**Suggested Answers of Worksheet**

**Activity 1**

|  |  |  |
| --- | --- | --- |
| Expenditure | Capital | Revenue |
| Annual license fees |  | ✓ |
| Annual insurance premium |  | ✓ |
| Gasoline |  | ✓ |
| Import duties | ✓ |  |
| Parking fees |  | ✓ |
| Purchase cost | ✓ |  |
| Repairs and maintenance |  | ✓ |
| Tunnel fees |  | ✓ |

**Activity 2**

Name of Company:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Nature of Business (Choose one): Restaurant/ Gym Centre/ Yoga Studio / Cafe/ Supermarket

The five non-current assets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Non-current Asset** | **Cost (HK$)**  **(A)** | **Estimated Useful Life (Years)** | **Residual Value (HK$)**  **(B)** | **Depreciable Amount (HK$)**  **(A) – (B)** |
| 1. Building | 18,000,000 | 60 | 120,000 | 17,880,000 |
| 2. Furniture & fixtures | 3,000,000 | 10 | 70,000 | 2,930,000 |
| 3. Office equipment | 900,000 | 8 | 8,000 | 892,000 |
| 4. Air-conditioning system | 1,000,000 | 5 | 6,000 | 994,000 |
| 5. Computer system | 800,000 | 5 | 25,000 | 775,000 |

[No standard answers for this part]

**Activity 3 - Group Discussion**

|  |  |
| --- | --- |
| Non-current Assets | Depreciation Methods |
| 1. Building | Straight-line |
| 2. Furniture & fixtures | Straight-line |
| 3. Office equipment | Straight-line |
| 4. Air-conditioning system | Reducing balance |
| 5. Computer system | Reducing balance |

**Activity 4 - Case Study and Group Discussion**

Tasks:

1. Determine the annual depreciation charges, accumulated depreciation and net book value of the machine for five years.
   * 1. Using the straight-line method

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Asset cost  $’000 | Depreciation rate | Annual Depreciation Expense  $’000 | Accumulated Depreciation  $’000 | Net Book Value at the end of the year  $’000 |
| 1 | 13,000 | 20% | 2,400 | 2,400 | 10,600 |
| 2 | 13,000 | 20% | 2,400 | 4,800 | 8,200 |
| 3 | 13,000 | 20% | 2,400 | 7,200 | 5,800 |
| 4 | 13,000 | 20% | 2,400 | 9,600 | 3,400 |
| 5 | 13,000 | 20% | 2,400 | 12,000 | 1,000 |

* + 1. Using the reducing balance method (200% of straight-line rate) (to the nearest dollar)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Asset cost  $’000 | Net Book Value at beginning of the year  $’000 | Depreciation rate | Annual Depreciation Expense  $’000 | Accumulated Depreciation  $’000 | Net Book Value  at the end of the year  $’000 |
| 1 | 13,000 | 13,000 | 40% | 5,200 | 5,200 | 7,800 |
| 2 | 13,000 | 7,800 | 40% | 3,120 | 8,320 | 4,680 |
| 3 | 13,000 | 4,680 | 40% | 1,872 | 10,192 | 2,808 |
| 4 | 13,000 | 2,808 | 40% | 1,123 | 10,135 | 1,685 |
| 5 | 13,000 | 1,685 | 40% | 674 | 11,989 | 1,011 |

* + 1. Using units of production method

Depreciation rate per unit: ($13,000,000 - $1,000,000) / 100,000 = $120

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Asset cost  $’000 | Units of production | Annual Depreciation Expense  $’000 | Accumulated Depreciation  $’000 | Net Book Value at end of the year  $’000 |
| 1 | 13,000 | 22,000 | 2,640 | 2,640 | 10,360 |
| 2 | 13,000 | 28,000 | 3,360 | 6,000 | 7,000 |
| 3 | 13,000 | 15,000 | 1,800 | 7,800 | 5,200 |
| 4 | 13,000 | 25,000 | 3,000 | 10,800 | 2,200 |
| 5 | 13,000 | 10,000 | 1,200 | 12,000 | 1,000 |
|  |  | Total: 100,000 | Total: 12,000 |  |  |

1. Compare the annual depreciation patterns using straight-line, reducing balance methods and units of production method. Which method will end up with larger net profit in year one in this case?

|  |
| --- |
| Straight-line: The depreciation expense spreads evenly over the useful life. |
| Reducing balance: A higher depreciation expense is charged in the early years. |
| Units of production: The depreciation expense is in proportion to the production units. |
| In year one, the depreciation expense for straight-line method is the smallest and therefore the net profit is the largest if straight-line method is adopted. |

1. Discuss the factors to consider when choosing the depreciation method.

|  |
| --- |
| The depreciation method selected should reflect the pattern of use according to the asset’s economic benefits consumed by the company. For example, applying the straight-line method for assets with constant uniform service; applying reducing balance method if the asset is more productive in earlier period of time; apply units of production if the business production activity fluctuates over years. |

1. Assume that the machine was purchased on 1 August Year 1 and straight-line method was adopted.
   1. Suggest two methods for calculating depreciation expenses for asset purchased during the year.

|  |
| --- |
| 1. Provide full year depreciation at the end of the year in the year of purchase. 2. Provide monthly depreciation. |

* 1. Calculate the straight-line depreciation charges for the year ended 31 December Year 1, using methods (i) and (ii) as suggested in (a) above. Assume the asset was not disposed during the year.

|  |
| --- |
| 1. $2,400 |
|  |
|  |
| 1. 2,400 x 5/12 = $1,000 |
|  |
|  |

**Activity 5 - A Mini-Case**

Task: Input missing data into the following table.

|  |  |  |
| --- | --- | --- |
|  | Machine | |
|  | A | B |
| Depreciation method used | Straight-line | Reducing balance |
| Depreciation rate used | 1/5 | 1/3 |
| Cost | $6,075 | $6,075 |
| Net book value at the end of Year 2 | $3,965 | $2,700 |
| Depreciation expense for Year 3 | $1,055 | $900 |

**Activity 6 – Disposal / Exchange of assets**

(1)

(i)(a)

Journal entries

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | | | $’000 | $’000 |
|  | Cash | | | 7,300 |  |
|  | Accumulated Depreciation - Machine | | | 4,800 |  |
|  | Loss on disposal | | | 900 |  |
|  | |  | Machine | | 13,000 |

Calculation of the gain/loss on disposal

|  |
| --- |
| Gain / Loss on Disposal ($’000)  = Cash – Net Book Value of the Non-current Asset  = Cash – (Cost - Accumulated Depreciation)  =7,300 – (13,000 – 4,800)  = -900 (Loss) |

(b)

Ledger accounts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  | Cash | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Balance b/d | 10,000 | Balance c/d | 17,300 |  |
|  | Disposal of Machine | 7,300 |  |  |  |
|  |  | 17,300 |  | 17,300 |  |
|  |  |  |  |  |  |
|  | Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Balance b/d | 13,000 | Disposal of Machine | 13,000 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Accumulated Depreciation - Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Disposal of Machine | 4,800 | Balance b/d | 4,800 |  |
|  |  |  | [(13,000-1,000)/5 x 2] |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Disposal of Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Machine | 13,000 | Cash | 7,300 |  |
|  |  |  | Accumulated Depreciation - Machine | 4,800 |  |
|  |  |  | Loss on Disposal | 900 |  |
|  |  | 13,000 |  | 13,000 |  |
|  |  |  |  |  |  |

(ii)(a)

Journal Entries

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | | | $’000 | $’000 |
|  | Cash | | | 7,300 |  |
|  | Accumulated Depreciation - Machine | | | 8,320 |  |
|  | |  | Machine | | 13,000 |
|  | |  | Gain on disposal | | 2,620 |

Calculation of the gain/loss on disposal

|  |
| --- |
| Gain / Loss on Disposal ($’000)  = Cash – Net Book Value of the Non-current Asset  = Cash – (Cost - Accumulated Depreciation)  =7,300 – (13,000 – 8,320)  = 2,620 (Gain) |

(b)

Ledger Accounts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  | Cash | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Balance b/d | 10,000 | Balance c/d | 17,300 |  |
|  | Disposal of Machine | 7,300 |  |  |  |
|  |  | 17,300 |  | 17,300 |  |
|  |  |  |  |  |  |
|  | Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Balance b/d | 13,000 | Disposal of Machine | 13,000 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Accumulated Depreciation - Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Disposal of Machine | 8,320 | Balance b/d | 8,320 |  |
|  |  |  | (13,000 x 40% + 13,000 x 60% x 40%) |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Disposal of Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Machine | 13,000 | Cash | 7,300 |  |
|  | Gain on Disposal | 2,620 | Accumulated Depreciation - Machine | 8,320 |  |
|  |  |  |  |  |  |
|  |  | 15,620 |  | 15,620 |  |
|  |  |  |  |  |  |

(2)

(i)(a)

Journal Entries

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | | | $’000 | $’000 |
|  | Machine | | | 15,000 |  |
|  | Accumulated Depreciation - Machine | | | 4,800 |  |
|  | Loss on Disposal | | | 900 |  |
|  | |  | Machine | | 13,000 |
|  | |  | Cash (15,000-7,300) | | 7,700 |

Calculation of the gain/loss on disposal ($’000)

|  |
| --- |
| Gain / Loss on Disposal ($’000)  = Trade-in value of old asset –  Net book value of the old asset  = 7,300 – (13,000-4,800) = -900 (loss on disposal) |

(b)

Ledger Accounts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  | Cash | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Balance b/d | 10,000 | Machine | 7,700 |  |
|  |  |  | Balance c/d | 2,300 |  |
|  |  | 10,000 |  | 10,000 |  |
|  |  |  |  |  |  |
|  | Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Balance b/d | 13,000 | Disposal of Machine | 13,000 |  |
|  | Cash | 7,700 | Balance c/d | 15,000 |  |
|  | Disposal of Machine – Trade-in | 7,300 |  |  |  |
|  |  | 28,000 |  | 28,000 |  |
|  |  |  |  |  |  |
|  | Accumulated Depreciation - Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Disposal of Machine | 4,800 | Balance b/d | 4,800 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Disposal of Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Machine | 13,000 | Machine – Trade-in | 7,300 |  |
|  |  |  | Accumulated Depreciation - Machine | 4,800 |  |
|  |  |  | Loss on Disposal | 900 |  |
|  |  | 13,000 |  | 13,000 |  |
|  |  |  |  |  |  |

(ii)(a)

Journal Entries

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | | | $’000 | $’000 |
|  | Machine | | | 15,000 |  |
|  | Accumulated Depreciation - Machine | | | 8,320 |  |
|  | |  | Machine | | 13,000 |
|  | |  | Cash (15,000-7,300) | | 7,700 |
|  | |  | Gain on Disposal | | 2,620 |

Calculation of the gain/loss on disposal($’000)

|  |
| --- |
| Gain / Loss on Disposal ($’000)  = Trade-in value of old asset –  Net book value of the old asset  = (7,300) – (13,000 – 8,320) = 2,620 (Gain on disposal) |

(b)

Ledger Accounts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  | Cash | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Balance b/d | 10,000 | Machine | 7,700 |  |
|  |  |  | Balance c/d | 2,300 |  |
|  |  | 10,000 |  | 10,000 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Balance b/d | 13,000 | Disposal of Machine | 13,000 |  |
|  | Cash | 7,700 | Balance c/d | 15,000 |  |
|  | Disposal of Machine | 7,300 |  |  |  |
|  |  | 28,000 |  | 28,000 |  |
|  |  |  |  |  |  |
|  | Accumulated Depreciation - Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Disposal of Machine | 8,320 | Balance b/d | 8,320 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Disposal of Machine | | | |  |
|  |  | $'000 |  | $'000 |  |
|  | Machine | 13,000 | Machine | 7,300 |  |
|  | Gain on Disposal | 2,620 | Accumulated Depreciation - Machine | 8,320 |  |
|  |  |  |  |  |  |
|  |  | 15,620 |  | 15,620 |  |
|  |  |  |  |  |  |