

Chapter 5
IND AS 36 IMPAIRMENT
SOLUTIONS

Illustration 1

Solution

As per IND AS 36, we should calculate the impairment loss by comparing the carrying value (after deducting site restoration provision) with the recoverable value (after deducting site restoration, if applicable) i.e.

1. Carrying Value: $1,000 - 500 = 500$
2. Recoverable Value
 - Higher of
 - a. Net Selling Price: 800
 - OR
 - b. Value in Use: 700
($1,200 - 500$)

As the Net Carrying Value (500) is less than the recoverable value (800), there is no impairment loss.

Illustration 2

Solution

As per IND AS 36, the value in use calculation should not include:

- a. Cash flows from financing activities. Therefore, 10% interest on vendor financing is ignored.
- b. Income Tax Items. Therefore tax rate of 30% is ignored.
- c. Cash inflows/Outflows expected to rise from an expected future improvement in the performance of an asset to which the entity is not committed. Therefore the expected cash flow of Rs. 1,00,000 on the new technology is ignored. Further, the benefits arising from the implementation of the new technology i.e. Reduction in cost should also be ignored.
- d. Past cash flow: The sales for the year 12-13 are historic and hence should not be considered. Similarly, the original cost of the asset and depreciation are relevant in calculating the carrying value and hence has no impact in the value in use calculation.

Calculation of Value in use:

| Particulars | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 |
|-------------------------|-------------|-------------|-------------|-------------|-------------|
| Quantity (A) (+ 5%) | 10,000 | 10,500 | 11,025 | 11,576 | 12,155 |
| × Price/Unit (B) (+ 3%) | 200 | 206 | 212 | 218 | 225 |
| Sales Rs. (C) | 20,00,000 | 21,63,000 | 23,37,300 | 25,23,568 | 27,34,875 |
| (A × B) = (C) | | | | | |
| Cost P.U. (D) | 160 | 162 | 165 | 168 | 171 |
| (+ 1%/ 2%) | | | | | |
| (-) Total Cost (E) | (16,00,000) | (17,01,000) | (18,19,125) | (19,44,768) | (20,78,505) |
| (A × D) = (E) | | | | | |
| (-) Maintenance (E) | | | (50,000) | | |
| (+) Salvage (G) | | | | | 80,000 |
| Cash Inflow (H) | 4,00,000 | 4,62,000 | 4,68,175 | 5,78,800 | 7,36,370 |

| | | | | | |
|-----------------|----------|----------|----------|----------|----------|
| (C – E – F + G) | | | | | |
| × DF @ 8% | 0.9259 | 0.8573 | 0.7938 | 0.7350 | 0.6805 |
| PV of C.I. | 3,70,360 | 3,96,073 | 3,71,637 | 4,25,418 | 5,01,100 |

Value in Use = 20,64,588

Reference Note:

- The calculation of total cost (E) is directly taken as total cost p.u. × number of units in line with ICAI's solution. However, the cost p.u. includes fixed overheads as well. Fixed overheads do not generally increase due to an increase in output. However, inflation continues to affect the fixed overheads. Therefore an alternative solution is possible where we separate the fixed cost and variable cost and then determine the total cost.

13-14

Fixed Cost would be Rs. 30 × 10,000 units = Rs. 3,00,000. This fixed cost will increase only due to inflation i.e. 1% and 2%

Variable Cost during 13-14 = (110 + 20) × 10,000 = 13,00,000

Therefore, Total Cost = 3,00,000 + 13,00,000 = 16,00,000

14-15

Fixed Cost = 3,00,000 + 1% = 3,03,000

Variable Cost = (130 + 1%) × 10,500 = 13,75,500

Therefore, Total cost = 3,03,000 + 13,75,500 = 16,78,500

- Rs. 80,000 represents the salvage value as it is the value of the asset at the end of the useful life. In absence of a specific inflation rate for salvage, we have taken 80,000 for the year ending 31st March, 2018 directly.

Illustration 3

Solution

Calculation of Value in Use

| Year | C.1 (\$) | DF @ 10% (\$) | PVCI |
|------|----------|------------------------|-------------|
| 1 | \$ 80 | 0.9090 | \$ 72.72 |
| 2 | \$ 100 | 0.8246 | \$ 82.46 |
| 3 | \$ 20 | 0.7513 | \$ 15.026 |
| | | Value in use (\$) | \$ 170.386 |
| | | × Spot Rate (31/03/11) | × Rs. 45/\$ |
| | | | Rs. 7667.37 |

Illustration 4

Solution

As per IND AS 36, the impact of reorganization can be considered in determining the value in use only if the entity is committed to reorganization plan i.e. the obligation to reorganize exists.

In the given case, the entity does not appear to be committed to reorganization plan and hence the value in use should be taken at 36 million and the benefits derived from a future reorganization should be ignored.

As there carrying value (40) exceeds the recoverable value (36), the business segment is impaired and the impairment loss of $40 - 36 = 4$ million should be recorded in Profit and Loss.

Illustration 5

Solution

Calculation of Carrying Amount on 31st March, 2014 (₹ in lakh)

| Particular | Amount |
|---|---------|
| Original Cost on 1st April, 2011 | 20,000 |
| Less: Depreciation $\frac{(20,000 - 500) * 3}{8}$ | (7,313) |
| Carrying Amount | 12,687 |

Calculation of Value in Use

| Year | Cash Flows | P.V. | Amount |
|--------------------------------------|------------|------|--------|
| 2014-2015 | 2,000 | .869 | 1,738 |
| 2015-2016 | 3,000 | .756 | 2,268 |
| 2016-2017 | 3,000 | .658 | 1,974 |
| 20X7-2018 | 4,000 | .572 | 2,288 |
| 2018-2019 (including residual value) | 2,500 | .497 | 1,242 |
| Total | | | 9,510 |

Calculation of Recoverable Amount

| Particular | Amount |
|-----------------------------------|--------|
| Value in Use | 9,510 |
| Fair value less costs of disposal | 10,000 |
| Recoverable Amount | 10,000 |

Calculation of Impairment Loss

Carrying Amount – Recoverable Amount

$$12,687 - 10,000 = 2,687$$

Calculation of Revised Carrying Amount

| Particular | Amount |
|-------------------------|---------|
| Carrying Amount | 12,687 |
| Less: Impairment Loss | (2,687) |
| Revised Carrying Amount | 10,000 |

Calculation of Revised Depreciation

Revised Carrying Amount – Residual Value

Remaining Life

$$\frac{10,000 - 500}{5} = 1,900$$

5

Illustration 6

Solution

As per IND AS 36, CGU is the smallest group of assets which are capable of generating largely independent cash flows.

In the given case, there is a minimum service requirement to operate buses in each of the seven routes i.e. the entity has to operate all the seven routes or none of them. Therefore cash flows generated by each of the buses on the seven routes are interdependent (and not independent).

Therefore all the 7 buses together should be considered as a CGU.

Extra:

1. If there was no minimum service requirement, then impairment testing can be done for each of the routes separately
2. In case the entity operates another 5 buses in a separate municipality, then the CGU would be 7 buses only (smallest) and not all 12 buses

Illustration 7

Solution

In the given case, the private railway line does not generate independent cash flows separately from the Mine and hence assessment of impairment should be done for the mining business as a whole i.e. the railway line and the other assets of the mine together constitute a CGU.

Illustration 8

Solution

- a. The output of Plant X has an active market and hence X is capable of generating independent cash flows. Similarly Y is selling 80% of its output to outside customers. This clearly indicates that Y also has a market for its products and hence Y is also capable of generating independent cash flows. Therefore Plant X should be treated as a separate CGU and Plant Y should also be treated as a separate CGU.
Reference Note: Information about internal transfer prices and the proportion of sale to Y (60%) is irrelevant.
- b. In case there is no active market for products of X, then both X and Y are dependent on each other and hence should be treated as a single CGU, as both of them together represent the smallest group of assets capable of generating largely independent cash flows.

Illustration 9

Solution

In the given case, the output of Plant 1 does not have a separate market and hence Plant 1 cannot be a separate CGU. Plant 2 & 3 has markets. However, we are given that the allocation of sales, from these plants depends on utilization levels, speed of delivery etc. which the entity determines by looking at both plants and hence there is interdependence between plants 2 & 3 as well.

Therefore, Plants 1, 2 and 3 constitute a single CGU.

Extra:

| Plant 1 | Plant 2 & 3 | C.G.U. |
|--------------|-------------|--|
| 1. No Market | Dependent | 1. Single C.G.U. (1, 2, 3) |
| 2. No Market | Independent | 1. Plant 1 (allocate), Plant 2 2. Plant 1 (allocate), Plant 3 |
| 3. Market | Dependent | 1. Plant 1 2. Plant 2 & 3 |
| 4. Market | Independent | 1. Plant 1 2. Plant 2 3. Plant 3 |

Illustration 10

Solution

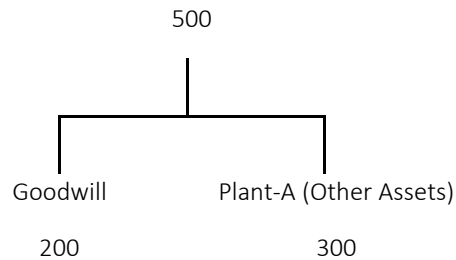
C.G.U.: Plant A (Including Goodwill)

$$1. \text{ Carrying Value} = \left(1,000 - \frac{1,000}{10} \times 1\right) + 200 \\ = 900 + 200 = 1,100$$

$$2. \text{ Recoverable Value} = 600 \\ (21/03/12)$$

$$3. \text{ Impairment} = 1,100 - 600 \\ = 500$$

$$4. \text{ Allocation} = 500$$



Reference: Goodwill under IND AS does not get amortized. It has an indefinite life. It is annually tested for impairment.

Illustration 11

Solution

CGUS: 1. X & Allocable office

2. Y & Allocable office

Impairment testing

(Rs in Millions)

| Particulars | X | Y |
|-----------------------|-------------------------------|-----------------------------|
| 1. Carrying Value | | |
| Individual Assets | 20 | 50 |
| Allocate office | 4 | 6 |
| | $(10 \times \frac{20}{50})$ | $(10 \times \frac{30}{50})$ |
| Total C.V. | 24 | 36 |
| 2. Recoverable Values | 18 | 38 |
| 3. Impairment (1 - 2) | 6 | NIL |
| 4. Allocation | | |
| Individuals Assets | 5 | |
| | $(6 \times \frac{20}{24})$ | |
| Corporate Assets | $(6 \times \frac{4}{24}) = 1$ | |

Illustration 12

Solution

Calculation of Impairment and Revised Carrying Values on 31/03/13

A. Saturn Ltd (C.G.U.)

| 1. | | Goodwill | Other Assets | Total |
|----------|-----------------------------------|----------|----------------------------------|-----------------------------------|
| 01/04/11 | Cost | 80,000 | 3,20,000 | 4,00,000 |
| | (-) | - | (32,000) | |
| | Depreciation | | $(\frac{3,20,000}{20} \times 2)$ | |
| 31/03/13 | Carrying Value | 80,000 | 2,88,000 | 3,68,000 |
| 2. | Recoverable Value (31/03/13) | | | 2,12,000 |
| 3. | Impairment (A - B) = (C) | 80,000 | 76,000 (1,56,000 - 80,000) | 1,56,000 (3,68,000 - 2,12,000) |
| 31/03/13 | Carrying Value (After Impairment) | NIL | 2,12,000 | 2,12,000 |

B. Reversal of Impairment on 31/03/15

The lifting of ban and a favorable change in net cash flows indicates improvements in service potential and hence we should follow the procedures for recording reversal. Further, as the impairment of goodwill cannot be reversed, no separate workings are done for goodwill.

Other Assets:

i. Ledger Balance (31/03/15)

| | | |
|----------|---|----------|
| 31/03/13 | Carrying Value (After impairments) | 2,12,000 |
| | (-) Depreciation $(\frac{2,12,000}{18} \times 2)$ | (23,556) |

| | | |
|----------|----------------|----------|
| 31/03/15 | Ledger Balance | 1,88,444 |
|----------|----------------|----------|

ii. Carrying Value (Ignoring Impairment)

| | | |
|----------|--|----------|
| 31/03/13 | Carrying Value (Ignoring Impairment) | 2,88,000 |
| | (-) Depreciation $\left(\frac{2,88,000}{18} \times 2\right)$ | (32,000) |
| 31/03/15 | Carrying Value (Ignoring Impairment) | 2,56,000 |

iii. Recoverable Value (31/03/15)

| | | |
|--|--------------------------|----------|
| Higher of Net Selling Price (OR) Value in Use | 2,90,000 3,04,000 | |
| Recoverable Value | | 3,04,000 |

iv. Maximum Permissible Ledger Balance = 2,56,000
[(Lower of (ii) and (iii))]v. Reversal of Impairment = 2,56,000 – 1,88,444
= 67,556

There would be a reversal of 67,556 in other assets. Further, there would be no reversal on Goodwill. The carrying value of other assets = 1,88,444 + 67,556 = 2,56,000.

Illustration 13

Solution

Assumption 1

In case the management does not intend to replace the machine, it is important to calculate the recoverable value of the damaged machine based on its Net Selling Price as well as value in use. As the value in use cannot be determined for the individual machine, impairment need to be tested at the CGU level. As the CGU is not impaired, there would be no impairment loss even for the individual asset.

Assumption2

In case the management is committed to replace the machine, the cash flows generated (if any) from using the machine would be negligible and hence the recoverable value of Machine A will be correctly represented by its Net Selling Price itself. Hence we can directly do impairment testing by comparing the carrying value and net selling price of the machine and CGU level impairment testing is not required. Additionally, in case the asset satisfies conditions under IND AS 105, then it could be classified as a Non-Current asset held for sale.

Illustration 14

Solution

Working Note 1- Corporate Asset X

In this case, we are given that X should be allocated on a reasonable basis. Since the carrying value as well as the useful life for each C.G.U. is available, the reasonable basis would be based on the ratio of time based weighted average carrying values i.e.

| Allocation of X (600) | | | |
|-----------------------|-------|--------|--------|
| | A | B | C |
| C.V. | 500 | 750 | 1,100 |
| × | | | |
| Life | 10 | 20 | 20 |
| | 5,000 | 15,000 | 22,000 |
| i.e. | 5 | 15 | 22 |

As corporate asset Y is un-allocable, it would not form part of the carrying value of A, B, C.

1. Impairment testing for Smaller C.G.U.'s
(I.e. A, B, C including allocate X)

| Particulars | A | B | C |
|--------------------------------------|------|--|--|
| 1. Carrying Value | | | |
| Individual Assets | 500 | 750 | 1,100 |
| + Allocable X (WN-1) | 71 | 214 | 315 |
| C.V. (A) | 571 | 964 | 1,415 |
| 2. Recoverable Value (B) | 600 | 900 | 1,400 |
| 3. Impairment (A - B) (C, if +ve) | N.A. | 64 | 15 |
| 4. Allocation | | | |
| Individual Assets | NIL | 50 | 12 |
| | | $\left(64 \times \frac{750}{964}\right)$ | $\left(15 \times \frac{1,100}{1,415}\right)$ |
| Corporate Asset X | NIL | 14 | 3 |
| | | $\left(64 \times \frac{214}{964}\right)$ | $\left(15 \times \frac{315}{1,415}\right)$ |

2. Corporate Asset Y is not allocated to any of the smaller C.G.U.'s. However, it can be allocated to the entity as a whole i.e. ABC Ltd. (larger C.G.U.)
ABC Ltd. (Larger C.G.U.)

| 1. Carrying Value | | Alternate (Including X) | |
|---------------------------|-------|-------------------------|-------|
| CGU – A | 500 | (500 + 71) | 571 |
| CGU – B (750 - 50) | 700 | (964 - 64) | 900 |
| CGU - C (1,100 - 12) | 1,088 | (1,415 - 15) | 1,400 |
| Corp – X (600 – 14 - 3) | 583 | - | |
| Corp – Y | 200 | | 200 |
| Carrying Value (ABC Ltd.) | 3,071 | | 3,071 |

| | | | |
|----------------------|-------|--|-------|
| 2. Recoverable Value | 3,200 | | 3,200 |
|----------------------|-------|--|-------|

3. As the carrying value of ABC Ltd. is less than the recoverable value, there is no additional impairment

Extra:

- In case the recoverable value of ABC Ltd. was 3,000, then there would be an impairment loss in the larger CGU (ABC Ltd.) of 71. In such a case, we would directly allocate the loss to corporate asset Y. This is because the CGU's A, B, C (including X) are already at the lower of their carrying values or recoverable values and hence they cannot be impaired any further. Hence the entire loss is to be taken up by the unallocable corporate asset only.
- Two step impairment testing is needed in case there are smaller CGU's. If we directly try to do impairment testing for the larger CGU's, it may hide a potential impairment loss as the benefit under a profitable CGU may offset the losses of another CGU. For e.g. in this question if we directly do impairment for larger CGU, the carrying amount would be $500 + 750 + 1,100 + 600 + 200 = 3,150$. Whereas the recoverable value is 3,200 and hence we would wrongly conclude that no impairment exists.

Illustration 15

Solution

- i. 2017-18

- i. Calculation of carrying value of the C.G.U. on 31/03/2018

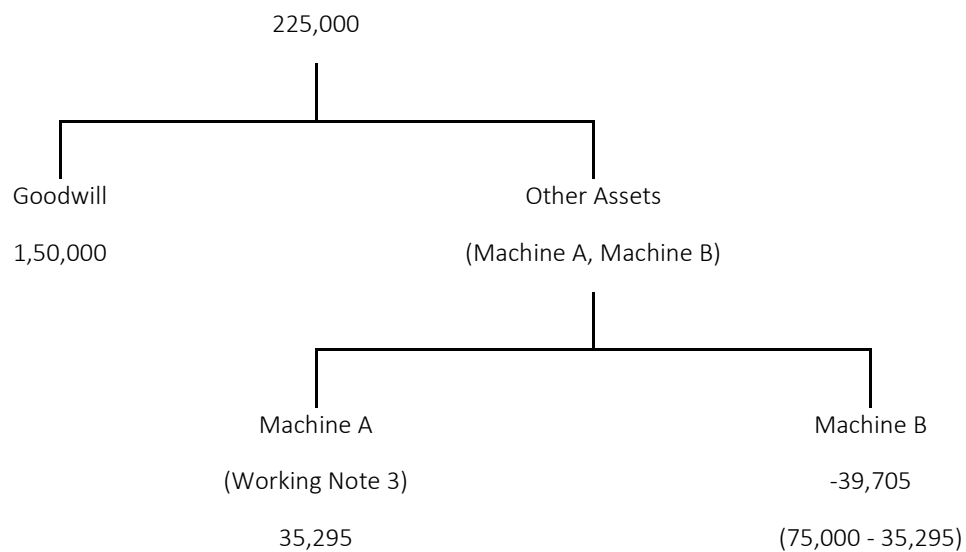
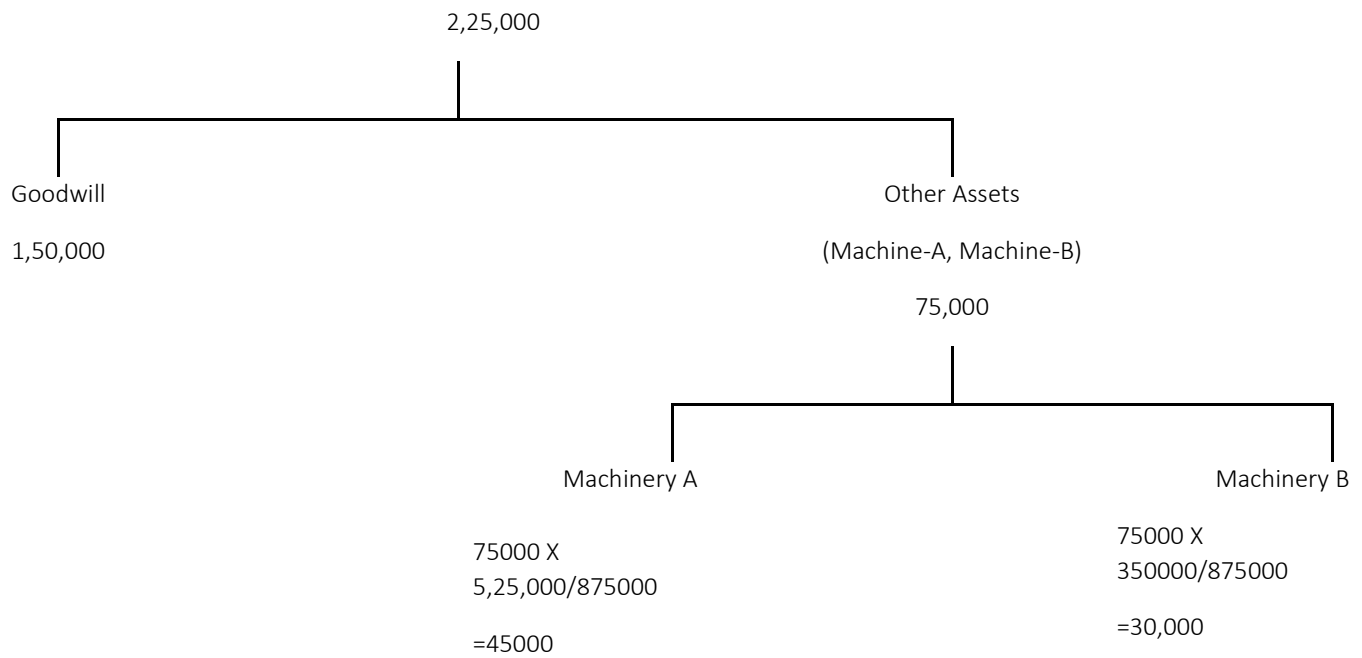
| | |
|---|-----------|
| Machinery A | 5,25,000 |
| $10,00,000 - \left(\frac{10,00,000 - 50,000}{10} \times 5 \right)$ | |
| Machinery B | 3,50,000 |
| $5,00,000 - \left(\frac{5,00,000}{10} \times 3 \right)$ | |
| Inventory | 2,00,000 |
| Goodwill | 1,50,000 |
| Carrying Value (31/03/18) | 12,25,000 |

- ii. Recoverable Value (31/03/18): 10,00,000 (Given)

iii. Impairment Loss: 2,25,000

i. Allocation: 2,25,000

Based on Working Note 3, the revised allocation of impairment loss would be:



As A's recoverable value is 4,89,705, we cannot reduce A's carrying value below 4,89,705. We do not have the individual net selling price/value in use for B and hence the shortfall is allocated to B.

Working Note 1 – Net Selling Price – Machinery A

| | |
|---------------------------------|------------|
| Current Market Value | 7,00,000 |
| (-) Dismantling Cost | (1,50,000) |
| (-) Specialized Packaging Cost | (25,000) |
| (-) Legal Fees | (75,000) |
| Net Selling Price – Machinery A | 4,50,000 |

Reference Note: Net Selling Price = the estimated selling price – the estimated selling expenses

Selling expense refer to the incremental expenses that an entity will incur if it sells assets and which an entity can save if it does not sell the assets.

The valuation fees of Rs. 1,00,000 is dependent upon the professional valuation and not dependent upon the sale. As the valuation has already been done, the valuation fees needs to be paid irrespective of the sale and hence the valuation fee is not considered while calculating the Net Selling Price.

Working Note 2 – Value in Use: Machinery A

| Year | C.I. | DF @ 10% | PVCI |
|------|---------------------|----------|----------|
| 1 | 1,50,000 | 0.9090 | 1,36,350 |
| 2 | 1,00,000 | 0.8264 | 82,640 |
| 3 | 1,00,000 | 0.7513 | 75,130 |
| 4 | 1,50,000 | 0.6830 | 1,02,450 |
| 5 | 1,50,000 | 0.6209 | 93,135 |
| | (1,00,000 + 50,000) | | 4,89,705 |

Working Note 3 – Impairment of Machinery A

As per the C.G.U. Impairment Loss Allocation, the carrying value of A would be 5,25,000 – 45,000 = 4,80,000

However, the recoverable value of Machinery A individually is the higher of

a. Net Selling Price (Working Note 1): 4,50,000

OR

b. Value in Use (Working Note 2): 4,89,705

i.e. 4,89,705 is the recoverable value.

Therefore, the value of Machinery A cannot fall below 4,89,705 and hence machinery A will not bear an impairment loss of Rs. 45,000. Instead, impairment loss would equal 5,25,000 – 4,89,705 = 35,295.

Carrying value of C.G.U. (31/03/18) (After Impairment)

| | |
|-------------------------------|----------|
| Machine A (5,25,000 – 35,295) | 4,89,705 |
| Machine B (3,50,000 – 39,705) | 3,10,295 |
| Inventory | 2,00,000 |

| | |
|--------------------------------|-----------|
| Goodwill (1,50,000 – 1,50,000) | NIL |
| Carrying Value | 10,00,000 |

II. 2018-19

Calculation of Depreciation

| Particulars | Machine A | Machine B |
|---|---|--|
| Carrying Value (After Impairment) 31/03/18 | 4,89,705 | 3,10,295 |
| (-) Depreciation | 87,941 $\left(\frac{4,89,705 - 50,000}{5} \times 1\right)$ | 44,328 $\left(\frac{3,10,295}{7} \times 1\right)$ |
| Carrying Value (31/03/19) (After Impairment) | 4,01,764 | 2,65,967 |

III. Calculation of Impairment Loss/Reversal of Impairment Loss as on 31/03/19

1. Carrying Value of C.G.U. (31/03/19)

| | |
|-------------------------------------|-----------|
| Machinery A | 4,01,764 |
| Machinery B | 2,65,967 |
| Inventory | 2,00,000* |
| Goodwill | NIL |
| Carrying Value of C.G.U. (31/03/19) | 8,67,731 |

* Assuming opening inventory = closing inventory

2. Recoverable Value (31/03/19) of C.G.U. 11,00,000

As the recoverable value is greater than the carrying value of the C.G.U., there appears to be a reversal of impairment. Assuming there is an improvement in service potential, a reversal of impairment can be checked for Machine A & B. The impairment on goodwill cannot be reversed and hence no additional workings are shown for the same.

Reversal of Impairment

| Particulars | Machine A | Machine |
|--|---|--|
| 1. Ledger Balance (31/03/19) (A) (After Impairment) | 4,01,764 | 2,65,967 |
| 2. Carrying Value (31/03/18) (Ignoring Impairment) | 5,25,000 | 3,50,000 |
| (-) Depreciation | (95,000) $\left(\frac{5,25,000 - 50,000}{5} \times 1\right)$ | (50,000) $\left(\frac{3,50,000}{7} \times 1\right)$ |
| Carrying Value (31/03/19) (B) | 4,30,000 | 3,00,000 |
| 3. Recoverable Value (C) | 4,50,000 | 3,10,000 |
| | | (7,60,000) – |
| | | 4,50,000 |
| 4. Maximum Permissible Ledger Balance [Lower of (B) and (C)] | 4,30,000 | 3,00,000 |
| 5. Reversal | 28,236 | 34,033 |

| | | | |
|--|-----------------------|------------------------|---|
| | (4,30,000 – 4,01,764) | (3,00,000 2,65,967) | – |
|--|-----------------------|------------------------|---|

Carrying Value as on 31/03/19 (After Reversal)

| | |
|-------------------------------|----------|
| Machine A (4,01,764 + 28,236) | 4,30,000 |
| Machine B (2,65,967 + 34,033) | 3,00,000 |
| Inventory | 2,00,000 |
| Goodwill | NIL |
| Carrying value (31/03/19) | 9,30,000 |

Reference Note – Inventory

IND AS 36 does not prescribe impairment on inventory separately. This is because under IND AS 2, inventories are valued at the lower of cost or NRV and hence the impairment if any, would already get covered under IND AS 2. However, in case management includes inventory in C.G.U., we should continue to record inventory as a part of C.G.U. This is because C.G.U. is the smallest group of assets capable of generating independent cash flows. Hence the effect of inventories would be there in Net Selling Price and value in use.

Therefore, inventory should be included in CGU so that a proper comparison can be done between carrying value and recoverable value. However, no impairment loss under IND AS 36 can be allocated to inventory.

Illustration 16

Solution

As per the requirement of the question, the following solution has been drawn on the basis of AS 28

| Particulars | Amount |
|---|--------|
| (i) Carrying amount of plant (before impairment) as on 31st March, 2019 | 2.40 |
| Carrying amount of plant (after impairment) as on 31st March, 2019 | 0.98 |
| (ii) Amount of impairment loss for the financial year ended 31st March, 2019 (2.4 Cr.- 0.98 Cr) | 1.42 |
| (iii) If the plant had been revalued ten years ago | |
| Debit to revaluation reserve | 0.48 |
| Amount charged to profit and loss (1.42 - 0.48) | 0.94 |
| (iv) If Value in use was zero | |
| Value in use (a) | Nil |
| Net selling price (b) | (0.08) |
| Recoverable amount [higher of (a) and (b)] | Nil |
| Carrying amount (closing book value) | Nil |
| Amount of write off (impairment loss) (` 2.4 Cr – Nil) | 2.4 |
| Entire book value of plant will be written off and charged to profit and | |

| | |
|---------------|--|
| loss account. | |
|---------------|--|

Working Notes:

Calculation of Closing Book Value, as at 31st March, 2019

| Particulars | in crore |
|--|----------|
| Opening book value as on 1.4.2018 (`20 crore -16.60 crore) | 3.40 |
| Less: Depreciation for financial year 2018–2019 | (1.00) |
| Closing book value as on 31.3.2019 (before impairment) | 2.40 |

Calculation of Estimated Net Selling Price on 31st March, 2019

| Particulars | ` in crore |
|--|------------|
| Estimated net selling price as on 1.4.2018 | 1.20 |
| Less: Estimated decrease during the year (20% of ` 1.20 Cr.) | (0.24) |
| Estimated net selling price as on 31.3.2019 | 0.96 |

Calculation of Estimated Value in Use of Plant on 31st March, 2019

| Particulars | ` in crore |
|---|------------|
| Estimated value in use as on 1.4.2018 | 1.40 |
| Less: Estimated decrease during the year (30% of `1.40 Cr.) | (0.42) |
| Estimated value in use as on 31.3.2019 | 0.98 |

Recoverable amount as on 31.3.2019 is equal to higher of Net selling price and value in use

| Particulars | ` in crore |
|--|------------|
| Net selling price | 0.96 |
| Value in use | 0.98 |
| Recoverable amount | 0.98 |
| Impairment Loss [Carrying amount – Recoverable amount ie. (2.40 Cr. – 0.98 Cr)] | 1.42 |
| Revised carrying amount on 31.3.2019 is equal to Recoverable amount (after impairment) | 0.98 Cr. |

Extra

What if the company carried out Impairment testing in the year 2018

Calculation of Impairment for year 2018

| Particulars | in crore |
|---|----------|
| Carrying amount before impairment on 1.4.2018 (20 - 16.60) | 3.40 |
| Recoverable amount ie. higher of NSP (1.20 cr) and Value in use (1.40 cr) | 1.40 |
| Impairment loss | 2.00 |
| Revised carrying amount after impairment as on 1.4.2018 | 1.40 |
| Less: Depreciation for 2018-2019 (as given in the question) | (1.00) |
| Carrying amount as on 31.3.2019 | 0.40 |
| Recoverable amount as on 31.3.2019 (Refer W.N. 2, 3 and 4 above) | 0.98 |
| Impairment Loss as on 31.3.2019 (since carrying amount is less than recoverable amount) | NIL |

Illustration 17

Solution

Carrying amount of asset on 31st March 2016 = 6,60,000

Calculation of Value in Use:

| Year ended | Cash flow` | Discount factor @ 9% | Amount` |
|------------------------------|------------|----------------------|------------------------|
| 31 st March, 20X7 | 2,76,000 | 0.9174 | 2,53,202 |
| 31 st March, 20X8 | 1,92,000 | 0.8417 | 1,61,606 |
| 31 st March, 20X9 | 1,20,000 | 0.7722 | 92,664 |
| 31 st March, 20Y0 | 1,14,000 | 0.7084 | <u>80,758</u> |
| Total (Value in Use) | | | <u>5,88,230</u> |

Calculation of Recoverable amount:

| Particulars | Amount (`) |
|--|------------|
| Value in use | 5,88,230 |
| Fair value less costs of disposal (6,00,000 – 96,000) | 5,04,000 |
| Recoverable amount (Higher of value in use and fair value less costs of disposal) | 5,88,230 |

Calculation of Impairment loss

| Particulars | Amount (₹) |
|--------------------------|-------------------|
| Carrying amount | 6,60,000 |
| Less: Recoverable amount | <u>(5,88,230)</u> |
| Impairment loss | <u>71,770</u> |

Calculation of Revised carrying amount:

| Particulars | Amount (₹) |
|-------------------------|-----------------|
| Carrying amount | 6,60,000 |
| Less: Impairment loss | <u>(71,770)</u> |
| Revised carrying amount | <u>5,88,230</u> |

Calculation of Revised Depreciation:

Revised carrying amount – Residual value

Remaining life = $(5,88,230 - 0) / 4 = ₹ 1,47,058$ per annum

Set off of Impairment loss:

The impairment loss of ₹ 71,770 must first be set off against any revaluation surplus in relation to the same asset. Therefore, the revaluation surplus of ₹ 36,000 is eliminated against impairment loss, and the remainder of the impairment loss ₹ 35,770 (₹ 71,770 – ₹ 36,000) is charged to profit and loss.

Treatment of Government compensation:

Any compensation by government would be accounted for as such when it becomes receivable. At this time, the government has only stated that it may reimburse the company and therefore credit should not be taken for any potential government receipt.

Illustration 18

Solution

As per para 57 of AS 28 “Impairment of assets”, if the recoverable amount (higher of net selling price and its value in use) of an asset is less than its carrying amount, the carrying amount of the asset should be reduced to its recoverable amount. In the given case, net selling price is Rs. 64.50 lakhs (Rs. 67.50 lakhs – Rs. 3 lakhs) and value in use is Rs. 60 lakhs. Therefore, recoverable amount will be Rs. 64.50 lakhs. Impairment loss will be calculated as Rs. 10.50 lakhs [Rs. 75 lakhs (Carrying Amount after revaluation - Refer Working Note) less Rs. 64.50 lakhs (Recoverable Amount)].

Thus impairment loss of Rs.10.50 lakhs should be recognised as an expense in the Statement of Profit and Loss immediately since there was downward revaluation of asset which was already charged to Statement of Profit and Loss.

Calculation of carrying amount of the Property, Plant and Equipment at the end of the fourth year on revaluation

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| | | <i>(Rs. in lakhs)</i> |
|--|--|-----------------------|
| Purchase price of a Property, Plant and Equipment | | 150.00 |
| Less: Depreciation for four years [(150 lakhs / 10 years) x 4 years] | | <u>(60.00)</u> |
| Carrying value at the end of fourth year | | 90.00 |
| Less: Downward revaluation charged to profit and loss account | | <u>(15.00)</u> |
| Revalued carrying amount | | <u>75.00</u> |

Illustration 19

Solution

(i) Calculation and allocation of impairment loss in 2016

(Amount in Rs. lakhs)

| | Goodwill | Identifiable assets | Total |
|---------------------------------------|----------|---------------------|---------|
| Historical cost | 2,000 | 4,000 | 6,000 |
| Accumulated depreciation (4 yrs.) | | (1,067) | (1,067) |
| Carrying amount before impairment | 2000 | 2,933 | 4,933 |
| Impairment loss* | (2000) | (213) | (613) |
| Carrying amount after impairment loss | 0 | 2,720 | 2,720 |

(ii) Carrying amount of the assets at the end of 2018

(Amount in Rs. lakhs)

| End of 2018 | Goodwill | Identifiable assets | Total |
|---|----------|---------------------|-------|
| Carrying amount in 2018 | 0 | 2,225 | 2,225 |
| Add: Reversal of impairment loss (W.N.2) | - | 175 | 175 |
| Carrying amount after reversal of impairment loss | - | 2,400 | 2,400 |

Working Note:

Calculation of depreciation after impairment till 2018 and reversal of impairment loss in 2018.

| (Amount in Rs. lakhs) | | | |
|---|-----------|---------------------|-------|
| | Good will | Identifiable assets | Total |
| Carrying amount after impairment loss in 2016 | 0 | 2,720 | 2,720 |
| Additional depreciation (i.e. $(2,720/11) \times 2$) | – | (495) | (495) |
| Carrying amount | | | 2,225 |
| Recoverable amount | | 2,225 | 3,420 |
| Excess of recoverable amount over carrying amount | 0 | | 1,195 |

Note: It is assumed that the restriction by the Government has been lifted at the end of the year 2018.

Determination of the amount to be impaired by calculating depreciated historical cost of the identifiable assets without impairment at the end of 2018

(Amount in Rs. lakhs)

| | Identifiable assets |
|---------------------------------------|---|
| End of 2018 | |
| Historical cost | 4,000 |
| Accumulated depreciation | $(266.67 \times 6 \text{ years}) = (1,600)$ |
| Depreciated historical cost | 2,400 |
| Carrying amount (in W.N. 1) | 2,225 |
| Amount of reversal of impairment loss | 175 |

Illustration 20

Solution

| (Rs. in crores) | |
|--|---------------|
| Carrying amount of the machine as on 1 st April, 2012 | 7.00 |
| Depreciation for 4 years i.e. 2012-2013 to 2015-2016 | <u>(4.00)</u> |
| Carrying amount as on 31.03.2016 | 3.00 |
| Add: Upward Revaluation (credited to Revaluation Reserve account) | <u>2.10</u> |
| Carrying amount of the machine as on 1 st April 2016 (revalued) | 5.10 |
| Less: Depreciation for 2 years i.e. 2016-2017 & 2017-2018 | <u>(3.40)</u> |

| | |
|---|---------------|
| Carrying amount as on 31.03.2018 | 1.70 |
| <i>Less:</i> Recoverable amount | <u>(0.79)</u> |
| Impairment loss | 0.91 |
| <i>Less:</i> Balance in revaluation reserve as on 31.03.2018: | |
| Balance in revaluation reserve as on 31.03.2016 | 2.10 |
| <i>Less:</i> Enhanced depreciation met from revaluation reserve | |
| 2016-2017 & 2017-2018 = [(1.70 – 1.00) x 2 years] | <u>(1.40)</u> |
| Impairment loss set off against revaluation reserve balance | <u>(0.70)</u> |
| Impairment Loss to be debited to profit and loss account | <u>0.21</u> |