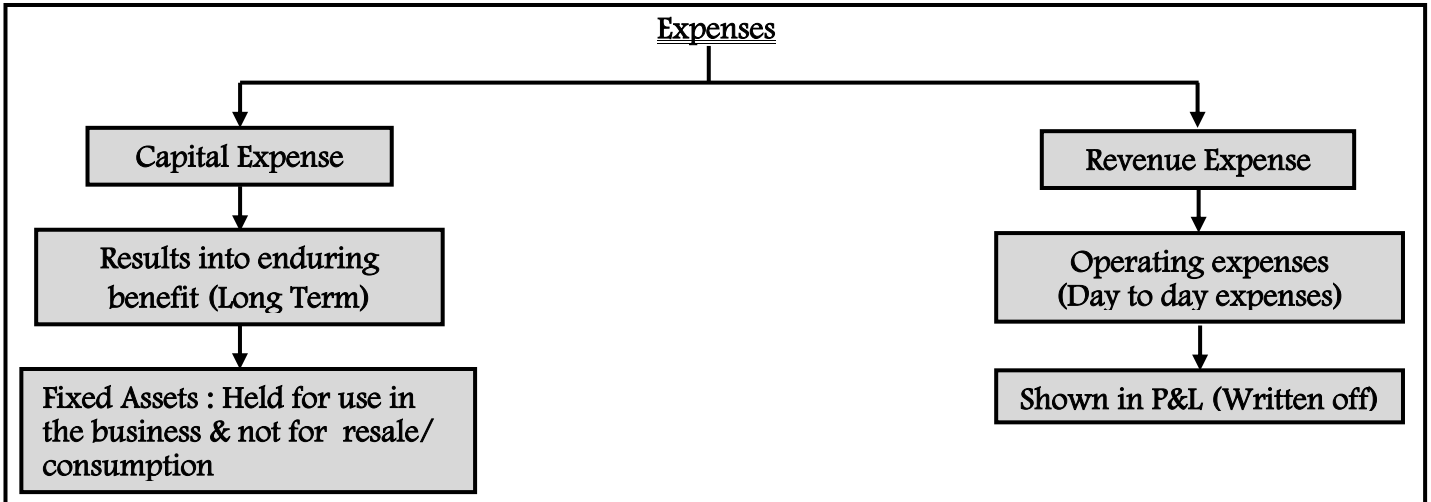
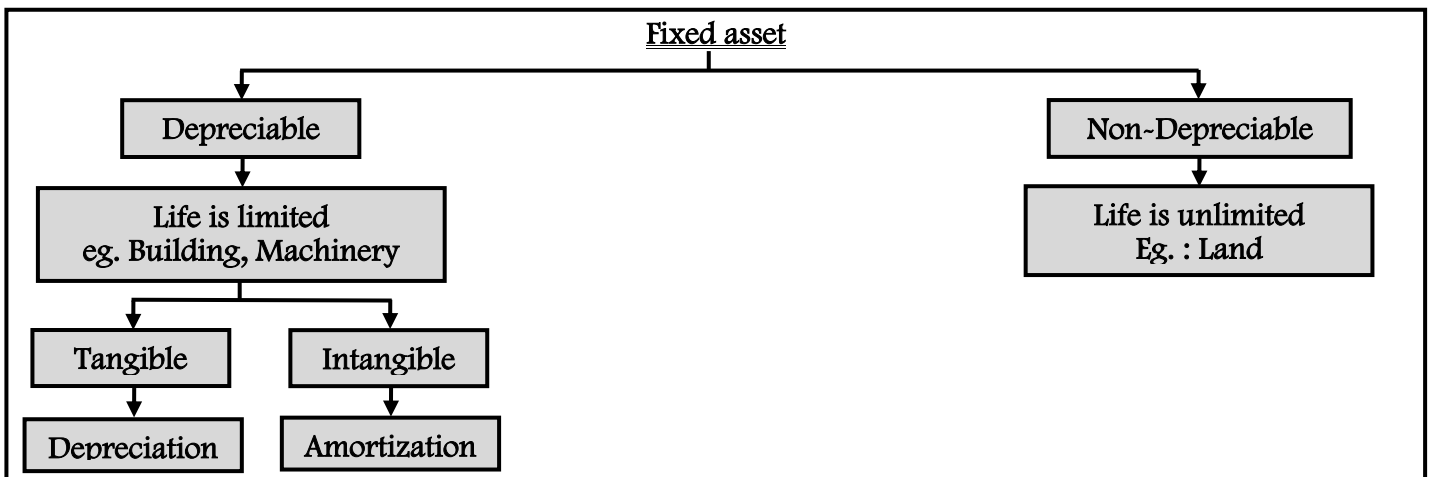


5. DEPRECIATION

CONCEPT 1 : WHAT IS EXPENSES?



CONCEPT 2 : FIXED ASSETS

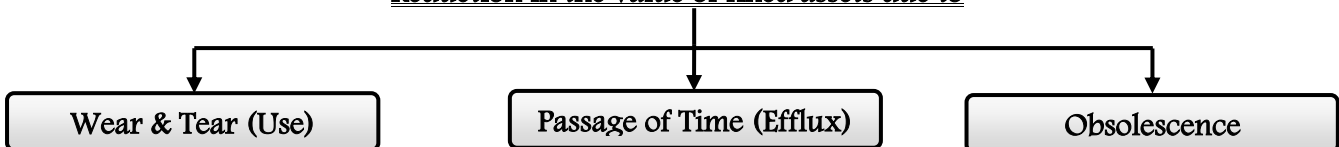


CONCEPT 3 : DEPRECIATION ACCOUNTING

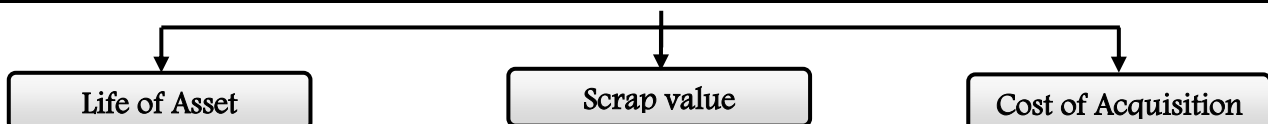
- Systematic allocating
- Depreciable amount.
- To the Profit & Loss A/c
- Over its useful life

CONCEPT 4 : DEPRECIATION

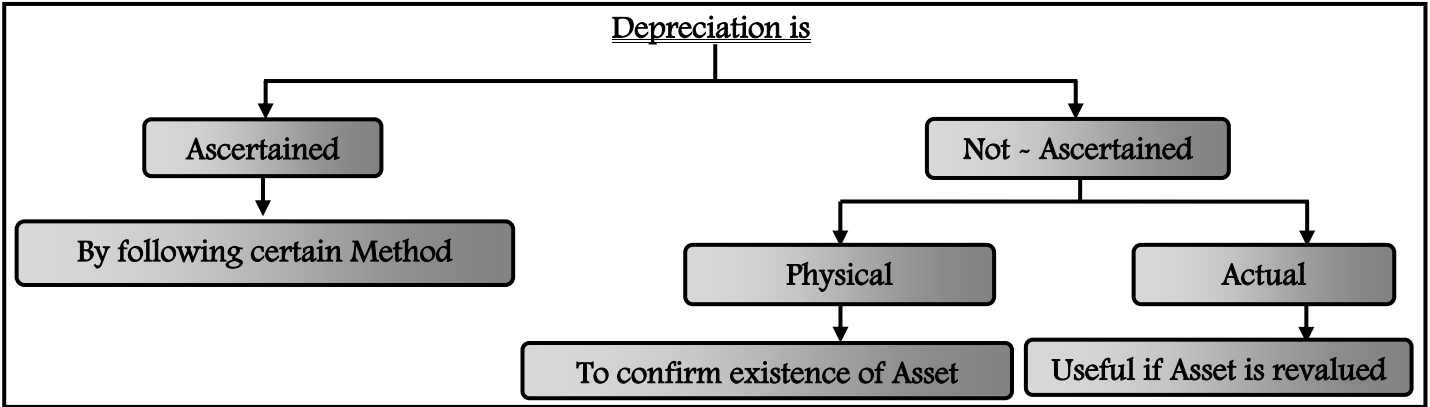
Reduction in the value of fixed assets due to



CONCEPT 5 : ELEMENTS RELEVANT FOR DECIDING RATE OR AMOUNT OF DEPRECIATION



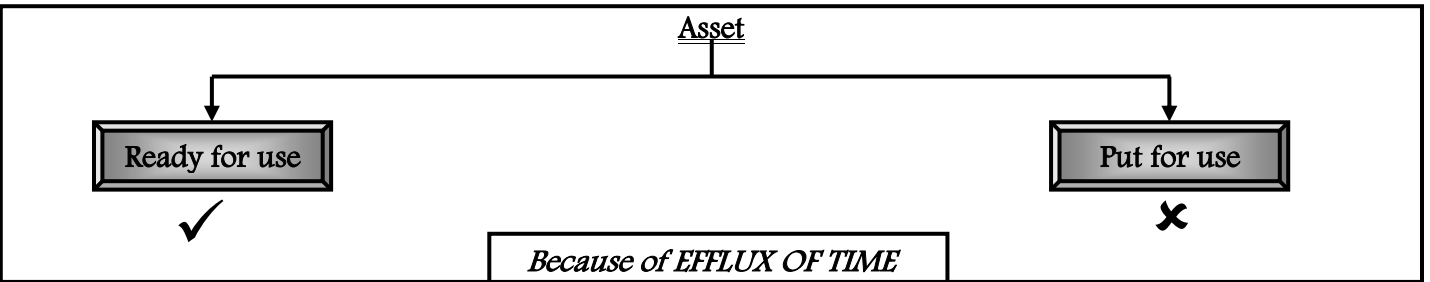
CONCEPT 6 : ASCERTAINMENT OF AMOUNT



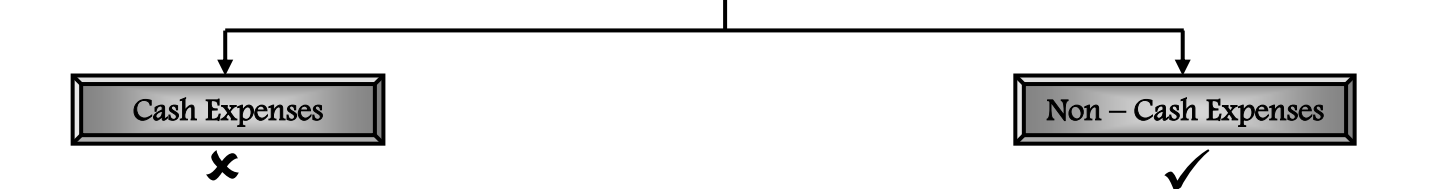
CONCEPT 7 : NEED/BENEFIT OF DEPRECIATION

- Assets are shown at proper (reduced) value at every Balance Sheet Date
- P&L shows true & fair view because, some portion of fixed asset is debited to P&L A/c.
- Funds get retained in the business so, used for *replacement of the asset*.

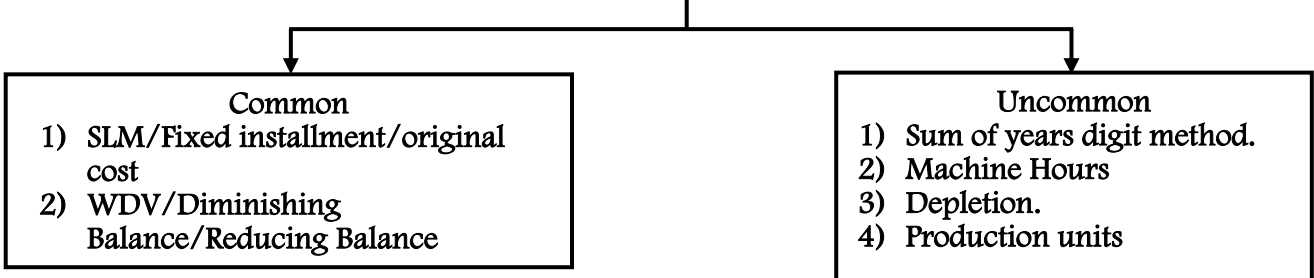
CONCEPT 8 : WHEN TO START DEPRECIATION?



CONCEPT 9 : DEPRECIATION



CONCEPT 10 : METHODS

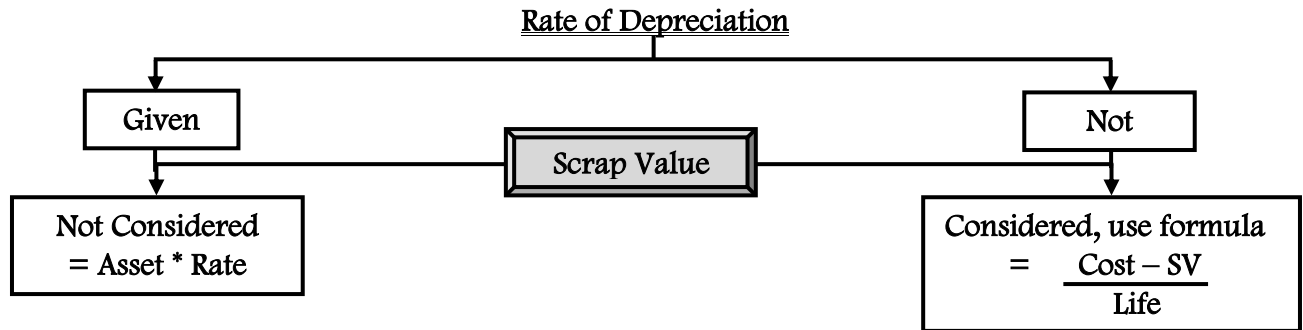


CONCEPT 11 : COMMON METHODS

1) Straight line method (SLM)/Fixed Installment/Original Cost Method :-

- Depreciation is same every year

- Formula :
$$\frac{\text{Cost} - \text{Scrap/Salvage/Realisable/ residual value}}{\text{Useful life (in years)}}$$



2) Written Down Value (WDV) :-

- Depreciation gets reduced every year
- Rate can be calculated using formula (90% not asked in exam) :-

- Rate =
$$\left(1 - \sqrt[n]{\frac{\text{Scrap value}}{\text{Cost}}} \right) * 100$$

n = Life of Asset

→ Salvage Value is of no use in WDV method (Reason : Rate of Depreciation is given)

☺ Examples :

1) Asset of Rs.100, Rate = 10%, SV = Rs.10 (TCV), Find Depreciation for 5 yrs.

Way 1: Using Table:-

Years	Operating Balance	Depreciation	Closing Balance
1	100	10	90
2	90	9	81
3	81	8.1	72.9
4	72.9	7.29	65.61
5	65.61	6.561	59.049

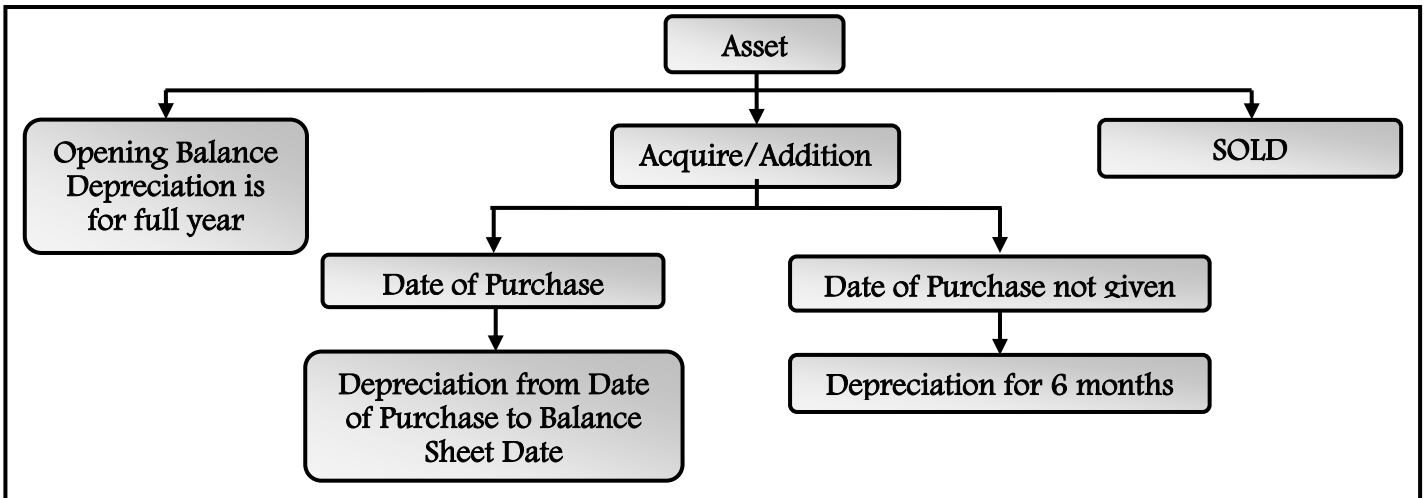
Way 2 : Calculator :-

$$\left. \begin{aligned} (1 - \text{Rate of dep.}) * \text{cost of asset} \\ = \\ = \\ = \end{aligned} \right\} \text{Closing Balance}$$

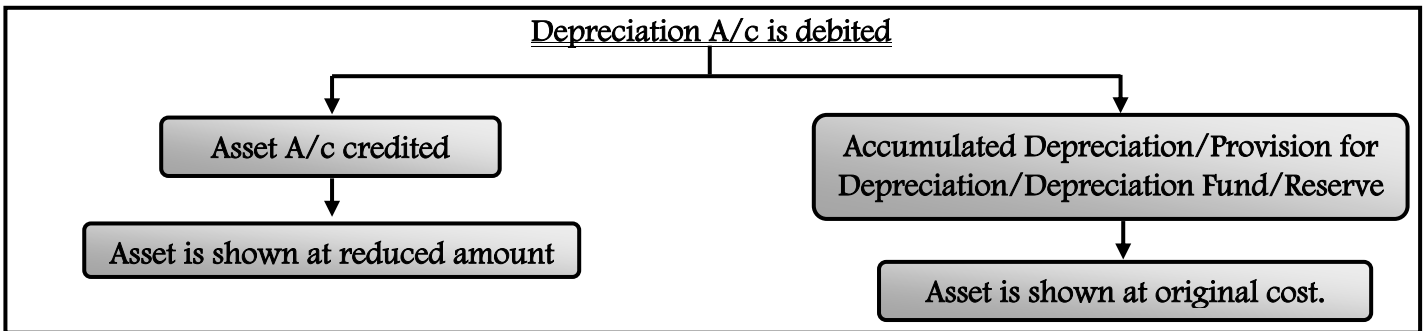
$$\left. \begin{aligned} (1 - \text{Rate of dep.}) * \text{cost of asset} \\ = \\ = \end{aligned} \right\} \text{1st Year Depreciation}$$

CONCEPT 12 : PERIOD OF DEPRECIATION

→ On the basis of time for which asset is to be used



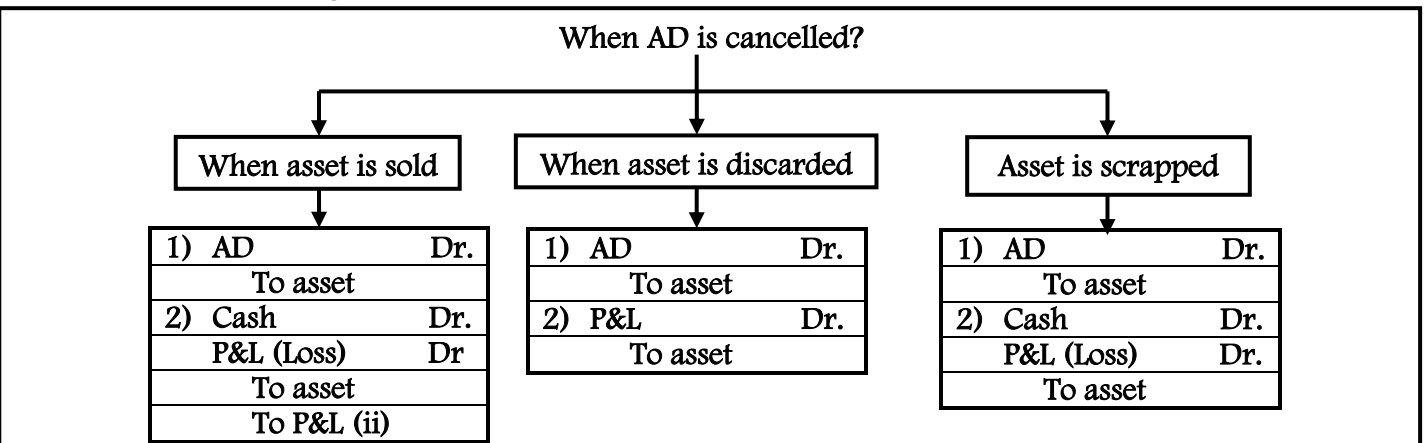
CONCEPT 13 : METHOD OF ACCOUNTING



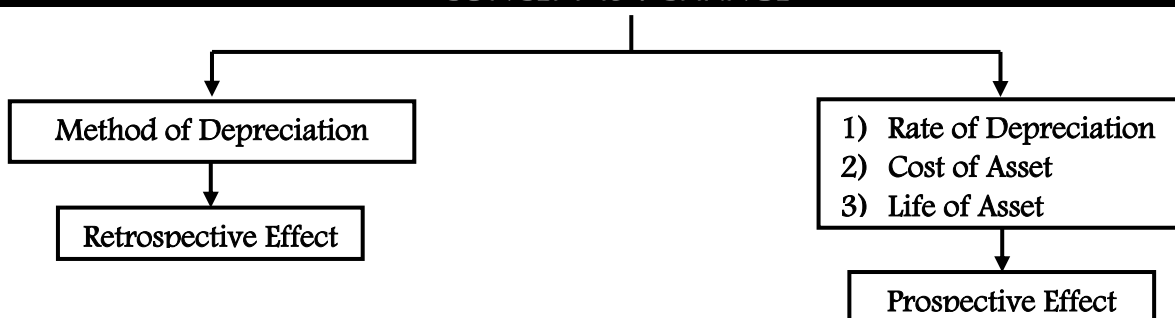
CONCEPT 14 : ACCUMULATED DEP. A/C

Features :-

- AD has credit balance
- Asset is shown at original cost



CONCEPT 15 : CHANGE



CONCEPT 16 : CHANGE IN METHOD OF DEPRECIATION

- Commonly followed method : SLM, WDV
- Depreciation method should be followed consistently, but change in method is permitted
 - 1) Due to change in statute / law.
 - 2) Due to change in AS.
 - 3) For better presentation
- SLM → WDV or WDV → SLM.
- Difference should be adjusted in P&L a/c.

☺ Example :

- 1) Asset cost = Rs100, Current Method = SML
 Rate of Depreciation = 10%, New Method = WDV
 Rate = 15%
 Method is changed in years 3.

Year	Particulars	SLM	WDV
0	Asset	100	100
1	Less : Depreciation	10	15
		90	85
2	Less : Depreciation	10	12.75
		80	72.25

Charge Depreciation on '80' → Prospective method not allowed

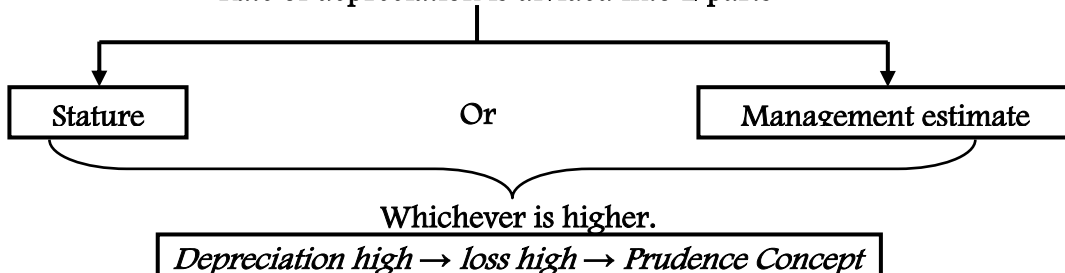
Sr. No.	Particulars	Rs
i)	Current Balance	80
ii)	Show Asset Balance	72.25
iii)	Asset reduced by	7.75

Sr. No.	Particulars	Dr	Cr
i)	P&L A/c	7.75	
	To Asset A/c		7.75

Now charge depreciation on 72.25 @ 15% = Rs.10.8375 i.e. Retrospective method

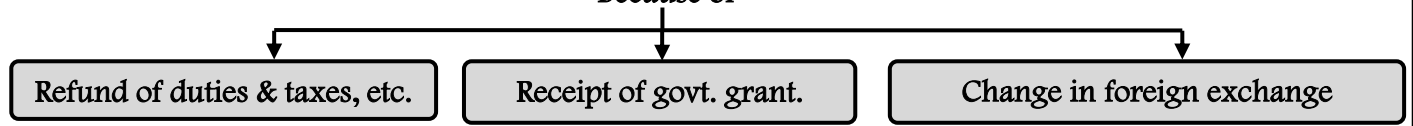
CONCEPT 17 : CHANGE IN RATE OF DEPRECIATION

Rate of depreciation is divided into 2 parts



CONCEPT 18 : CHANGE IN COST OF ASSET

Because of



- 1) E.g. asset costing Rs.5 lakhs useful life – 10 years, depreciated by SLM.
 In 3rd Year Govt. grant received Rs.1 lakh. Calculate depreciation of 3rd years.

CONCEPT 19 : REVALUATION OF ASSET

→ Revalued amt. is to be written off over its remaining useful life.

E.g. Asset costing Rs.1, 00,000, Useful life – 10 years. In 3rd year asset revalued upward by Rs.20, 000
Calculate depreciation for 3rd year

Sr. No.	Particulars	Rs
i)	Cost	1,00,000
ii)	(-) : Depreciation 1 st years	(10,000)
iii)	(-) : Depreciation 2 nd years	(10,000)
iv)	WDV	80,000
v)	(+) : Upward Revaluation	20,000
vi)	Revised WDV (iv + v)	1,00,000

$$\text{Dep. for 3rd years} = \frac{1,00,000}{8} = \underline{\underline{\text{Rs}12,500}}$$

CONCEPT 20 : CHANGE IN LIFE OF ASSET

→ Estimation of life which may be revised in future

→ The unamortized balance should be written off over useful life i.e. prospective

Adjustment

1) E.g. Asset - Rs.2,00,000. Life – 10 years. SLM method. In 5th years life is expected 12 years

Step I : Depreciation for 4 years & WDV			
Sr. No.	Particulars	Computation	Rs
i)	Depreciation	(2,00,000/10 years)	20,000
ii)	WDV at the end of 4 th year	[2,00,000 – (20,000*4)]	1,20,000
Step II : Depreciation for 5-12 years & WDV			
iii)	Depreciation	(1,20,000/8 years)	15,000
iv)	WDV at the end of 5 th year	(ii - iii)	1,05,000

CONCEPT 21 : UNCOMMON METHODS

Sum of Years digit method:-

→ This method is useful when rate of dep. is not given but depreciation is required reducing.

→ Combination of SLM (rate of dep. not given) & WDV (dep. is reducing).

→ Depreciation is calculated in the ratio of remaining life of the asset in the beginning of that year to the sum of digits of the total of all the years.

→ Formula :-

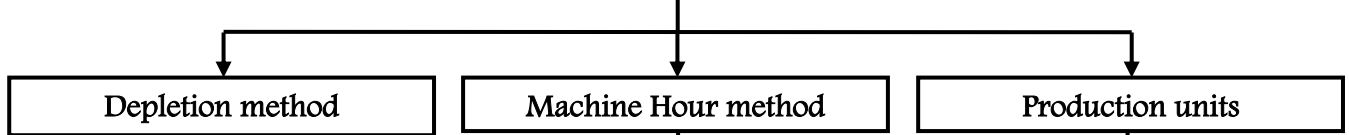
$$(\text{Cost} - \text{Scrap value}) \times \frac{\text{Remaining life including current years}}{\text{Sum of years of digit}} = n \frac{(n+1)}{2}$$

1) Eg. Cost = Rs1,00,000 life – 10 years. Calculate depreciation for 4 year

Year	Computation	Amount of Depreciation
1	[1,00,000 * (10/55)]	18,182
2	[1,00,000 * (9/55)]	16,364
3	[1,00,000 * (8/55)]	14,545
4	[1,00,000 * (7/55)]	12,727

CONCEPT 22 : DEPLETION / MACHINE HOUR / PRODUCTION UNITS METHOD [TQ.1 (i)]

Depreciation way is same



Depletion method Formula : $\frac{(\text{Cost} - \text{SV}) * \text{Extracted qty from mine in that years}}{\text{Total extractable quantity (in whole life)}}$	Machine Hour method Formula : $\frac{(\text{Cost} - \text{SV}) * \text{Machine hours for that years}}{\text{Total machine hours (in whole life)}}$	Production units Formula : $\frac{(\text{Cost} - \text{SV}) * \text{Unit production that years}}{\text{Total units production (in whole life)}}$
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- 1) E.g. Machine cost = Rs. 5, 00,000 Effective hours = 1, 00,000 Hrs. Year 1 = 10,000Hrs.
 Year 2 = 20,000 Hrs. Year 3 = 18,000 Hrs.

Year	Computation	Amount of Depreciation
1	$[5,00,000 * (10,000/1,00,000)]$	50,000
2	$[5,00,000 * (20,000/1,00,000)]$	1,00,000
3	$[5,00,000 * (18,000/1,00,000)]$	90,000

CONCEPT 23 : SINKING FUND /DEPRECIATION FUND INVESTMENTS [TQ.1 (ii)]

- In addition to depreciation, every year an equal amount together with interest earned is invested outside the business
- ☞ OBJECTIVE - To have *sufficient Fund for replacement* when useful life will be over.
- Amount of investment is ascertained by using *Annuity Table*.

Journal Entries:-

Sr. No.	Particulars	Dr	Cr
Year 0 :	At the beginning of the years :		
1)	Asset A/c Dr. To Cash		
2)	At the end of 1 st year :		
a)	Depreciation A/c Dr. To Sinking fund (Similar to AD a/c) (Asset is shown at cost)		
b)	P&L A/c Dr. To Depreciation		
c)	Sinking Fund Investment A/c Dr. To Cash		
3)	At the end of year 2 :		
a)	Interest Received Bank A/c Dr. To Sinking Fund A/c		
b)	Depreciation A/c Dr. To Sinking Fund A/c		
c)	P&L A/c Dr. To Depreciation		
d)	Sinking Fund Investment A/c Dr. To Cash		

4)	At the end of last year :		
a)	Interest Received		
	Bank A/c Dr.		
	To Sinking Fund A/c		
b)	P&L A/c Dr.		
	To Depreciation A/c		
c)	Sinking Fund Investment Sold :		
	Cash A/c Dr.		
	Sinking Fund A/c (Loss) Dr.		
	To Sinking Fund Investment A/c		
	To Sinking Fund A/c (Profit)		
d)	Asset balance transfer to Sinking Fund		
	Sinking Fund A/c Dr.		
	To Asset A/c (Original Cost)		
5)	Balance in Sinking Fund		
a)	Credit Balance		
	Sinking Fund A/c Dr.		
	To General Reserve		
b)	Profit & Loss A/c Dr.		
	To Sinking Fund A/c		

CONCEPT 24 : FACTORS CONSIDERED FOR CALCULATION OF DEPRECIATION [TQ.3]

- ✓ Cost of asset including expenses for installation, commissioning, trial run, etc
- ✓ Estimated useful life of the asset and
- ✓ Estimated scrap value, if any of the asset.

CONCEPT 25 : DISTINCTION BETWEEN SLM & WDV METHOD OF DEPRECIATION [TQ.1]

Sr. No	Factors	Straight Line Method	Written Down Value Method
[i]	Depreciation charge	Equal throughout the life.	Reduced over the years as asset grows old.
[ii]	Depreciation of Asset	Asset can be fully depreciated	Asset can never be fully depreciated
[iii]	Total Charges	Will not be uniform	More or less evenly distributed throughout the life of asset

CONCEPT 26 : REVISION OF ESTIMATED LIFE OF PPE

- ↳ The residual value & useful life of asset should be reviewed at least at end of each financial year-end.
- ↳ If it differs from previous estimates, it is accounted as a change in an accounting estimate
- ↳ Whenever there is a revision in the estimated useful life of the asset, the unamortised depreciable amount should be charged over the revised remaining estimated useful life of the asset.

CONCEPT 27 : REVISION OF ESTIMATED LIFE OF PPE

- ✓ If there is an *upward revision first time*, then amount of appreciation is debited to Asset A/c & Credited to Revaluation Reserve.
- ✓ If there is *downward revision* then P&L is debited and Asset Account is credited.
- ✓ If asset was *earlier revalued downward* and *later on revalued upward* then appreciation to extent of earlier downfall is *credited to profit and loss account*.
- ✓ If an asset was *earlier revalued upward* and then *later on it was revalued downward* then the downfall to the extent of earlier appreciation is *debited to Revaluation Reserve Account*.
- ✓ In case the *revaluation has a material effect* on the amount of depreciation, the same should be *disclosed separately* in the year in which revaluation is carried out.

CONCEPT 28 : PROVISION FOR REPAIRS AND RENEWALS

- Expenditure incurred for repairs, renewals and maintenance on plant and machinery may vary over the years during the working life.
- Thus, for equalizing the charge of repairs and renewals, a Provision for Repairs and Renewals Account is opened beforehand.
- Average of this expenditure is debited to Profit and Loss Account and credited to Provision for Repairs and Renewals Account irrespective of actual expenses incurred every year.
- The balance in provision for Repairs and Renewals Account is carried forward and in the end or on sale of the asset, the account is closed by transfer to the Asset Account for any balance left.
