

## Chapter 11- Depreciation

**Q.1 Calculate 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.**

The solution can be presented as follows

Annual Depreciation = (Cost of Machine – Scrap Value of Machine) / Life in Years

$$= (1,20,000 - 72,000) / 4$$

$$= 48000 / 4$$

$$= ₹ 12,000$$

Rate of Depreciation = (Amount of Depreciation / Cost of Machine) × 100

$$= (12,000 / 1,20,000) \times 100$$

$$= 10\%$$

**Q.2 On 1st April, 2019, 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.**

The solution can be presented as follows



**Book of X Ltd.**  
**Machinery Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2019				2020			
Apr-01	Bank		4,00,000	Mar.31	Depreciation		40,000
Apr-01	Bank (Erection Expense)		50,000		Balance c/d		4,10,000
			4,50,000				4,50,000
2020				2021			
Apr-01	Balance b/d		4,10,000	Mar.31	Depreciation		40,000
			4,10,000		Balance c/d		3,70,000
			3,70,000				4,10,000
2021				2022			
Apr-01	Balance b/d		3,70,000	Mar.31	Depreciation		40,000
			3,70,000		Balance c/d		3,30,000
							3,70,000

Working Note:

Depreciation can be calculated as

$$\text{Depreciation} = (4,00,000 + 50,000 - 50,000) / 10$$

$$= 4,00,000 / 10$$

$$= 40,000$$

**Q.3** On 1st April, 2015, 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 2016 and 1st October, 2018 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.

The solution can be presented as follows

Furniture Account							
Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2015 Apr-01	To Bank A/c		55,000	2016 Mar-31	By Depreciation A/c Furniture		5000
				Mar-31	By Balance c/d Furniture 1		50,000
			55,000				55,000
2016 Apr 01	To Balance b/d Furniture 1		50,000	2017 Mar-31	By Depreciation A/c Furniture 1	5,000	
Apr-01	To Bank A/c Furniture 2		9,500		Furniture 2	900	5,900
				Mar-31	By Balance c/d Furniture 1	45,000	
					Furniture 2	8,600	53,600
			59,500				59,500
2017 Apr-01	To Balance b/d Furniture 1	45,000		2018 Mar-31	By Depreciation A/c Furniture 1	5,000	
	Furniture 2	8,600	53,600		Furniture 2	900	5,900
				Mar-31	By Balance c/d Furniture 1	40,000	
			53,600		Furniture 2	7,700	47,700
							53,600
2018 Apr-01	To Balance b/d Furniture 1	40,000		2019 Mar-31	By Depreciation A/c Furniture 1	5,000	
	Furniture 2	7,700	47,700		Furniture 2	900	
					Furniture 3	400	6,300
Oct-01	To Bank A/c		8,400	Mar-31	By Balance c/d Furniture 1	35,000	
					Furniture 2	6,800	
					Furniture 3	8,000	49,800
			56,100				56,100



**Working Notes:**

We know that

Annual Depreciation = (Cost of Asset – Scrap Value of Asset) / Life in Years

Now for Furniture 1

Annual Depreciation = (55000 – 5000) / 10

= 50000 / 10

= 5000

Furniture 2

Annual Depreciation = (9500 – 500) / 10

= 9000 / 10

= 900

Furniture 3

Annual Depreciation = (8400 – 400) / 10

= 8000 / 10

= 800

As furniture was purchased 6 months into the accounting hence depreciation for 6 months will be half therefore it will be 400.



**Q.4** From the following transactions of a concern, prepare the Machinery Account for the year ended 31st March, 2019:

- 1st April, 2018 : Purchased a second-hand machinery for ₹ 40,000  
 1st April, 2018 : Spent ₹ 10,000 on repairs for making it serviceable.  
 30th September, 2018 : Purchased additional new machinery for ₹ 20,000.  
 31st December, 2018 : Repairs and renewal of machinery ₹ 3,000.  
 31st March, 2019 : Depreciate the machinery at 10% p.a.

The solution can be presented as follows

**Machinery Account**

Dr.

Cr.

Date	Particulars	J.F.	Amount (₹)	Date	Particular	J.F.	Amount (₹)
2018				2019			
Apr.01	Bank (M1)		50,000	Mar.31	Depreciation		
Sep-30	Bank (M2)		20,000		M1		5,000
					M2 (6 months)		1,000
							6,000
				Mar.31	Balance c/d		
					M1		45,000
					M2 (6 months)		19,000
			70,000				64,000
							70,000

**Note:** The expenses for repair will not be accounted as repair was done after the machine was put to use.

**Q.5** An asset was purchased for ₹ 10,500 on 1st April, 2012. 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, 2019. Calculate the following.

(i) The Depreciation expense for the year ended 31st March, 2013.

(ii) The net book value of the asset on 31st March, 2017.

(iii) The gain or loss on sale of the asset on 31st March, 2019.

The solution can be presented as follows

Asset Account							
Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2012				2013			
Apr-01	Bank		10,500	Mar.31	Depreciation		1,000
				Mar.31	Balance c/d		9,500
			10,500				10,500
2013				2014			
Apr-01	Balance b/d		9,500	Mar.31	Depreciation		1,000
			9,500	Mar.31	Balance c/d		8,500
							9,500
2014				2015			
Apr-01	Balance b/d		8,500	Mar.31	Depreciation		1,000
			8,500	Mar.31	Balance c/d		7,500
							8,500
2015				2016			
Apr-01	Balance b/d		7,500	Mar.31	Depreciation		1,000
			7,500	Mar.31	Balance c/d		6,500
							7,500
2016				2017			
Apr-01	Balance b/d		6,500	Mar.31	Depreciation		1,000
			6,500	Mar.31	Balance c/d		5,500
							6,500
2017				2018			
Apr-01	Balance b/d		5,500	Mar.31	Depreciation		1,000
			5,500	Mar.31	Balance c/d		4,500
							5,500
2018				2019			
Apr-01	Balance b/d		4,500	Mar.31	Depreciation		1,000
				Mar.31	Bank		600
				Mar.31	Profit and Loss (Loss)		2,900
			4,500				4,500



**The following values are obtained**

- (i) For the year ended March 31, 2013 Depreciation Expense is ₹ 1000
- (ii) The Net Book Value of the asset on March 31, 2017 is found to be ₹ 5,500
- (iii) Loss on Sale of the asset on March 31, 2019 was calculated to be ₹ 2,900

**Q.6 On 1st April, 2015, A Ltd. purchased a machine for ₹ 2,40,000 and spent ₹ 10,000 on its erection. On 1st October, 2015 an additional machinery costing ₹ 1,00,000 was purchased. On 1st October, 2017, the machine purchased on 1st April, 2015 was sold for ₹ 1,43,000 and on the same date, a new machine was purchased at 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.**

The solution can be presented as follows



# Machinery Account

Dr.

Cr.

Date	Particulars	J.F	Amount(₹)	Date	Particulars	J.F.	Amount(₹)
2015				2016			
Apr-01	To Bank A/c (2,40,000 + 10,000)		2,50,000	Mar-31	By Depreciation A/c		
	Machinery 1				Machinery 1	12,500	
Oct-01	To Bank A/c		1,00,000		Machinery 2 (for 6 Months)	2,500	15,000
	Machinery 2						
				Mar-31	By Balance c/d		
					Machinery 1	2,37,500	
					Machinery 2	97,500	3,35,000
			3,50,000				3,50,000
2016				2017			
Apr-01	To Balance b/d			Mar-31	By Depreciation A/c		
	Machinery 1	2,37,500			Machinery 1	12,500	
	Machinery 2	97,500	3,35,000		Machinery 2	5,000	17,500
				Mar-31	By Balance c/d		
					Machinery 1	2,25,000	
					Machinery 2	92,500	3,17,500
			3,35,000				3,35,000
2017				2017			
Apr-01	To Balance b/d			Oct-01	By Depreciation A/c (for 6 months)		6,250
	Machinery 1	2,25,000		Oct-01	To Bank A/c		1,43,000
	Machinery 2	92,500	3,17,500		(Machinery 1 sold)		
				Oct-01	By Profit and loss A/c		75,750
					(loss on sale)		
Oct-01	To Bank A/c		2,00,000	2018			
				Mar-31	By Depreciation A/c		
					Machinery 2	5,000	
					Machinery 3 (for 6 months)	5,000	10,000
				Mar-31	By Balance c/d		
					Machinery 2	87,500	
					Machinery 3	1,95,000	2,82,500
			5,17,500				5,17,500
2018				2019			
Apr-01	To Balance b/d			Mar-31	By Depreciation A/c		
	Machinery 1	87,500			Machinery 2	5,000	
	Machinery 2	1,95,000	2,82,500		Machinery 3	10,000	15,000
				Mar-31	By Balance c/d		
					Machinery 2	82,500	
					Machinery 3	1,85,000	2,67,500
			2,82,500				2,82,500





**Working Notes:**

1. Deprecation for machines can be calculated as

$$\text{Machine 1} = 2,50,000 \times 5 / 100$$

$$= 12,500$$

$$\text{Machine 2} = 1,00,000 \times 5 / 100$$

$$= 5,000$$

$$\text{Machine 3} = 2,00,000 \times 5 / 100$$

$$= 10,000$$

2. Calculation of profit or loss on sale of Machine 1

Particulars	Amount (₹)
Book Value on April 01, 2017	2,25,000
Less : Deprecation for six months	-6,250
Book Value on Oct. 01, 2017	2,18,750
Less : Sale Proceeds	-1,43,000
Loss on Sale of Machine	75,750



**Q.7 A Van was purchased on 1st April, 2016 for ₹ 60,000 and ₹ 5,000 was spent on its repair and registration. On 1st October, 2017 another van was purchased for ₹ 70,000. On 1st April, 2018, the first van purchased on 1st April, 2016 was sold for ₹ 45,000 and a new van costing ₹ 1,70,000 was purchased on the same date. Show the Van Account from 2016-17 to 2018-19 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.**

The solution can be presented as follows

Van Account							
Dr.				Cr.			
Date	Particulars	J.F.	₹ .	Date	Particulars	J.F.	₹ .
2016				2017			
Apr-01	To Bank A/c			Mar-31	By Depreciation A/c Van I		6,500
	Van I		65,000	Mar-31	By Balance c/d Van I		58,500
			<b>65,000</b>				<b>65,000</b>
2017				2018			
Apr-01	To Balance b/d Van I		58,500	Mar-31	By Depreciation A/c Van I	6,500	
Oct-01	To Bank A/c Van II		70,000		Van II (6 month)	3,500	10,000
				Mar-31	By Balance c/d Van I	52,000	
					Van II	66,500	1,18,500
			<b>1,28,500</b>				<b>1,28,500</b>
2018				2018			
Apr-01	To Balance b/d Van I			Apr-01	By Bank A/c Van I		45,000
	Van I	52,000		Apr-01	By Profit and Loss A/c		7,000
	Van II	<u>66,500</u>	1,18,500	2019			
Apr-01	To Bank A/c Van III		1,70,000	Mar-31	By Depreciation A/c Van II	7,000	
					Van III	17,000	24,000
				Mar-31	By Balance c/d Van II	59,500	
					Van III	<u>1,53,000</u>	<u>2,12,500</u>
			<b>2,88,500</b>				<b>2,88,500</b>



### Working Notes

1. Depreciation can be calculated as

$$\text{Van 1} = 65,000 \times 10 / 100$$

$$= 6,500$$

$$\text{Van 2} = 70,000 \times 10 / 100$$

$$= 7,000$$

$$\text{Van 3} = 1,70,000 \times 10 / 100$$

$$= 17,000$$

2. Calculation of profit or loss on sale of Van (I)

Particulars	Amount (₹)
Book Value on Apr. 01, 2018	52,000
Less: Sale of Van	-45,000
Loss on Sale of Van	7,000

**Q.8** On 1st April, 2015, Star Ltd. purchased 5 machines for ₹ 60,000 each. On 1st April, 2017, one of the machines was sold at a loss of ₹ 8,000. On 1st July, 2018, second machine was sold at a loss of ₹ 12,500. A new machine was purchased for ₹ 1,00,000 on 1st October, 2018.

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.



The solution can be presented as follows

**Machinery Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2015 Apr-01	To Bank A/c (60,000×5)			2016 Mar-31	By Depreciation A/c (6,000×5)		30,000
			3,00,000	Mar-31	By Balance c/d Van I		2,70,000
			<b>3,00,000</b>				<b>3,00,000</b>
2016 Apr-01	To Balance b/d (54,000×5)		2,70,000	2017 Mar-31	By Depreciation A/c (6,000×5)		30,000
			2,70,000	Mar. 31	By Balance c/d		2,40,000
			<b>2,70,000</b>				<b>2,70,000</b>
2017 Apr-01	To Balance b/d (48,000×5)		2,40,000	2017 Apr-01	By Bank A/c		40,000
			2,40,000	Apr-01	By Profit and Loss A/c		8,000
				2018 Mar-31	By Depreciation A/c		
					Remaining 4 Machines (6,000×4)		24,000
			<b>2,40,000</b>	Mar-31	By Balance c/d		1,68,000
			1,68,000				<b>2,40,000</b>
2018 Apr-01	To Balance b/d (42,000×4)		1,68,000	2018 Jul-01	By Bank A/c		28,000
				Jul-01	By Profit and Loss A/c		12,500
				Jul-01	By Depreciation (Machine Sold)		1,500
Oct-01	To Bank A/c		1,00,000	2019 Mar-31	By Depreciation A/c		
					Remaining 3 Machines (6,000×3)		18,000
					By Depreciation New Machine- 6 Months		5,000
				Mar-31	By Balance c/d		
					Machine (Old-3)-36,000×3		1,08,000
					Machine (New-1) 95,000		95,000
			<b>2,68,000</b>				<b>2,68,000</b>



**Working Notes:**

1) Sale proceeds obtained from Machinery sold on 1st April, 2017

Book Value of Machine on 1st April 2017 = (Total machine opening balance / 5)

$$= ₹ (2,40,000/5)$$

$$= ₹ 48,000$$

$$\text{Loss on Sale of Machinery} = ₹ 8,000$$

Sale proceeds = Book Value – Loss on Sale

$$= ₹ (48,000 – 8,000)$$

$$= ₹ 40,000$$

2) Sale proceeds obtained from Machinery sold on 1st July 2018

Book Value of the Machine = [(Total opening balance of Machinery on this date/4) – Depreciation]

$$= ₹ [(1,68,000/4) – 1,500]$$

$$= ₹ 40,500$$

Loss on Sale of Machinery = ₹ 12,500

Sale proceeds from the Machinery = Book Value of the Machine – Loss on Sale

$$= (40,500 – 12,500)$$

$$= ₹ 28,000$$

**Q.9** A company whose accounting year is a financial year, purchased on 1st July, 2015 machinery costing ₹ 30,000. It purchased further machinery on 1st January, 2016 costing ₹ 20,000 and on 1st October, 2016 costing ₹ 10,000. On 1st April, 2017, one-third of the machinery installed on 1st July, 2015 became 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, 2018?

The solution can be presented as follows



**Machinery Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2015 Jul-01	To Bank A/c Machinery I		30,000	2016 Mar-31	By Depreciation A/c Machinery I (9 months)		2,250
2016 Jan-01	To Bank A/c Machinery II		20,000	Mar-31	Machinery II		500
					By Balance c/d		
					Machinery I		27,750
					Machinery II		19,500
			<b>50,000</b>				<b>47,250</b>
2016 Apr-01	To Balance b/d Machinery I			2017 Mar-31	By Depreciation A/c Machinery I		3,000
	Machinery II				Machinery II		2,000
			47,250		Machinery III		500
Oct-01	To Bank A/c Machinery III		10,000	Mar-31	By Balance c/d		
					Machinery I		24,750
					Machinery II		17,500
					Machinery III		9,500
			<b>57,250</b>				<b>51,750</b>
2017 Apr-01	To Balance b/d			2017 Apr-01	By Bank A/c Machinery I (1/3 <sup>rd</sup> portion)		3,000
	Machinery I		24,750	Apr-01	By Profit and Loss A/c		5,250
	Machinery II		17,500	2018 Mar-31	By Depreciation A/c		
	Machinery III		9,500		Machinery I (on 2/3 <sup>rd</sup> portion)		2,000
			51,750		Machinery II		2,000
					Machinery III		1,000
				Mar-31	By Balance c/d		
					Machinery I (on 2/3 <sup>rd</sup> portion)		14,500
					Machinery II		15,500
					Machinery III		8,500
			<b>51,750</b>				<b>38,500</b>
							<b>51,750</b>



### Working Notes

#### 1. Calculation of Depreciation

$$\text{Machine 1} = 30,000 \times 10 / 100$$

$$= 3,000$$

$$\text{Depreciation of } 2/3^{\text{rd}} \text{ of the machine} = 3000 \times 2 / 3$$

$$= 2,000$$

$$\text{Machine 2} = 20,000 \times 10 / 100$$

$$= 2,000$$

$$\text{Machine 3} = 10,000 \times 10 / 100$$

$$= 1,000$$

#### 2. Calculation of profit or loss on sale of $1/3^{\text{rd}}$ Portion of Machine I

Particulars	Amount (₹)
Book Value of $1/3^{\text{rd}}$ portion of Machine I on April 01, 2017 ( $24,750 \times 1/3$ )	8,250
Less: Sale Value	-3,000
Loss on sale	5,250



**Q.10** On 1st July, 2015, A Co. Ltd. purchases second-hand machinery for ₹ 20,000 and spends ₹ 3,000 on reconditioning and installing it. On 1st January, 2016, the firm purchases new machinery worth ₹ 12,000. On 30th June, 2017, the machinery purchased on 1st January, 2016, was sold for ₹ 8,000 and on 1st July, 2017, a fresh plant was installed.

Payments for this plant was to be made as follows:

1st July, 2017	₹ 5,000
30th June, 2018	₹ 6,000
30th June, 2019	₹ 5,500

Payments in 2018 and 2019 include interest of ₹ 1,000 and ₹ 500 respectively.

The company writes off 10% p.a. on the original cost. The accounts are closed every year on 31st March. Show the Machinery Account for the year ended 31st March, 2018.

The solution can be presented as follows



In the books of A. Co. Ltd  
Machinery

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2015 Jul-01	To Bank A/c Machinery I (20,000+3,000)		23,000	2016 Mar-31	By Depreciation A/c Machinery I (9 months)		1,725
2016 Jan-01	To Bank A/c Machinery II		12,000	Mar-31	Machinery II (3 months)		300
				Mar-31	By Balance A/c Machinery I		21,275
					Machinery II		11,700
			35,000				32,975
2016 Apr-01	To Balance b/d Machinery I		21,275	2017 Mar-31	By Depreciation A/c Machinery I		2,300
	Machinery II		11,700		Machinery II		1,200
			32,975	Mar-31	By Balance A/c Machinery I		18,975
					Machinery II		10,500
			32,975				29,475
2017 Apr-01	To Balance c/d Machinery I		18,975	2017 Jun-30	By Bank A/c Machinery II		8,000
	Machinery II		10,500	Jun-30	By Depreciation A/c Machinery II (3 months)		300
			29,475	Jun-30	By Profit and Loss A/c		2,200
Jul-01	To Bank A/c Machinery III		5,000	2018 Mar-31	By Depreciation A/c Machinery I		2,300
Jul-01	To Creditors for Machinery A/c (Machinery III)		10,000		Machinery III (on 15,000 for 8 months)		1,125
					By Balance c/d Machinery I		16,675
					Machinery III		13,875
			44,475				30,550
							44,475



### Working Notes

#### 1. Calculation of Depreciation

$$\text{Machine 1} = 23,000 \times 10 / 100$$

$$= 2,300$$

$$\text{Machine 2} = 12,000 \times 10 / 100$$

$$= 1,200$$

$$\text{Machine 3} = 15,000 \times 10 / 100$$

$$= 1,500$$

#### 2. Calculation of profit on loss on sale of Machine (II)

Particulars	Amount (₹)
Book Value of Machine (II) on April 01, 2017	10,500
Less : Depreciation for 3 Months	-300
Book Value on June 30	10,200
Less : Sale	-8,000
Loss on Sale	2,200

**Q.11** On 1st April, 2016, Shivam Enterprise purchased a second-hand machinery for ₹ 52,000 and spent ₹ 2,000 on cartage, ₹ 3,000 on unloading, ₹ 2,000 on installation and ₹ 1,000 as brokerage of the middle man. It was estimated that the machinery will have a scrap value of ₹ 6,000 at the end of its useful life, which is 10 years. On 31st December 2016, repairs and renewals amounted to ₹ 2,500 were paid. On 1st October, 2018, this machine was sold for ₹ 30,600 and an amount of ₹ 600 was paid as commission to an agent. Calculate the amount of annual depreciation and rate of depreciation. Also prepare the Machinery Account for first 3 years, assuming that firm follows financial year for accounting.

The solution can be presented as follows

Amount of Depreciation =  $\text{Cost of Machine} - \text{Scrap Value of Machine}$  / Life in Years

$$= (60,000 - 6,000) / 10$$

$$= 5,400$$

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

$$= (5,400 / 60,000) \times 100$$

$$= 9\%$$



### Machinery Account

Dr.			Cr.		
Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2016			2017		
Apr. 01	Bank A/c	60,000	Mar. 31	Depreciation A/c	5,400
			Mar. 31	Balance c/d	54,600
		60,000			60,000
2017			2018		
Apr. 01	Balance b/d	54,600	Mar. 31	Depreciation A/c	5,400
			Mar. 31	Balance c/d	49,200
		54,600			54,600
2018			2019		
Apr. 01	Balance b/d	49,200	Oct. 01	Depreciation A/c (for 6 months)	2,700
				Bank A/c (Sale)	30,000
				Profit and Loss A/c (Loss on Sale)	16,500
		49,200			49,200

#### Working Notes:

Calculation of Profit or Loss on Sale

Particulars	Amount
Value of Machine as on Apr. 01, 2018	49,200
Less: Depreciation for 6 months	2,700
Value of Machine 1 as on Oct. 01, 2018	46,500
Less: Sale Value	30,000
<b>Loss on Sale</b>	<b>16,500</b>



**Q.12** Modern Ltd. purchased a machinery on 1st August, 2016 for ₹ 60,000. On 1st October, 2017, it purchased another machine for ₹ 20,000 *plus* CGST and SGST @ 6% each. On 30th June, 2018, it sold the first machine purchased in 2016 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.

The solution can be presented as follows

**In the book of Modern Ltd.  
Machinery Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2016 Aug-01	To Bank A/c Machinery 1		60,000	2017 Mar-31	By Depreciation A/c Machinery 1 (8 months)		8,000
				Mar-31	Balance c/d		52,000
			<b>60,000</b>				<b>60,000</b>
2017 Apr-01	To Balance b/d		52,000	2018 Mar-31	By Depreciation A/c Machinery 1	12,000	
Oct-01	To Bank A/c Machinery 2		20,000		Machinery 2 (6 Months)	2,000	14,000
				Mar-31	By Balance c/d Machinery 1	40,000	
					Machinery 2	18,000	58,000
			<b>72,000</b>				<b>72,000</b>
2018 Apr-01	To Balance b/d			2018 Jun-30	By Depreciation A/c Machinery 1 (3 months)		3000
	Machinery 1	40,000		Jun-30	By Bank A/c Machinery 1		38,500
	Machinery 2	18,000	58,000	2019 Mar-31	By Depreciation A/c Machinery 2		4,000
Jun-30	To Profit and Loss A/c (profit)		1,500	Mar-31	By Balance c/d		14,000
			<b>59,500</b>				<b>59,500</b>

### Input CGST A/c

Dr.				Cr.			
Date	Particulars	J.F.	(₹)	Date	Particulars	J.F.	(₹)
2017 Oct-01	To Purchases A/c		1,200	2018 Mar-31	By Balance c/d		1,200
			1,200				1,200

### Input SGST A/c

Dr.				Cr.			
Date	Particulars	J.F.	(₹)	Date	Particulars	J.F.	(₹)
2017 Oct-01	To Purchases A/c		1,200	2018 Mar-31	By Balance c/d		1,200
			1,200				1,200

### Output IGST A/c

Dr.				Cr.			
Date	Particulars	J.F.	(₹)	Date	Particulars	J.F.	(₹)
2019 Mar-31	By Balance c/d		4,620	2018 Jun-30	To sales A/c		4,620
			4,620				4,620

### Working Notes

#### 1. Calculation of Annual Depreciation

$$\text{Machine 1} = (60,000 \times 20) / 100$$

$$= 12,000$$

$$\text{Machine 2} = (20,000 \times 20) / 100$$

$$= 4,000$$

## 2. Calculation of Profit or Loss

Particulars	Amount (₹)
Value on Apr 01, 2018	40,000
Depreciation for 3 Months	-3,000
Value on June 30, 2018	37,000
Less : Sales Value of Machine	-38,500
Profit on sale of Machine 1	1,500

**Q.13** On 1st July, 2016, Sohan Lal & Sons purchased a plant costing ₹ 60,000. Additional plant was purchased on 1st January, 2017 for ₹ 40,000 and on 1st October, 2017, for ₹ 20,000, *plus* CGST and SGST @ 6% each. On 1st April, 2018, one-third of the plant purchased on 1st July, 2016, 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.

The solution can be presented as follows

**In the book of Sohan Lal and Sons  
Plant Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2016 Jul-01	To Bank A/c Plant I		60,000	2017 Mar-31	By Depreciation A/c Plant I (9 months)		4,500
2017 Jan-01	To Bank A/c Plant II		40,000	Mar-31	Plant II (3 months)		1,000
					By Balance c/d		
					Plant I	55,500	
					Plant II	39,000	94,500
			<b>1,00,000</b>				<b>1,00,000</b>
2017 Apr-01	To Balance b/d Plant I			2018 Mar-31	By Depreciation A/c		
	Plant II	55,500			Plant I	6,000	
		39,000	94,500		Plant II	4,000	
Oct-01	To Bank A/c Plant III		20,000		Plant III (6 months)	1,000	11,000
				Mar-31	By Balance c/d		
					Plant I	49,500	
					Plant II	35,000	
					Plant III	19,000	1,03,500
			<b>1,14,500</b>				<b>1,14,500</b>
2018 Apr-01	To Balance b/d			2018 Apr-01	By Bank A/c		6,000
	Plant I	49,500		Apr-01	By Profit and Loss A/c		10,500
	Plant II	35,000	1,03,500	2019 Mar-31	By Depreciation A/c		
	Plant III	19,000			Plant I	4,000	
					Plant II	4,000	
					Plant III	2,000	10,000
				Mar-31	By Balance c/d		
					Plant I	29,000	
					Plant II	31,000	
					Plant III	17,000	77,000
			<b>1,03,500</b>				<b>1,03,500</b>

**Input CGST A/c**

Dr.				Cr.			
Date	Particulars	J.F.	(₹)	Date	Particulars	J.F.	(₹)
2017				2018			
Oct-01	To Purchases A/c		1,200	Mar-31	By Balance c/d		1,200
			<b>1,200</b>				<b>1,200</b>





**Input SGST A/c**

Dr.				Cr.			
Date	Particulars	J.F.	(₹)	Date	Particulars	J.F.	(₹)
2017 Oct-01	To Purchases A/c		1,200	2018 Mar-31	By Balance c/d		1,200
			<b>1,200</b>				<b>1,200</b>

**Output CGST A/c**

Dr.				Cr.			
Date	Particulars	J.F.	(₹)	Date	Particulars	J.F.	(₹)
2019 Mar-31	By Balance c/d		360	2018 Apr-01	To Sales A/c		360
			<b>360</b>				<b>360</b>

**Output SGST A/c**

Dr.				Cr.			
Date	Particulars	J.F.	(₹)	Date	Particulars	J.F.	(₹)
2019 Mar-31	By Balance c/d		360	2018 Apr-01	To Sales A/c		360
			<b>360</b>				<b>360</b>

**Working Notes**

1. Calculation of Depreciation

Plant 1 =  $60,000 \times 10 / 100 = 6,000$

Plant 2 =  $40,000 \times 10 / 100 = 4,000$

Plant 3 =  $20,000 \times 10 / 100 = 2,000$



2. Calculation of profit or loss on Sale of Plant I

Particulars	Amount (₹)
1/3 <sup>rd</sup> of Book Value of Plant I as on April 01, 2018 ( $49,500 \times 1/3$ )	16,500
Less : Sale of Plant	-6,000
Loss on Sale of Plant	10,500

**Q.14** Following balances appear in the books of Rama Bros:

		₹
1st April, 2016	Machinery A/c	80,000
	Provision for Depreciation A/c	36,000

On 1st April, 2016, they decided to sell a machine for ₹ 8,700. This machine was purchased for ₹ 16,000 in April, 2012. Prepare the Provision for Depreciation Account and Machinery Account on 31st March, 2017, assuming the firm has been charging Depreciation at 10% p.a. on Straight Line Method.

The solution can be presented as follows

**In the books of Rama Bros.  
Machinery Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2016 Apr-01	To Balance b/d (64000 + 16000)		80,000	2016 Apr-01	By Provision for Depreciation A/c		6,400
				Apr-01	By Bank A/c		8,700
				Apr-01	By Profit and Loss A/c		900
				2017 Mar-31	By Balance c/d		64,000
			80,000				80,000



### Provision for Depreciation Account

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2016				2016			
Apr-01	To Machinery A/c (Accumulate dep. for Machinery sold )		6,400	Apr-01	By Balance b/d		36,000
2017				2017			
Mar-31	To Balance c/d		36,000	Mar-31	By Depreciation A/c		6,400
			<b>42,400</b>				<b>42,400</b>

### Working Notes

(1) Calculation of Book Value of Machine Sold on April 01, 2016

Particulars	Amount (₹)
Machine purchased in 2012	16,000
Less: Accumulate Depreciation for 4 years till Mar 31, 2016 (1,600 × 4)	-6,400
<b>Book value on April 01, 2016</b>	<b>9,600</b>

(2) Calculation of profit or loss on Sale of Machine

Particulars	Amount (₹)
Book Value on April 01, 2016	9,600
Less: Sale Value	-8,700
<b>Loss on Sale of Machine</b>	<b>900</b>

**Q.15** Following balances appear in the books of Priyank Brothers:

		₹
1st April, 2017	Machinery A/c	20,00,000
	Provision for Depreciation A/c	8,00,000

On 1st April, 2017, they decide to sell a machine for ₹ 5,00,000. This machine was purchased for ₹ 7,50,000 on 1st April, 2014. Prepare the Machinery Account and Provision for Depreciation Account for the year ended 31st March, 2018 assuming that the firm has been charging Depreciation @ 10% p.a. on the Straight-Line Method.

The solution can be presented as follows

**Books of Priyank Brothers  
Machinery Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2017				2017			
Apr-01	Balance b/d		20,00,000	Apr-01	Provision for Depreciation		2,25,000
				Apr-01	Bank		5,00,000
				Apr-01	Profit and Loss (Loss)		25,000
				2018			
				Mar.31	Balance c/d		12,50,000
			20,00,000				20,00,000



### Provision for Depreciation Account

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2017				2017			
Apr-01	Machinery		2,25,000	Apr-01	Balance b/d		8,00,000
2018				2018			
Mar.31	Balance c/d		7,00,000	Mar.31	By Depreciation A/c		1,25,000
			9,25,000				9,25,000

### Working Notes

#### 1. Calculation of Loss on Sale of Machinery

Particulars	Amount (₹)
Original cost of Machine Sold	7,50,000
Less: Accumulated Depreciation on Machine Sold, for 3 years, (7,50,000 × 10% × 3 years)	-2,25,000
Book Value of Machine Sold	5,25,000
Less: Sale Value	-5,00,000
Loss on Sale of Machine	25,000

**Q.16** Following balances appear in the books of X Ltd. as on 1st April, 2018:

	₹
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, 2018, a machinery which was purchased on 1st July, 2015 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, 2019.

The solution can be presented as follows

Machinery Account							
Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2018				2018			
Apr-01	To Balance b/d (4,00,000 +1,00,000)		5,00,000	Oct-01	By Provision for Depreciation A/c		32,500
Oct-01	To Bank A/c		2,00,000	Oct-01	By Bank A/c		42,000
				Oct-01	By Profit and Loss A/c		25,500
				2019			
				Mar-31	By Balance c/d		6,00,000
			<b>7,00,000</b>				<b>7,00,000</b>

Provision for Depreciation A/c Account							
Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2018				2018			
Oct-01	To Machinery A/c		32,500	Apr-01	By Balance b/d		2,25,000
2019				2019			
Mar-31	To Balance c/d		2,47,500	Mar-31	By Depreciation A/c		55,000
			<b>2,80,000</b>				<b>2,80,000</b>

### Working Notes:

1. Calculation of Loss on Sale of Machinery

Particulars	Amount (₹)
Original cost of Machine Sold	1,00,000
Less: Accumulated Depreciation on Machine Sold, from July 2015 to Oct 01, 2018 ( $1,00,000 \times 10\% \times 3.25$ years)	-32,500
Book Value of Machine Sold	67,500
Less: Sale Value	-42,000
Loss on Sale of Machine	25,500

## 2. Calculation of Depreciation Charged during the year

Particulars	Amount (₹)
On 4,00,000 @ 10% ( $4,00,000 \times 10\%$ )	40,000
On 2,00,000 @ 10% for 6 months ( $2,00,000 \times 10\% \times 6/12$ )	10,000
On 1,00,000 @ 10% for 6 months ( $1,00,000 \times 10\% \times 6/12$ )	5,000
Total	55,000

## 3. Journal entries for sale and purchase with GST

### Journal

Date	Particulars	L.F.	Debit Amount (₹)	Credit Amount (₹)
2018 Oct-01	Bank A/c Dr. To Machinery A/c To Output CGST A/c To Output SGST A/c (Machinery purchased on 1st July, 2014 sold with CGST @ 12% paid.)		47,040	42,000 2,520 2,520
Oct-01	Machinery A/c Dr. Input IGST A/c Dr. To Bank A/c (Machinery purchased with IGST @ 12% paid.)		2,00,000 24,000	2,24,000

**Q.17 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.**

The solution can be presented as follows

Boiler Account							
Dr				Cr			
Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
1st year				1st year			
Jan.01	Bank (10,000 + 2,000 + 7,000 + 1,000)		20,000	Dec.31	Depreciation		2,000
					Balance c/d		18,000
			20,000				20,000
2nd year				2nd year			
Jan.01	Balance b/d		18,000	Dec.31	Depreciation		1,800
				Dec.31	Balance c/d		16,200
			18,000				18,000
3rd year				3rd year			
Jan.01	Balance b/d		16,200	Dec.31	Depreciation		1,620
				Dec.31	Balance c/d		14,580
			16,200				16,200



**Q.18** 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.

The solution can be presented as follows

Furniture Account (Original Cost Method)							
Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
I year Jan.01	Bank		4,000	I year Dec.31	Depreciation		200
				Dec.31	Balance c/d		3,800
			4,000				4,000
II year Jan.01	Balance b/d		3,800	II year Dec.31	Depreciation		200
				Dec.31	Balance c/d		3,600
			3,800				3,800
III year Jan.01	Balance b/d		3,600	III year Dec.31	Depreciation		200
				Dec.31	Balance c/d		3,400
			3,600				3,600
IV year Jan.01	Balance b/d		3,400	IV year Dec.31	Depreciation		200
				Dec.31	Balance c/d		3,200
			3,400				3,400

**Furniture Account**  
(Diminishing Balance Method)

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
I year Jan.01	Bank		4,000	I year Dec.31	Depreciation		200
				Dec.31	Balance c/d		3,800
			4,000				4,000
II year Jan.01	Balance b/d		3,800	II year Dec.31	Depreciation		190
				Dec.31	Balance c/d		3,610
			3,800				3,800
III year Jan.01	Balance b/d		3,610	III year Dec.31	Depreciation		181
				Dec.31	Balance c/d		3,429
			3,610				3,610
IV year Jan.01	Balance b/d		3,429	IV year Dec.31	Depreciation		171
				Dec.31	Balance c/d		3,258
			3,429				3,429

**Q.19** Babu purchased on 1st April, 2017, a machine for ₹ 6,000. On 1st October, 2017, he also purchased another machine for ₹ 5,000. On 1st October, 2018, he sold the machine purchased on 1st April, 2017 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, 2018 and 2019.

The solution can be presented as follows

**Books of Babu  
Machinery Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2017 Apr. 01 Oct. 01	Bank (I) Bank (II)		6,000 5,000	2018 Mar. 31	Depreciation I II (for 6 months)		600 250
				Mar. 31	Balance c/d I II		850 5,400 4,750
			11,000				10,150 11,000
2018 Apr. 01	Balance b/d I II			2018 Oct. 01 Oct. 01 Oct. 01	Depreciation (I) (for 6 months) Bank (I) Profit and Loss (Loss)		270 4,000 1,130
			10,150	2019 Mar. 31 Mar. 31	Depreciation (II) Balance c/d (II)		475 4,275
			10,150				10,150

**Working Note**

(1) Calculation of profit or loss on sale of machine:

Particulars	Amount (₹)
Book Value of Machinery Apr. 01, 2018	5,400
Less : Depreciation (for 6 Months)	-270
Book Value of Machinery on Oct. 01 2018	5,130
Less : Sale	-4,000
Loss on Sale	1,130



**Q.20** X bought a machine for ₹ 25,000 on which he spent ₹ 5,000 for carriage and freight. ₹ 1,000 for brokerage of the middleman, ₹ 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.

The solution can be presented as follows

**Books of X  
Machinery Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
I year Jan.01	Bank (25,000 + 5,000 + 1,000 + 3,500 + 500)		35,000	I year Dec.31	Depreciation		3,500
				Dec.31	Balance c/d		31,500
			35,000				35,000
II year Jan.01	Balance b/d		31,500	II year Dec.31	Depreciation		3,150
				Dec.31	Balance c/d		28,350
			31,500				31,500
III year Jan.01	Balance b/d		28,350	III year Dec.31	Depreciation		2,835
				Dec.31	Balance c/d		25,515
			28,350				28,350
IV year Jan.01	Balance b/d		25,515	IV year Jan.01	Bank (30,500 – 500 brokerage)		30,000
Dec.31	Profit and Loss (Profit)		4,485				
			30,000				30,000



**Q.21** A company purchased a machinery for ₹ 50,000 on 1st October, 2016. Another machinery costing ₹ 10,000 was purchased on 1st December, 2017. On 31st March, 2019, the machinery purchased in 2016 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.

The solution can be presented as follows

Machinery Account							
Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2016 Oct.01	Bank (I)		50,000	2017 Mar.31	Depreciation (for 6 Months)		3,750
				Mar.31	Balance c/d		46,250
			50,000				50,000
2017 Apr.01	Balance b/d (I)		46,250	2018 Mar.31	Depreciation		
Dec.01	Bank (II)		10,000		I 6,938		
					II 500		7,438
				Mar.31	Balance c/d		
					I 39,312		
					II 9,500		48,812
			56,250				56,250
2018 Apr.01	Balance b/d			2019 Mar.31	Depreciation		
	I 39,312				I 5,897		
	II 9,500		48,812		II 1,425		7,322
				Mar.31	Bank (I)		28,415
				Mar.31	Profit and Loss (Loss)		5,000
				Mar.31	Balance c/d (II)		8,075
			48,812				48,812

### Working Note

Calculation of profit or loss on sale of machine:

Particulars	Amount (₹)
Book Value of Machine I on Apr. 01, 2018	39,312
Less : Depreciation (39,312 × 15%)	5,897
Book Value of Machine I on Mar. 31, 2019	33,415
Less : Sale Value	-28,415
Loss on Sale of Machine I	5,000

**Q.22** On 1st April, 2016, a machinery was purchased for ₹ 20,000. On 1st October, 2017 another machine was purchased for ₹ 10,000 and on 1st April, 2018, 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, 2017, 2018 and 2019? What will be the balance in Machinery Account as on 31st March, 2019?

The solution can be presented as follows

**I. Calculation of Depreciation from April 01, 2016 to March 31, 2019**

**Depreciation Rate:** 10% p.a. on Diminishing Balance Method

Year	Machinery	Date of Purchase	Value	No. of Months	Amt. of Dep.	Total Dep.
2016-17	Machinery 1	April 01, 2016	20,000	12	2,000	2,000
2017-18	Machinery 1	April 01, 2016	18,000 (20,000 - 2,000)	12	1,800	2,300
	Machinery 2	Oct. 01, 2017	10,000	6	500	
2018-19	Machinery 1	April 01, 2016	16,200 (18,000 - 1,800)	12	1,620	3,070
	Machinery 2	Oct. 01, 2017	9,500 (10,000 - 500)	12	950	
	Machinery 3	Apr. 01 2018	5,000	12	500	



## II. Balance in Machinery Account as on March 31, 2019 will be ₹ 27,630

**Working Notes:** Preparation of Machinery Account

Machinery Account							
Dr.						Cr.	
Date	Particulars	J.F.	(₹)	Date	Particulars	J.F.	(₹)
2016 Apr-01	To Bank A/c Machinery 1		20,000	2017 Mar-31	By Depreciation A/c Machinery 1		2,000
				Mar-31	By Balance c/d Machinery 1		18,000
			<b>20,000</b>				<b>20,000</b>
2017 Apr-01	To Bank A/c b/d Machinery 1		18,000	2018 Mar-31	By Depreciation A/c Machinery 1	1,800	
Oct-01	To Bank A/c Machinery 2		10,000		Machinery 2	500	2300
					$\left(10,000 \times \frac{10}{100} \times \frac{6}{12}\right)$		
					By Balance c/d		
					Machinery 1	16,200	
					Machinery 2	9,500	25,700
			<b>28,000</b>				<b>28,000</b>
2018 Apr-01	To Balance b/d			2019 Mar-31	By Depreciation A/c		
	Machinery 1	16,200			Machinery 1	1,620	
	Machinery 2	9,500	25,700		Machinery 2	950	
Apr-01	To Bank A/c Machinery 3		5,000		Machinery 3	500	3,070
				Mar-31	By Balance c/d		
					Machinery 1	14,580	
					Machinery 2	8,550	
					Machinery 3	4,500	27,630
			<b>30,700</b>				<b>30,700</b>



**Q.23 M/s. P & Q purchased machinery for ₹ 40,000 on 1st October, 2016. Depreciation is provided @ 10% p.a. on the Diminishing Balance. On 31st January, 2019, one-fourth of the machinery was found unsuitable and disposed of 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, 2017, 2018 and 2019. Accounts are closed on 31st March each year.**

The solution can be presented as follows

Machinery Account							
Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2016 Oct-01	To Bank A/c			2017 Mar-31	By Depreciation A/c		
	Machinery I (3/4) 30,000				Machinery I (3/4) (for 6months) 1,500		
	Machinery I(1/4) 10,000		40,000		Machinery I (1/4) (for 6 months) 500		2,000
				Mar-31	By Balance c/d		
			40,000		Machinery I (3/4) 28,500		
					Machinery I (1/4) 9,500		38,000
							40,000
2017 Apr-01	To Balance b/d			2018 Mar-31	By Depreciation A/c		
	Machinery I (3/4) 28,500				Machinery I (3/4) 2,850		
	Machinery I(1/4) 9,500		38,000		Machinery I (1/4) 9,50		3,800
				Mar-31	By Balance c/d		
			38,000		Machinery I (3/4) 25,650		
					Machinery I (1/4) 8,550		34,200
							38,000
2018 Apr-01	To Balance b/d			2019 Jan-31	By Depreciation A/c		
					Machinery I (1/4) (for 10 Months) 713		
	Machinery I (3/4) 25,650			Jan-31	By Bank A/c Machinery I (1/4) 5,600		
	Machinery I(1/4) 8,550		34,200		By Profit and Loss A/c (Loss) 2,237		
				Mar-31	By Depreciation A/c		
Jan-31	To Bank A/c 15,000		15,000		Machinery I (3/4) 2,565		
					Machinery II (for 2 months) 250		2,815
				Mar-31	By Balance c/d		
			49,200		Machinery I (3/4) 23,085		
					Machinery II 14,750		37,835
							49,200



## Working Note

1. Calculation of Profit or Loss on Sale of Machine I (1/4):

Particulars	Amount (₹)
Book Value of Machine (I) (1/4) on Apr. 01, 2018	8,550
Less : Depreciation for 10 Months	-713
Book Value of Machine (I) (1/4) on Jan. 31 2019	7,837
Less : Sale Value	-5,600
Loss on Sale of Machine I (1/4)	2,237

**Q.24** On 1st October, 2015, 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, 2018 the machine was sold to Deepa for ₹ 30,500 and ₹ 500 was paid as commission to broker through whom the sales was effected. Find out the profit or loss on sale of machine if accounts are closed on 31st March, every year.

The solution can be presented as follows

### Machinery Account

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2015 Oct-01	Bank (25,000+5,000+1,000+4,000)		35,000	2016 Mar.31	Depreciation (for 6 months)		1,750
				Mar.31	Balance c/d		33,250
			35,000				35,000
2016 Apr.01	Balance b/d		33,250	2017 Mar.31	Depreciation		3,325
				Mar.31	Balance c/d		29,925
			33,250				33,250
2017 Apr.01	Balance b/d		29,925	2018 Mar.31	Depreciation		2,993
2018 Mar.31	Profit and Loss A/c (Profit on Sale)		3,068	Mar.31	Bank A/c (30,500 – 500)		30,000
			32,993				32,993



**Working Note:**

1. Calculation of Profit or Loss on sale of Machine I:

Particulars	Amount (₹)
Book Value of Machine on Apr. 01, 2017	29,925
Less : Depreciation for the year	-2,993
Book Value of Machine I on Mar. 31, 2018	26,932
Less : Sale Value (30,500 – 500)	-30,000
Profit on Sale	3,068

**Q.25** A company purchased on 1st July, 2015 machinery costing ₹ 30,000. It further purchased machinery on 1st January, 2016 costing ₹ 20,000 and on 1st October, 2016 costing ₹ 10,000. On 1st April, 2017, one-third of the machinery installed on 1st July, 2015 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.

The solution can be presented as follows



**Machinery Account**

**Dr.**

**Cr.**

Date	Particulars	J.F	Amount (₹)	Date	Particulars	J.F	Amount (₹)
2015 Jul-01	To Bank A/c Machinery I(2/3) 20,000			2016 Mar-31	By Depreciation A/c		
Jul-01	To Bank A/c Machinery I(1/3) 10,000		30,000		Machinery I (2/3)( 9 months) 1,500		
2016 Jan-01	To Bank A/c Machinery II 20,000		20,000		Machinery I(1/3) (9 months) 750		
					Machinery II (3 months) 500		2,750
			<b>50,000</b>	Mar-31	By Balance c/d		
					Machinery I (2/3) 18,500		
2016 Apr-01	To Balance b/d 18,500				Machinery I (1/3) 9,250		
	Machinery I(2/3) 18,500				Machinery II 19,500		47,250
	Machinery I(1/3) 9,250						<b>50,000</b>
	Machinery II 19,500		47,250	2017			
Oct-01	To Bank A/c Machinery III 10,000		10,000	Mar-31	By Depreciation A/c		
					Machinery I(2/3) 1,850		
			<b>57,250</b>		Machinery I(1/3) 925		
					Machinery II 1,950		5,225
					Machinery III 500		
				Mar-31	By Balance c/d		
2016 Apr-01	To Balance b/d 16,650				Machinery I (2/3) 16,650		
	Machinery I(2/3) 16,650				Machinery I(1/3) 8,325		
	Machinery I(1/3) 8,325				Machinery II 17,550		52,025
	Machinery II 17,550		52,025		Machinery III 9,500		<b>57,250</b>
	Machinery III 9,500			2017			
			<b>52,025</b>	Apr-01	By Bank A/c Machinery I (1/3)		3,000
				Apr 0 1	By Profit and Loss A/c		5,325
				2018			
				Mar-31	By Depreciation A/c		
					Machinery I(2/3) 1,665		
					Machinery II 1,755		4,370
					Machinery III 950		
				Mar-31	By Balance c/d		
					Machinery I(2/3) 14,985		
					Machinery II 15,795		
				Mar-31	Machinery III 8,550		39,330
			<b>52,025</b>				<b>52,025</b>



**Working Note:**

1. Calculation of Profit or Loss on Sale of Plant I (1/3):

Particulars	Amount (₹)
Book Value of Plant I (1/3) as on Apr 01, 2017	8,325
Less: Sale Value	-3,000
Loss on Sale	5,325

**Q.26 Astha Engineering Works purchased a machine on 1st July, 2015 for ₹ 1,80,000 and spent ₹ 20,000 on its installation.**

**On 1st April, 2016, it purchased another machine for ₹ 2,40,000. On 1st October, 2017, the machine purchased on 1st July, 2015 was sold for ₹ 1,45,000 *plus* CGST and SGST @ 6% each. On 1st January, 2018, another machine was purchased for ₹ 4,00,000 *plus* IGST @ 12%.**

**Prepare the Machinery Account for the years ended 31st March, 2016 to 2018 after charging Depreciation @ 10% p.a. by Diminishing Balance Method. Accounts are closed on 31st March every year.**

The solution can be presented as follows



### Machinery Account

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2015-16				2015-16			
July 01	To Balance b/d (1,80,000 + 20,000)			Mar. 31	By Depreciation A/c (9 months)		15,000
	Machinery I		2,00,000	Mar. 31	By Balance c/d		1,85,000
			<b>2,00,000</b>				<b>2,00,000</b>
2016-17				2016-17			
Apr-01	To Balance b/d Machinery I		1,85,000	Mar-31	By Depreciation A/c		
Apr-01	To Bank A/c Machinery II		2,40,000		Machinery I	18,500	
					Machinery II	24,000	42,500
				Mar-31	By Balance c/d		
					Machinery I	1,66,500	
					Machinery II	2,16,000	3,82,500
			<b>4,25,000</b>				<b>4,25,000</b>
2017-18				2017-18			
Apr-01	To Balance b/d			Oct-01	By Depreciation A/c		8,325
	Machinery I	1,66,500		Oct-01	Machinery I (6 months)		
	Machinery II	2,16,000	3,82,500	Oct-01	By Bank A/c		
					Machinery I		1,45,000
Jan-01	To Bank A/c			Oct-01	By Profit and Loss A/c		13,175
	Machinery III		4,00,000	Mar-31	By Depreciation A/c		
					Machinery II	21,600	
					Machinery III (3 months)	10,000	31,600
				Mar-31	By Balance c/d		
					Machinery II	1,94,400	
					Machinery III	3,90,000	5,84,400
			<b>7,82,500</b>				<b>7,82,500</b>

#### Working Note:

1. Calculation of profit or loss on sale of Machine I:

Particulars	Amount (₹)
Book Value of as on Apr. 01, 2017	1,66,500
Less: Depreciation (for 6 Months)	-8,325
Book Value on Oct 01, 2017	1,58,175
Less: Sale Value	-1,45,000
Loss on Sale	13,175



2. Journal entry for purchase with GST

Journal				
Date	Particulars	L.F.	Debit Amount (₹)	Credit Amount (₹)
2018 Jan 01	Machinery A/c Dr.		4,00,000	
	Input IGST A/c Dr.		48,000	
	To Bank A/c (Machinery purchased with IGST @ 12% paid)			4,48,000

**Q.27** Following balances appear in the books of M/s. Amrit as on 1st April, 2018:

		₹
<b>2018</b>		
<b>1st April</b>	<b>Machinery A/c</b>	<b>60,000</b>
	<b>Provision for Depreciation A/c</b>	<b>36,000</b>

On 1st April, 2018, they decided to dispose of a machinery for ₹ 8,400 which was purchased on 1st April, 2014 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, 2019. Depreciation was charged at 10% p.a on Cost following Straight Line Method.

The solution can be presented as follows

**Books of M/s. Amrit  
Machinery Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2018				2018			
Apr-01	Balance b/d (44,000 + 16,000)		60,000	Apr-01	Machinery Disposal		16,000
				2019			
				Mar-31	Balance c/d		44,000
			60,000				60,000

**Provision for Depreciation Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2018				2018			
Apr-01	To Machinery Disposal A/c (4 years)		6,400	Apr-01	By Balance b/d		36,000
2019				2019			
Mar-13	To Balance c/d		34,000	Mar-31	By Depreciation A/c (Machine costing Rs.44,000)		4,400
			40,400				40,400

**Machinery Disposal Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2018				2018			
Apr-01	To Machinery A/c		16,000	Apr-01	By Provision for Depreciation A/c		6,400
				2019			
				Mar-31	By Bank A/c		8,400
					By Profit and Loss A/c		1,200
			16,000				16,000



### Working Note

1. Calculation of profit or loss on Machine Sold:

Particulars	Amount (₹)
Original Cost of Machine Sold on April 01, 2014	16,000
Less : Accumulated Depreciation on Machine Sold (1,600 × 4)	-6,400
Book Value of April 01, 2018	9,600
Less : Sale Value	-8,400
Loss on Sale	1,200

**Q.28** On 1st October, 2011, X Ltd. purchased a machinery for ₹ 2,50,000. A part of machinery which was purchased for ₹ 20,000 on 1st October, 2011 became obsolete and was disposed of on 1st January, 2014 (having a book value ₹ 17,100 on 1st April, 2013) for ₹ 2,000. Depreciation is charged @ 10% annually on written down value. Prepare Machinery Disposal Account and also show your workings. The books being closed on 31st March of every year.

The solution can be presented as follows





### Machinery Account

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2011 Oct-01	To Bank A/c			2012 Mar-31	By Depreciation A/c		
	Machinery I (part 1) 2,30,000				Machinery I (part 1) ( 6 months) 11,500		
	Machinery I (part 2) 20,000		2,50,000		Machinery I (part 2) (6 months) 1,000		12,500
				Mar-31	By Balance c/d		
					Machinery I (part 1) 2,18,500		
					Machinery I (part 2) 19,000		2,37,500
			<b>2,50,000</b>				<b>2,50,000</b>
2012 Apr-01	To Balance b/d			2013 Mar-31	By Depreciation A/c		
	Machinery I (part 1) 2,18,500				Machinery I (part 1 ) 21,850		
	Machinery I (part 2) 19,000		2,37,500		Machinery I (part 2) 1,900		23,750
				Mar-31	By Balance c/d		
					Machinery I (part 1) 1,96,650		
					Machinery I (part 2) 17,100		2,13,750
			<b>2,37,500</b>				<b>2,37,500</b>
2013 Apr-01	To Balance b/d			2014 Jan-01	By Depreciation A/c		
	Machinery I (part 1) 1,96,650				Machinery I (part 2) (9 months)		1,283
	Machinery I (part 2) 17,100		2,13,750	Jan-01	By Bank A/c Machinery I (part 2)		2,000
				Jan-01	By Profit and Loss A/c (Loss)		13,817
				Mar-31	By Depreciation A/c		
					Machinery I (part 1)		19,665
				Mar-31	By Balance c/d		1,76,985
			<b>2,13,750</b>				<b>2,13,750</b>

**Q.29** Sharma & Co. whose books are closed on 31st March, purchased a machinery for ₹ 1,50,000 on 1st April, 2016, Additional machinery was acquired for ₹ 50,000 on 1st October, 2016. Certain machinery which was purchased for ₹ 50,000 on 1st October, 2016 was sold for ₹ 40,000 on 30th September, 2018.

Prepare the Machinery Account and Accumulated Depreciation Account for all the years up to the year ended 31st March, 2019. Depreciation is charged @ 10% p.a. on Straight Line Method. Also, show the Machinery Disposal Account.

The solution can be presented as follows

**In the books of Sharma and Co.  
Machinery Account**

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2016				2017			
Apr-01	To Bank A/c Machinery I		1,50,000	Mar-31	By Balance c/d		2,00,000
Oct-01	To Bank A/c Machinery II		50,000				
			<b>2,00,000</b>				<b>2,00,000</b>
2018				2018			
Apr-01	To Balance b/d		2,00,000	Sep-30	By Machinery Disposal Machinery II		50,000
				2018			
			<b>2,00,000</b>	Mar-31	By Balance c/d		1,50,000
							<b>2,00,000</b>

### Accumulate Deprecation Account

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2017 Mar-31	To Balance c/d Machinery I                      15,000 Machinery II                      2,500		17,500	2017 Mar-31	By Depreciation A/c Machinery I                      15,000 Machinery II (for 6 months)      2,500		17,500
			<b>17,500</b>				<b>17,500</b>
2018 Mar-31	To Balance c/d Machinery I                      30,000 Machinery II                      7,500		37,500	2017 Apr-01	By Balance b/d Machinery I                      15,000 Machinery II                      2,500		17,500
			<b>37,500</b>	2018 Mar-31	By Depreciation A/c Machinery I                      15,000 Machinery II                      5,000		20,000
							<b>37,500</b>
2018 Sep-30	To Machinery disposal A/c		10,000	2018 Apr-01	By Balance b/d Machinery I                      30,000 Machinery II                      7,500		37,500
2019 Mar-31	To Balance c/d		45,000	Sep-30	By Depreciation A/c Machinery II                      2,500		2,500
			<b>55,000</b>	2019 Mar-31	By Deprecation A/c Machinery I                      15,000		15,000
							<b>55,000</b>

### Machinery Disposal Account

Dr.				Cr.			
Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
2018 Sep-30	Machinery		50,000	2018 Sep-30	Accumulated Depreciation		10,000
			<b>50,000</b>	Sep-30	Bank		40,000
							<b>50,000</b>



### Working notes

1. Calculation of Profit or Loss on sale of Machine II:

Particulars	Amount (₹)
Original Cost Oct 01, 2016	50,000
Less : Accumulated Depreciation	-10,000
Book Value on Sept 30, 2018	40,000
Less : Sale Value	-40,000
Profit / Loss	None (Nil)

