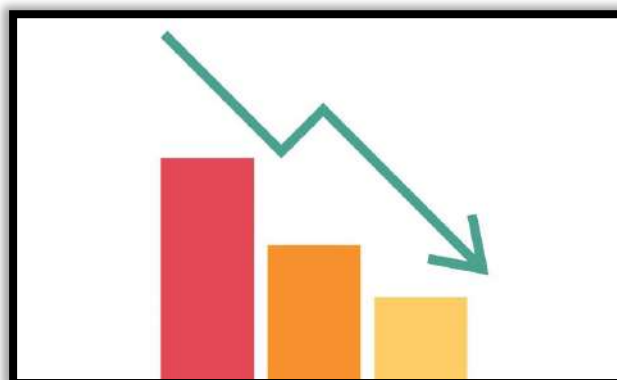


CHAPTER – 5

CONCEPT AND ACCOUNTING OF DEPRECIATION



Definition of Depreciation	Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life.
Objectives for providing depreciation	Correct income measurement True position statement Funds for replacement Ascertainment of true cost of production.
Factors in the measurement of depreciation	Cost of asset Estimated useful life of the asset Estimated scrap value (if any) at the end of useful life of the asset.
Methods for providing depreciation	<ul style="list-style-type: none"> ♣ 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	<p>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.</p>
PROVISION FOR REPAIRS AND RENEWALS	<p>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.</p> <p>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.</p>



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 factor 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 and diminishing balance method of depreciation.

Answer:

True: Both are same methods. The depreciation is computed by applying 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 a 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

$$\frac{\text{Acquisition Cost} - \text{Residual value}}{\text{Estimated Life in Production Unit}}$$

(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 comparison	Straight line method (SLM)	Written down method (WDM)
Meaning	A method of depreciation in which the cost of the asset is spread uniformly over the life years by writing off a fixed amount every year.	A method of depreciation in which a fixed rate of depreciation is charged on the book value of the asset, over its useful life.
Calculation of depreciation	On the original cost	On the written down value of the asset
Annual depreciation charge	Remains fixed during the useful life.	Reduces every year
Value of asset	Completely written off	Not completely written off
Amount of depreciation	Initially lower	Initially higher
Impact of repairs and depreciation on P&L A/c	Increasing trend	Remains constant
Appropriate for	Assets with negligible repairs and maintenance like leases, copyright.	Assets whose repairs increase, as they get older like machinery, 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 contra-asset 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 amounts—known 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 additional 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 Jan 1	To	Bank A/c	1,94,000	1993 Dec.31	By	Dep. A/c	25,000
July 1	To	Bank A/c	6,000		By	Balance c/d	2,75,000
	To	(Erection cost) Bank A/c	1,00,000				
			3,00,000				3,00,000
1994 Jan. 1	To	Balance b/d	2,75,000	1994 Dec. 31	By	Dep A/c	30,000
					BY	Balance c/d	2,45,000

				Dec. 31			
			2,75,000				2,75,000
1995 Jan. 1	To	Balance b/d	2,45,000	1995 July 1	By	Bank A/c (sales proceeds)	1,00,000
July 1	To	Bank A/c	1,50,000		By	P&L A/c (Loss on Sale)	60,000
				Dec. 31	By	Dep. A/c	17,500
					By	Balance c/d	2,17,500
			3,95,000				3,95,000

Question 20

M/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

2013 3 Jan.	To	Bank A/c	1,00,00,000	2013 Dec. 31	Depreciation A/c [(2,000/2,00,000) X 1,00,00,000]	1,00,000
				Dec. 31		
					By balance c/d	99,00,000
			1,00,00,000			1,00,00,000

2014 Jan. 1	To	Balance b/d	99,00,000	2014 Dec. 31	By Depreciation A/c	5,00,000
				Dec. 31	By Balance c/d	94,00,000
			99,00,000			99,00,000
2015 Jan 1	To	Balance b/d	94,00,000	2015 Dec. 31	By Depreciation A/c	7,50,000
				Dec. 31	By Balance c/d	86,50,000
			94,00,000			94,00,000

Depreciation Account

2013			2013		
Dec. 31	To Quarry lease A/c	<u>1,00,000</u> 1,00,000	Dec. 31	By profit & Loss A/c	<u>1,00,000</u> 1,00,000
2014			2014		
Dec. 31	To Quarry lease A/c	<u>5,00,000</u> 5,00,000	Dec. 31	By Profit & Loss A/c	<u>5,00,000</u> 5,00,000
2015			2015		
Dec. 31	To Quarry lease A/c	<u>7,50,000</u> 7,50,000	Dec. 31	By Profit & Loss A/c	<u>7,50,000</u> 7,50,000

Question 21

M/s Anshul commenced business on 1st 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.

Solution:**Depletion method of depreciation**

2011	Cost depreciation	7,00,000 (1,05,000)		1,05,000
2012	Written Down Value (WDV) cost depreciation W.D. V	5,95,000 -(89,250)	1,50,000 (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

2015			2015		By Depreciation
Jan 1.	To balance b/d	4,57,523	Dec. 31	(60,900+15,353+20,000)	96,253
				By balance c/d	5,61,270
	To Bank	2,00,000			
		6,57,523			6,57,523
2016					
Jan. 1	To balance b/d	5,61,270			

Working Notes:

$$\text{Depreciation on F1} = \frac{55,000 - 5,000 (\text{Scrap value})}{10 \text{ Years}} = 5,000 \text{ P.a}$$

$$\text{Depreciation on F2} = \frac{9,500 - 500 (\text{Scrap value})}{10 \text{ years}} = 900 \text{ P.a}$$

$$\text{Depreciation on F3} = \frac{8,400 - 400 (\text{Scrap value})}{10 \text{ Years}} = 400 \text{ P.a}$$

$$\text{Depreciation on F3 (six months)} = 800 \times 6/12 = 400$$

Question 23

From the following transactions of a concern, prepare the Machinery Account for ended 31st 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 for 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 Apr. 1	To Bank A/c Machinery 1		50,000	2015 Mar. 31	By Depreciation A/c Machinery 1 5,000 Machinery 2 1,000		6,000
Sept 30	To Bank A/c Machinery 2		20,000	Mar. 31	By balance c/d Machinery 1 45,000 Machinery 2 19,000		64,000
			70,000				70,000

Question 24

Modern Ltd. Purchased machinery on 1st July Rs. 60,000 on 1st October, 2004 based another machine for Rs. 20,000 On 30th June, 2005, it sold the first machine hosed in 2003 for Rs. 38,500. Depreciation – provided at 20% p.a. on the original cost year. Accounts are closed on 31st 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. F	₹	Date	Particulars	J. F	₹
2003 July 01	To Bank A/c Machinery 1		60,000	2004 Mar 31	By depreciation A/c Machinery 1(for 8 months)		8,000
					Balance c/d		
				Mar 31			52,000
			60,000				60,000
2004 Apr. 01	To Balance b/d		52,000	2004 Mar. 31	By depreciation A/c Machinery 1 12,000		14,000
Oct 1	To bank a/c Machinery 2		20,000	Mar 31	Machinery 2 2,000 (6 month)		
					By balance c/d		
					Machinery 1 40,000		58,000
					Machinery 2 18,000		
			72,000				72,000
2005 Apr. 01	To Balance b/d			2005 June 30	By depreciation A/c Machinery 1 (for 3 months)		3,000
	Machinery 1 40,000		58,000	June 30	By bank A/c machinery 1		38,500
	Machinery 2 18,000		1500	Mar 31	By Depreciation A/c Machinery 2		4,000
					By balance c/d		14,000
							-
			59 500				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	$\frac{\text{Cost of asset – Estimated Resident value}}{\text{Estimated useful life of the asset}}$
	$\frac{1,20,000 - 12,000}{12}$
	$\frac{1,08,000}{12}$
	9,000

Depreciation Account

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

Books of Ashok Ltd.

Machine account

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
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2010 July 01	To Bank A/c		1,08,000	2010 Dec. 31	By Depreciation A/c		4,500
Apr 01	To Bank A/c Installation Expenses)		12,000	Mar. 31	By Balance c/d		1,15,500
			1,20,000				1,20,000
2011 Dec. 31	To balance b/d		1,15,500	2011 Dec. 31	By Depreciation A/c		9,000
				Dec. 31	By balance c/d		1,06,500
			1,15,500				1,15,000
2012 Dec. 31	To balance b/d		1,06,500	2012 Dec. 31	By Depreciation A/c		9,000
				Dec. 31	By balance c/d		97,500
			1,06,500				1,06,500
2013 Dec 31	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 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	85,000– 4,250 =80,750	12 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 months	$72,675 \times \frac{10}{100}$	7,268
	Machine 2	2,51,333	12 months	$2,51,333 \times \frac{10}{100}$	25,133
				Total	32,401
2014	Machine 1	65,407	12 months	$65,407 \times \frac{10}{100}$	6,541
	Machine 2	2,26,200	12 months	$\frac{10}{100} \times 2,60,000$	22,620
				Total	29,261

Books of Berlia Ltd.

Machine Account

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

2012 Jan 01	To balance b/d		80,750	2012 Dec 31	By depreciation A/c Machine 1		
Sep 01	To bank A/c (Purchase price of machine 2)		2,50,000				
Sep 01	To Bank A/c (Installation charges on machine 2)		10,000		Machine 2		16742
				Dec. 31	By balance c/d		3,24,008
			3,40,750				3,40,750
2011 Jan 01	To balance b/d		3,24,008	2013 Dec. 31	By Depreciation A/c Machine 1 Machine 2 By balance c/d		32,401 2,91,607
							3,24,008
2014 Jan 01	TO Balance b/d		2,91,607	2014 Dec. 31	By depreciation A/c Machine 1 Machine 2		29,161 2,62,446
				Dec. 31	By balance c/d		
			2,91,607				2,91,607

Depreciation Account

Date	Particulars	J.F	Amount Rs.	Date	Particulars	J.F	Amount Rs.
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2011 Mar. 31	To Machine A/c		4,250	2011 Mar. 31	By Profit & Loss A/c		4,250
			4,250				4,250
2012 Mar 31	To Machine A/c		17,642	2012 Mar 31	By Profit & Loss A/c		17,642
			17,642				17,642
2013 Mar 31	To Machine A/c		32,401	2013 Mar 31	By Profit & Loss A/c		32,401
			32,401				32,401
2014 Mar 31	To Machine A/c		29,161	Mar 31	By profit & 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
				2,00,000
2013	Disposed old truck	9 months	$2,00,000 \times \frac{20}{100} \times \frac{9}{12}$	30,000
	Remaining 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 Apr 31	To Bank A/c		10,00,000	2011 Dec 31	By Balance c/d		10,00,000
			10,00,000				10,00,000
2012 Jan 01	To Balance b/d		10,00,000	2012 Dec. 31	By balance c/d		10,00,000
			10,00,000				10,00,000
2013 Jan 01	To Balance b/d		10,00,000	2013 Dec 31	By truck Disposal A/c (one truck Disposed)		2,00,000
Oct 01	To Bank A/c (Purchase of Second-hand truck)		1,00,000	Dec 31	By Balance b/d		9,20,000
Oct 01	To Bank A/c (Overhauling of second-hand truck)		20,000				
			11,20,000				11,20,000

Provision for Depreciation Account

Date	Particulars	J. F	Amount	Date	Particulars		J. F	Amount
2011 Dec 31	To Balance c/d		1,50,000	2011 Dec 31	By Depreciation A/c old 5 Trucks	1,50,000		1,50,000
			1,50,000					1,50,000
2012 Dec 31	To Balance c/d		3,50,000	2012 Jan 01	By balance b/d			1,50,000
				Dec 31	By Depreciation A/c old 5 trucks	2,00,000		2,00,000
			3,50,000					3,50,000
2013 Oct 01	To Truck Disposal A/c		1,00,000	2013 Jan 01	By balance b/d			1,50,000
				Oct 01	By depreciation a/c			
	=30,000 + 40,000 +30,000 = 1,00,000				Disposed old truck	30,000		30,000
Dec 31	To Balance c/d		4,46,000	Dec. 31	By Depreciation A/c remaining 4 old trucks	1,60,000		
					Old truck			2,00,000
						6,000		1,66,000.
			5,46,000					5,46,000

Truck Disposal Account

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
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2013				2013			
Oct 01	To Truck A/c		2,00,000	Oct 01	By provision for depreciation A/c		1,00,000
				Oct 01	By Insurance A/c		70,000
				Oct 01	By profit & Loss A/c (Loss)		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	=8,00,000-60,000 = 7,40,000	12 months	$7,40,000 \times \frac{15}{100}$	1,11,000
2012 – 2013	=7,40,000- 1,11,000=6,29,000	12 months	$6,29,000 \times \frac{15}{100}$	94,350
2013 - 2014	=6,29,000-94,350 =5,34,650	9 months	$5,34,650 \times \frac{15}{100} \times \frac{6}{12}$	60,148

Description	Amount Rs.
Book value as on Dec 31, 2013 = Book Value as on Apr. 01, 2013 – Depreciation till Dec 31, 2013 = 5,34,650 – 60,148 = 4,74,502	4,74,502
Sale Price of truck	5,00,000

Profit on sale of Truck = sale price – Book Value =5,00,000 – 4,74,502	25,498
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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:

Year	Bus	Book Value	Duration	Calculation	Depreciation
2011	Bus 1	10,00,000	12 months	$10,00,000 \times \frac{15}{100}$	1,50,000
	Other 2 Buses	=2 X 10,00,000 =20,00,000	12 months	$20,00,000 \times \frac{15}{100}$	3,00,000
				Total	17,500
2012	Bus 1	= 10,00,000 – 1,50,000 =8,50,000	12 months	$8,50,000 \times \frac{15}{100}$	1,27,500
	Other 2 Buses	=20,00,000 – 3,00,000 = 17,00,000	12 months	$17,00,000 \times \frac{15}{100}$	2,55,000
2013	Bus 1	=8,50,000 – 1,27,500 =7,22,500	6 months	$7,22,500 \times \frac{15}{100} \times \frac{6}{12}$	54,188
	Other 2 buses	=17,00,000 – 2,55,000 =14,45,000	12 months	$14,45,000 \times \frac{15}{100}$	2,16,750
				Total	2,16,750
2014	Other 2 Buses	=14,45,000- 2,16,750 =12,28,250	12 months	$12,28,250 \times \frac{15}{100}$	1,84,238

				Total	1,84,238
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Bus Disposal Calculation

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

Books of Satkar Transport Ltd.

Bus Account

Date	Particulars	J. F	Amount	Date	Particulars		J. F	Amount
2011 Jan 01	To Bank A/c (Purchase price of 3 buses)		30,00,000	2011 Dec 31	By Depreciation A/c			
				Dec 31	Bus 1 Other 2 buses By Balance c/d	1,50,000 3,00,000		4,50,000 25,50,000

			30,00,000					30,00,000
2012 Jan 01	To Balance b/d		25,50,000	2012 Dec 31	By Depreciation A/c			
				Dec 31	Bus 1 Other 2 buses By balance c/d	1,27,500 2,55,000		3,82,500 21,67,500
			25,50,000					25,50,000
2013 Jan 1	To balance b/d		21,67,500	2013 Jul 01	By Depreciation A/c Bus 1			
Jul 01	To profit & loss A/c		31,688	Jul 01	By bank a/c	54,188		54,188
				Dec 31	Depreciation A/c other 2 buses By balance c/d	2,16,750		2,16,750 12,28,250
			21,99,188					21,99,188
2014 Jan 01	To balance b/d		12,28,250	2014 Dec 31	By depreciation A/c other 2 buses	34500 1,84,238		1,84,238
				Dec 31	By balance c/d			10,44,012
			12,28,250					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.
2000 Jan 1	Machinery Account To Bank Account (Purchase of machine)	Dr.	1,00,000	1,00,000
31 Mar.	Depreciation Account To Machinery Account (Depreciation on Machinery for 3months)	Dr.	4,500	4,500
	Profit and loss Account To Depreciation Account (Depreciation charges to profit and loss A/c)	Dr.	4,500	4,500
2001 31 Mar.	Depreciation Account To Machinery Account (depreciation of machinery for one year)	Dr.	18,000	18,000
31 Mar.	Profit and loss account To depreciation Account (Depreciation charges transferred to profit and loss account)		18,000	18,000
2002 31 Mar.	Depreciation Account To Machinery Account (Annual Depreciation charges)	Dr.	18,000	18,000
	Profit and loss Account To Depreciation Account (Depreciation charges transferred to profit and loss account)	Dr.	18,000	18,000

2003 31 Mar.	Depreciation Account To machinery account (Annual Depreciation charges)	Dr.	18,000	18,000
	Profit and loss account To Depreciation Account (Transfer of annual depreciation to profit and loss account)	Dr.	18,000	18,000
2004 31 Mar.	Depreciation Account To machinery account (Annual depreciation charges)	Dr.	18,000	18,000
	Profit and loss account To Depreciation Account (Transfer of depreciation charges to profit and loss account)	Dr.	18,000	18,000
31 Dec.	Bank Account To machinery account (Machinery sold Rs. 10,000 as scrap)	Dr.	10,000	10,000
2005 21 Mar.	Depreciation Account To Machinery account (Depreciation charges for 9 months on Rs., 1,00,000 @ 18%)	Dr.	13,500	13,500
31 Mar	Profit loss Account To Depreciation Account (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 old crane 1	5,00,000	6 months	$5,00,000 \times \frac{10}{100} \times \frac{6}{12}$	25,000
	Other 4 old cranes	=40,00,000 - 5,00,000 =35,00,000	9 months	$35,00,000 \times \frac{10}{100} \times \frac{9}{12}$	2,62,500
	4 new cranes	= 2 X 4,50,000 =9,00,000	3 months	$9,00,000 \times \frac{10}{100} \times \frac{9}{12}$	22,500
Total					3,10,000

Crane 1 Disposal Calculation

Description	Amount
Original cost of Crane 1	5,00,000
Accumulated Depreciation =Depreciation in 2011 – 2012 = 25,000	25,000
Book value as on Oct 01, 2011 =Original cost – Depreciation till Oct, 01, 2011 = 5,00,000 – 25,000 = 4,75,000	4,75,000

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

Books of Noida Cranes Company

Cranes Account

Date	Particulars	J. F	Amount	Date	Particulars		J. F	Amount
2011 Apr. 01	To Balance b/d		40,00,000	2011 Oct 31	By Depreciatio n A/c Crane 1	25,000		25,000
Oct 01	To Profit & Loss A/c		47,500	Oct 01	By bank A/c (sale of crane 1)			5,22,500
Oct 01	To bank A/c (Purchase of 2 new cranes)		9,00,000	2012	By Depreciatio n A/c			
				Mar 31	4 old cranes 2 new cranes	2,62,500 22,500		

					By balance c/d			
								2,85,000
								41,15,000
			49,47,500					49,47,500

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 in 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.
01-01-17	To bank A/c (Mach. I)	4,80,000 20,000	31-12-17	By Depreciation A/c Mach I (10% of Rs. 5,00,000)	50,000	
	To Bank A/c					

01-01-17	(Installation charges)	2,00,000	31-12-17	Mach II (10% of Rs. 2,00,000 x 6 / 12)	10,000	60,000
				By balance c/d Mach I (Rs. 5,00,000 – Rs. 50,000)	450000	6,40,000
				Mach II (Rs. 2,00,000 – Rs. 10,000)	190000	
		7,00,000				7,00,000
01-01-18	To Balance b/d	6,40,000	01-07-18	By Depreciation A/c Mach 1 (10% of Rs. 4,50,000 X 6 / 12)		22,500
01-07-18	To Bank A/c (Mach III)	5,00,000	01-07-18	By bank A/c (Sale Proceeds)		2,90,000
			01-07-18	By profit & loss A/c (Loss on Sale – W.N.1)		1,37,500
			31-12-18	By Depreciation A/c Mach II (10% of Rs. 1,90,000)	19000	
				Mach III (10% of Rs. 5,00,000 X 6/12)	25000	44,000
			31-12-18	By Balance c/d Mach II (Rs. 1,90,000 – Rs. 19,000)	171000	6,46,000
				Mach III (Rs. 5,00,000 – Rs. 25,000)	475000	
		11,40,000				11,40,000

Working Notes:

W.N.1 – Calculation of Profit / (Loss) on sale of Machine 1

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

DEC 2020

Question 3

Discuss the factors taken into consideration for calculation of depreciation.

Answer:

Following are the factor taken into consideration 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 1st July 2017 on. 1st 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. 60,00,000. The company

writes off 20% of the original cost per annum. The company observes the calendar year as its financial year

Give the motor truck account for two years ending 31st December, 2020

**Books of LG transport Co
Motor Truck A/c**

Dr.			Cr.		
Date	Particulars	Amount	Date	Particulars	Amount
1/1/19	To Balance B/d (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 (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 ($50,00,000 \times 9 \times 20\%$) + ($60,00,000 \times 20\%$)	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

Less: Depreciation for 2017 (1/7/17 to 31/12/17) ($5,00,00,000 \times 20\% \times 6/12$)	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 st July, 2017	50,00,000
Less: Depreciation up to 31 st Dec, 2017 ($50,00,000 \times 20\% \times 6/12$)	5,00,000
WDV as on 01 st Jan, 2018	45,00,000
Less: Depreciation up to 31 st dec, 2018 ($50,00,000 \times 20\%$)	10,00,000
WDV as on 01 st Jan, 2019	35,00,000
Less: Depreciation up to 1 st Oct, 2019 ($50,00,000 \times 20\% \times 9/12$)	7,50,000
Book value of the truck as on 1 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 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			

15th August, 2020 was public holiday. However, 10th 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 13.08.2020	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 13.08.2020	Amount	Product
27-05-20	30-08-20	17	3,700	67,900
07-06-20	11-09-20	29	4,000	1,16,000
10-07-20	13-08-20	0	5,000	0
			12,700	1,78,900

$$\text{Average Due Date} = \text{Base Date} \pm \frac{\text{Difference in Products}}{\text{Difference in Amount}}$$

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

$$2,63,600/6,000 = 43.93 \text{ (approx.)}$$

Hence date of settlement of the balance amount is 44 days after 13th August
i.e. 26th September.

On 26th September 2020 Rajesh has to pay Mahesh Rs. 6,000 to settle the account.

JULY 2021

Question 6

The balance of Machinery Account of a firm on 1st April, 2020 was ₹ 28,54,000. Out of this, a plant having book value of ₹ 2,16,000 as on 1st April, 2020 was sold on 1st 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 1st 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 31st 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 ($₹ 2,16,000 \times 15\% \times 3/12$)	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