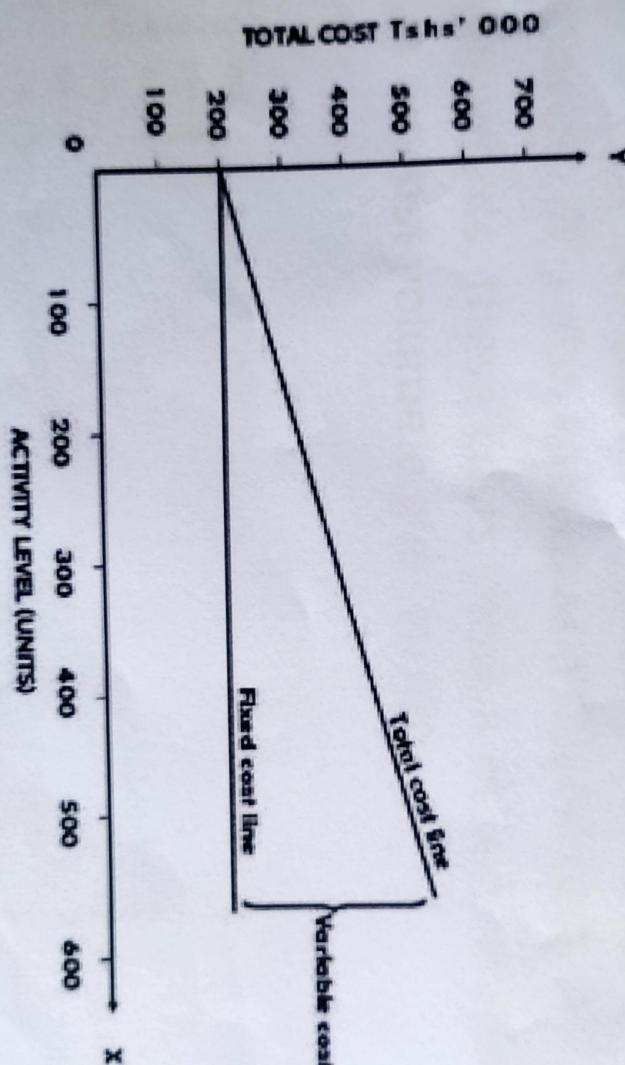
- Indirect material and labour cost
- Power and fuel
- Lubricants
- Tools and spares
- Products purchased for resale

Total Variable cost



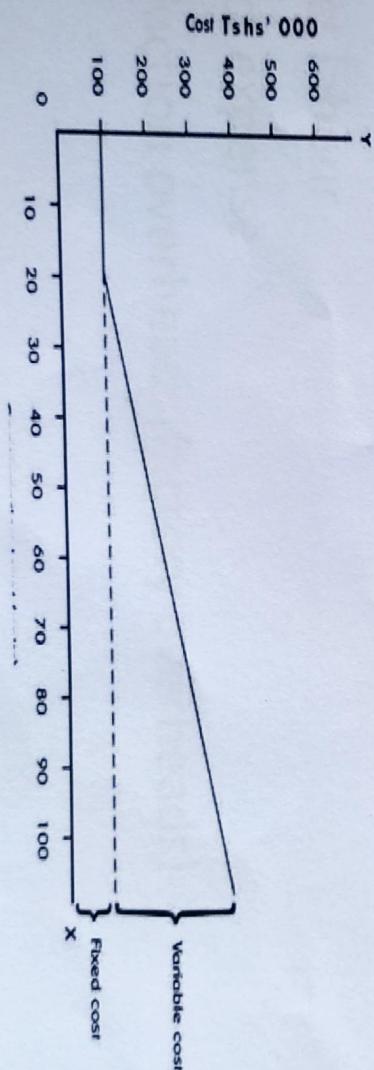
Per unit variable costs





Semi-variable cost

- This is a cost composed of a mixture of fixed and variable components .It is also known as a mixed cost.
- In other words, these costs show a mixed relationship, when plotted against volume.e.g electricity



2. Product and Period costs

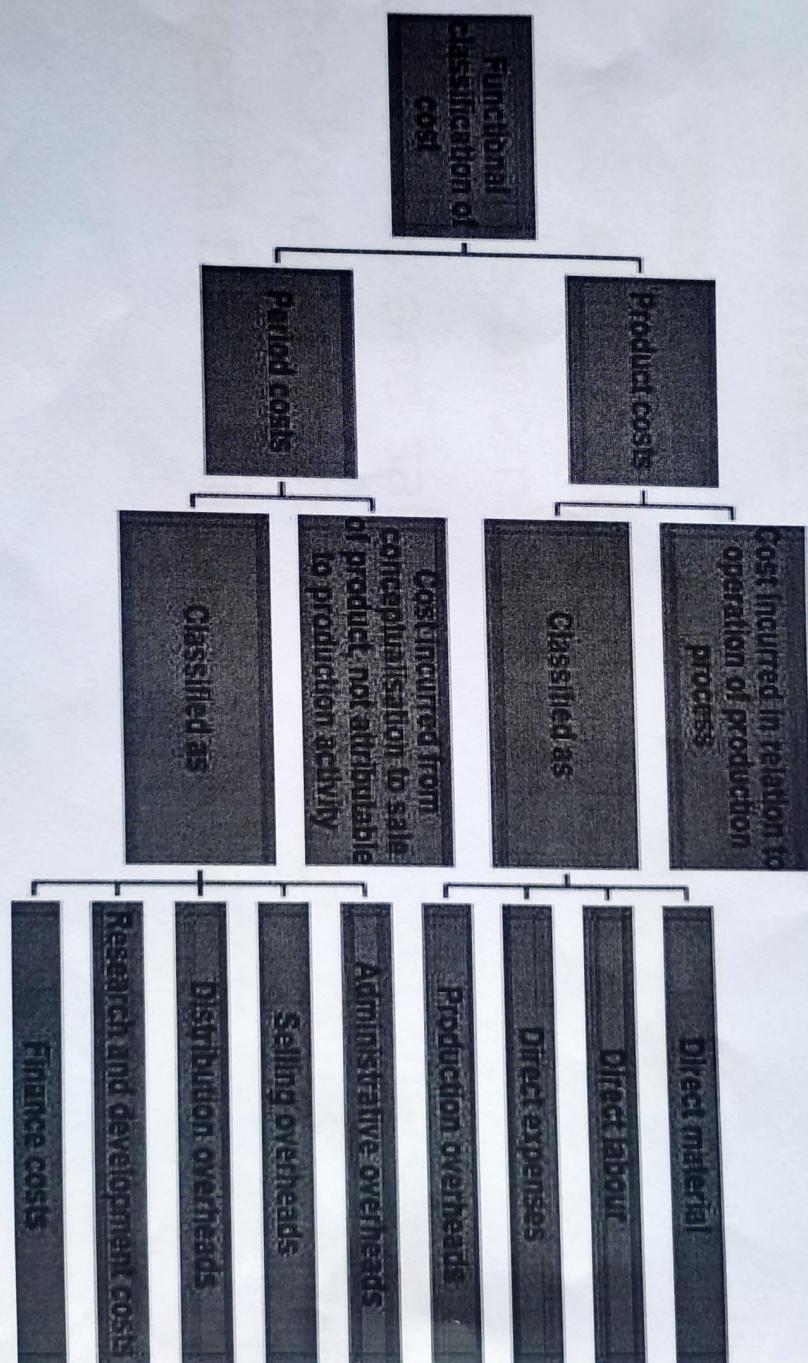
Product costs: These are the costs incurred in relation to manufacturing a product and period costs are the costs incurred in a specific production cycle period.

Product costs are sub-classified as:

- Direct material
- Direct labour
- Direct expense
- Production overheads(factory overheads)

Period costs: All the costs incurred from conceptualization to sale of a product, other than those attributable to production activity, inclusive of administration costs, selling costs, distribution costs, finance costs and research and development costs are the period costs.

E.G Salaries paid to office staff of the finance department are non-production costs. These are not spent on actual production, but are essential for the running of the organization.



- Direct and Indirect costs

Direct costs: Cost that can be specifically identified, or traced in full to the product or service, in a economically feasible manner.

E.G Potatoes and salt are the direct ingredients in the preparation of potato chips. Costs incurred on these will be direct costs.

- **Direct costs** consist of all the direct materials, direct labour and direct expenses. Indirect costs consist of indirect materials, indirect labour and indirect expenses.
- These are collectively also termed overheads

Other types of costs

1. **Relevant costs:** costs pertinent to the making of a specific managerial decision.
2. **Differential costs:** differences in total cost between alternatives that are calculated to assist decision making.
3. **Opportunity costs:** the value of benefits sacrificed when one course of action is chosen in preference to an alternative.
4. **Sunk costs:** costs already incurred and not relevant for decision-making.

Example

- Amber Plc wants to purchase a new machine that will enhance its productivity to 3 times its existing capacity, and discard the old machine. The purchase cost of the new machine is Tshs50,000,000,000. The old machine was purchased for Tshs20,000,000,000. There will be a time gap of 1 month until the new machine is installed for production and hence sales up to Tshs50,000,000 will have to be forgone.

Quiz

Consider the following Balance sheet calculate any 3 ratios and interpret accordingly

	20X7	
	Tshs'000	Tshs'000
Non-current assets		
Tangible assets		20,000
Current assets		
Inventory	24,000	
Trade Receivables	32,500	
Cash		56,500
Total assets		76,500
 Equity and Liabilities		
Ordinary share capital (Tshs 1,000 each)	9,000	
10% irredeemable preference shares (Tshs 1,000 each)	6,000	
Accumulated profits	9,900	
Non-current liabilities		
Loans from banks		24,900
Current liabilities		
Payables	11,000	
Bank overdraft	25,000	
Total equity and liabilities	15,600	40,600
		76,500