ACMP 4.0

- Depreciation
- Inventory Valuation

Depreciation

- **Depreciation:** Cost of using any long term asset. This is a process of cost allocation.

Concepts for Charging Depreciation

- Cost of the Asset

- Estimated Useful Life of the Asset/Rate of Depreciation

- Estimated Salvage Value: Required for Straight Line Method

- Method to be applied

Methods of Depreciation

- <u>Two Common Methods of Depreciation used in IT Industry of Bangladesh:</u>

    -Straight Line Method

    -Decreasing Balance Method

1. Straight Line Method

- Per Year Depreciation= (Cost-Salvage Value)/ Useful Life

or (Cost-Salvage Value)*Rate of Depreciation

Problem: An asset was purchased on April 01, 2021 at a cost of Tk. 12,000. Estimated salvage value is Tk. 2,000 and useful life is 8 years. Straight line method of depreciation was being followed. On September 30, 2024 the asset was sold for Tk. 8,500. Find out the amount of gain/loss in this sale.

Solution

- Per Year Depreciation=[(12,000-2,000)/8] =1,250
- Total Accumulated Depreciation till Sept. 30, 2024=1,250*3.5= 4,375
- Book Value (BV)/Written Down Value (WDV)= Cost-Accumulated Depreciation
- BV or WDV=(12,000-4,375)=7,625
- Gain=8,500-7,625=875 gain

2. Decreasing Balance Method

- Balance of the asset is reduced every year by the amount of depreciation of respective year.

- Salvage Value not considered.

- **Problem:** An asset was purchased on January 01, 2023 with cost of Tk. 10,000. Decreasing balance method of depreciation is followed @12%. What will be the amount of depreciation in 2025?

Solution

- 2023=10,000*12%=1,200
- 2024=(10,000-1200)=8,800*12%=1,056
- 2025=(8,800-1,056)=7,744*12%=929

Inventory Valuation-Impact

- Begenning Inventory+Cost of Purchase-Ending Inventory=Cost of Goods Sold (COGS)
- Hence, Net Sales-COGS=Gross Profit

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-Therefore, impact is in both income statement and balance sheet.

Methods of Inventory Valuation

- First In First Out (FIFO)/Last In Still There (LIST)
- Last In First Out (LIFO)/First In Still There (FIST)
- Weighted Average Method

Problem-Inventory Valuation

- Feb-1: Balance 400 units @ $ 20 p/u
- Feb-6: Purchased 1200 units $ Tk 22 p/u
- Feb-23: Purchase 700 units @ $ 25 p/u
- During the month, total 1800 units were sold @ $ 30 per unit.

Requirements: Find out i) COGS ; ii) 'Value of Ending Inventory (VOEI)'; and, iii) Gross Profit (GP) on February 28 using (i) FIFO; (ii) LIFO; and, (iii) Weighted Average methods.

FIFO

- COGS= (400*20)+(1200*22)+(200*25)=39,400
- Value of End. Inv.= 500*25=12,500
- Gross Profit=(1,800*30)-39,400=14,600

LIFO

- COGS=(700*25)+(1100*22)=41,700

- VOEI=(100*22)+(400*20)=10,200

- Gross Profit=(1,800*30)-41,700=12,300

Weighted Average Method

- Average cost per unit= Total Cost/Total units= [(400*20)+(1200*22)+(700*25)]/(400+1200+700) =22.565

COGS=22.565*1800=40,617

VoEI=500*22.565=11,283

Gross Profit=(1,800*30)-40,617=13,383