## CHAPTER - 5 <br> CONCEPT AND ACCOUNTING OF DEPRECIATION



Definition of Depreciation

Objectives for providing depreciation

Factors in the measurement of depreciation

Methods for providing depreciation

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life.

Correct income measurement True position statement Funds for replacement Ascertainment of true cost of production.

Cost of asset Estimated useful life of the asset Estimated scrap value (if any) at the end of useful life of the asset.

* Straight line method
\& Reducing balance method
* Sum of years of digits method
* Annuity method
* Sinking fund method
* Machine hour method
* Production units' method
* Depletion method

REVALUATION OF PROPERTY, PLANT AND EQUIPMENT

PROVISION FOR REPAIRS ANDRENEWALS

If there is an upward revision in the value of asset for the first time, then the amount of appreciation is debited to Asset Account and credited to Revaluation Reserve Account.

Expenditure incurred for repairs, renewals and maintenance on plant and machinery may vary over the years during the working life. Thus, for equalising the charge of repairs and renewals, sometimes a Provision for Repairs and Renewals Account is opened.

Whenever the depreciable asset is revalued, the depreciation should be charged on the revalued amount on the basis of the remaining estimated useful life of the asset.


## Question 1

State with reasons whether the following are true or false:
The expressions depreciation is to be charged at $10 \%$ and $10 \%$ p.a. on furniture and fittings carry the same meaning.

## Answer:

False: They differ on the basis of time factor $10 \%$ p.a. implies that time fact is to be considered while calculating depreciation on pro-rata basis where simply $10 \%$ implies that time factor is immaterial for calculation.

Question 2
State with reasons whether the following are true or false.

There is no difference between the written down value method an diminishing balance method of depreciation.

Answer:
True: Both are same methods. The depreciation is computed by apply fixed rate on the diminishing balance which is known as written down value.

## Question 3

State with reasons whether the following are true or false.
Higher depreciation will not affect cash profit of the business.
Answer:
True: It is a non-cash expense and therefore will not affect cash profit of the business.

## Question 4

State with reasons whether the following are true or false.
Depreciation is a process of allocation of the cost of fixed asset
Answer:
True: It is measure of wear and tear of an asset On charging depreciation the cost of fixed asset is allocated during the period it is used.

## Question 5

Write short notes on:
$>$ Depletion method of depreciation Sinking fund method.

Answer:

Depletion method of depreciation: Natural resources include physical assets like mineral deposits, oil and gas resources and timber. These natural resources exhaust by exploitation. Depletion per unit is calculated as

## AcquisitionCost-Residualvalue <br> EstimatedLifeinProductionUnit.

(ii) Sinking fund method of providing depreciation is used where the aim is not only to charge depreciation but also to replace the asset. In case a large sum of money is required for the replacement of an asset at the end of its effective life, it may not be advisable to leave in the amount of depreciation set apart annually, for it may or may not be available in the form of concern itself the readily realisable assets at the time it is required. To safeguard this position, the amount annually provided for depreciation may be placed to the credit of the Sinking Fund account, and at the same time an equivalent amount may be invested in government securities. The book value of the old asset, at the time, is transferred to the Sinking Fund Account. Any amount realised on sale of the old asset, as well as the profit or loss on sale of securities, is transferred to the Sinking Fund Account and it is closed off by transfer of the balance to the profit and loss account or general reserve.

## Question 6

Why is Accumulated Depreciation an Asset Account?

## Answer:

Having an asset account such as Accumulated Depreciation allows a company's balance sheet to easily report both 1 ) the amount of an asset's cost that has been depreciated as of the date of the balance sheet, and 2) the asset's cost. This is possible because Accumulated Depreciation is credited each time that Depreciation Expense is debited. Since Accumulated Depreciation will have a continually increasing credit balance it is referred to as a contra asset account.

## Question 7

## Differentiate Straight line and WDV method of Depreciation.

Answer:

| Basis for <br> comparison | Straight line method ( SLM ) | Written down method (WDM) |
| :--- | :--- | :--- |
| Meaning | A method of depreciation in which <br> the cost of the asset is spread <br> uniformly over the life years by <br> writing off a fixed amount every <br> year. | A method of depreciation in which a <br> fixed rate of depreciation is charged <br> on the book value of the asset, over <br> it useful life. |
| Calculation of <br> depreciation | On the original cost | On the written down value of the <br> asset |
| Annual depreciation <br> charge | Remains fixed during the useful <br> life. | Reduces every year <br> Value of assetCompletely written off |
| Amount <br> depreciation | Not completely written off |  |
| Impact of repairs and <br> depreciation on P\&L <br> A/c | Increasing trend | Initially higher <br> Appropriate for |
| Assets with negligible repairs and constant <br> maintenance lower <br> copyright. | Assets whose repairs increase, as <br> they get older like machinery, <br> vehicles etc. |  |

## Question 8

Why is depreciation on the income statement different from the depreciation on the balance sheet?

## Answer:

Depreciation on the income statement is the amount of depreciation expense that is appropriate for the period of time indicated in the heading of the income statement. The depreciation reported on the balance sheet is the accumulated or the cumulative total amount of depreciation that has been reported as expense on the income statement from the time the assets were acquired until the date of the balance sheet.

## Question 9

## What Is Depreciation Expense?

## Answer:

Depreciation expense is the allocated portion of the cost of a company's fixed assets that is appropriate for the accounting period indicated on the company's income statement.

## Question 10

## What Are the Effects of Depreciation?

## Answer:

The depreciation of assets such as equipment, buildings, furnishing, trucks, etc. causes a corporation's asset amounts, net income, and stockholders' equity to decrease. This occurs through an accounting adjusting entry in which the account Depreciation Expense is debited and the contra asset account Accumulated Depreciation is credited. The amount of the annual depreciation that is reported on the financial statements is an estimate based on the asset's 1) cost, 2) estimated salvage value, and 3) useful life. Depreciation should be thought of as an allocation of the asset's cost to expense (and not as a valuation technique). In other words, the accountant is matching the cost of the asset to the periods in which revenues are generated from the asset. The amount of the annual depreciation reported on the U.S. income tax return is based on the tax regulations. Since depreciation is a deductible expense for income tax purposes, the corporation's taxable income (and associated tax payments) will be reduced by its tax depreciation expense. (In any one year, the depreciation expense for taxes will likely be different from the amount reported on the financial statements.) It should be noted that depreciation is viewed as a noncash expense. That is, the corporation's cash balance is not changed by the annual depreciation entry. (Often the corporation's cash is reduced for the asset's entire cost at the time the asset is acquired.)

## Question 11

What Is Book Value?

## Answer:

The book value of an asset is the asset's cost minus the asset's accumulated depreciation

## Question 12

What Is Scrap Value?

## Answer:

In financial accounting, scrap value is associated with the depreciation of assets used in a business. In this situation, scrap value is defined as the expected or estimated value of the asset at the end of its useful life. Scrap value is also referred to as an asset's salvage value or residual value.

## Question 13

## What is the Difference Between Depreciation Expense and Accumulated Depreciation?

## Answer:

Depreciation expense is the amount of depreciation that is reported on the income statement. In other words, it is the amount that pertains only to the period of time indicated in the heading of the income statement. Accumulated depreciation is the total amount of depreciation that has been taken on a company's assets up to the date of the balance sheet. Accumulated depreciation is also the title of the contra asset account reported in the property, plant and equipment section of the balance sheet. The accumulated depreciation for an individual asset is subtracted from the asset's cost in determining the asset's carrying value or book value.

## Question 14

What Is the Purpose of Depreciation?
Answer:

The purpose of depreciation is to match the cost of a productive asset (that has a useful life of more than a year) to the revenues earned from using the asset. Since it is hard to see a direct link to revenues, the asset's cost is usually allocated to (assigned to, spread over) the years in which the asset is used. Depreciation systematically allocates or moves the asset's cost from the balance sheet to expense on the income statement over the asset's useful life. In other words, depreciation is an allocation process in order to achieve the matching principle; it is not a technique for determining the fair market value of the asset. The accounting entry for depreciation is a debit to Depreciation Expense and a credit to Accumulated Depreciation (a contraasset account that is reported in the same section of the balance sheet as the asset that is being depreciated).

## Question 15

## Why Isn't Land Depreciated?

## Answer:

Land is not depreciated because land is assumed to have an unlimited useful life. Other long-lived assets such as land improvements, buildings, furnishings, equipment, etc. have limited useful lives. Therefore, the costs of those assets must be allocated to those limited accounting periods. Since land's life is not limited, there is no need to allocate the cost of land to any accounting periods.

## Question 16

## Are Depreciation, Depletion and Amortization Similar?

## Answer:

In accounting the terms depreciation, depletion and amortization often involve the movement of costs from the balance sheet to the income statement in a systematic and logical manner. For example, the systematic expensing of the cost of assets such as buildings, equipment, furnishings and vehicles is known as depreciation. The systematic expensing of the cost
of natural resources is referred to as depletion. The systematic expensing of other long-term costs such as bond issue costs and organization costs is referred to as amortization. Depreciation, depletion and amortization are also described as noncash expenses, since there is no cash outlay in the years that the expense is reported on the income statement. As a result, these expenses are added back to the net income reported in the operating activities section of the statement of cash flows when it is prepared under the indirect method. The term amortization is also used to indicate the systematic reduction in a loan balance resulting from a predetermined schedule of interest and principal payments.

## Question 17

## What Is an Asset's Useful Life?

Answer:
An asset's useful life is the period of time (or total amount of activity) for which the asset will be economically feasible for use in a business. In other words, it is the period of time that the business asset will be in service and used to earn revenues. Because of the advances in technology, an asset's useful life is often less than its physical life. For example, a computer may be useful for only three years even though it could physically be operated for decades. The useful life (as well as the salvage value at the end of the useful life) are estimated amounts needed in the calculation of the asset's depreciation. Depreciation is required so that the company's financial statements comply with the matching principle.

## Question 18

## What Would Cause a Decrease in Accumulated Depreciation?

## Answer:

A decrease in accumulated depreciation will occur when an asset is sold, scrapped, or retired. At that point, the asset's accumulated depreciation and its cost are removed from the accounts. (The net of these two amountsknown as the book value or carrying value-is then compared to the
proceeds to determine if there is a gain or loss on the disposal.) Some accounting textbooks state that the cost of an expenditure that extends the useful life of an asset should be debited to the accumulated depreciation account instead of the asset account. Such an entry will also reduce the credit balance in the accumulated depreciation account.

## PRACTICAL

## Question 19

A purchased-on 1st January, 1993 certain machinery at Rs 1,94,000 and spent Rs. 6,000 on its erection. On 1st July, 1993 addition machinery costing 1,00,000 was purchased. On 1st July, 1995 the machinery purchased on 1st January, 1993 having become obsolete was auctioned for Rs $1,00,000$ and on the same date new machinery was purchased at a cost of Rs $1,50,000$. Depreciation was provided for annually on 31st December at the rate of $10 \%$ per annum on the original cost of the machinery. No depreciation need be provided when a machinery is sold in an auctioned, for that part of the year in which sale or auction took place. B for the above, depreciation shall be provided on time basis. In 1996 however A changed this method of providing depreciation and adopted the method writing off $15 \%$ p.a. on the written down value on the balance as appeared in machinery account on 1-1-1996. Show the machinery account for the calendar years 1993 to 1996

Solution:
Machinery account

| Date | Particulars |  | amt | Date | Particulars |  | amt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 <br> Jan 1 <br> July 1 | To <br> To <br> To | Bank A/c <br> Bank A/c <br> (Erection <br> cost) Bank <br> A/c | 1,94,000 <br> 6,000 <br> 1,00,000 | $\begin{aligned} & \hline 1993 \\ & \text { Dec. } 31 \end{aligned}$ | $\begin{aligned} & \text { By } \\ & \text { By } \end{aligned}$ | Dep. A/c <br> Balance c/d | $\begin{gathered} 25,000 \\ 2,75,000 \end{gathered}$ |
|  |  |  | 3,00,000 |  |  |  | 3,00,000 |
| $\begin{aligned} & 1994 \\ & \text { Jan. } 1 \end{aligned}$ | To | Balance b/d | 2,75,000 | 1994 <br> Dec. <br> 31 | By BY | Dep $A / c$ <br> Balance $\mathrm{c} / \mathrm{d}$ | $\begin{gathered} 30,000 \\ 2,45,000 \end{gathered}$ |

## Dec.

31

|  |  |  | 2,75,000 |  |  |  | 2,75,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1995 \\ & \text { Jan. } 1 \end{aligned}$ | To | Balance b/d | 2,45,000 | $\begin{aligned} & 1995 \\ & \text { July } 1 \end{aligned}$ | By | Bank A/c (sales | 1,00,000 |
| July 1 | To | Bank A/c | 1,50,000 |  | By | proceeds) <br> P\&L A/c | 60,000 |
|  |  |  |  | Dec. | By | (Loss on Sale) | 17,500 |
|  |  |  |  | 31 | By | Dep. A/c <br> Balance c/d | 2,17,500 |
|  |  |  | 3,95,000 |  |  |  | 3,95,000 |

## Question 20

$\mathrm{M} / \mathrm{s}$ Surya took lease of a quarry on 1-1-2013 for ${ }^{`} 1,00,00,000$. As per technical estimate the total quantity of mineral deposit is $2,00,000$ tonnes. Depreciation was charged on the basis of depletion method.
Extraction pattern is given in the following table:
Year Quantity of mineral extracted
2013 2,000 tonnes
2014 10,000 tonnes
2015 15,000 tonnes
Show the quarry lease Account and depreciation account for each year from 2013 to 2015

Solution:
Quarry Lease Account
$\left.\begin{array}{|l|l|l|l|l|l|c|}\hline \begin{array}{l}2013 \\ \text { 3 Jan. }\end{array} & \text { To } & \text { Bank A/c } & 1,00,00,000 & 2013 \\ \text { Dec. 31 }\end{array} \begin{array}{l}\text { Depreciation A/c } \\ {[(2,000 / 2,00,000)} \\ \text { X1,00,00,000] }\end{array}\right]$

| 2014 <br> Jan. 1 | To | Balance <br> b/d | $99,00,000$ | 2014 <br> Dec. 31 | By Depreciation <br> A/c | $5,00,000$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  |  |  | Dec. 31 | By Balance c/d | $94,00,000$ |  |
| 2015 <br> Jan 1 | To | Balance <br> b/d | $94,00,000$ | 2015 <br> Dec. 31 | By Depreciation <br> A/c | $7,50,000$ |

## Depreciation Account

| 2013 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dec. 31 | To Quarry lease A/c | $\frac{1,00,000}{1,00,000}$ | Dec. 31 | By profit \& Loss A/c | $\frac{1,00,000}{1,00,000}$ |
| 2014 |  |  | 2014 |  |  |
| Dec. 31 | To Quarry lease A/c | $\frac{5,00,000}{5,00,000}$ | Dec. 31 | By Profit \& Loss $\mathrm{A} / \mathrm{c}$ | $\frac{5,00,000}{5,00,000}$ |
| 2015 |  |  | 2015 |  |  |
| Dec. 31 | To Quarry lease A/c | $\frac{7,50,000}{7,50,000}$ | Dec. 31 | By Profit \& Loss A/c | $\frac{7,50,000}{7,50,000}$ |

## Question 21

M/s Anshul commenced business on 1 ${ }^{\text {st }}$ January 2011, when they purchased plant and equipment for $7,00,000$. They adopted a policy of charging depreciation at $15 \%$ per annum on diminishing balance basis and over the years, their purchases of plant have been:

On 1-1-2015 it was decided to change the method and rate of depreciation to straight line basis. On this date remaining useful life was assessed as 6 years for all the assets purchased before 1.1.2015 and 10 years for the asset purchased on 1.1 .2015 with no scrap value.

Calculate Difference in depreciation to be adjusted in Plant And equipment Account for the year ending 31 march.

## For more Info Visit - www.KITest.in

## Solution:

## Depletion method of depreciation

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 2011 | Cost depreciation | 7,00,000 |  | 1,05,000 |
|  |  | $(1,05,000)$ |  |  |
| 2012 | Written Down Value (WDV) cost | 5,95,000 | 1,50,000 |  |
|  | depreciation W.D. V | -(89,250) | $(22,500)$ | 1,11,750 |
|  |  | 5,05,750 | 1,27,500 |  |
| 2013 | Depreciation W.D. V | $(75,863)$ | $(19,125)$ | 94,988 |
|  |  | 4,29,887 | 1,08,375 |  |
| 2014 | Depreciation W.D. V | $(64,483)$ | $(16,256)$ | 80,739 |
|  |  | $(60,900)$ | $(15,353)$ |  |
| 2015 | Depreciation W.D. V | 3,04,504 | 76,766 | 76,253 |

Plant and Equipment Account

|  |  |  |  |  | By <br> Depreciation |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2015 |  |  | 2015 |  | 56,253 |
| Jan 1. | To balance <br> b/d | $4,57,523$ | Dec. <br> 31 | $(60,900+15,353+20,000)$ <br> By balance c/d | $5,61,270$ |
|  | To Bank | $2,00,000$ |  |  | $6,57,523$ |
| 2016 |  | $6,57,523$ |  |  |  |
| Jan. 1 | To balance <br> b/d | $5,61,270$ |  |  |  |

Working Notes:
Depreciation on F1 $=\frac{55,000-5,000(\text { Scrap value })}{10 \text { Years }}=5,000$ P.a
Depreciation on F2 $=\frac{9,500-500(\text { Scrap value })}{10 \text { years }}=900$ P.a
Depreciation on F3 $=\frac{8,400-400 \text { (Scrap value }}{10 \text { Years }}=400$ P.a
Depreciation on F3 (six months) $=800$ X 6/12 $=400$

## Question 23

From the following transactions of a concern, prepare the Machinery Account for ended 31at March, 2015: 1st April, 2014: Purchased second-hand machinery for Rs.40,000. 1st April, 2014: Spent Rs.10,000 on repairs for making it serviceable. 30th September, 2014: Purchased additional new machinery fort 20,000. 31st December, 2014: Repairs and renewals of machinery Rs.3,000. 31st March, Depreciate the Machine @ 10 \%

Solution:
Machinery a/c

| Date | Particulars | J.F | Rs. | Date | Particulars | J.F | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 |  |  |  | 2015 |  |  |  |
| Apr. 1 | To Bank A/c Machinery 1 |  | 50,000 | Mar. <br> 31 | By Depreciation A/c |  |  |
| Sept 30 | To Bank A/c Machinery 2 |  | 20,000 |  | Machinery 1 <br> 5,000 <br> Machinery 2 <br> 1,000 |  | 6,000 |
|  |  |  |  | Mar. <br> 31 | By balance $\mathrm{c} / \mathrm{d}$ <br> Machinery 1 <br> 45,000 <br> Machinery 2 <br> 19,000 |  | 64,000 |
|  |  |  | 70,000 |  |  |  | 70,000 |

## Question 24

Modern Ltd. Purchased machinery on $1^{\text {st }}$ July Rs. 60,000 on $1^{\text {st }}$ October, 2004 based another machine for Rs. 20,000 On 30 ${ }^{\text {th } J u n e, ~ 2005, ~ i t ~ s o l d ~}$ the first machine hosed in 2003 fort Rs. 38,500. Depreciation - provided at $20 \%$ p.a. on the original cost year. Accounts are closed on 31 ${ }^{\text {st }}$ March every year. Prepare the machinery $A / c$ for three year.

Solution:

| Particulars | ₹ |
| :--- | :---: |
| Value on Jan 01, 2005 | 40,000 |


| Depreciation for 3 months | $(3,000)$ |
| :--- | :---: |
| Value of March, 31,2005 | 37,000 |
| Less: Sale of Machine | 38,500 |
| Profit on sale of Machine 1 | 1,500 |

Book of Modern Ltd.
Machinery account

| Date | Particulars | J. | ₹ | Date | Particulars | J. | ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \hline 2003 \\ \text { July } 01 \end{gathered}$ | To Bank A/c Machinery 1 |  | 60,000 | 2004 <br> Mar 31 <br> Mar 31 | By depreciation A/c Machinery 1 (for 8 months) <br> Balance c/d |  | $\begin{aligned} & 8,000 \\ & 52,000 \end{aligned}$ |
|  |  |  | 60,000 |  |  |  | 60,000 |
| 2004 <br> Apr. 01 <br> Oct 1 | To Balance b/d <br> To bank a/c Machinery 2 |  | $\begin{aligned} & 52,000 \\ & 20,000 \end{aligned}$ | $\begin{gathered} 2004 \\ \text { Mar. } \\ 31 \\ \text { Mar } 31 \end{gathered}$ | By depreciation A/c  <br> Machinery 1 12,000 <br> Machinery 2 2,000  <br> (6 month)  <br> By balance c/d  <br> Machinery 1 40,000 <br> Machinery 2 18,000 |  | 14,000 58,000 |
|  |  |  | 72,000 |  |  |  | 72,000 |
| $\begin{gathered} 2005 \\ \text { Apr. } 01 \end{gathered}$ | To Balance b/d <br> Machinery 1 <br> 40,000 <br> Machinery 2 <br> 18,000 |  | $\begin{gathered} 58,000 \\ 1500 \end{gathered}$ | $\begin{gathered} 2005 \\ \text { June } \\ 30 \\ \\ \text { June } \\ 30 \\ \text { Mar } 31 \end{gathered}$ | By depreciation A/c <br> Machinery 1 <br> (for 3 months) <br> By bank A/c machinery 1 <br> By Depreciation A/c <br> Machinery 2 <br> By balance c/d |  | $\begin{gathered} 3,000 \\ \\ 38,500 \\ 4,000 \\ 14,000 \end{gathered}$ |
|  |  |  | 59500 |  |  |  | 59,500 |

## Question 25

On July 01, 2010, Ashok Ltd. Purchased a machine for Rs. 1,08,000 and spent Rs. 12,000 on its installation. At the time of purchase, it was estimated that the effective commercial life of the machine will be 12 years and after 12 years its salvage value will be Rs. 12,000

Prepare machine account and depreciation Account in the books of Ashok Ltd. For first three years, if depreciation is written off according to straight line method.

| Cost of machine | $1,08,000+12,000$ |
| :--- | :--- |
|  | $1,20,000$ |
| Yearly Depreciation | $\frac{\text { Cost of asset - Estimated Resident value }}{\text { Estimated useful life of the asset }}$ |
|  | $\frac{1,20,000-12,000}{12}$ |
|  | $\frac{1,08,000}{12}$ |

Depreciation Account

| Date | Particulars | J.F | Amount | Date | Particulars | J.F | Amount |
| :---: | :--- | :---: | :---: | :---: | :--- | :---: | :---: |
| 2010 <br> Dec. <br> 31 | To machine <br> A/c |  | 4,500 | 2010 <br> Dec. <br> 31 | By Profit \& Loss <br> A/c |  | 4,500 |
| 2011 |  | 4,500 |  |  |  | 4,500 |  |
| Dec. <br> 31 | To Machine <br> A/c | 9,000 | 2011 <br> Dec <br> 31 | By profit \& Loss <br> A/c |  | 9,000 |  |
|  |  |  | 9,000 |  |  |  | 9,000 |
| 2012 <br> Dec. <br> 31 | To machine <br> A/c |  | 9,000 | 2012 <br> Dec. <br> 31 | By profit \& loss <br> A/c |  | 9,000 |
|  |  |  | 9,000 |  |  |  | 9,000 |

Books of Ashok Ltd.
Machine account

| Date | Particulars | J.F | Amount | Date | Particulars | J.F | Amount |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| $\begin{gathered} 2010 \\ \text { July } 01 \\ \text { Apr } 01 \end{gathered}$ | To Bank A/c <br> To Bank A/c <br> Installation <br> Expenses) | $\begin{gathered} 1,08,000 \\ 12,000 \end{gathered}$ | 2010 <br> Dec. <br> 31 <br> Mar. <br> 31 | By <br> Depreciation <br> A/c <br> By Balance c/d | $\begin{gathered} 4,500 \\ 1,15,500 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1,20,000 |  |  | 1,20,000 |
| $\begin{gathered} 2011 \\ \text { Dec. } 31 \end{gathered}$ | To balance b/d | 1,15,500 | 2011 <br> Dec. <br> 31 <br> Dec. <br> 31 | By <br> Depreciation <br> A/c <br> By balance c/d | $\begin{gathered} 9,000 \\ 1,06,500 \end{gathered}$ |
|  |  | 1,15,500 |  |  | 1,15,000 |
| $\begin{gathered} 2012 \\ \text { Dec. } 31 \end{gathered}$ | To balance b/d | 1,06,500 | 2012 <br> Dec. <br> 31 <br> Dec. <br> 31 | By <br> Depreciation A/c <br> By balance c/d | $\begin{gathered} 9,000 \\ 97,500 \end{gathered}$ |
|  |  | 1,06,500 |  |  | 1,06,500 |
| $\begin{gathered} 2013 \\ \text { Dec } 31 \end{gathered}$ | To balance b/d | 97,500 | 2013 |  |  |

## Question 26

Berlia Ltd. Purchased a second-hand machine for 56,000 on July 01, 2011 and spent 24,000 on its repair and installation and 5,000 for its carriage. On September 01, 2012, it purchased another machine for $2,50,000$ and spent 10,000 on its installation.

Prepare machinery account and depreciation account from the year 2011 to 2014, if depreciation is provided on machinery @10\% p.a. on written down value method annually on December 31.

| Year | Machine | Book <br> value | Duration | Calculation | Depreciation |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2011 | Machine 1 | 85,000 | 6 months | $85000 \times \frac{10}{100} \times \frac{6}{12}$ | 4,250 |
|  |  |  |  | Total | 4,250 |


| 2012 | Machine 1 | $\begin{aligned} & 85,000- \\ & 4,250 \\ & =80,750 \end{aligned}$ | $12$ <br> months | $80,750 \times \frac{10}{100}$ | 8,075 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Machine 2 | 2,60,000 | 4 months | $2,60,000 \times \frac{10}{100} \times \frac{4}{12}$ | 8,667 |
|  |  |  |  | Total | 16,742 |
| 2013 | Machine 1 | 72,675 | $12$ <br> months | $72,675 \times \frac{10}{100}$ | 7,268 |
|  | Machine 2 | 2,51,333 | $12$ <br> months | $2,51,333 \times \frac{10}{100}$ | 25,133 |
|  |  |  |  | Total | 32,401 |
| 2014 | Machine 1 | 65,407 | $12$ <br> months | $65,407 \times \frac{10}{100}$ | 6,541 |
|  | Machine 2 | 2,26,200 | $12$ <br> months | $\frac{10}{100} \times 2,60,000$ | 22,620 |
|  |  |  |  | Total | 29,261 |

Books of Berlia Ltd.
Machine Account

| Date | Particulars | J. <br> F | Amount | Date | Particulars | J. <br> F | Amount |
| :--- | :--- | :---: | :---: | :---: | :--- | :---: | :---: |
| 2011 <br> Jul 01 | To Bank A/c <br> (Purchase price of <br> machine 1) |  | 56,000 | 2011 <br> Dec. <br> 31 | By <br> Depreciation <br> A/c |  | 4250 |
| Jul 01 | To Bank A/c <br> (Repair charges <br> for machine 1) | 24,000 | Dec. <br> 31 | By Balance <br> c/d |  | 80,750 |  |
| Jul 01 | To Bank A/c <br> (Installation <br> charges | 5,000 |  |  |  |  |  |
|  |  |  | 85,000 |  |  |  | 85,000 |


| $\begin{array}{\|l\|} \hline 2012 \\ \text { Jan } 01 \\ \\ \text { Sep } \\ 01 \end{array}$ | To balance $\mathrm{b} / \mathrm{d}$ <br> To bank A/c <br> (Purchase price of machine 2) | $\begin{gathered} 80,750 \\ 2,50,000 \end{gathered}$ | $\begin{aligned} & 2012 \\ & \text { Dec } \\ & 31 \end{aligned}$ | By depreciation A/c Machine 1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l\|} \hline \text { Sep } \\ 01 \end{array}$ | To Bank A/c (Installation charges on machine 2) | 10,000 |  | Machine 2 | 16742 |
|  |  |  | Dec. <br> 31 | By balance c/d | 3,24,008 |
|  |  | 3,40,750 |  |  | 3,40,750 |
| $\begin{aligned} & 2011 \\ & \text { Jan } 01 \end{aligned}$ | To balance b/d | 3,24,008 | $\begin{aligned} & 2013 \\ & \text { Dec. } \\ & 31 \end{aligned}$ | By <br> Depreciation <br> A/c <br> Machine 1 <br> Machine 2 <br> By balance c/d | $\begin{gathered} 32,401 \\ 2,91,607 \end{gathered}$ |
|  |  |  |  |  | 3,24,008 |
| $\begin{aligned} & 2014 \\ & \text { Jan } 01 \end{aligned}$ | TO Balance b/d | 2,91,607 | 2014 <br> Dec. <br> 31 <br> Dec. <br> 31 | By depreciation A/c <br> Machine 1 <br> Machine 2 <br> By balance c/d | $\begin{gathered} 29,161 \\ 2,62,446 \end{gathered}$ |
|  |  | 2,91,607 |  |  | 2,91,607 |

Depreciation Account

| Date | Particulars | J.F | Amount <br> Rs. | Date | Particulars | J.F | Amount <br> Rs. |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |


| 2011 <br> Mar. <br> 31 | To Machine <br> A/c | 4,250 | Mar.31 |  <br> Loss A/c |  | 4,250 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2012 <br> Mar 31 | To Machine <br> A/c | 17,642 | Mar 31 |  <br> Loss A/c |  | 17,642 |
|  |  | 17,642 |  |  | 4,250 |  |
| 2013 <br> Mar 31 | To Machine <br> A/c | 32,401 | Mar 31 |  <br> Loss A/c |  | 32,401 |
|  |  | 32,401 |  |  | 32,642 |  |
| 2014 <br> Mar 31 | To Machine <br> A/c | 29,161 | Mar 31 |  <br> Loss A/c | 29,161 |  |
|  |  | 29,161 |  |  | 29,161 |  |

## Question 27

Carriage Transport Company purchased 5 trucks at the cost of ₹ 2,00,000 each on April 01, 2011. The company writes off depreciation @20\% p.a. on original cost and closes its books on December 31, every year. On October 01, 2013, one of the trucks is involved in an accident and is completely destroyed. Insurance company agreed to pay ₹ 70,000 in full settlement of the claim. On the same date the company purchased a second-hand truck for ₹ $1,00,000$ and spent ₹ 20,000 on its overhauling. Prepare truck account and provision for depreciation account for the three years ended on December 31, 2013. Also give truck account if truck disposal account is prepared.

## Solution:

Working Notes:
Depreciation chart

| Year | Truck | Duration | Calculation | Depreciation |
| :--- | :---: | :---: | :---: | :---: |
| 2011 | Old 5 trucks | 9 months | $5 \times 2,00,000 \times \frac{20}{100} \times \frac{9}{12}$ | $1,50,000$ |


|  |  |  |  | $1,50,000$ |
| :--- | :--- | :--- | :--- | :---: |
| 2012 | Old 5 trucks | 12 months | $5 \times 2,00,000 \times \frac{20}{100}$ | $2,00,000$ |
| 2013 | Disposed old <br> truck | 9 months | $2,00,000 \times \frac{20}{100} \times \frac{9}{12}$ | 30,000 |
|  | Remaining <br> old 4 trucks | 12 months | $4 \times 2,00,000 \times \frac{20}{100} \times \frac{9}{12}$ | $1,60,000$ |
|  | New Truck | 3 months | $1,20,000 \times \frac{20}{100} \times \frac{3}{12}$ | 6,000 |
|  |  |  |  | $1,96,000$ |

Books of carriage Transport Company
Truck Account

| Date | Particulars | J.F | Amount | Date | Particulars | J.F | Amount |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2011 <br> Apr <br> 31 | To Bank A/c |  | $10,00,000$ | 2011 <br> Dec <br> 31 | By Balance c/d | $10,00,000$ |  |
| 2012 <br> Jan 01 | To Balance <br> b/d |  | $10,00,000$ | 2012 <br> Dec. <br> 31 | By balance c/d | $10,00,000$ |  |
| 2013 | To Balance |  | $10,00,000$ | 2013 <br> Dec <br> Jan 01 <br> b/d | By truck <br> Disposal A/c <br> (one truck <br> Disposed) |  | $2,00,000$ |
| Oct 01 | To Bank A/c <br> (Purchase of <br> Second-hand <br> truck) | $1,00,000$ | Dec <br> By Balance b/d | $9,20,000$ |  |  |  |
| Oct 01 | To Bank A/c <br> (Overhauling <br> of second- <br> hand truck) | 20,000 |  |  |  | $10,00,000$ |  |
|  |  | $11,20,000$ |  |  |  |  |  |

Provision for Depreciation Account

| Date | Particulars | J <br> F | Amount | Date | Particulars |  | J <br> F | Amount |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2011 <br> Dec <br> 31 | To Balance <br> c/d |  | $1,50,000$ | 2011 <br> Dec <br> 31 | By Depreciation <br> A/c old 5 Trucks | $1,50,000$ |  | $1,50,000$ |
| 2012 <br> Dec <br> 31 | To Balance <br> c/d |  | $3,50,000$ |  |  |  |  |  |

Truck Disposal Account

| Date | Particulars | J.F | Amount | Date | Particulars | J.F | Amount |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 2013 |  |  | 2013 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Oct 01 | To Truck <br> A/c |  | $2,00,000$ | Oct 01 | By provision for <br> depreciation A/c | $1,00,000$ |
|  |  | Oct 01 <br> Oct 01 <br> By Insurance A/c <br> By profit \& Loss A/c <br> (Loss) | 70,000 <br> 30,000 |  |  |  |
|  |  |  | $2,00,000$ |  |  | $2,00,000$ |

## Question 28

On October 01, 2010, a Truck was purchased for ₹ 8,00,000 by Laxmi Transport Ltd. Depreciation was provided at 15\% p.a. on the diminishing balance basis on this truck. On December 31, 2013 this Truck was sold for ₹ $5,00,000$. Accounts are closed on 31st March every year Calculate Profit on sale of truck.

Solution:
Working Notes: Depreciation Chart: -

| Year | Book value | Duration | Calculation | Depreciation |
| :---: | :---: | :---: | :---: | :---: |
| 2010-2013 | 8,00,000 | 6 months | $8,00,000 \times \frac{15}{100} \times \frac{6}{12}$ | 60,000 |
| 2011-2012 | $\begin{aligned} & =8,00,000-60,000 \\ & =7,40,000 \end{aligned}$ | $\begin{gathered} 12 \\ \text { months } \end{gathered}$ | $7,40,000 \times \frac{15}{100}$ | 1,11,000 |
| 2012-2013 | $\begin{aligned} & =7,40,000- \\ & 1,11,000=6,29,000 \end{aligned}$ | $\begin{gathered} 12 \\ \text { months } \end{gathered}$ | 6,29,000× $\frac{15}{100}$ | 94,350 |
| 2013-2014 | $\begin{aligned} & =6,29,000-94,350 \\ & =5,34,650 \end{aligned}$ | 9 months | $5,34,650 \times \frac{15}{100} \times \frac{6}{12}$ | 60,148 |
| Description |  |  |  | Amount Rs. |
| $\begin{aligned} & \text { Book value as on Dec 31, 2013 } \\ & =\text { Book Value as on Apr. 01,2103 - Depreciation till Dec 31, } \\ & 2013 \\ & =5,34,650-60,148 \\ & =4,74,502 \end{aligned}$ |  |  |  | 4,74,502 |
| Sale Price of truck |  |  |  | 5,00,000 |

$$
\begin{array}{l|l}
\text { Profit on sale of Truck } & \\
=\text { sale price }- \text { Book Value } & 25,498 \\
=5,00,000-4,74,502 &
\end{array}
$$

## Question 29

On January 01, 2011, Satkar Transport Ltd. Purchased 3 buses for Rs. 10,00,000 each. On july, 2013, one bus was involved in an accident and was completely destroyed and Rs. 7,00,000 were received from the insurance Company in full settlement. Depreciation is written off @ 15\% p.a on diminishing balance method. Prepare bus account from 2011 to 2014. Books are closed on December 31 every year.

Solution:
$\left.\begin{array}{|l|l|l|l|l|l|}\hline \text { Year } & \text { Bus } & \text { Book Value } & \begin{array}{l}\text { Duratio } \\ \mathbf{n}\end{array} & \text { Calculation } & \begin{array}{l}\text { Depreciat } \\ \text { ion }\end{array} \\ \hline 2011 & \text { Bus 1 } & 10,00,000 & \begin{array}{l}12 \\ \text { months }\end{array} & 10,00,000 \times \frac{15}{100} & 1,50,000 \\ \hline & \begin{array}{l}\text { Other 2 } \\ \text { Buses }\end{array} & \begin{array}{l}=2 \times 10,00,000 \\ =20,00,000\end{array} & \begin{array}{l}12 \\ \text { months }\end{array} & 20,00,000 \times \frac{15}{100} & 3,00,000 \\ \hline 2012 & \text { Bus 1 } & =10,00,000- \\ 1,50,000 \\ =8,50,000\end{array}\right)$

For more Info Visit - www.KITest.in

## Bus Disposal Calculation

| Description | Amount |
| :--- | :---: |
| Original cost of bus 1 | $10,00,000$ |
| Accumulated Depreciation <br> - Depreciation in 2011 - Depreciation in 2012 + Depreciation <br> in 2013 <br> $-1,50,000 ~+~ 1,27,500 ~+~ 54,188 ~$ <br> = 3,31,688 |  |
| Book value as on Jul 01, 2013 <br> = Original Cost - Depreciation till Jul 01, 2013 <br> = 10,00,000 - 3,31,688 <br> =6,68,312 |  |
| Insurance Claimed on bus 1 |  |
| Profit due to insurance claim | 7,00,000 |
| = Insurance claim - Book value |  |
| $=7,00,000$ - 6,68,312 | 31,688 |

Books of Satkar Transport Ltd.
Bus Account

| Date | Particulars | J. <br> $\mathbf{F}$ | Amount | Date | Particulars |  | J. <br> F | Amount |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2011 <br> Jan 01 | To Bank A/c <br> (Purchase <br> price of 3 <br> buses) |  | $30,00,000$ | 2011 <br> Dec 31 | By <br> Depreciation <br> A/c |  |  |  |


|  |  | 30,00,000 |  |  |  | 30,00,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 2012 \\ & \text { Jan } 01 \end{aligned}$ | To Balance b/d | 25,50,000 | 2012 <br> Dec 31 <br> Dec 31 | By <br> Depreciation <br> A/c <br> Bus 1 <br> Other 2 <br> buses <br> By balance <br> c/d | $\begin{aligned} & 1,27,500 \\ & 2,55,000 \end{aligned}$ | $\begin{aligned} & 3,82,500 \\ & 21,67,500 \end{aligned}$ |
|  |  | 25,50,000 |  |  |  | 25,50,000 |
| $\begin{aligned} & 2013 \\ & \text { Jan } 1 \\ & \text { Jul } 01 \end{aligned}$ | To balance <br> b/d <br> To profit \& loss A/c | $\begin{aligned} & 21,67,500 \\ & 31,688 \end{aligned}$ | 2013 <br> Jul 01 <br> Jul 01 <br> Dec 31 <br> Dec 31 | By <br> Depreciation <br> A/c <br> Bus 1 <br> By bank a/c <br> Depreciation <br> A/c other 2 <br> buses <br> By balance <br> c/d | $54,188$ $2,16,750$ | $\begin{aligned} & 54,188 \\ & 7,00,000 \\ & \\ & 2,16,750 \\ & 12,28,250 \end{aligned}$ |
|  |  | 21,99,188 |  |  |  | 21,99,188 |
| 2014 <br> Jan 01 | To balance b/d | 12,28,250 | 2014 <br> Dec 31 <br> Dec 31 | By depreciation A/c other 2 buses <br> By balance c/d | $\begin{aligned} & 34500 \\ & 1,84,238 \end{aligned}$ | $\begin{aligned} & 1,84,238 \\ & 10,44,012 \end{aligned}$ |
|  |  | 12,28250 |  |  |  | 12,28,250 |

## Question 30

Soloman purchases a machine for Rs. 1,00,000 and 1 January 2,000. Its estimated useful life is 5 years and scarp Values Rs. 10,000. It is
decided to write off depreciation under straight lien method. Pass necessary journal entries for five years and the accounting period ends on 321 March every year.

| Date | Particulars |  | Debit Rs. | Credit Rs. |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 2000 \\ & \text { Jan } 1 \end{aligned}$ | Machinery Account To Bank Account <br> (Purchase of machine) | Dr. | 1,00,000 | 1,00,000 |
| 31 Mar. | Depreciation Account <br> To Machinery Account <br> (Depreciation on Machinery for 3months) <br> Profit and loss Account <br> To Depreciation Account <br> (Depreciation charges to profit and loss A/c) | Dr. | $\begin{aligned} & 4,500 \\ & 4,500 \end{aligned}$ | $\begin{aligned} & 4,500 \\ & 4,500 \end{aligned}$ |
| $\begin{aligned} & 2001 \\ & 31 \text { Mar. } \end{aligned}$ | Depreciation Account <br> To Machinery Account <br> (depreciation of machinery for one year) | Dr. | 18,000 | 18,000 |
| 31 Mar. | Profit and loss account <br> To depreciation Account <br> (Depreciation charges transferred to profit and loss account) |  | 18,000 | 18,000 |
| $\begin{aligned} & 2002 \\ & 31 \text { Mar. } \end{aligned}$ | Depreciation Account <br> To Machinery Account (Annual Depreciation charges) <br> Profit and loss Account <br> To Depreciation Account <br> (Depreciation charges transferred to profit and loss account) | Dr. Dr. | $\begin{aligned} & 18,000 \\ & 18,000 \end{aligned}$ | $\begin{aligned} & 18,000 \\ & 18,000 \end{aligned}$ |


| $2003$ <br> 31 Mar. | Depreciation Account <br> To machinery account <br> (Annual Depreciation charges) <br> Profit and loss account <br> To Depreciation Account <br> (Transfer of annual depreciation to profit and loss account) | Dr. <br> Dr. | $\begin{aligned} & 18,000 \\ & 18,000 \end{aligned}$ | $\begin{aligned} & 18,000 \\ & 18,000 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 2004 \\ & 31 \text { Mar. } \end{aligned}$ | Depreciation Account To machinery account | Dr. | 18,000 | 18,000 |
|  | (Annual depreciation charges) <br> Profit and loss account <br> To Depreciation Account (Transfer of depreciation charges to profit and loss account) | Dr. | 18,000 | 18,000 |
| 31 Dec. | Bank Account To machinery account <br> (Machinery sold Rs. 10,000 as scrap) | Dr. | 10,000 | 10,000 |
| $\begin{aligned} & 2005 \\ & 21 \text { Mar. } \end{aligned}$ | Depreciation Account <br> To Machinery account <br> (Depreciation charges for 9 months on Rs., 1,00,000 @ 18\% | Dr. | 13,500 | 13,500 |
| 31 Mar | Profit loss Account To Depreciation Account <br> (Transfer of Depreciation account to profit and loss account) | Dr. | 13,500 | 13,500 |

## Question 31

A Noida based construction company owns 5 cranes and the value of this asset in its books on April 01, 2011 is ₹ 40,00,000. On October 01, 2011 it sold one of its cranes whose value was ₹ $5,00,000$ on April 01, 2011 at a 10\% profit. On the same day it purchased 2 cranes for ₹

4,50,000 each. Prepare cranes account. It closes the books on December 31 and provides for depreciation on 10\% written down value.

## Solution:

Working Notes:
Depreciation Chart

| 2011-2012 | Sold out <br> old crane 1 | 5,00,000 | 6 months | $\begin{aligned} & 5,00,000 \times \frac{10}{100} \times \\ & \frac{6}{12} \end{aligned}$ | 25,000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Other 4 old cranes | $\begin{aligned} & =40,00,000- \\ & 5,00,000 \\ & =35,00,000 \end{aligned}$ | 9 months | $\begin{aligned} & 35,00,000 \times \\ & \frac{10}{100} \times \frac{9}{12} \end{aligned}$ | 2,62,500 |
|  | $\begin{aligned} & 4 \text { new } \\ & \text { cranes } \end{aligned}$ | $\begin{aligned} & =2 \mathrm{X} \\ & 4,50,000 \\ & =9,00,000 \end{aligned}$ | 3 months | $\begin{aligned} & 9,00,000 \times \frac{10}{100} \times \\ & \frac{9}{12} \end{aligned}$ | 22,500 |
| Total |  |  |  |  | 3,10,000 |

Crane 1 Disposal Calculation

| Description | Amount |
| :--- | :---: |
| Original cost of Crane 1 | $5,00,000$ |
| Accumulated Depreciation <br> =Depreciation in 2011-2012 <br> $=$ 25,000 | 25,000 |
| Book value as on Oct 01, 2011 <br> =Original cost - Depreciation till Oct, 01, 2011 <br> $=5,00,000 ~-~ 25,000 ~$ |  |
| $=4,75,000$ | $4,75,000$ |

## Selling Price

$=$ Book value $+10 \%$ of Book value
5,22,500
$=4,75,000+10 \%$ of $4,75,000$
$=4,75,000+47,500$
$=5,22,500$
Profit on crane 1
= Sale Price - Book Value
47,500
$=5,22,500-4,75,000$
$=47,500$
Alternatively, Profit $=10 \%$ of Book value
$=10 \%$ of $4,75,000$
$=47,500$

## Books of Noida Cranes Company

Cranes Account

| Date | Particulars | $\begin{aligned} & \mathrm{J} . \\ & \mathrm{F} \end{aligned}$ | Amount | Date | Particulars |  | $\begin{aligned} & \mathrm{J} . \\ & \mathrm{F} \end{aligned}$ | Amount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 <br> Apr. <br> 01 | To Balance b/d |  | 40,00,000 | $\begin{aligned} & 2011 \\ & \text { Oct } \\ & 31 \end{aligned}$ | By <br> Depreciatio <br> n A/c <br> Crane 1 | 25,000 |  | 25,000 |
| $\begin{aligned} & \text { Oct } \\ & 01 \end{aligned}$ | To Profit \& Loss A/c |  | 47,500 | Oct <br> 01 | By bank A/c (sale of crane 1) |  |  | 5,22,500 |
| $\begin{aligned} & \text { Oct } \\ & 01 \end{aligned}$ | To bank A/c (Purchase of 2 new cranes) |  | 9,00,000 | 2012 | By <br> Depreciatio n A/c |  |  |  |
|  |  |  |  | Mar <br> 31 | 4 old cranes 2 new cranes | $\begin{aligned} & 2,62,500 \\ & 22,500 \end{aligned}$ |  |  |


|  |  |  |  | By balance <br> c/d |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## NOVEMBER 2018

## Question 1

State with reasons whether the following statement is true or false.
Depreciation is a non - cash expense and does not result in any cash cash

## Answer:

True: Depreciation is a non - cash. Expense and unlike other normal expenditure (e.g., wages, rent etc.) does not result is any cash outflow.

## NOVEMBER 2019

## Question 2

X purchased a machinery on 1st January 2017 for $4,80,000$ and spent 20,000 on its installation. On July 1, 2017 another machinery costing 2,00,000 was purchased. On 1st July, 2018 the machinery purchased on 1st January, 2017 having become scrapped and was sold for 2,90,000 and on the same date fresh machinery was purchased for ₹ $5,00,000$.
Depreciation is provided annually on 31st December at the rate of 10\% p.a. on written down value. Prepare Machinery account for the years 2017 and 2018. [4 marks] Answer:

> In the Books of X Machinery A/c

| Date | Particulars | Rs. | Date | Particulars |  | Rs. |
| :--- | :--- | :---: | :---: | :--- | :--- | :--- |
| 01- | To bank A/c | $4,80,000$ | $31-12-$ | By Depreciation A/c |  |  |
| 01-17 | (Mach. I) | 20,000 | 17 | Mach I | 50,000 |  |
|  |  |  |  | (10\% of Rs. <br> $5,00,000)$ |  |  |
|  | To Bank A/c |  |  |  |  |  |


| $\begin{aligned} & \hline 01- \\ & 01-17 \end{aligned}$ | (Installation charges) | 2,00,000 | $\begin{aligned} & 31-12- \\ & 17 \end{aligned}$ | Mach II <br> (10\% of Rs. <br> 2,00,000 x $6 / 12$ ) <br> By balance c/d <br> Mach I <br> (Rs. 5,00,000 - Rs. <br> 50,000) <br> Mach II <br> (Rs. 2,00,000 - Rs. <br> 10,000) | $10,000$ <br> 450000 <br> 190000 | $60,000$ $6,40,000$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 7,00,000 |  |  |  | 7,00,000 |
| $\begin{array}{\|l\|} \hline 01- \\ 01-18 \end{array}$ | To Balance b/d | $\begin{aligned} & 6,40,000 \\ & 5,00,000 \end{aligned}$ | $\begin{aligned} & 01-07- \\ & 18 \end{aligned}$ | By Depreciation A/c <br> Mach 1 <br> (10\% of Rs. <br> 4,50,000 X $6 / 12$ ) |  | 22,500 |
| $\begin{array}{\|l} \text { 01- } \\ 07-18 \end{array}$ | To Bank A/c (Mach III) |  | $\begin{aligned} & 01-07- \\ & 18 \end{aligned}$ | By bank A/c (Sale Proceeds) |  | 2,90,000 |
|  |  |  | $\begin{aligned} & 01-07- \\ & 18 \end{aligned}$ | By profit \& loss A/c (Loss on Sale W.N.1) |  | 1,37,500 |
|  |  |  | $\begin{aligned} & 31-12- \\ & 18 \end{aligned}$ | By Depreciation A/c <br> Mach II <br> (10\% of Rs. <br> 1,90,000) <br> Mach III <br> ( $10 \%$ of Rs. $5,00,000 \text { X 6/12) }$ |  | 44,000 |
|  |  |  | $\begin{aligned} & 31-12- \\ & 18 \end{aligned}$ | By Balance c/d <br> Mach II <br> (Rs. 1,90,000 - Rs. <br> 19,000) <br> Mach III <br> (Rs. 5,00,000 - Rs. <br> 25,000) | $\begin{aligned} & 171000 \\ & 475000 \end{aligned}$ | 6,46,000 |
|  |  | 11,40,000 |  |  |  | 11,40,000 |
| Working Notes: |  |  |  |  |  |  |

For more Info Visit - www.KITest.in

| Particulars.............................................................................. | Rs. |
| :---: | :---: |
| Sales Proceeds <br> Less: W. D. V as on 01-07-2018 <br> W. D. V as on 01-01-2018 4,50,000 <br> Less: Depreciation from 01-01-2018 to 01-07-2018 $\quad(22,500)$ <br> ( $10 \%$ of $4,50,000 \times 6 / 12$ ) | $2,90,000$ $4,27,500$ |
| Profit/ (Loss) on Sale of Machine | 1,37,500 |

## DEC 2020

## Question 3

Discus the factors taken into consideration for calculation of depreciation.
Answer:
Following are the factor taken into consideration for calculation for calculation of Depreciation:

1\} Cost of Assets
2\} Estimated useful life of the assets
3\} Estimated scrap value
i. Cost off assets represents its acquisition cost installation, commissioning and improvement Cost.
ii. Estimated useful life of the assets mean product life of the assets for which it can be used in the business enterprises
iii. Estimated scrap value is that value which is likely to be received after the useful life of the assets.

## JAN 2021

## Question 4

M/s Dayal Transport Company purchased 10 trucks @ Rs. 50, 00, 000 each on $1^{\text {st }}$ July 2017 on. $1^{\text {st }}$ October. 2019 one of the trucks is involved in an accident and is completely destroyed and Rs. 35,00,000 is received from the insurance in full settlement on the same date another truck is purchased by the company for the same of Rs. $\mathbf{6 0 , 0 0 , 0 0 0}$. The company

## writes off $20 \%$ of the original cost per annum. The company observes the calendar year as its financial year <br> Give the motor truck account for two years ending 31 ${ }^{\text {st }}$ December, 2020

> Books of LG transport Co Motor Truck A/c

Dr. Cr.

| Date | Particulars | Amount | Date | Particulars | Amount |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1/1/19 | To Balance <br> B/d <br> (WN1) | 3,50,00,000 | 1/10/19 | By Depreciation (WN2) | 7,50,000 |
| 1/10/19 | To P \& L A/c | 7,50,000 | 1/10/19 | By Bank A/c <br> (claim)(WN2) | 35,00,000 |
| 1/10/19 | To Bank A/c | 60,00,000 | 31/12/19 | By Depreciation on Remaining Truck (50, $00,000 \times 9 \times 20 \%$ ) | 90,00,000 |
|  |  |  | 31/12/19 | By Depreciation on new truck (80,00,000 $\times$ $20 \% \times 3 / 12$ ) | 3,00,000 |
|  |  |  |  | By Balance c/d | 2,82,00,000 |
|  |  | 4,17,50,000 |  |  | 4,17,50,000 |
| 1/1/20 | To Balance b/d | 2,82,00,000 | 31/12/20 | By depreciation $\begin{aligned} & (50,00,000 \times 9 \times 20 \%) \\ & +(60,00,000 \times 20 \%) \end{aligned}$ | 1,02,00,000 |
|  |  |  | $31 / 12 / 20$ | By balance c/d | 1,80,00,000 |
|  |  | 2,82,00,000 |  |  | 2,82,00,000 |
| 1/1/21 | To Balance b/d | 1,80,00,000 |  |  |  |

WN 1: Calculation of WOV (book value) of the trucks as on 1st Jan, 2019
Particulars
Amount

Purchase price of the truck as on $01 / 7 / 17(50,00,000 \times 19)$
50,00,00,000

| $\begin{array}{l}\text { Less: Depreciation for } 2017(1 / 7 / 17 \\ 20 \% \times 6 / 12)\end{array}$ to $\left.31 / 12 / 17\right)(5,00,00,000 \times$ | $50,00,000$ |
| :--- | :---: |
| WDV of 10 trucks as on $01 / 01 / 18$ | $4,50,00,000$ |
| Less: Depreciation for $2018(5,00,00,000 \times 20 \%)$ | $1,00,00,000$ |
| WDV as on $01 / 01 / 19$ | $3,50,00,000$ |

WN 2: Calculation of Profit/loss truck destroyed in accident

| Particulars | Amount |
| :---: | :---: |
| Original cost of the truck as on $1^{\text {st }}$ July, 2017 | 50,00,000 |
| Less: Depreciation up to 31 ${ }^{\text {st }}$ Dec, 2017 ( $50,00,000 \times 20 \% \times 6 / 12$ ) | 5,00,000 |
| WDV as on 01 ${ }^{\text {st }}$ Jan, 2018 | 45,00,000 |
| Less: Depreciation up to 31st ${ }^{\text {st }}$ dec, 2018 ( $50,00,000 \times 20 \%$ ) | 10,00,000 |
| WDV as on 01 ${ }^{\text {st }}$ Jan, 2019 | 35,00,000 |
| Less: Depreciation up to $1^{\text {st }}$ Oct, 2019 ( $\left.50,00,000 \times 20 \% \times 9 / 12\right)$ | 7,50,000 |
| Book value of the truck as on $1^{\text {st }}$ oct, 2019 | 27,50,000 |
| Less: Insurance claim received | 35,00,000 |
| Profit on truck destroyed |  |

## Question 5

Mahesh had the following bill receivable and bills payables against Rajesh. Calculate the average due date when the payment can be received or made without any loss of interest

| Date | Bills <br> Receivable | Tenure | Date | Bills Payable | Tenure |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $12-06-20$ | 5,000 | 3 Month | $27-05-20$ | 3,700 | 3 Month |
| $10-07-20$ | 6,200 | 1 Month | $07-06-20$ | 4,000 | 3 Month |
| $15-07-20$ | 3,500 | 3 Month | $10-07-20$ | 5,000 | 1 Month |
| $10-06-20$ | 1,500 | 2 Month |  |  |  |
| $28-06-20$ | 2,500 | 2 Month |  |  |  |

$15^{\text {th }}$ August, 2020 was public holiday. However, $10^{\text {th }}$ September, 2020 was also suddenly declared as holiday.

## Calculation of Average Due Date:(CHAPTER 5)

Let us take 13,08,2020 as Base date.
Bills Receivables

| Date | Due Date | No. of days from <br> $\mathbf{1 3 . 0 8 . 2 0 2 0}$ | Amount | Product |
| :---: | :---: | :---: | :---: | :---: |
| $12-06-20$ | $15-9-20$ | 33 | 5,000 | $1,65,000$ |
| $10-07-20$ | $13-08-20$ | 0 | 6,200 |  |
| $15-07-20$ | $18-10-20$ | 66 | 3,500 | $2,31,000$ |
| $12-06-20$ | $14-08-20$ | 1 | 1,500 | 1,500 |
| $28-06-20$ | $31-08-20$ | 18 | 2,500 | 45,000 |
|  |  | 18,700 | $4,42,500$ |  |

Bills Payables

| Date | Due Date | No. of days from <br> $\mathbf{1 3 . 0 8 . 2 0 2 0}$ | Amount | Product |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 7 - 0 5 - 2 0}$ | $30-08-20$ | 17 | 3,700 | 67,900 |
| $\mathbf{0 7 - 0 6 - 2 0}$ | $11-09-20$ | 29 | 4,000 | $1,16,000$ |
| $\mathbf{1 0 - 0 7 - 2 0}$ | $13-08-20$ | 0 | 5,000 | 0 |
|  |  |  | 12,700 | $1,78,900$ |

Average Due Date $=$ Base Date $\pm \frac{\text { Difference in Products }}{\text { Difference in Amount }}$
Excess of products of bills receivable over bills payable $=4,42,500-1,78,900$
$=2,63,600$
Excess of bills receivable over bills payable $=18,700-12,700=6,000$
Number of days from the base date to the date of settlement is 2,63,600/6,000
$=43.93$ (approx.)
Hence date of settlement of the balance amount is 44 days after $13^{\text {th }}$ August
i.e. $26^{\text {th }}$ September.

On 26 ${ }^{\text {th }}$ September 2020 Rajesh has to pay Mahesh Rs. 6,000 to settle the account.

## JULY 2021

## Question 1

The balance of Machinery Account of a firm on $1^{\text {st }}$ April, 2020 was ₹ 28,54,000. Out of this, a plant having book value of ₹ $2,16,000$ as on $1^{\text {st }}$ April, 2020 was sold on $1^{\text {st }}$ July 2020 for ₹ 82,000 . On the same date a new plant was purchased for ₹ $4,58,000$ and ₹ 22,000 was spent on its erection. On $1^{\text {st }}$ November, 2020 a new machine was purchased for ₹ $5,60,000$. Depreciation is written off @ $15 \%$ per annum under the diminishing balance method. Calculate the depreciation for the year ended 31 ${ }^{\text {st }}$ March, 2021
Answer:
Calculation of an amount of depreciation for the year ended 31-3-2021

| Particulars | Amount (₹) |
| :---: | :---: |
| Depreciation on sold asset up to 1-7-20 (₹ $2,16,0000 \times 15 \% \times 3 / 12)$ | 8,100 |
| Depreciation on remaining asset (₹ $28,54,000-₹ 2,16,000$ ) $\times 15 \%$ | 3,95,700 |
| Depreciation on asset purchased on 1-7-20 (₹ 4,58,000 + ₹ $22,000) \times 15 \% \times 9 / 12$ | 54,000 |
| Depreciation on asset purchased on 1-11-20 (₹ 5,60,000 $\times 15 \% \times$ 5/12) | 35,000 |
| Total depreciation for the year ended 31-3-2021 | 4,92,800 |

## DEC 2021

## Question 1

On 1st January, 2019 Kohinoor Transport Company purchased a Bus for` $8,00,000$. On 1st July, 2020 this bus was damaged due to fire and was completely destroyed and $6,00,000$ were received by a cheque from the Insurance Company in full settlement on 1st October, 2020. On 1st July, 2020 another Bus was purchased by the company for ${ }^{\mathbf{1}} \mathbf{1 0 , 0 0 , 0 0 0}$.
The Company charges Depreciation @ 20\% per annum under the WDV Method. Calculate the amount of depreciation for the year ended 31 st March, 2021 and gain or loss on the destroyed Bus. (5 Marks) Answer:

Calculation of Gain/Loss on Bus damaged by Fire

| Particulars |  |
| :--- | ---: |
| Original cost as on 1.1.2019 | $\mathbf{8 , 0 0 , 0 0 0}$ |
| Less: Depreciation for 2018 -19 (3 months) | $(40,000)$ |
| WDV as on 31st March,2019 | $7,60,000$ |
| Less: Depreciation for $2019-20$ | $(1,52,000)$ |
| WDV as on 31st March,2020 | $6,08,000$ |
| Less: Depreciation for 2020-21 (3 months) | $(30,400)$ |
| WDV as on $1^{\text {st }}$ July,2020 | $5,77,600$ |
| Less: Amount received from Insurance company | $(6,00,000)$ |
| Gain on Bus damaged by Fire | $\mathbf{2 2 , 4 0 0}$ |

Calculation of depreciation for the year ended 31st March,2021

| Machine I damaged on | Machine II Purchased on |
| ---: | ---: |
| $1^{\text {st }}$ | $1^{\text {st }}$ |

July,2020
(8,00,000)
July,2020
(10,00,000)

Book value as on $1^{\text {st }}$ April, 2020
Purchased on 1st July,2020
Depreciation @20\% Machines

6,08,000

30,400 (for 3 months)

10,00,000
1,50,000 (for 9 months)

Total depreciation ` $\mathbf{1 , 8 0 , 4 0 0}$

## JUNE 22

## Question 1

The Machinery Account of a Factory showed a balance of `95 Lakhs on 1st April, 2020. The Books of Accounts Depreciation is written off of the Factory are closed on 31st March every year and @ 10\% per annum under the Diminishing Balance Method. On 1st September,2020 a new machine was acquired at a cost of` 14 Lakhs and ` 44,600 was incurred on the same day as installation charges for erecting the machine. On 1st September,2020 a machine which had cost \({ }^{`} 21,87,000\) on 1st April,2018 was sold for ${ }^{`} 3,75,000$. Another machine which had cost ${ }^{`} 21,85,000$ on 1st April,2019 was scrapped on 1st September,2020 and it realized nothing. Prepare Machinery Account for the year ended 31st March,2021. Allow the same rate of depreciation as in the past and calculate depreciation to the nearest multiple of a rupee. Also show all the necessary working notes.
(10 Marks)

## Plant and Machinery Account for the year ended 31st March,2021

| 01-04-20 | To Balance b/d | 95,00,000 | 01-09-20 | By Bank (Sales) | 3,75,000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01-09-20 | $\begin{aligned} & \text { To Bank } \\ & (14,00,000+ \\ & 44,600) \end{aligned}$ | 14,44,600 |  | By Depreciation (on sold machine) | 73,811 |
|  |  |  |  | By Loss on sale | 13,22,659 |
|  |  |  |  | By Loss on scrapping the machine | 18,84,562 |
|  |  |  |  | $\begin{array}{ll} \text { By } & \text { Depreciation } \\ \text { (on } & \text { Scrapped } \\ \text { machinery) } \end{array}$ | 81,938 |
|  |  |  |  | By Depreciation (Note iii) | 6,60,471 |
|  |  |  |  | By Balance c/d | 65,46,159 |
|  |  | 109,44,600 |  |  | 109,44,600 |

## Working Note:

(i) Calculation of loss on sale of machine on 01-09-2020


Note: The figures are rounded off to nearest rupee

