

PRACTICAL PROBLEM

Q1. Calculated the Amount of annual Depreciation and Rate of Depreciation under Straight Line Method (SLM) from the following:

Purchased a second-hand machine for 96,000, spent 24,000 on its cartage, repairs and installation, estimated useful life of machine 4 years. Estimated residual value 72,000

Solution – Calculation of Rate of Depreciation by Straight Line Method:-

$$= \text{Amount of Depreciation} = \frac{\text{Cost of Asset} - \text{Estimated Scrap value}}{\text{Number of year of life of Asset}}$$

$$= \text{Amount of Depreciation} = \frac{1,20,000 - 72,000}{4}$$

$$= 12,000$$

$$= \text{Rate of Depreciation} = \frac{\text{Amount of Depreciation}}{\text{Cost of Asset}} \times 100$$

$$= \text{Rate of Depreciation} = \frac{12,000}{1,20,000} \times 100$$

$$= 10\% \text{ P.a.}$$

Q2. On 1st April, 2018, X Ltd. Purchased a machine costing 4, 00,000 and spent 50,000 on its installation. The estimated life of the machinery is 10 years, after which its residual value will be 50,000 only. Find the amount of annual depreciation according to the Fixed Instalment Method and prepare Machinery Account for the first three years. The books are closed on 31st March every year.

Solution –

Book of X Ltd

Dr

Machinery Account

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
2016 Apr 1	To Bank A/c (Cost of Asset + Expense)		4,50,000	2017 Mar 31	By Depreciation A/c		40,000
				Mar 31	By Balance c/d		4,10,000
			4,50,000				4,50,000
2017 Apr 1	To Balance b/d		4,10,000	2018 Mar 31	By Depreciation A/c		40,000
				Mar 31	By Balance c/d		3,70,000
			4,10,000				4,10,000
2018 Apr 1	To Balance b/d		3,70,000	2019 Mar 31	By Depreciation A/c		40,000
				Mar 31	By Balance c/d		3,30,000
			3,70,000				3,70,000
2019 Apr 1	To Balance b/d		3,30,000				

Working Note 1:-

Cost of Assets = Purchases Price of Machine + Repairs and Installation Charge

= (4, 00,000 + 50,000)

= 4, 50,000

Working Note 2:- Calculation of Depreciation:-

Amount of Depreciation = $\frac{\text{Cost of Asset + Installation Charge} - \text{Scrap Value}}{\text{Number of the Year of the Life of Asset}}$

Amount of Depreciation = $\frac{(4, 00,000 + 50,000 - 50,000)}{10}$

10

= 40,000 P.A.

Q3. On 1st April, 2017, furniture costing 55,000 was purchased. It is estimated that its life is 10 years at the end of which it will be sold for 5,000. Additions are made on 1st April, 2018 and 1st October, 2020 to the value of 9,500 and 8,400 (Residual values 500 and 400 respectively). Show the Furniture Account for the first four years, if Depreciation is written off according to the Straight Line Method.

**Solution -
Dr**

**In the Books of.....
Furniture Account**

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
2017 Apr 1	To Bank A/c - 1		55,000	2018 Mar 31	By Depreciation A/c - 1		5,000
			55,000	Mar 31	By Balance c/d - 1		50,000
							55,000
2018 Apr 1	To Balance b/d - 1		50,000	2019 Mar 31	By Depreciation A/c		
Apr 1	To Bank A/c - 2		9,500		1 5,000		
					2 900		5,900
				Mar 31	By Balance c/d		
					1 45,000		
					2 8,600		53,600
			59,500				59,500
2019 Apr 1	To Balance b/d			2020 Mar 31	By Depreciation A/c		
	1 45,000				1 5,000		
	2 8,600		53,600		2 900		5,900
				Mar 31	By Balance c/d		
					1 40,000		
					2 7,700		47,700
			53,600				53,600
2020 Apr 1	To Balance b/d			2021 Mar 31	By Depreciation A/c		
	1 40,000				1 5,000		
	2 7,700		47,700		2 900		
Oct 1	To Bank A/c - 3		8,400		3 400		6,300
					By Balance c/d		
					1 35,000		
					2 6,800		
					3 8,000		49,800
			56,100				56,100

Working Note – Calculation of Depreciation

$$\text{Amount of Depreciation} = \frac{\text{Cost of Asset} - \text{Scrap Value}}{\text{Number of year of Life of Asset}}$$

For Furniture 1

$$\text{Amount of Depreciation} = \frac{55,000 - 5,000}{10} = 5,000 \text{ P.A.}$$

For Furniture 2

$$\text{Amount of Depreciation} = \frac{9,500 - 500}{10} = 900 \text{ P.A.}$$

For Furniture 3

$$\text{Amount of Depreciation} = \frac{8,400 - 400}{10} = 800 \text{ P.A.}$$

$$\text{Depreciation for Furniture 3 (for Six Months)} = 800 \times 6/12 = 400$$

Q4. From the following transactions of a concern, prepare the Machinery Account for the year ended 31st March, 2021:

- 1st April, 2020: Purchased a second-hand machinery for 40,000
- 1st April, 2020: Spent 10,000 on repairs for making it serviceable
- 30th Sep, 2020: Purchased additional new machinery for 20,000
- 31st December, 2020: Repairs and renewal of machinery 3,000
- 31st March, 2021: Depreciate the machinery at 10% p.a.

Solution –

Dr

Machinery Account

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
2018				2021			
Apr 1	To Bank A/c - 1		50,000	Mar 31	By Depreciation A/c		
Apr 1	To Bank A/c - 2		20,000		1 5,000		
					(6 months) 2 1,000		6,000
				Mar 31	By Balance c/d		
					1 45,000		
					(6 months) 2 19,000		64,000
			70,000				70,000

Q5. An asset was purchased for 10,500 on 1st April, 2014. The scrap value was estimated to be 500 at the end of asset's 10 years life. Straight Line Method of Depreciation was used. The accounting year ends on 31st March every year.

The asset was sold for 600 on 31st March, 2021. Calculate the following:

I. The Depreciation expense for the year ended 31st March, 2015

II. The net book value of the asset on 31st March, 2019.

III. The gain or loss on sale of the asset on 31st March, 2021.

Solution –

Dr				Asset Account				Cr			
Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount				
2015 Apr 1	To Bank A/c		10,500	2016 Mar 31	By Depreciation A/c		1,000				
				Mar 31	By Balance c/d		9,500				
			10,500				10,500				
2016 Apr 1	To Balance b/d		9,500	2017 Mar 31	By Depreciation A/c		1,000				
				Mar 31	By Balance c/d		8,500				
			9,500				9,500				
2017 Apr 1	To Balance b/d		8,500	2018 Mar 31	By Depreciation A/c		1,000				
				Mar 31	By Balance c/d		7,500				
			8,500				8,500				
2018 Apr 1	To Balance b/d		7,500	2019 Mar 31	By Depreciation A/c		1,000				
				Mar 31	By Balance c/d		6,500				
			7,500				7,500				
2019 Apr 1	To Balance b/d		6,500	2020 Mar 31	By Depreciation A/c		1,000				
				Mar 31	By Balance c/d		5,500				
			6,500				6,500				
2020 Apr 1	To Balance b/d		5,500	2021 Mar 31	By Depreciation A/c		1,000				
				Mar 31	By Balance c/d		4,500				
			5,500				5,500				
2021 Apr 1	To Balance b/d		4,500	2022 Mar 31	By Depreciation A/c		1,000				
				Mar 31	By Balance c/d		600				
			4,500		By P & L A/c (Loss)		2,900				
							4,500				

Working Note –

I. Depreciation Expense for the year ended 31st March, 2015

$$\text{Amount of Depreciation} = \frac{\text{Cost of Asset} - \text{Scrap Value}}{\text{Number of year of life of Asset}}$$

$$\begin{aligned}\text{Amount of Depreciation} &= \frac{10,500 - 500}{10} \\ &= 1,000 \text{ P.A.}\end{aligned}$$

II. The net book value of the assets on 31st March, 2020

$$\begin{aligned}\text{Net Book Value} &= \text{Cost Price} - \text{Depreciation till date} \\ &= 10,500 - 1,000 \times 5 \\ &= 5,500\end{aligned}$$

III. Calculation of Profit or Loss on the Sale of Asset

$$= \text{Value of Assets on 1 April, 2017} - \text{Total Depreciation}$$

$$= 10,500 - 7,000$$

$$\text{Net Book Value of Asset} = 3,500$$

$$\text{Loss on sale of Machinery} = \text{Net Book value of Asset} - \text{Sales Price}$$

$$= 3,500 - 600$$

$$= 2,900$$

Q6. On 1st April, 2017, Star Ltd. Purchased 5 machines for 60,000 each. On 1st April, 2019, one of the machines was sold at a loss of 8,000. On 1st July, 2020, second machine was sold at a loss of 12,500. A new machine was purchased for 1, 00,000 on 1st October, 2020.

Prepare Machinery Account for 4 years, assuming accounts are closed on 31st March each year and depreciation is charged @ 10% per annum as per Straight Line Method.

Solution –

Dr

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
1 st Year Apr 1	To Bank A/c (60,000 x 5)		3,00,000	2 nd Year Mar 31	By Depreciation A/c By Balance c/d		30,000 2,70,000
			3,00,000				3,00,000
2 nd Year Apr 1	To Balance b/d		2,70,000	3 rd Year Mar 31	By Depreciation A/c By Balance c/d		30,000 2,40,000
			2,70,000				2,70,000
3 rd Year Apr 1	To Balance b/d		2,40,000	3 rd Year Apr 1	By Statement of P&L By Bank A/c Sold (60,000-12,000-8,000)		8,000 40,000
				4 th Year Mar 31	By Depreciation A/c (2, 40,000 x 10%) By Balance c/d		24,000 1,68,000
			2,40,000				2,40,000
4 th Year Apr 1	To Balance b/d		1,68,000	4 th Year July 1	By Statement of P&L		12,500
Oct 1	To Bank A/c		1,00,000	July 1	By Bank A/c Sold(B/F) (60,000-6,000-6,000- 6,000-1,500-12,500)		28,000
				5 th Year Mar 31	By Depreciation A/c (1,80,000x10%+1,00,000 x10%x6/12+60,000x 10%x3/12) By Balance c/d		24,500 2,03,000
			2,68,000				2,68,000

Q7. On 1st April, 2017, A Ltd. Purchased a machine for 2, 40,000 and spent 10,000 on its erection. On 1st October, 2017, an additional machinery costing 1,00,000 was purchased on 1st October, 2019, the machine purchased on 1st April, 2017 was sold for 1,43,000 and on the same date, a new machine was purchased at a cost of 2,00,000. Show the Machinery Account for the first four financial years after charging Depreciation at 5% p.a. by the Straight Line Method.

Solution –

Dr				Machinery Account				Cr			
Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount				
2015				2016							
Apr 1	To Bank A/c – 1		2,50,000	Mar 31	By Depreciation A/c						
Oct 1	To Bank A/c - 2		1,00,000		1 12,500						
					(6 months) 2 2,500					15,000	
				Mar 31	By Balance c/d						
					1 2,37,500						
					2 97,500					3,35,000	
										3,50,000	
			3,50,000							3,50,000	
2016				2017							
Apr 1	To Balance b/d			Mar 31	By Depreciation A/c						
	1 2,37,500				1 12,500						
	2 97,500		3,35,000		2 92,500					17,500	
				Mar 31	By Balance c/d						
					1 2,25,000					3,17,500	
					2 92,500					3,35,000	
			3,35,000							3,35,000	
2017				2017							
Apr 1	To Balance b/d			Oct 1	By Depreciation A/c					6,250	
	1 2,25,000				(For 6 months)						
	2 92,500		3,17,500	Oct 1	By Bank A/c – 1					1,43,000	
July 1	To Bank A/c - 3		2,00,000	Oct 1	By P&LA/c(Loss on sale)					75,750	
				2018							
				Mar 31	By Depreciation A/c						
					1 5,000						
					(6 months) 2 5,000					10,000	
				Mar 31	By Balance c/d						
					1 87,500						
					2 1,95,000					2,82,500	
			5,17,500							5,17,500	
2018				2021							
				Mar31	By Depreciation A/c						

Apr 1	To Balance b/d				1 5,000		
	1 87,500				2 10,000		15,000
	2 1, 95,000		2,82,500		By Balance c/d		
					1 82,500		
					2 1,85,000		2,67,500
			2,82,500				2,82,500

Working Note 1:-

Cost of Assets = Purchases Price of Machine + Repairs and Installation charge

Cost of Assets = 2, 40,000 + 10,000

Cost of Assets = 2, 50,000

Working Note 2:-

Calculation of Depreciation

Amount of Depreciation = Cost of Asset x Rate of Depreciation

For Machine 1

Amount of Depreciation = 2, 50,000 x 5/100 = 12,500 P.a.

For Machine 2

Amount of Depreciation = 1, 00,000 x 5/100 = 5,000 P.a.

For Machine 2 (Six Months)

Amount of Depreciation = 1, 00,000 x 5/100 x 6/12 = 2,500 P.a.

For Machine 3

Amount of Depreciation = 2, 00,000 x 5/100 = 10,000 P.a.

Working Note 3:-

I. Calculation of Profit or Loss on the Sale of Machine 1

=Value of Assets on 1 April, 2017 – Total Depreciation on machine 1

= 2, 25,000 – 6,250 = 2, 18,750

Loss on sale of Machinery = Net Book value of Asset – Sales Price

= 2, 18,750 – 1, 43,000 = 75,750

Q8. A Van was purchased on 1st April, 2018 for 60,000 and 5,000 was spent on its repairs and registration. On 1st October, 2019 another van was purchased for 70,000. On 1st April, 2020, the first van purchased on 1st April, 2018 was sold for 45,000 and a new van costing 1, 70,000 were purchased on the same date. Show the Van Account from 2018-19 to 2020-21 on the basis of Straight Line Method, if the rate of Depreciation charged is 10% p.a. Assume that books are closed on 31st March every year.

Solution –

Dr

Van Account

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
2018 Apr 1	To Bank A/c - 1		65,000	2019 Mar31	By Depreciation A/c - 1		6,500
				Mar31	By Balance c/d		58,500
			65,000				65,000
2019 Apr 1	To Balance b/d – 1		58,500	2020 Mar31	By Depreciation A/c		
Oct 1	To Bank A/c - 2		70,000		1 6,500		
					(6 months) 2 3,500		10,000
				Mar31	By Balance c/d		
					1 52,000		
					2 66,500		1,18,500
			1,28,500				1,28,500
2020 Apr 1	To Balance b/d			2020 Apr 1	By Bank A/c -1		45,000
	1 52,000			Apr 1	By P&L a/c (Loss on Sale)		7,000
	2 66,500		1,18,500	2021 Mar31	By Depreciation A/c		
Apr 1	To Bank A/c - 3		1,70,000		1 7,000		
					2 17,000		24,000
					By Balance c/d		
					1 59,500		
					2 1,53,000		2,12,500
			2,88,500				2,88,500

Working Note 1:-

Calculation of Depreciation

Amount of Depreciation = Cost of Asset x Rate of Depreciation

For Van 1

Amount of Depreciation = $65,000 \times 10/100 = 6,500$ P.a.

For Van 2

Amount of Depreciation = $70,000 \times 10/100 = 7,000$ P.a.

For Van 2 (Six Months)

Amount of Depreciation = $70,000 \times 10/100 \times 6/12 = 3,500$ P.a.

For Van 3

Amount of Depreciation = 1, $70,000 \times 10/100 = 17,000$ P.a.

Working Note 3:-

I. Calculation of Profit or Loss on the Sale of Van 1

=Value of Machinery on 1 April, 2017 – Total Depreciation on Van 1

= $65,000 - 13,000 = 52,000$

Loss on sale of Machinery = Net Book value of Van – Sales Price

= $52,000 - 45,000 = 7,000$

Q9. A company whose accounting year is a financial year, purchased on 1st July, 2018 machinery costing 30,000.

It purchased further machinery on 1st January, 2019 costing 20,000 and on 1st October, 2019 costing 10,000

On 1st April, 2020, one-third of the machinery installed on 1st July, 2018 become obsolete and was sold for 3,000

Show how Machinery Account would appear in the books of the company. It being given that machinery was depreciated by Fixed Instalment Method at 10% p.a. What would be the value of Machinery Account on 1st April, 2020?

Solution -

Dr

Machinery Account

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
2018 July 1	To Bank A/c - 1		30,000	2019 Mar 31	By Depreciation A/c (9months) 1 2,250 2 500		2,750
2019 Jan 1	To Bank A/c - 2		20,000	Mar 31	By Balance c/d 1 27,750 2 19,500		47,250
			50,000				50,000
2019 Apr 1	To Balance b/d 1 27,750 2 19,500		47,250	2020 Mar 31	By Depreciation A/c 1 3,000 2 2,000 3 500		5,500
July 1	To Bank A/c - 3		10,000	Mar 31	By Balance c/d 1 24,750 2 17,500 3 9,500		51,750
			57,250				57,250
2020 Apr 1	To Balance b/d 1 24,750 2 17,500 3 9,500		51,750	2020 Apr 1	By Bank a/c 1(1/3 rd portion)		6,250
				Apr 1	By P&LA/c(Loss on sale)		1,43,000
				2021 Mar 31	By Depreciation A/c (2/3 rd portion) 1 2,000 2 2,000 3 1,000		75,750
				Mar 31	By Balance c/d		5,000

					(2/3 rd portion)1 14,500		
					2 15,500		
					3 8,500		38,500
			51,750				51,750

Working Note 1:-

Calculation of Depreciation

Amount of Depreciation = Cost of Asset x Rate of Depreciation

For Machinery 1

Amount of Depreciation = 30,000 x 10/100 = 3,000 P.a.

For Machinery 1 (For 9 Months)

Amount of Depreciation = 30,000 x 10/100 x 9/12 = 2,250 P.a.

For Machinery 2

Amount of Depreciation = 20,000 x 10/100 = 2,000 P.a.

For Machinery 3

Amount of Depreciation = 10,000 x 10/100 = 1,000 P.a.

Working Note 2:-

I. Calculation of Profit or Loss on the Sale of 1/3rd Part of Machine-1

=Value of Machinery on 1 April, 2016 – Total Depreciation on Machinery 1

= 30,000 – 5,250 = 24,750

Loss on sale of Machinery = Value of 1/3rd Part of Machinery – Sales Price

= 8,250 – 3,000 = 5,250

Q10. On 1st April, 2010, Plant and Machinery was purchased for 1, 20,000. New machinery was purchased on 1st October, 2010 for 50,000 and on 1st July,

2011, for 25,000. On 1st January, 2013, a machinery of the original value of 20,000 which was included in the machinery purchased on 1st April, 2010, was sold for 6,000. Prepare Plant and Machinery A/c for three years after providing depreciation at 10% p.a. on Straight Line Method.

Solution –

Dr				Machinery Account				Cr			
Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
2010				2011							
Apr 1	To Bank A/c – 1		1,20,000	Mar 31	By Depreciation A/c						
Oct 1	To Bank A/c - 2		50,000		1 12,000						
					2 2,500						14,500
				Mar 31	By Balance c/d						
					1 1,08,000						
					2 47,500						1,55,500
			1,70,000								1,70,000
2011				2012							
Apr 1	To Balance b/d			Mar 31	By Depreciation A/c						
	1 1,08,000				1 12,000						
	2 47,500		1,55,500		2 5,000						
					3 1,875						18,875
July 1	To Bank A/c - 3		25,000	Mar 31	By Balance c/d						
					1 96,000						
					2 42,500						
					3 23,125						1,61,625
			1,80,500								1,80,500
2012				2013							
Apr 1	To Balance b/d			Jan 1	By Depreciation A/c						1,500
	1 96,000			Jan 1	By Bank a/c 1						6,000
	2 42,500			Jan 1	By P & L A/c (Loss)						8,500
	3 23,125		1,61,625	Mar 31	By Depreciation A/c						
					1 10,000						
					2 5,000						
					3 2,500						17,500
				Mar 31	By Balance c/d						
					1 70,000						
					2 37,500						
					3 20,625						1,28,125
			1,61,625								1,61,625

Working Note 1:-

Q11. On 1st July, 2017, A Co. Ltd purchases second-hand machinery for 20,000 and spends 3,000 on reconditioning and installing it. On 1st January, 2018, the firm purchases new machinery worth 12,000. On 30th June, 2019, the machinery purchased on 1st January, 2018, was sold for 8,000 and on 1st July, 2019, a fresh plant was installed. A payment for this plant was to be made as follows:

1 st July, 2019	5,000
30 th June, 2020	6,000
30 th June, 2021	5,500

Solution –

Book of A. Co. Ltd

Dr

Machinery Account

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
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2018 July 1	To Bank A/c - 1		23,000	2019 Mar31	By Depreciation A/c (9 months) 1 1,725		
2019 Jan 1	To Bank A/c - 2		12,000	Mar31	(3 months) 2 300		2,025
					By Balance c/d		
					1 21,275		
					2 11,700		32,975
			35,000				35,000
2019 Apr 1	To Balance b/d			2020 Mar31	By Depreciation A/c		
	1 21,275				1 2,300		
	2 11,700		32,975	Mar31	2 1,200		3,500
					By Balance c/d		
					1 18,975		
					2 10,500		29,475
			32,975				32,975
2020 Apr 1	To Balance b/d			2020 June30	By Bank a/c - 2		8,000
	1 18,975			June30	By Depreciation A/c - 2		300
	2 10,500		29,475	Junr30	By P&LA/c(Loss on sale)		2,200
				2021			
July 1	To Bank A/c-3		5,000	Mar31	By Depreciation A/c		
July 1	To Creditors A/c-3		10,000		1 2,300		
					(9 months) 2 1,125		3,425
				Mar31	By Balance c/d		
					1 16,675		
					2 13,875		30,550
			44,475				44,475

Working Note 1:-

Calculation of Depreciation

Amount of Depreciation = Cost of Asset x Rate of Depreciation

For Machinery 1

Amount of Depreciation = 23,000 x 10/100 = 2,300 P.a.

For Machinery 1 (For 9 Months)

Amount of Depreciation = 23,000 x 10/100 x 9/12 = 1,725 P.a.

For Machinery 2

Amount of Depreciation = 12,000 x 10/100 = 1,200 P.a.

For Machinery 2 (For 3 Months)

Amount of Depreciation = $12,000 \times 10/100 \times 3/12 = 300$ P.a.

For Machinery 3

Amount of Depreciation = $15,000 \times 10/100 = 1,500$ P.a.

For Machinery 3 (For 9 Months)

Amount of Depreciation = $15,000 \times 10/100 \times 9/12 = 1,125$ P.a.

Working Note 2:-

I. Calculation of Profit or Loss on the Sale of Machine-2

= Value of Machinery on 1 July, 2018 - Total Depreciation on Machinery 2

= $12,000 - 1,800 = 10,200$

Loss on sale of Machinery = Value of Machinery on 1 July, 2019 - Sales Price

= $10,200 - 8,000 = 2,200$

Q12. Modern Ltd. purchased machinery on 1st August, 2018 for 60,000. On 1st October, 2019, it purchased another machine for 20,000 plus CGST and SGST @ 6% each. On 30th June, 2020, it sold the first machine purchased in 2018 for 38,500 charging IGST @ 12%. Depreciation is provided @ 20% p.a. on the original cost each year. Accounts are closed on 31st March every year. Prepare the Machinery Account for three years.

Solution -

Book of A. Co. Ltd

Dr

Machinery Account

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
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2018 Aug 1	To Bank A/c – 1		60,000	2019 Mar31	By Depreciation A/c (8 months)		8,000
				Mar31	By Balance c/d		52,000
			60,000				60,000
2019 Apr 1	To Balance b/d		52,000	2020 Mar31	By Depreciation A/c		
Oct 1	To Bank A/c - 2		20,000		1 12,000		
					(6 months)2 2,000		14,000
				Mar31	By Balance c/d		
					1 40,000		
					2 18,000		58,000
			72,000				72,000
2020 Apr 1	To Balance b/d			2020 June30	By Depreciation A/c – 1 (3 months)		3,000
	1 40,000				By Bank A/c - 1		
	2 18,000		58,000	June30			38,500
June30	To P&LA/c (profit)		1,500	2021 Mar31	By Depreciation A/c -2		4,000
				Mar31	By Balance c/d		14,000
			59,500				59,500

Working Note 1:-

Calculation of Depreciation

Amount of Depreciation = Cost of Asset x Rate of Depreciation

For Machinery 1

Amount of Depreciation = 60,000 x 20/100 = 12,000 P.a.

For Machinery 1 (For 8 Months)

Amount of Depreciation = 60,000 x 20/100 x 8/12 = 8,000 P.a.

For Machinery 1 (For 3 Months)

Amount of Depreciation = 60,000 x 20/100 x 8/12 x 3/12 = 3,000 P.a.

For Machinery 2

Amount of Depreciation = 20,000 x 20/100 = 4,000 P.a.

For Machinery 2 (For 6 Months)

Amount of Depreciation = 20,000 x 20/100 x 6/12 = 8,000 P.a.

Working Note 2:-

I. Calculation of Profit or Loss on the Sale of Machine

= Value of Machinery on 1 April, 2015 – Total Depreciation on Machinery

$$= 60,000 - 23,000 = 37,000$$

Loss on sale of Machinery = Value of Machinery on 1 Oct, 2017 – Sales Price

$$= 37,000 - 38,500 = 1,500$$

Working Note 3:-

Journal

2016

Oct 1	Machinery A/c	...Dr	20,000	
	Input CGST A/c	...Dr	1,200	
	Input SGST A/c	... Dr	1,200	
	To Bank A/c			22,400

(Being purchased machine with CGST and SGST @ 6% Paid)

2017

Jun 30	Bank A/c	...Dr	43,120	
	To Machinery A/c			38,500
	To Output IGST A/c			4,620

(Being Machinery sold & IGST @ 12% charged)

Q13. On 1st July, 2018, Sohan Lal & Sons purchased a plant costing 60,000. Additional plant was purchased on 1st January, 2019 for 40,000 and on 1st October, 2019, for 20,000, plus CGST and SGST @ 6% each. On 1st April, 2020, one-third of the plant purchased on 1st July, 2018, was found to have become obsolete and was sold for 6,000, charging CGST and SGST @ 6% each. Prepare the Plant Account for the first three years in the books of Sohan Lal & Sons. Depreciation is charged @ 10% p.a. on Straight Line Method. Accounts are closed on 31st March each year.

Solution –

Book of Sohan Lal & Sons

Dr				Machinery Account				Cr	
Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount		
2018 July 1	To Bank A/c - 1		60,000	2019 Mar31	By Depreciation A/c (9 months) 1 4,500				
2019 Jan 1	To Bank A/c - 2		40,000		(3 months) 2 1,000			5,500	
				Mar31	By Balance c/d				
					1 55,500				
					2 39,000			94,500	
			1,00,000					1,00,000	
2019 Apr 1	To Balance b/d			2020 Mar31	By Depreciation A/c				
	1 55,500				1 6,000				
	2 39,000		94,500		2 4,000				
Oct 1	To Bank A/c - 3		20,000		(6 months) 3 1,000			11,000	
				Mar31	By Balance c/d				
					1 49,500				
					2 35,000				
					3 19,000			1,03,500	
			1,14,500					1,14,500	
2020 Apr 1	To Balance b/d			2020 Apr 1	By Bank a/c - 2			6,000	
	1 49,500			Apr 1	By P&LA/c(Loss)			10,500	
	2 35,000				(16,500 - 6,000)				
	3 19,000		1,03,500	2021 Mar31	By Depreciation A/c				
					1 4,000				
					2 4,000				
					3 2,000			10,000	
				Mar31	By Balance c/d				
					1 29,000				
					2 31,000				
					3 17,000			77,000	
			44,475					44,475	

Working Note 1:-

Calculation of Depreciation

Amount of Depreciation = Cost of Asset x Rate of Depreciation

For Plant 1

Amount of Depreciation = 60,000 x 10/100 = 6,000 P.a.

For Plant 1 (For 2/3 part)

Amount of Depreciation = 60,000 x 10/100 x 12/12 x 2/3 = 4,000 P.a.

For Plant 2

Amount of Depreciation = 40,000 x 10/100 = 4,000 P.a.

For Plant 3

Amount of Depreciation = $20,000 \times 10/100 = 2,000$ P.a.

Working Note 2:-

I. Calculation of Profit or Loss on the Sale of Plant 1

= Value of Machinery on 1 July, 2018 - Total Depreciation on Machinery

= $60,000 - 10,500 = 49,500$

Loss on sale of Machinery = Value of $1/3^{\text{rd}}$ part of machinery - Sales Price

= $16,500 - 6,000 = 10,500$

Working Note 3:-

Journal

2016

Oct 1	Machinery A/c	...Dr	20,000	
	Input CGST A/c	...Dr	1,200	
	Input SGST A/c	... Dr	1,200	
	To Bank A/c			22,400
	(Being purchased machine with CGST and SGST @ 6% Paid)			

2017

Apr 1	Bank A/c	...Dr	6,720	
	To Machinery A/c			6,000
	To Output CGST A/c			360
	To Output SGST A/c			360
	(Being Machinery sold with CGST and SGST @ 6% each)			

Q14. Following balances appear in the books of Hari Bros:

1 st April, 2020	Machinery A/c	80,000
	Provision for Depreciation A/c	36,000

On 1st April, 2020, they decided to sell a machine for 8,700. This machine was purchased for 16,000 in April, 2016. Prepare the Provision for Depreciation Account and Machinery Account on 31st March, 2021, assuming the firm has been charging Depreciation at 10% p.a. on Straight Line Method.

Solution -

In the Books of Hari Bros

Dr

Machinery Account

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
------	-------------	-----	--------	------	-------------	-----	--------

2020 Apr1	To Balance b/d		80,000	2020 Apr1	By Bank A/c		8,700
				Apr1	By Provision for Depreciation A/c		6,400
				Apr1	By P&L A/c (Loss)		900
				2021 Mar	By Balance c/d		64,000
			80,000	31			80,000
Apr1	To Balance b/d		64,000				

Provision for Depreciation Account

Dr

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F.	Amount
2020 Apr 1	To Machinery A/c		6,400	2020 Apr 1	By Balance b/d		36,000
2021 Mar31	To Balance b/d		36,000	2021 Mar 31	By Depreciation A/c (On 64,000 @ 10%)		6,400
			42,400				42,400
				Apr 1	By Balance c/d		36,000

Working Note 1:-

I. Calculation of Value of Machine on 1 April 2015 & Loss on sale of Machine

= Value of Machinery on 1 April, 2020 – Total Depreciation on Machinery

$$= 16,000 - 6,400 = 9,600$$

Profit on Sale of Machine = Value of Machinery on 1 April, 2020 – Sales Price

$$= 9,600 - 8,700 = 900$$

Amount of Depreciation = $16,000 \times 10/100 = 1,600$ p.a.

Total Depreciation = $1,600 \times 4 = 6,400$

Q15. Following balances appear in the books of Priyank Brothers:

1st April, 2020 Machinery A/c 20, 00,000

 Provision for Depreciation A/c 8, 00,000

On 1st April, 2020, they decide to sell a machine for 5, 00,000. This machine was purchased for 7, 50,000 on 1st April, 2017. Prepare the Machinery Account and Provision for Depreciation Account for the Year ended 31st March, 2021 assuming that the firm has been charging Depreciation @ 10% p.a. on the Straight Line Method.

Solution –

Books of Priyank Brothers

Dr

Machinery Account

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
2020 Apr1	To Balance b/d		20,00,000	2020 Apr1	By Bank A/c		5,00,000
				Apr1	By Provision for Depreciation A/c		2,25,000
				Apr1 2021	By P&L A/c (Loss)		25,000
				Mar31	By Balance c/d		12,50,000
2021 Apr1	To Balance b/d		2,00,000				20,00,000
			12,50,000				

Provision for Depreciation Account

Dr

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F.	Amount
2020 Apr 1	To Machinery A/c		2,25,000	2020 Apr 1	By Balance b/d		8,00,000
2021 Mar31	To Balance b/d		7,00,000	2021 Mar 31	By Depreciation A/c		1,25,000
			9,25,000				9,25,000
				Apr 1	By Balance c/d		7,00,000

Working Note 1:-

I. Calculation of Value of Machine on 1 April 2015 & Loss on sale of Machine

= Value of Machinery on 1 April, 2015 – Total Depreciation on Machinery

$$= 7,50,000 - 2,25,000 = 5,25,000$$

Profit on Sale of Machine = Value of Machinery on 1 April, 2015 – Sales Price

$$= 5,25,000 - 5,00,000 = 25,000$$

Amount of Depreciation = $7,50,000 \times 10/100 = 75,000$ p.a.

Total Depreciation = $75,000 \times 3 = 2,25,000$

Q16. Following balances appear in the books of X Ltd. As on 1st April, 2019:

Machinery A/c 5,00,000

Provision for Depreciation A/c 2,25,000

The machinery is depreciated @ 10% p.a. on the Fixed Instalment

Method. The accounting year being April-March .On 1st October, 2019, a machinery which was purchased on 1st July, 2018 for 1,00,000 was sold for 42,000 plus CGST and SGST @ 6% each and on the same date a new machine was purchased for 2,00,000 paying IGST @ 12% . Prepare Machinery Account and Provision for Depreciation Account for the year ended 31st March, 2020.

**Solution –
Dr**

**In the Books of X Ltd
Machinery Account**

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
2020 Apr1 Oct 1	To Balance b/d To Bank A/c		5,00,000 2,00,000	2020 Oct 1 Oct 1 Oct 1 2021 Mar31	By Bank A/c By Provision for Depreciation A/c By P&L A/c (Loss) By Balance c/d		42,000 32,500 25,500 6,00,000
2021 Apr1	To Balance b/d		7,00,000 6,00,000				7,00,000

Provision for Depreciation Account

Dr

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F.	Amount
2020 Oct 1 2021 Mar31	To Machinery A/c To Balance b/d		32,500 2,47,500 2,80,000	2020 Apr 1 2021 Mar 31 Apr 1	By Balance b/d By Depreciation A/c By Balance c/d		2,25,000 55,000 2,80,000 2,47,500

Working Note 1:-

Calculation of Loss on Sale of Machinery

Cost of Machine sold	1,00,000
Less Depreciation 2017-18 = $(1,00,000 \times 10\% \times 9/12)$	7,500
Less Depreciation 2018-19 = $(1,00,000 \times 10\%)$	10,000
Less Depreciation 2019-20 = $(1,00,000 \times 10\%)$	10,000
Less Depreciation 2020-21 = $(1,00,000 \times 10\% \times 6/12)$	5,000
Written down value on the date of sale	32,000
Less Selling price of Machinery	67,500
	42,000

Loss on Sale of Machinery

25,500

Working Note 2:-

Calculation of Depreciation Charged during the year

Depreciation on 1 st Machines 4, 00,000 x 10%	40,000
Depreciation on 2 nd Machines 2, 00,000 x 10% x 6/12	10,000
Depreciation on 3 rd Machines 1, 00,000 x 10% x 6/12	5,000
Total Depreciation for the year	55,000

Working Note 3:-

Journal

2017

Oct 1	Bank A/c	...Dr	47,040	
	To Machinery A/c			42,000
	To Output CGST A/c			2,520
	To Output SGST A/c			2,520
	(Being Machinery sold with CGST and SGST @ 6% Charged)			
Apr 1	Machinery A/cDr	2, 00,000	
	Input IGST A/c	...Dr	24,000	
	To Bank A/c			2, 24,000
	(Being Machinery sold with CGST and SGST @ 6% each)			

Q17. A boiler was purchased from abroad for 10,000. Shipping and forwarding charges 2,000, Import duty 7,000 and expenses of installation amounted to 1,000.

Calculate the Depreciation for the first three years (separately for each year) @ 10% p.a. on Diminishing Balance Method.

Solution –

Dr

Boiler Account

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
1 year	To Bank A/c		20,000	1 year	By Depreciation A/c		2,000
				1 year	By Balance c/d		18,000
			20,000				20,000

2 year	To Balance b/d		18,000	2 year	By Depreciation A/c		1,800
				2 year	By Balance c/d		16,200
			18,000				18,000
3 year	To Balance b/d		16,200	3 year	By Depreciation A/c		1,620
				3 year	By Balance c/d		14,580
			16,200				16,200

Working Note 1:-

$$\begin{aligned}
 \text{Cost of Boiler} &= \text{cost of Boiler} + \text{Shipping and forward charges} + \text{Import Duty} + \\
 &\quad \text{Installation Charges} \\
 &= 10,000 + 2,000 + 7,000 + 1,000 \\
 &= 20,000
 \end{aligned}$$

Working Note 2:-

Calculation of Depreciation

$$\text{Amount of Depreciation} = \text{Opening Balance} \times \text{Rate of Depreciation}$$

For 1 year

$$\text{Amount of Depreciation} = 20,000 \times 10/100 = 2,000 \text{ P.a.}$$

For 2 year

$$\text{Amount of Depreciation} = 18,000 \times 10/100 = 1,800 \text{ P.a.}$$

For 3 year

$$\text{Amount of Depreciation} = 16,200 \times 10/100 = 1,620 \text{ P.a.}$$

Q18. The original cost of furniture amounted to 4,000 and it is decided to write off 5% on the original cost as Depreciation at the end of each year. Show the Ledger Account as it will appear during the first four years. Show also how the same account will appear if it was decided to write off 5% p.a. on the diminishing balance of the asset each year.

Solution – Original Cost Basis:-

Dr Furniture Account Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
1 year	To Bank A/c		4,000	1 year	By Depreciation A/c		200

2 year	To Balance b/d		4,000	1 year	By Balance c/d		3,800
			3,800	2 year	By Depreciation A/c		200
3 year	To Balance b/d		3,800	2 year	By Balance c/d		3,600
			3,600	3 year	By Depreciation A/c		200
4 year	To Balance b/d		3,600	3 year	By Balance c/d		3,400
			3,400	4 year	By Depreciation A/c		200
			3,400	4 year	By Balance c/d		3,200
							3,400

Diminishing Balance Method:-

Dr				Furniture Account				Cr	
Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount		
1 year	To Bank A/c		4,000	1 year	By Depreciation A/c		200		
				1 year	By Balance c/d		3,800		
			4,000				4,000		
2 year	To Balance b/d		3,800	2 year	By Depreciation A/c		190		
				2 year	By Balance c/d		3,610		
			3,800				3,800		
3 year	To Balance b/d		3,610	3 year	By Depreciation A/c		181		
				3 year	By Balance c/d		3,429		
			3,610				3,610		
4 year	To Balance b/d		3,429	4 year	By Depreciation A/c		171		
				4 year	By Balance c/d		3,258		
			3,429				3,429		

Working Note 1:- Original Cost Basis

Calculation of Depreciation

Amount of Depreciation = Opening Balance x Rate of Depreciation

Amount of Depreciation = 4,000 x 5/100 = 200 p.a.

Working Note 2:- Diminishing Balance Method

Calculation of Depreciation

Amount of Depreciation = Opening Balance x Rate of Depreciation

For 1 year

Amount of Depreciation = $4,000 \times 5/100 = 200$ P.a.

For 2 year

Amount of Depreciation = $3,800 \times 5/100 = 190$ P.a.

For 3 year

Amount of Depreciation = $3,610 \times 5/100 = 181$ P.a.

For 3 year

Amount of Depreciation = $3,429 \times 5/100 = 171$ P.a.

Q19. Babu purchased on 1st April, 2019, a machine for 6,000. On 1st October, 2019, he also purchased another machine for 5,000. On 1st October, 2020, he sold the machine purchased on 1st April, 2019 for 4,000.

It was decided that Depreciation @ 10% p.a. was to be written off every year under Diminishing Balance Method.

Assuming the accounts were closed on 31st March every year, show the Machinery Account for the years ended 31st March, 2020 and 2021.

Solution –

Book of Babu

Machinery Account

Dr

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
------	-------------	------	--------	------	-------------	------	--------

2019				2020			
Apr 1	To Bank A/c - 1		6,000	Mar31	By Depreciation A/c		
Oct 1	To Bank A/c - 2		5,000		1 4,500		
					(6 months) 2 1,000		850
				Mar31	By Balance c/d		
					1 5,400		
					2 4,750		10,150
			<u>11,000</u>				<u>11,000</u>
2019				2020			
Apr 1	To Balance b/d			Oct 1	By Depreciation A/c-1		
	1 5,400				(6 months)		270
	2 4,750		10,150	Oct 1	By Bank a/c - 1		4,000
				Oct 1	By P&LA/c(Loss)		1,130
				2021			
				Mar31	By Depreciation A/c- 2		475
				Mar31	By Balance c/d- 2		4,275
			<u>10,150</u>				<u>10,150</u>

Working Note 1:-

Calculation of Profit/Loss on Sale of Machine

Cost of Machine sold	6,000
Less Depreciation 2019-20 = (6,000 x 10%) = 600	
Less Depreciation 2020-21 = (5,400 x 10% x 6/12) = 270	870
Written down value on the date of sale	<u>5,130</u>
Less Selling price of Machinery	4,000
Loss on Sale of Machinery	1,130

Working Note 2:-

Calculation of Depreciation

Amount of Depreciation = Opening Balance x Rate of Depreciation x Number of Month

For Machinery 1 (1year 12 months)

Amount of Depreciation = 6,000 x 10/100 x 12/12 = 600 P.a.

For Machinery 1 (2year 6 months)

Amount of Depreciation = 5,400 x 10/100 x 6/12 = 270 P.a.

For Machinery 2 (1 year 6 months)

Amount of Depreciation = 5,000 x 10/100 x 6/12 = 250 P.a.

For Machinery 2 (2year 12 months)

Amount of Depreciation = $4,750 \times 10/100 \times 12/12 = 475$ P.a.

Q20. X bought a machine for 25,000 on which he spent 5,000 for carriage and freight, 1,000 for brokerage of the middlemen, 3,500 for installation and 500 for an iron pad. The machine is depreciated @ 10% p.a. on Written down Value basis. After three years, the machine was sold to Y for 30,500 and 500 was paid as commission to the broker through whom the sale was affected. Find out the profit and loss on sale of machine.

Solution –

Books of X

Dr

Machinery Account

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
1 year	To Bank A/c		35,000	1 year	By Depreciation A/c		3,500
				1 year	By Balance c/d		31,500
			35,000				35,000
2 year	To Balance b/d		31,500	2 year	By Depreciation A/c		3,150
				2 year	By Balance c/d		28,350
			31,500				31,500

3 year	To Balance b/d	28,350	3 year	By Depreciation A/c	2,835
			3 year	By Balance c/d	25,515
		28,350			3,600
4 year	To Balance b/d	25,515	4 year	By Bank A/c	30,000
Dec31	To P&L A/c (Profit)	4,485			
		30,000			30,000

Working Note 1:-

- A. Book Value of Machinery = Cost of Machine + Freight + Brokerage + Installation**
 $= 25,000 + 5,000 + 1,000 + 3,500 + 500$
 $= 35,000$
- b. Selling price of machinery = 30,500 - 500**
 $= 30,000$

Working Note 2:-

Calculation of Profit/Loss on Sale of Machine

Cost of Machine sold	35,000
Less Depreciation 2015-16 = $(35,000 \times 10\%)$	= 3,500
Less Depreciation 2016-17 = $(31,500 \times 10\%)$	= 3,150
Less Depreciation 2017-18 = $(28,350 \times 10\%)$	= 2,835
Written down value on the date of sale	9,485
Less Selling price of Machinery	30,000
Profit on Sale of Machinery	4,485

Working Note 3:-

Calculation of Depreciation

Amount of Depreciation = Opening Balance x Rate of Depreciation x Number of Month

For 1year (12 months)

Amount of Depreciation = $35,000 \times 10/100 \times 12/12 = 3,500$ P.a.

For 2year (12 months)

Amount of Depreciation = $31,500 \times 10/100 \times 12/12 = 3,150$ P.a.

For 3 year (12 months)

Amount of Depreciation = $28,350 \times 10/100 \times 12/12 = 2,835$ P.a.

Q21. A company purchased a machine for 50,000 on 1st October, 2018. Another machine costing 10,000 was purchased on 1st December, 2019. On 31st March, 2021, the machine purchased in 2018 was sold at a loss of 5,000. The company charges depreciation @ 15% p.a. on Diminishing Balance Method. Accounts are closed on 31st March every year. Prepare the Machinery Account for 3 years.

Solution –

Dr

Machinery Account

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
------	-------------	------	--------	------	-------------	------	--------

2017 Oct 1	To Bank A/c - 1		50,000	2018 Mar31	By Depreciation A/c (6 Months)		3,750
				Mar31	By Balance c/d		46,250
			<u>50,000</u>				<u>50,000</u>
2019 Apr 1	To Balance b/d -1		46,250	2020 Mar31	By Depreciation A/c		
Dec 1	To Bank A/c - 2		10,000		1 6,938		
					2 500		7,438
				Mar31	By Balance c/d		
					1 39,312		
					2 9,500		48,812
			<u>56,250</u>				<u>56,250</u>
2020 Apr 1	To Balance b/d			2021 Mar31	By Depreciation A/c		
	1 39,312				1 5,897		
	2 9,500		48,812		2 1,425		7,322
				Mar31	By Bank a/c - 1		28,415
				Mar31	By P&LA/c(Loss)		5,000
				Mar31	By Balance c/d- 2		8,075
			<u>48,812</u>				<u>48,812</u>

Working Note 1:-

Calculation of Profit/Loss on Sale of Machine

Cost of Machine sold	50,000
Less Depreciation 2016-17 = $(50,000 \times 15\% \times 6/12) = 3,750$	
Less Depreciation 2017-18 = $(46,250 \times 15\%) = 6,938$	
Less Depreciation 2018-19 = $(39,312 \times 15\%) = 5,897$	16,585
Written down value on the date of sale	<u>33,415</u>
Less Selling price of Machinery	28,415
Profit on Sale of Machinery	5,000

Q22. On 1st April, 2018, machinery was purchased for 20,000. On 1st October, 2019, another machine was purchased for 10,000 and on 1st April, 2020, one more machine was purchased for 5,000. The firm depreciates its machinery @ 10% p.a. on the Diminishing Balance Method. What is the amount of Depreciation for the years ended 31st March, 2019, 2020 and 2021? What will be the balance in Machinery Account as on 31st March, 2021?

Solution -

1. Calculation of Depreciation from April 1, 2015 to March 31,2021

Machinery 1st

Amount of Depreciation = Opening Balance x Rate of Depreciation x Number of Month

For 2015-16 year (12 months)

Amount of Depreciation = $20,000 \times 10/100 \times 12/12 = 2,000$ P.a.

For 2016-17 year (12 months)

Amount of Depreciation = $(20,000 - 2,000)18,000 \times 10/100 \times 12/12 = 1,800$ P.a.

For 2017-18 year (12 months)

Amount of Depreciation = $(18,000 - 1,800)16,200 \times 10/100 \times 12/12 = 1,620$ P.a.

Machinery 2nd

Amount of Depreciation = Opening Balance x Rate of Depreciation x Number of Month

For 2016-17 year (6 months)

Amount of Depreciation = $10,000 \times 10/100 \times 6/12 = 500$ P.a.

For 2017-18 year (12 months)

Amount of Depreciation = $(10,000 - 500)9,500 \times 10/100 \times 12/12 = 950$ P.a.

Machinery 3rd

Amount of Depreciation = Opening Balance x Rate of Depreciation x Number of Month

For 2017-18 year (12 months)

Amount of Depreciation = $5,000 \times 10/100 \times 12/12 = 500$ P.a.

Calculation of Total Depreciation:-

Years	Machinery 1st	Machinery 2nd	Machinery 3rd	Total
2015-16	2,000	-	-	2,000
2016-17	1,800	500	-	2,300
2017-18	1,620	950	500	3,070

2. The Balance in Machinery Account as on March 31, 2021 will be 27,630

Dr

Machinery Account

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
2018 Apr 1	To Bank A/c - 1		20,000	2018 Mar31	By Depreciation A/c -1		2,000
			<u>20,000</u>	Mar31	By Balance c/d -1		18,000
							<u>20,000</u>
2019 Apr 1	To Balance b/d -1		18,000	2020 Mar31	By Depreciation A/c		
Oct 1	To Bank A/c - 2		10,000		1 1,800		
					2 500		2,300
				Mar31	By Balance c/d		
					1 16,900		
					2 9,500		25,700
			<u>28,000</u>				<u>28,000</u>
2020 Apr 1	To Balance b/d			2021 Mar31	By Depreciation A/c		
	1 16,200				1 1,620		
	2 9,500		25,700		2 950		
Apr 1	To Bank A/c - 3		5,000		3 500		3,070
				Mar31	By Balance c/d		
					1 14,580		
					2 8,550		
					3 4,500		27,630
			<u>30,700</u>				<u>30,700</u>

Q23. M/s P & Q purchased machinery for 40,000 on 1st October, 2018.

Depreciation is provided @ 10% p.a. on the Diminishing Balance. On 31st January, 2021, one-fourth of the machinery was found unsuitable and disposed off for 5,600. On the same date new machinery at a cost of 15,000 was purchased. Write up the Machinery Account for the years ended 31st March, 2019, 2020 and 2021. Accounts are closed on 31st March each year.

Solution –

Dr

Machinery Account

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
------	-------------	------	--------	------	-------------	------	--------

2018				2019			
Oct 1	To Bank A/c		30,000	Mar31	By Depreciation A/c		
Oct 1	To Bank A/c		10,000		(30,000x10%x6/12) 1,500		
					(10,000x10%x6/12) 500		2,000
				Mar31	By Balance c/d		
					(30,000-1,500) 28,500		
					(10,000-500) 9,500		38,000
			<u>40,000</u>				<u>40,000</u>
2019				2020			
Apr 1	To Balance b/d			Mar31	By Depreciation A/c		
	1(3/4) 28,500				(28,500x10%) 2,850		
Oct 1	1(1/4) 9,500		38,000		(9,500x10%) 950		3,800
				Mar31	By Balance c/d		
					(28,500-2,850) 25,650		
					(9,500-950) 8,550		34,200
			<u>38,000</u>				<u>38,000</u>
2020				2021			
Apr 1	To Balance b/d			Jan 31	By Depreciation A/c		713
	1(3/4) 25,650			Jan 31	(8,550x10%x10/12)		
1	1(1/4) 8,550		34,200		By Bank A/c		5,600
					By Profit & Loss A/c		
	To Bank A/c		15,000		(Loss on sale of machine)		
2021				Mar31	8,550-712-5,600=2,237)		2,237
Jan 1				Mar31	By Depreciation A/c		
					(25,650x10%x12/12) 2,565		
					(15,000x10%x2/12) 250		2,815
					By Balance c/d		
					(25,650 - 2,565) 23,085		
					(15,000 - 250) 14,750		37,835
			<u>49,200</u>				<u>49,200</u>

Working Note 1:-

Calculation of Profit/Loss on Sale of Machine

¼ Cost of Machine sold	8,550
Less Depreciation for 10 months = $(8,550 \times 10\% \times 10/12) = 713$	
Written down value on the date of sale	7,837
Less Selling price of Machinery	5,600
Profit on Sale of Machinery	2,237

Working Note 2:-

Calculation of Depreciation

Amount of Depreciation = Opening Balance x Rate of Depreciation x Number of Month

For 2015-16 (1year 6 months)

Amount of Depreciation = $30,000 \times 10/100 \times 6/12 = 1,500$ P.a.

For 2015-16 (2 year 6 months)

Amount of Depreciation = $10,000 \times 10/100 \times 6/12 = 500$ P.a.

For 2016-17 (1 year 12 months)

Amount of Depreciation = $28,500 \times 10/100 \times 12/12 = 2,850$ P.a.

For 2016-17 (2 year 12 months)

Amount of Depreciation = $9,500 \times 10/100 \times 12/12 = 950$ P.a.

For 2017-18 (1 year 12 months)

Amount of Depreciation = $25,650 \times 10/100 \times 12/12 = 2,565$ P.a.

For 2017-18 (2 year 10 months)

Amount of Depreciation = $8,550 \times 10/100 \times 10/12 = 713$ P.a.

Q24. On 1st October, 2018, Meenal Sharma bought a machine for 25,000 on which he spent 5,000 for carriage and freight 1,000 for brokerage of the middle-man, 4,000 for installation. The machine is depreciated @ 10% p.a. on written down value basis. On 31st March, 2021 the machine was sold to Deepa for 30,500 and 500 was paid as commission to broker through whom the sales was affected. Find out the profit or loss on sale of machine if accounts are closed on 31st March, every year.

Solution -

Dr

Machinery Account

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
------	-------------	------	--------	------	-------------	------	--------

2018 Oct 1	To Bank A/c		35,000	2019 Mar 31	By Depreciation A/c (35,000x10%x9/12)		1,750
				Mar 31	By Balance c/d		33,250
			<u>35,000</u>				<u>35,000</u>
2019 Apr 1	To Balance b/d		33,250	2020 Mar 31	By Depreciation A/c (33,250x10%)		3,325
				Mar 31	By Balance c/d		29,925
			<u>33,250</u>				<u>33,250</u>
2020 Apr 1	To Balance b/d		29,925	2021 Mar31	By Depreciation A/c (29,925x10%)		2,993
2021 Mar 31	To P&L A/c (Profit)		3,068	Mar31	By Bank A/c (30,500-500)		30,000
			<u>32,993</u>				<u>32,993</u>

Working Note 1:-

- a. **Book Value of Machinery = Cost of Machine + Freight + Installation**
 $= 25,000 + 5,000 + 1,000 + 4,000$
 $= 35,000$
- b. **Selling Price of Machinery = 30,500 - 500**
 $= 30,000$

Working Note 2:-

Calculation of Profit/Loss on Sale of Machine

1/3 Cost of Machine sold	35,000
Less Depreciation 2018-19 = $(35,000 \times 10\% \times 9/12) = 1,750$	
Less Depreciation 2019-20 = $(33,250 \times 10\%) = 3,325$	
Less Depreciation 2020-21 = $(29,925 \times 10\%) = 2,993$	8,068
Written down value on the date of sale	26,932
Less Selling price of Machinery	30,000
Profit on Sale of Machinery	3,068

Q25. A company purchased on 1st July, 2018 machinery costing 30,000. It further purchased machinery on 1st January, 2019 costing 20,000 and on 1st October, 2019 costing 10,000. On 1st April, 2020, one-third of the machinery installed on 1st July, 2018 became obsolete and was sold for 3,000. The company follows financial year as accounting year. Show how the Machinery Account would appear in the books of company if depreciation is charged @ 10% p.a. on Written down Value Method.

Solution-

Dr

Machinery Account

Cr

Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
------	-------------	------	--------	------	-------------	------	--------

2018 July 1	To Bank A/c -1	30,000	2019 Mar31	By Depreciation A/c (30,000x10%x9/12) 2,250	
2019 Oct 1	To Bank A/c -2	20,000	Mar31	(20,000x10%x3/12) 500	2,750
			Mar31	By Balance c/d (30,000-2,250) 27,750 (20,000-500) 19,500	47,250
		<u>50,000</u>			<u>50,000</u>
2019 Apr 1	To Balance b/d 1 27,750 2 19,500	47,250	2020 Mar31	By Depreciation A/c (27,750x10%) 2,775 (19,500x10%) 1,950 (10,000x10%) 500	5,225
Oct 1	To Bank A/c	10,000	Mar31	By Balance c/d (27,750-2,775) 24,975 (19,500-1,950) 17,550 (10,000 - 500) 9,500	52,025
		<u>57,250</u>			<u>57,250</u>
2020 Apr 1	To Balance b/d 1 24,975 2 17,550 3 9,500	52,025	2021 Apr 1	By Bank A/c - 1 (1/3)	3,000
			Apr 1	By Profit & Loss A/c (Loss)	5,325
			Mar31	By Depreciation A/c (24,975x10%x2/3) 1,665 (17,550x10%) 1,755 (9,500x 10%) 950	4,370
			Mar31	By Balance c/d (16,650 - 1,665) 14,985 (17,550 - 1,755) 14,795 (9,500 - 950) 8,550	39,330
		<u>52,025</u>			<u>52,025</u>

Working Note 1:-

Calculation of Profit/Loss on Sale of Machine

1/3 Cost of Machine sold	35,000
Less Depreciation = (10,000 x 10% x 9/12) = 750	
Less Depreciation = (9,250 x 10%) = 950	1,675
Written down value on the date of sale	8,325
Less Selling price of Machinery	3,000
Profit on Sale of Machinery	5,325

Q26. Astha Engineering Works Purchased a machine on 1st July, 2018 for 1, 80,000 and spent 20,000 on its installation.
On 1st April, 2019, it purchased another machine for 2, 40,000. On 1st October, 2020, the machine purchased on 1st July, 2018 was sold for 1, 45,000 plus CGST and SGST @ 6% each. On 1st January, 2021, another machine was purchased for 4, 00,000 plus IGST @ 12%. Prepare the Machinery Account for the years ended 31st March, 2019 to 2021 after charging Depreciation @ 10% p.a. by Diminishing Balance Method. Accounts are closed on 31st March every year.

Solution –

Book of Astha Engineering Works

Dr

Machinery Account

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
------	-------------	-----	--------	------	-------------	-----	--------

2015 July 1	To Bank A/c - 1	2,00,000	2016 Mar31	By Depreciation A/c (2,00,000x10%x9/12)	15,000
			Mar31	By Balance c/d	1,85,000
		<u>2,00,000</u>			<u>2,00,000</u>
2016 Apr 1	To Balance b/d1	1,85,000	2017 Mar31	By Depreciation A/c (1,85,000x10%) 18,500	
Apr 1	To Bank A/c	2,40,000		(2,40,000x10%) <u>24,000</u>	42,500
			Mar31	By Balance c/d (1,85,000-18,500) 1,66,500	
				(2,40,000-24,000) <u>2,16,000</u>	3,82,500
		<u>4,25,000</u>			<u>4,25,000</u>
2017 Apr 1	To Balance b/d		2017- 18		
	1 1,66,500		Oct 1	By Depreciation A/c - 1 (1,66,500x10%x6/12)	8,325
	2 <u>2,16,000</u>	3,82,500	Oct 1	By Bank A/c	1,45,000
2018 Jan 1	To Bank A/c - 3	4,00,000	Oct 1	By Profit & Loss A/c (Loss)	13,175
			Mar31	By Depreciation A/c (2,16,000x10%) 21,600	
				(4,00,000x10%x3/12) <u>10,000</u>	31,600
			Mar31	By Balance c/d (2,16,000 -21,600) 1,94,400	
				(4,00,000-10,000) <u>3,90,000</u>	5,84,400
		<u>7,82,500</u>			<u>7,82,500</u>

Working Note 1:-

$$\begin{aligned}
 \text{Total cost of Machinery} &= \text{Cost of Machinery} + \text{Installation charge} \\
 &= 1,80,000 + 20,000 \\
 &= 2,00,000
 \end{aligned}$$

Journal entries

2018

Jan 1	Machinery A/c	...Dr	4,00,000
	Input IGST A/c	...Dr	48,000
	To Bank A/c		4,48,000
	(Being Machinery purchased & IGST @ 12% paid)		

Working Note 2:-

Calculation of Profit/Loss on Sale of Machine

Cost of Machine sold	2,00,000
Less Depreciation 2015-16 = $(2,00,000 \times 10\% \times 9/12) = 15,000$	
Less Depreciation 2016-17 = $(1,85,000 \times 10\%) = 18,500$	
Less Depreciation 2017-18 = $(1,66,500 \times 10\% \times 6/12) = 8,325$	41,825
Written down value on the date of sale	<u>1,58,175</u>
Less Selling price of Machinery	1,45,000
Loss on Sale of Machinery	13,175

Q27. Following balances appear in the books of M/s Amrit as on 1st April, 2020:

2020		
1 st April	Machinery A/c	60,000
	Provision for Depreciation A/c	36,000

On 1st April, 2020, they decided to dispose off machinery for 8,400 which was purchased on 1st April, 2016 for 16,000.

You are required to prepare the Machinery Account, Provision for Depreciation Account and Machinery Disposal Account for the year ended 31st March, 2021. Depreciation was charged at 10% p.a. on cost following Straight Line Method.

Solution –

In the Books of M/s. Amrit

Dr

Machinery Account

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
2020 Apr 1	To Balance b/d		60,000	2020 Apr 1	By Machinery Disposal A/c		16,000
				2021 Mar 31	By Balance c/d		44,000
			60,000				60,000
Apr 1	To Balance b/d		44,000				

Dr Machinery Disposal Account				Cr			
Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
2020 Apr1	To Machinery A/c		16,000	2020 Apr 1	By Provision for Depreciation A/c		6,400
				2021 Mar 31	By Bank a/c		8,400
				Mar 31	By P&L A/c (Loss)		1,200
			16,000				16,000

Dr Provision for Depreciation Account				Cr			
Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
2020 Apr1	To Machinery Disposal A/c (1,600x4)		6,400	2020 Apr 1	By Balance b/d		36,000
2021 Mar31	To Balance c/d		34,000	2021 Mar31	By Depreciation A/c (44,000x10%)		4,400
			40,000				40,000

Working Note 1:-

Calculation of Profit/Loss on Sale of Machine

Value of Machinery on 1 April , 2020	16,000
Less Total Depreciation on Machinery (1,600 x 4)	6,400
Value of Machinery on 1 April, 2020	9,600
Less Selling price of Machinery	8,400
Loss on Sale of Machinery	1,200

Q28. Ashoka 7 Co. Whose Books are closed on 31st March, purchased a machinery for 1, 50,000 on 1st April, 2018. Additional machinery was acquired for 50,000 on 1st October, 2018. Certain machinery which was purchased for 50,000 on 1st October, 2018 was sold for 40,000 on 30th September, 2020.

Prepare the Machinery Account and Accumulated Depreciation Account for all the years up to the Year ended 31st March, 2021. Depreciation is charged @ 10% p.a. on Straight Line Method. Also show the Machinery Disposal Account.

Solution –

Books of Sharma & Co

Dr

Machinery Account

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
------	-------------	-----	--------	------	-------------	-----	--------

2018 Apr 1 Oct 1	To Bank A/c - 1 To Bank A/c - 2		1,50,000 50,000 <u>2,00,000</u>	2019 Mar 31	By Balance c/d		2,00,000
2019 Apr 1	To Balance b/d		2,00,000 <u>2,00,000</u>	2020 Mar 31	By Balance c/d		2,00,000 <u>2,00,000</u>
2020 Apr 1	To Balance b/d		2,00,000 <u>2,00,000</u>	2020 Sep 30 2021 Mar 31	By Machinery Disposal A/c By Balance c/d		50,000 1,50,000 <u>2,00,000</u>

Dr

Provision for Depreciation Account

Cr

Date	Particulars	JF	Amount	Date	Particulars	JF	Amount
2019 Mar31	To Balance c/d		17,500 <u>17,500</u>	2019 Mar31	By Depreciation A/c		17,500 <u>17,500</u>
2020 Mar31	To Balance c/d		37,500 <u>37,500</u>	2020 Apr 1 2020 Mar31	By Balance b/d By Depreciation A/c		17,500 20,000 <u>37,500</u>
2020 Sep30	To Machinery Disposal A/c (2,500 + 5,000 + 2,500)		10,000	2020 Apr 1 Sep30 2021 Mar31	By Balance b/d By Depreciation A/c By Depreciation A/c		37,500 2,500 15,000 <u>55,000</u>
2021 Mar31	To Balance c/d		45,000 <u>55,000</u>				

Dr

Machinery Disposal Account

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
2018 Sep30	To Machinery A/c		50,000 <u>50,000</u>	2018 Sep 30 Sep 30	By Provision for Depreciation A/c By Bank a/c		10,000 40,000 <u>50,000</u>

Working Note 1:-

Calculation of Depreciation

Amount of Depreciation = Opening Balance x Rate of Depreciation x Number of Month

For 2016-17

Amount of Depreciation = 1, 50,000 x 10/100 = 15,000 P.a.

For 2016-17 (6 months)

Amount of Depreciation = 50,000 x 10/100 x 6/12 = 2,500 P.a.

For 2017-18

Amount of Depreciation = 1, 50,000 x 10/100 = 15,000 P.a.

For 2017-18

Amount of Depreciation = 50,000 x 10/100 = 5,000 P.a.

Working Note 2:-

Calculation of Profit or Loss

Original Cost Oct 1 2016	50,000
Less Depreciation	10,000
Book Value on Sept 30, 2018	40,000
Less Sale value	40,000
Profit/Loss	0

Q29. On 1st April, 2014, Veeru Ltd. Purchased a machinery for 2, 50,000 and spent 50,000 on its installation. On 1st July, 2016, 1/3rd of machinery purchased on 1st April, 2014 was sold for 15,000 and a new machinery at the cost of 2, 00,000 was purchased on the same date. The company has adopted the method of providing depreciation @ 15% p.a. on Straight Line Method. Show the Machinery Account, Provision for Depreciation Account and machinery Disposal Account for Three years ended on 31st March, 2015 to 31st March, 2017.

Solution -

Dr

Machinery Account

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
------	-------------	-----	--------	------	-------------	-----	--------

2014 Oct 1	To Cash A/c		2,50,000 2,50,000	2015 Mar 31	By Balance c/d		2,50,000 2,50,000
2015 Apr 1	To Balance b/d		2,50,000 2,50,000	2016 Mar 31	By Balance c/d		2,50,000 2,50,000
2016 Apr 1	To Balance b/d		2,50,000 2,50,000	2017 Jan 1 Mar 31	By Machinery Disposal A/c By Balance c/d		20,000 2,30,000 2,50,000
2017 Apr 1	To Balance b/d		2,30,000				

Dr

Provision for Depreciation Account

Cr

Date	Particulars	JF	Amount	Date	Particulars	JF	Amount
2014 Mar31	To Balance c/d		12,500	2014 Mar31	By Depreciation A/c (2,50,000x10%x6/12)		12,500
			12,500				12,500
2015 Mar31	To Balance c/d		36,250	Apr 1 2015 Mar31	By Balance b/d By Depreciation A/c (2,50,000-12,500)x10%		12,500 23,750
			36,250				36,250
2016 Jan 1	To Machinery Disposal A/c (1,000 + 1,900 + 1,282)		4,182	Apr 1 2016 Jan 1	By Balance b/d By Depreciation A/c (17,100x10%x9/12)		36,250 1,282
Mar31	To Balance c/d		53,015	Mar31	By Depreciation A/c (2,50,000-36,250- 17,100)x10%		19,665
			57,197				57,197
				Apr 1	By Balance b/d		53,015

Dr

Machinery Disposal Account

Cr

Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount
2014 Jan 1	To Machinery A/c		20,000	2014 Jan 1	By Provision for Dep. A/c		4,182
				Jan 1	By Bank a/c		2,000
				Jan 1	By P&L a/c (Loss)		12,818
			20,000				20,000

Working Note 1:-

Calculation of Profit/Loss on Sale of Machine

Cost of Machinery sold on 1 Oct.11	20,000
Less Depreciation 2014-15 = $(20,000 \times 10\% \times 6/12)$	1,000
Written Down value	19,000
Less Depreciation 2015-16 = $(19,000 \times 10\%)$	1,900
Written Down Value	17,100
Less Depreciation 2016-17 = $(17,100 \times 10\% \times 9/12)$	1,282
Written Down Value	15,818
Less Selling price of Machinery	2,000
Loss on Sale of Machinery	13,818