BOND :

The expenditure of bonds is an excellent example of the principles of the capital recovery . it is specially printed piece of paper which states the value of the bond and the manner in which interest to be paid the company must pay face value of the bond at it . maturity date by this method the issuing company is amertizers its debt and the investors recovered its capital with interest . the bond is the promise of the company to pay the depth and is the legal document it gives the investor in written for the use of his capital .

PROBLEM :

A 10years 6% bond having a face value (principle) of rs 1000 is a promise to pay rs 30 every , 6 months for a period of 10 years and rs 1000 at the end of 10yrs .

Solution :

The value of the bond is made up at 2 parts ;

The present value of bond 1000 to be payed sometimes in future .
A series of interest payments which will also be made in the future .

Eq(2.1) $S = p\,(1+i)^n$

$S = 1000(1+3/100)^{20} \longrightarrow P = S/(1+i)^n$

$P = 553.70$

$P = R(1+i)^n\text{-}1 \,/\, i(1+i)^n$

$= 30(1+3/100)^{20}\text{-}1 \,/\, 3/100(1+3/100)^{20}$

$P = 44630$

DEFINE “DEPRECIATION”:

Depreciation is a systematic and a rational process of distributing the cost of tangible assets over the life of assets .
Depreciation is a process of allocation

Cost to be allocated (acquisition cost – salvage)
Allocated over the estimated useful life of assets
A non cash expense that reduces the value of an asset as result of wear and tear , age , or obsolescence . most assets lose their value overtime (in other words , they depreciate), and must be replaced once the end of their useful life is reached . there are several accounting methods that are used in order to write off an assets depreciation cost over the period of its usefullife . because it is a non-cash expense , depreciation lowers the company repeated earning while increasing free cash flow .

DEPRECIATION METHOD

The change of depreciation can impact the net profit in the income statement so the methods of calculating depreciation is very important . adopting different methods of calculating result will be different. And it will refer to the expenses are tax in income statement. Choosing the fit methods of calculating depreciation, it need to be faced by the finance

There are several possible methods of calculating depreciation:

Straight line method
Reducing balance method
Sum of the digits method
Revaluation method
Double declining balance depreciation
Sinking – fund method
Fixed percentage method

Straight line method :

Its the simplest and most popular methods of calculating depreciation. Under this method the depreciation charge is constant over the life of the asset. And we need know three pieces of information .

The original (historical) cost of the asset
An estimate of its useful life to the business
An estimate of its residual valued at the end of its useful life

Annual depreciation charge = (original – residual value)/estimated useful value

Reducing balance method :

Under this method the depreciation charge will be earlier years of the life of the asset . here needs a percentage to apply. And in the first year the percentage is applied to cost but in

subsequent years its is applied to the assets not book value (alternately known as written down value)

Sum of the digits method :

The aim of this method is to show a higher depreciation charge in the early years of the life of an asset.

Revaluation method :

When a non- current asset has been revalues , the charge from depreciation should be based on the revalued amount and the remaining useful economic life of the asset .

Double declining balance depreciation :

The double declining balance depreciating method is the straight line method on steroids. To use it accounts first calculate depreciation as if they were using the staright line method. They then figure out the total percentage of the asset that is depreciated the first year and double it. Each subsequent year, that same

Sinking fund method :

It is based on setting up a sinking fund in which money accumulates to replace exit stream at a proper time. In this method, n annual deposits could be put aside as a fund that is invested to yield a return of 'i" on the fund these earnings become part of the total earnings of the company .

If (P-L) = 1000, i= 6 %, and n=10years , the annual deposit as computed from eq. (2-9) is 75.90, but if a sinking fund that is not invested outside the company is used for accounting purposes the annual charge for depreciation increases each year because interest on the amount accumulating in the depreciation account must be added. Such interest is on the original capital.

Fixed percentage method :

In this method , a fixed percentage of the remaining capital (book value) from the preceeding year may be computed for each year . This percentage may be 5,10 or any other percent and always leaves a final value in the last year which may be considered as salvage value or junk value L .

If instead of assuming the fixed percentage , an assumed salvage value equal to L is considered to be the as a fraction to be used, is computed from

$$F = 1-\sqrt[n]{L/P} = 1-\sqrt[10]{0.0909} = 0.214$$

Thus, an annual deduction of 21.4percent of the preceding years value of equipment will, when continued for 10 yrs , leave a residual value of 100 for p =1,100. After 'n' years the book value is $p\,(1-f)^{n.}$