GNE 502
MODULE 7
ASSET VALUATION

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Course Content

- Module 1: Introduction to Engineering Economics
- Module 2: Costing of Production Systems
- Module 3: Sources of Finance
- Module 4: Investment Appraisals.
- Module 5: Interest Formulas and Problems
- Module 6: Annual Costs, Present Worth and Rate of Return
- Module 7: Valuation of Assets
- Module 8: Financial Management
- Module 9: Financial Statements
- Module 10: Budget Control

Module 7: Valuation of Assets

Module Learning Outcomes

At the end of this module students are expected to be able to;

- ❖**Understand and explain asset valuation and its importance.**
- ❖**Identify and explain various steps involved in valuation of an asset.**
- ❖ **have basic understanding of the various types of assets.**
- ❖**Know how to calculate tangible and intangible assets.**
- ❖**Solve basic valuation problems.**
- ❖**Define book value of assets.**

Valuation of Asset

- It is the process of determination of the current value of an asset belonging to a company or firm.
- Such asset may include stocks, buildings, equipment etc
- Valuation is needful due to fluctuations and depreciation in value of such assets.
- An asset may therefore be defined as a resource that a person/company owns and is expected to yield more economic value.

Valuation of Asset

- Here, a business's net worth can be calculated by adding up the current value of its assets and subtracting the total assets from the value of its liabilities.
- Assets cant be well valued till we understand the various types of assets that exists.

Types of Assets

- Tangible Assets
- Intangible Assets
- Fixed Assets
- Financial Assets
- Current Assets

Types of Assets

- Tangible Assets

  These form of assets can either be seen or touched physically. They are hence said to have physical presence. Examples includes buildings, properties, equipment e.t.c.

Types of Assets

- Intangible Assets

  Assets in this category can neither be seen or touched physically. They are hence said to have NO physical presence. Examples includes copyrights, patents, trademarks e.t.c.

Types of Assets

- Fixed Assets

  These form of assets cannot be easily converted into cash. They include large equipment, buildings, furniture and other properties. They are assets that live for a longer time and are not easily consumed or disposed.

Types of Assets

- Current Assets

These form of assets includes cash and assets that can easily be converted to cash. They are most often consumed within the operating year.

Book Value of Asset Definition

- Book Value of Assets is the value of an asset as stated in the books of records of a company or an individual at any particular given instance.

- For companies, it is calculated as the original cost of the asset less accumulated depreciation and impairment costs.

- **Assets Book Value Formula = Total Value of an Asset – Depreciation – Other Expenses Directly Related to it**

Where

- Total Value of the asset = Value at which the asset is purchased
- Depreciation = Periodic reduction in the value of the asset amortized as per standards
- Other Cost = Include impairment cost and related costs which directly affect the cost of the asset

Example #1

Royles Plc purchased a water purifying system for office use in december 2015 at $20,000. The useful life of the purifier was estimated to be 5 years. Calculate the book value of the purifier at the end of 2017 (use the straight-line method of depreciation for calculation).

Solution

Given

- Purchase Cost of the purifier: $20,000.
- Useful life: 5 years

  Using straight-line method of depreciation for calculation, each year

depreciation value = $20,000 / 5

= $4,000

Hence Depreciation history is as follows

first year = $20,000 - $4,000

= $16,000 (Dec, 2016)

Second year = $16,000 - $4,000

= $12,000 (Dec, 2017)

Example #2

Polycarp Motors acquired an asset whose value amounts to $ 850,000 in 2018. If the assets' periodic reduction in value was $ 25,000 and demurrage cost incurred was $5,000. Calculate book value of the asset.

Solution

Given

- Total value of Asset: $850,000.
- Depreciation cost: $25,000.
- Other Costs: $5,000.

Hence

BV of Asset = TV of Asset – (Depreciation + other costs)

BV = $850,000 – ($25,000 + $5,000)

= $850,000 - $30,000

= $820,000

Practice Question

1. Explain briefly the term “Valuation of Asset”
2. List and Explain 4 types of Assets
3. Explain the following
   i. Net Book Value
   ii. Depreciation of Assets
4. A company issues common stocks equal to 1,000,000 in the market and as on March 31st, 2015 its total stockholder equity is $1,250,000. Calculate the book value of each stock as on that date.