1. A firm purchased a second-hand machine on 1st April, 2020 and paid ₹ 1,40,000 for it. It spent on its overhauling and installation ₹ 20,000. On 1st October, 2020, another machine costing ₹ 80,000 was purchased. On 1st October, 2022, the machine purchased on 1st April, 2020 was disposed off for ₹ 1,04,000, charging CGST and SGST @ 6% each and a new machine costing ₹ 2,00,000 was installed, paying CGST and SGST @ 6% each. Depreciation was provided @ 10% p.a. by the Straight Line Method. Give the Machinery Account and Depreciation Account for 3 years. Firm's books are closed on 31st March every year.

   [*Loss on Sale of Machinery—₹ 16,000; Balance of Machinery A/c—₹ 2,50,000.*]

   [**Hint:** Loss on Sale of Machinery: Book Value on 1.10.2022 ₹ 1,20,000 [*i.e.*, ₹ 1,40,000 + ₹ 20,000 – ₹ 40,000 (Depreciation from 1.4.2020 to 1.10.2022)] – ₹ 1,04,000 (Selling Price) = ₹ 16,000.]

2. Kaushal Traders purchased a second-hand machinery on 1st April, 2020 for ₹ 23,000 and spent ₹ 2,000 on its repair. It was decided to depreciate the machinery @ 20% p.a. on 31st March at Diminishing Balance Method.

   Prepare the Machinery Account from years ended 31st March, 2021 to 2023 and show Profit or Loss as it was sold on 31st March, 2023 for ₹ 10,800. [*Loss on Sale—₹ 2,000.*]

3. A Machinery was purchased for ₹ 1,80,000 on 1st July, 2020. Depreciation was charged @ 10% p.a. on Diminishing Balance Method. 1/4th of this Machinery was sold on 1st October, 2022 for 36,000. Prepare Machinery Account from the year ended 31st March, 2021 to 2023, if the books are closed on 31st March every year.

   [*Balance of Machinery A/c (31st March, 2023)—*
   ₹ 1,01,148; Gain (Profit) on Sale of Machinery—₹ 410.]

4. *A* Limited has the following balances on 1st April, 2022:

	₹
Machinery A/c	2,00,000
Provision for Depreciation A/c	90,000

   The company charged depreciation @ 10% p.a. on Straight Line Method. Accounts are closed on 31st March every year. On 1st October, 2022, a part of machinery purchased on 1st July, 2019 for ₹ 40,000 was sold for ₹ 18,400, charging CGST and SGST @ 6% each and on the same date a new plant was purchased for ₹ 1,00,000 *plus* IGST @ 12%.

   Prepare 'Machinery Account' and 'Provision for Depreciation Account' for the year ended 31st March, 2023.

   [*Balance of Machinery A/c* (*31st March, 2023*)*—₹ 2,60,000;*
   Loss on Sale of Machinery—₹ 8,600; Balance of Provision
   for Depreciation A/c (*31st March, 2023*)*—₹ 1,00,000.*]

   [**Hint:** Loss on Sale of Machinery = ₹ 40,000 (Cost) – ₹ 13,000 (Depreciation for 3¼ years) – ₹ 18,400 (Sale Value) = ₹ 8,600.]

5. A firm purchased on 1st April, 2020 certain machinery for ₹ 5,82,000 and spent ₹ 18,000 on its installation. On 1st October, 2020, additional machinery costing ₹ 2,00,000 was purchased. On 1st October, 2022, the machinery purchased on 1st April, 2020 was auctioned for ₹ 2,86,000 *plus* CGST and SGST @ 6% each and a new machinery for ₹ 4,00,000, *plus* IGST @ 12% was purchased on the same date. Depreciation was provided annually on 31st March at the rate of 10% p.a. on the Written Down Value Method. Prepare the Machinery Account for the three years ended 31st March, 2023.

[*Balance of Machinery A/c—₹ 5,33,900; Loss on Sale of Machine—₹ 1,75,700.*]

6. Shakti Cements purchased on 1st April, 2020 a plant for ₹ 80,000. On 1st July, 2021, it purchased additional plant costing ₹ 48,000. On 1st December, 2022, the plant purchased on 1st April, 2020 was sold for ₹ 42,000 *plus* IGST @ 12% and on the same date a fresh plant was purchased for ₹ 75,000 *plus* CGST and SGST @ 6% each. Depreciation is provided at 10% p.a. on the Diminishing Balance Method. Accounts are closed on 31st March each year. Show the Plant Account for 3 years (along with working notes).

[*Loss on Sale of Machinery—₹ 18,480; Balance on March, 2023 of Plant (II)—₹ 39,960 and Plant (III)—₹ 72,500.*]

7. On 1st April, 2020, Amit Kumar purchased five machines for ₹ 60,000 each. Depreciation @ 10% p.a. on initial cost has been charged from the Profit & Loss Account and credited to Provision for Depreciation Account.

   On 1st April, 2021, one machine was sold for ₹ 50,000 and on 1st April, 2022 another machine was sold for ₹ 50,000. An improved model costing ₹ 1,00,000 was purchased on 1st October, 2021. IGST was paid @ 12%. Amit Kumar closes his books on 31st March each year.

   You are required to show: (*i*) Machinery Account; (*ii*) Machinery Disposal Account and (*iii*) Provision for Depreciation Account for the period of three accounting years ended 31st March, 2023.

[*Loss on Sale of Machine (1st April, 2021)—₹ 4,000; Gain (Profit) on Sale of Machinery (1st April, 2022)—₹ 2,000; Balance of Machinery A/c (31st March, 2023)—₹ 2,80,000.*]

8. On 1st April, 2020, 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 2020, repairs and renewals amounted to ₹ 2,500 were paid. On 1st October, 2022, 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.

[*Annual Depreciation—₹ 5,400; Rate of Depreciation—9% p.a.; Loss on Sale of Machinery—₹ 16,500.*]

[**Hint:** Annual Depreciation $= \frac{\text{Cost} - \text{Estimated Scrap Value}}{\text{Estimated Useful Life}}$

$$= \frac{₹\ 60,000 - ₹\ 6,000}{10} = ₹\ 5,400.$$

Cartage of ₹ 2,000, unloading of ₹ 3,000, installation charge of ₹ 2,000 and brokerage of ₹ 1,000 paid will be added to the cost of machinery. The amount spent on repairs and renewals is of revenue nature and not of capital nature. So, it is not debited to Machinery Account.]

9. On 1st October, 2020, *X* Ltd. purchased a machinery for ₹ 2,50,000. A part of machinery which was purchased for ₹ 20,000 on 1st October, 2020 became obsolete and was disposed off on 1st January, 2023 (having a book value ₹ 17,100 on 1st April, 2022) 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.

[*Loss on Sale of Machinery*—₹ *13,817.*]

[**Hint:** Loss on Sale of Machinery = ₹ 17,100 (1st April, 2022) – ₹ 1,283 (Depreciation up to 1st January, 2023) – ₹ 2,000 (Sale value) = ₹ 13,817.]

10. Determine the missing values in the following accounts, if depreciation is to be charged @ 10% p.a. as per Straight Line Method:

Dr. MACHINERY ACCOUNT *Cr.*

Date	Particulars	₹	Date	Particulars	₹
2021			2022		
April 1	To Bank A/c	3,00,000	March 31	By Balance *c/d*	...(1)...
		...(2)...			...(3)...
2022			2022		
April 1	To Balance *b/d*	...(4)...	April 1	By Machinery Disposal A/c	60,000
			2023		
			March 31	By Balance *c/d*	...(5)...
		3,00,000			3,00,000

Dr. PROVISION FOR DEPRECIATION ACCOUNT *Cr.*

Date	Particulars	₹	Date	Particulars	₹
2022			2022		
March 31	To Balance *c/d*	...(6)...	March 31	By Depreciation A/c	...(7)...
		...(8)...			...(9)...
2022			2022		
April 1	To ...(10)...	...(11)...	April 1	By Balance *b/d*	...(12)...
2023			2023		
March 31	To Balance *c/d*	48,000	March 31	By Depreciation A/c	24,000
		54,000			54,000

Dr. MACHINERY DISPOSAL ACCOUNT *Cr.*

Date	Particulars	₹	Date	Particulars	₹
2022			2022		
April 1	To Machinery A/c	...(13)...	April 1	By Provision for Depreciation A/c	6,000
			April 1	By Bank A/c (Sales)	50,000
			April 1	By ...(14)...	...(15)...
		60,000			60,000

[*1:* ₹ *3,00,000; 2:* ₹ *3,00,000; 3:* ₹ *3,00,000; 4:* ₹ *3,00,000; 5:* ₹ *2,40,000; 6:* ₹ *30,000; 7:* ₹ *30,000; 8:* ₹ *30,000; 9:* ₹ *30,000; 10: Machinery Disposal A/c; 11:* ₹ *6,000; 12:* ₹ *30,000; 13:* ₹ *60,000; 14: Loss on Sale A/c (Profit & Loss A/c); 15:* ₹ *4,000.*]

11. In the following Machinery Account, determine the missing values, if depreciation is to be charged @ 10% p.a. as per Straight Line Method:

Dr. MACHINERY ACCOUNT *Cr.*

Date	Particulars	₹	Date	Particulars	₹
2020			2021		
Oct. 1	To Bank A/c	1,40,000	March 31	By Depreciation A/c	...
Oct. 1	To Bank A/c	10,000	March 31	By Balance *c/d*	...
	—Installation Expenses				
		1,50,000			1,50,000
2021			2022		
April 1	To Balance *b/d*	...	March 31	By Depreciation A/c	...
			March 31	By Balance *c/d*	...
		1,42,500			1,42,500
2022			2023		
April 1	To Balance *b/d*	...	March 31	By Depreciation A/c	...
			March 31	By Balance *c/d*	...
		1,27,500			1,27,500

Solution:

Dr. MACHINERY ACCOUNT *Cr.*

Date	Particulars	₹	Date	Particulars	₹
2020			2021		
Oct. 1	To Bank A/c	1,40,000	March 31	By Depreciation A/c (Note)	**7,500**
Oct. 1	To Bank A/c	10,000		**(₹ 1,50,000 × 10/100 × 6/12)**	
	—Installation Expenses		March 31	By Balance *c/d*	**1,42,500**
		1,50,000			1,50,000

2021				2022			
April	1	To Balance *b/d*	**1,42,500**	March	31	By Depreciation A/c	**15,000**
				March	31	By Balance *c/d*	**1,27,500**
			1,42,500				1,42,500
2022				2023			
April	1	To Balance *b/d*	**1,27,500**	March	31	By Depreciation A/c	**15,000**
				March	31	By Balance *c/d*	**1,12,500**
			1,27,500				1,27,500

Note: Depreciation for the first year (2020–21) will be charged for 6 months because the machinery was purchased on 1st October, 2020, *i.e.*, it was used for six months.