

Activity-Based Methods:

1 Hours Method

2 Unit Production Method

3 Kilometers Method

Hours Method

Depreciation = Hours Worked x Rate of Depreciation per Hour

Rate of Depreciation per Hour = (Total Cost - Scrap Value) / Life in Hours

Unit Production Method

Depreciation = Units Produced x Rate of Depreciation per Unit

Rate of Depreciation per Unit = (Total Cost - Scrap Value) / Life in Units

Kilometers Method

Depreciation = Kilometers Run x Rate of Depreciation per Kilometer

Rate of Depreciation per Kilometer = (Total Cost - Scrap Value) / Life in Kilometers

Example for Activity Based Methods:

A machine was acquired on Feb 15, 2015 at a cost of Rs.530,000 with scrap value of Rs.30,000. Machine has useful life of 250,000 units and 125,000 hours.

Required:

Compute depreciation charge for machine under each case:

- 1) The company uses unit production method and machine produced 40,000 units in 2015, 50,000 units in 2016, 30,000 units in 2017, 65,000 units in 2018, 35,000 units in 2019 and 30,000 units in 2020.
- 2) The company uses hours methods and machine is used 80,000 hours in 2015, 25,000 hours in 2016, 13,000 hours in 2017 and 7,000 hours in 2018

Case no 1:

Schedule for Depreciation Charge

Unit Production Method

Depreciation = Units Produced x Rate of Depreciation per Unit

Rate of Depreciation per Unit = (Total Cost - Scrap Value)/Life in Units

= (530,000 - 30,000)/250,000

= Rs.2 per unit

Year	Computation	Depreciation Expense	Accumulated Depreciation	Book Value
				530,000
2015	40,000 x 2	80,000	80,000	450,000
2016	50,000 x 2	100,000	180,000	350,000
2017	30,000 x 2	60,000	240,000	290,000
2018	65000 x 2	130,000	370,000	160,000
2019	35000 x 2	70,000	440,000	90,000
2020	30000 x 2	60,000	500,000	30,000

Case no 2:

Schedule for Depreciation Charge

Hours Method

Depreciation = Hours Worked x Rate of Depreciation per Hour

Rate of Depreciation per Hour = (Total Cost - Scrap Value)/Life in Hours

= (530,000 - 30,000)/125,000

= Rs.4 per hour

Year	Computation	Depreciation Expense	Accumulated Depreciation	Book Value
				530,000
2015	80000 x 4	320,000	320,000	210,000
2016	25000 x 4	100,000	420,000	110,000
2017	13000 x 4	52,000	472,000	58,000
2018	7000 x 4	28,000	500,000	30,000