



WORKSHEET: 22

School: Ba Sangam College

Year: 1101

Name: _____

Subject : Accounting

Strand – 6	SYSTEMS FOR IMPLEMENTING THE ACCOUNTING PROCESS- I
Sub Strand (6.3)	Sub System Inventory
Content Learning Outcome (6.3.1)	Evaluate the internal control procedures over inventory.

Diminishing Value Method

- The depreciation charge is larger in the early years but decreases as the asset becomes mature.

Advantages	Disadvantages
As the asset gets older, repairs and maintenance increases but these cost are offset by lower depreciation in later years	is not appropriate for lease because it does not provide equal amount of depreciation each year
Is appropriate where the risk of obsolescence is high e.g. motor vehicles and machinery	not possible to write the total cost at the end of the life because some balances remain

Units of Production Method

- Calculates depreciation on the basis of expected output or usage of the fixed asset.
- life is expressed in number of units, mileage, number of hours rather than number of years.
- known as Units of Activity, Units of Usage and Unit of Use method. Generally used for airplanes, plants, machines.
- Deprecation and book value under this method fluctuates depending on the usage in each year.

Advantages	Disadvantages
Suitable in case of fixed assets that depreciate in proportion to units of activity rather than just the passage of time.	Is limited to only certain types of assets. Not suitable for furniture or buildings
Most accurately reflects the pattern of consumption of economic benefits.	is solely based on usage, does not take into account assets life.

Formula

$$\text{Depreciation per Unit} = \frac{\text{Original Cost} - \text{Scrap value}}{\text{Estimated Total Production}}$$

$$\text{Depreciation per Annum} = \text{Depreciation per unit} \times \text{Number of units in each year}$$

OR

$$\text{Depreciation per Annum} = \frac{\text{Original Cost} - \text{Scrap value}}{\text{Estimated Total Production}} \times \text{No. of Units p.a}$$

Example

Edward purchased a new Toyota Corolla vehicle from Cars Motors Ltd for \$46000. The life of the vehicle is estimated at 300000 kilometers and its residual value at that time will be \$16000. The distance travelled by the Toyota Vehicle was as follows:

Years	Kilometers
1	90000
2	75000
3	80000
4	92000

Required:

- ✚ Calculate the depreciation per kilometer

$$\text{Depreciation per Unit} = \frac{\text{Original Cost} - \text{Scrap value}}$$

$$\text{Unit} \quad \text{Estimated Total Production}$$

$$\text{\$0.10 per kilometer} = \frac{\text{\$46000} - \text{\$16000}}$$

$$300000 \text{ kilometers}$$

✚ Compute the amount of depreciation for each of the years and complete the table

Year	Original Cost	Working	Annual Depreciation	Accumulated Depreciation	Book Value
1	46000	\$.10/km x 90000	9000	9000	37000
2	46000	\$.10/km x 75000	7500	16500	29500
3	46000	\$.10/km x 80000	8000	24500	21500
4	46000	\$.10/km x 92000	9200	33700	12300

✚ Calculate the profit or loss on sale if the Toyota Vehicle was sold at the end of the second year for \$23000.

$$\text{Loss on sale} = \text{Selling Price} - \text{Book Value}$$

$$\$6500 = \$23000 - 29500$$

Calculations:

1. On January, 2011 Anaseini purchased, Machinery at a cash price of \$70000. She paid \$5000 for landing charges. The Accountant Raju Raj estimated the Machinery would produce 150000 units while the residual value is \$15000.

Actual units produced

Year	Output in units
1	6500
2	8100
3	6200
4	7250

Required:

Study the information given above and answer the questions that follow.

- Calculate depreciation rate per unit
- What is the accumulated depreciation at the end of the Third year
- What is the book value of Machinery at the end of First year
- Calculate the gain or loss on sale if the Machine was sold at the end of Second year at \$70000 and prepare the journal entry to record gain or loss on sale
- Prepare the journal entry to record depreciation expense for the Second year

a	
b	
c	
d	
e	