27) Sullivan Sales purchased a machine on January 1, 2013 which cost $450,000, had a residual value of $50,000 and a useful life of 10 years. Sullivan Sales can replace this machine with one that is more efficient and sells the old machine for $100,000 on July 1, 2015.

Required:

Prepare the appropriate journal entry to record the sale of this machine, assuming the company uses the double-declining-balance method of depreciation.

Answer:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year** | **Book Value**  **Beginning of**  **Year** | **Rate** | **Annual**  **Depreciation** | **Accumulated**  **Depreciation** | **Book Value**  **End of Year** |
|  |  |  |  |  | 450,000 |
| 2013 | 450,000 | 20% | 90,000 | 90,000 | 360,000 |
| 2014 | 360,000 | 20% | 72,000 | 162,000 | 288,000 |
| 2015 | 288,000 | 20% | 28,800 | 190,800 | 259,200 |
|  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Account** | **Debit** | **Credit** |
| July 1, 2015 | Cash | 100,000 |  |
|  | Accumulated Depreciation | 190,800 |  |
|  | Loss on Sale of Machine | 159,200 |  |
|  | Machine |  | 450,000 |

28) A computer, with a cost of $10,000 is sold on July 1. Accumulated depreciation up to the date of sale is $5,000. Journalize the entries for the disposal of the computer under the following INDEPENDENT scenarios:

1. The computer was sold for $6,000.

2. The computer was sold for $1,000.

3. The computer is obsolete and was thrown in the trash.

Answer:

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Account | DR | CR |
|  |  |  |  |
| 1. | Cash | 6,000 |  |
|  | Accumulated Depreciation | 5,000 |  |
|  | Gain on Sale of Computer |  | 1,000 |
|  | Computer |  | 10,000 |
|  |  |  |  |
|  | Book value = $10,000 - $5,000 = $5,000 |  |  |
|  | Cash Received - Book Value = Gain/Loss  $6,000 - $5,000 = $1,000 gain |  |  |
|  |  |  |  |
| 2. | Cash | 1,000 |  |
|  | Accumulated Depreciation | 5,000 |  |
|  | Loss on Sale of Computer | 4,000 |  |
|  | Computer |  | 10,000 |
|  |  |  |  |
|  | Book value = $10,000 - $5,000 = $5,000 |  |  |
|  | Cash Received - Book Value = Gain/Loss  $1,000 - $5,000 = $4,000 Loss |  |  |
|  |  |  |  |
| 3. | Accumulated Depreciation | 5,000 |  |
|  | Loss on Disposal of Computer | 5,000 |  |
|  | Computer |  | 10,000 |
|  |  |  |  |
|  | Book Value = $10,000 - $5,000 = $5,000 |  |  |
|  | Cash Received - Book Value = Gain/Loss |  |  |
|  | 0 - $5,000 = $5,000 Loss |  |  |

53) A machine costing $40,000 was purchased on January 1, 2014. It has an estimated useful life of 5 years and a salvage value of $5,000.

Required:

1. Calculate depreciation expense for 2014 and 2015 using (a) straight-line rate, and (b) double-declining balance method.

2. Determine the book value of the machine at December 31, 2015 under the (a) straight-line method and (b) double-declining balance method.

Answer:

1.

**a. Straight-line:**

Depreciation Expense for 2014 and 2015:

($40,000 - $5,000) ÷ 5 = $7,000

**b. Double-declining balance:**

Depreciation Expense for 2014:

$40,000 × 40% = $16,000

Depreciation Expense for 2015:

($40,000 - $16,000) × 40% = $9,600

2.

(a) Straight-line:

Book value = cost - accumulated depreciation

Book value at 12/31/2015 = $40,000 - ($7,000 + $7,000) = $26,000

(b) Double-declining balance:

Book value = cost - accumulated depreciation

Book value at 12/31/2015 = $40,000 - ($16,000 + $9,600) = $14,400

54) A plant asset is acquired by a business on January 1, 2014, for $100,000. The asset's estimated residual value is $10,000 and its estimated life is 5 years. Management chooses to use straight-line depreciation.

On January 1, 2016, management revises the total useful life to 8 years and the residual value to $5,000.

Required:

1. Compute the balance in Accumulated Depreciation on January 1, 2016.

2. Compute the Depreciation Expense for the year ending December 31, 2016.

3. Compute the balance in Accumulated Depreciation on December 31, 2016.

4. Prepare the adjusting journal entry on December 31, 2016 for the year. Omit the explanation.

Answer:

1. ($100,000 - $10,000) ÷ 5 = $18,000

$18,000 × 2 = $36,000

2. ($100,000 - $36,000 - $5,000) ÷ 6 = $9,833

3. $36,000 + $9,833 = $45,833

4.

|  |  |  |
| --- | --- | --- |
| ACCOUNT | DEBIT | CREDIT |
| Depreciation Expense | 9,833 |  |
| Accumulated Depreciation |  | 9,833 |

55) On January 1, 2015, Williams Company, Inc. purchased machinery for $350,000 and depreciated it on a straight-line basis over 20 years. The estimated residual value was zero. On January 1, 2018, the company realized the machine will remain useful for only 5 more years and also revised the residual value to $12,000.

Required:

1. What is the depreciation expense per year before the change in estimate?

2. What is the revised depreciation expense per year?

3. Prepare the adjusting journal entry for the year ending December 31, 2018. Omit the explanation.

Answer:

1. Depreciation Expense:

Original calculation:

($350,000 - 0) ÷ 20 = $17,500 per year

$17,500 × 3 = $52,500 Accumulated Depreciation

2. Revised depreciation expense:

($350,000 - $52,500 - $12,000) ÷ 5 = $57,100

3.

|  |  |  |
| --- | --- | --- |
| ACCOUNTS | DEBIT | CREDIT |
| Depreciation Expense | 57,100 |  |
| Accumulated Depreciation |  | 57,100 |