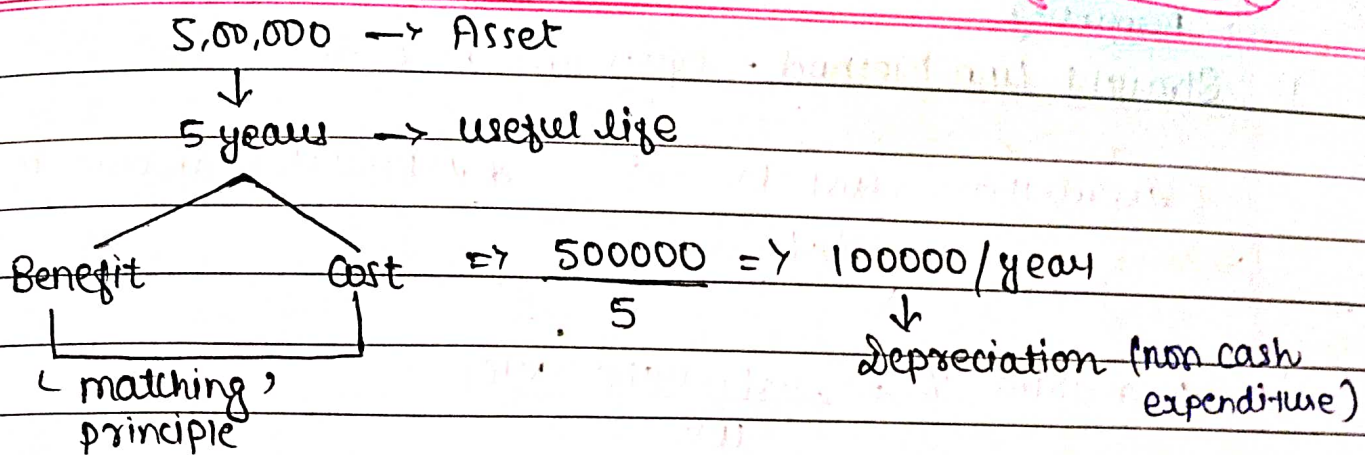
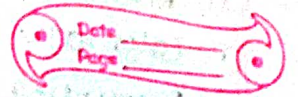
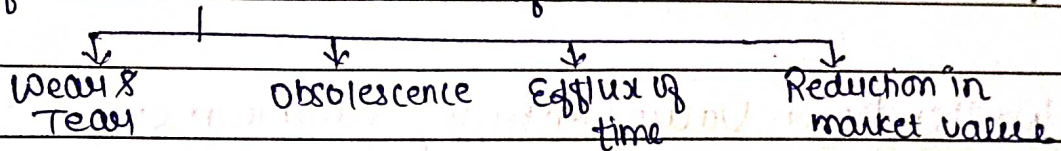


# CH-5 Depreciation and Amortisation



(a) To provide for reduction in value of assets.



(b) To show correct profit or loss

(c) To accumulate funds for the replacement of assets

(d) To ascertain true cost of production

## # Factors necessary to calculate Depreciation:-

(a) Cost of asset (plus installation expense, commissioning, trial run etc)

(b) estimated useful life of the asset

(c) estimated scrap value (residual value)

## • Methods to calculate depreciation:-

(a) Straight line method (SLM)

(b) Written down value method (WDV)

(c) Sum of years digit method

(d) Machine hour method / Production unit method / Depletion method

- \* Process of Normal Sale
- (i) provide depreciation till date of sale
- (ii) calculate profit/loss
- (iii) Accounting

1.7 Straight Line Method - equal amount of depreciation

$$\text{Depreciation} = \frac{\text{Cost} - \text{RV}}{\text{U.L}}$$

\* Depreciation amount is constant

$$\text{Depreciation \%} = \frac{\text{Depreciation} \times 100}{\text{Cost}}$$

• Cost - residual value = Depreciable value

2.7 Written Down Value / Reducing Balance method = Depreciation on reduced value

eg. Cost = 10,00,000, Dep. % = 10%

$$\begin{array}{r} 1000000 \\ (-) 100000 \\ \hline 900000 \end{array} \rightarrow \begin{array}{r} 900000 \\ (-) 90000 \\ \hline 810000 \end{array} \rightarrow \begin{array}{r} 810000 \\ (-) 81000 \\ \hline 729000 \end{array}$$

\* Depreciation amount keeps diminishing (reducing)

$$\text{Depreciation} = \text{Cost} - A \left(1 - \frac{R}{100}\right)^n$$

\* Provision for Depreciation method (Separate method of presentation)

(Liability a/c)  
Provision for Depreciation A/c

Depreciation A/c Dr. To Provision for Depreciation A/c

To Balance c/d	5000	By Depreciation A/c	5000
		By balance b/d	5000

B/S  
machine  
(-) provision

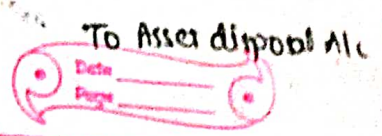
Better disclosure

\* Last year provision + New provision = ACCUMULATED DEPRECIATION

\* process of sale in Provision method

- (i) provide depreciation till date of sale
- (ii) transfer cost of asset to asset disposal A/c
- (iii) transfer accumulate dep- to asset disposal A/c
- (iv) Sales
- (v) Balancing figure will be profit/loss on sale of asset

\* Bank A/c Dr.



To machinery A/c	500000	By Provision for Dep- A/c	125000
		By Bank A/c	200000
		By Loss on sale of asset A/c	175000

\* Provision for Depreciation Method

- > Under this method, we prepare 3 accounts:-
  - (a) Machinery / Asset a/c (at cost) (transfer to asset disposal a/c during sales)
  - (b) provision for depreciation a/c
  - (c) Asset disposal a/c (only at time of sales)

• Important Journal entries:-

- (a) Transfer of asset to asset disposal a/c
 

Asset disposal A/c Dr.  
To Asset A/c
- (b) Transfer of provision for depreciation to asset disposal a/c
 

Provision for depreciation A/c Dr.  
To Asset disposal A/c

\* Process of sale under provision for depreciation method :-

- (a) provide depreciation till date of sale
- (b) transfer cost of asset to asset disposal a/c
- (c) transfer accumulated depreciation to asset disposal a/c
- (d) Sales
- (e) Balancing figure will be profit/loss on sale of asset

## • Change in method of depreciation / change in useful life

Accounting estimate

↓  
change in accounting estimate will always have a prospective effect

⇓  
It will affect only future year

During change in method of depreciation, book value (reduced) as considered as cost on which depreciation would be charged.

## \* Sum of Years digit method

↳ accelerated method of depreciation

• Steps to calculate depreciation under sum of years digit method :-

Step 1 - Calculate sum of years digit

eg. useful life = 5 years

$$5+4+3+2+1 = 15$$

$$\text{Sum of years} = \frac{n(n+1)}{2}, \quad n = \text{useful life}$$

Step 2 -  $\text{Depreciation} = \frac{(\text{Cost} - \text{R.V.}) \times \text{remaining U.L (incl. c.y)}}{\text{Sum of years digit}}$

eg. Cost = ₹ 700000 ; Residual Value = ₹ 100000  
U.L = 5 years

$$\rightarrow \text{Sum of years digit} = \frac{5 \times 6}{2} = 15$$

• 1<sup>st</sup> year  $\Rightarrow 600000 \times \frac{5}{15} = ₹ 200000$

• 2<sup>nd</sup> year  $\Rightarrow 600000 \times \frac{4}{15} = ₹ 160000$

• 3<sup>rd</sup> year  $\Rightarrow 600000 \times \frac{3}{15} = ₹ 120000$

• 4<sup>th</sup> year  $\Rightarrow 600000 \times \frac{2}{15} = ₹ 80000$

• 5<sup>th</sup> year  $\Rightarrow 600000 \times \frac{1}{15} = ₹ 40000$

\* Machine Hour method / Production unit method / Depletion method

eg. Total hours = 15000 hours

Cost = 30,00,000

• year 1 = 3000 hours =  $\frac{3000}{15000} \times \frac{6000000}{30000000} \Rightarrow 600000$  (Depreciation)

• year 2 = 4000 hours =  $\frac{4000}{15000} \times \frac{2000000}{30000000} \Rightarrow 800000$  (Depreciation)

\* Depletion method = mines, quarries, natural resources

method 1:  $\text{Cost per hour/unit} = \frac{\text{Cost} - \text{RV}}{\text{Total Hours / Unit}}$

$\text{No. of hours/unit consumed} \times \text{Cost per hour}$

method 2:

$\text{Depreciation} = \frac{\text{Cost} - \text{RV}}{\text{Total no. of hours/unit}} \times \text{no. of hours/unit consumed}$