DEPRECIATION

Solution 1

Statement of Annual Depreciation under Machine Hours Rate Method

Year	Annual Depreciation
1 – 3	3,000 / 24,000 x (30,00,000 – 2,00,000) = 3,50,000
4 – 6	2,600 / 24,000 x (30,00,000 – 2,00,000) = 3,03,333
7 – 10	1,800 / 24,000 x (30,00,000 – 2,00,000) = 2,10,000

Solution 2

Statement of Annual Depreciation under Production Units Method

Year	Annual Depreciation
1 – 3	20,000 / 1,50,000 x (20,00,000 – 2,00,000) = 2,40,000
4 – 7	15,000 / 1,50,000 x (20,00,000 – 2,00,000) = 1,80,000
8 – 10	10,000 / 1,50,000 x (20,00,000 – 2,00,000) = 1,20,000

Solution 3

Quarry Lease A/c

Date	Particulars	Amount	Date	Particulars	Amount
2019			2019		
1/1	To Bank A/c	1,00,00,000	31/12	By Depreciation A/c (1,00,00,000*2,000/2,00,000)	1,00,000
			31/12	By Balance c/d	99,00,000
		1,00,00,000			**1,00,00,000**
2020			2020		
1/1	To Balance b/d	99,00,000	31/12	By Depreciation A/c (1,00,00,000*10,000/2,00,000)	5,00,000
			31/12	By Balance c/d	94,00,000
		99,00,000			**99,00,000**
2021			2021		
1/1	To Balance b/d	94,00,000	31/12	By Depreciation A/c (1,00,00,000*15,000/2,00,000)	7,50,000
			31/12	By Balance c/d	86,50,000
		94,00,000			**94,00,000**

Depreciation A/c

Date	Particulars	Amount	Date	Particulars	Amount
2019			2019		
31/12	To Quarry Lease A/c	1,00,000	31/12	By Profit & Loss A/c	1,00,000
		1,00,000			**1,00,000**
2020			2020		
31/12	To Quarry Lease A/c	5,00,000	31/12	By Profit & Loss A/c	5,00,000
		5,00,000			**5,00,000**
2021			2021		
31/12	To Quarry Lease A/c	7,50,000	31/12	By Profit & Loss A/c	7,50,000
		7,50,000			**7,50,000**

Solution 4

Machine A/c

Date	Particulars	Amount	Date	Particulars	Amount
2021			2021		
1/7	To Bank A/c	14,00,000	31/12	By Depreciation A/c (15,00,000*10%*6/12)	75,000
1/7	To Bank A/c	1,00,000	31/12	By Balance c/d	14,25,000
		15,00,000			**15,00,000**
2022			2022		
1/1	To Balance b/d	14,25,000	31/12	By Depreciation A/c (14,25,000*10%)	1,42,500
			31/12	By Balance c/d	12,82,500
		14,25,000			**14,25,000**

Solution 5

Dr. **Machinery Account** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
2020 Jan,1	To Bank A/c	4,80,000	2020 Dec,31	By Depreciation A/c	60,000
Jan, 1	To Bank A/c (Installation charges)	20,000		I : 5,00,000×10% = 50,000	
July, 1	To Bank A/c	2,00,000		II: 2,00,000 × 10% ×6/12 = 10,000	
			Dec.,31	By Balance c/d	6,40,000
				I: 4,50,000	
				II: 1,90,000	
		7,00,000			**7,00,000**
2021 Jan,1	To Balance b/d	6,40,000	2021 July,1	By Depreciation 4,50,000×10%×6/12	22,500
	I : 4,50,000		July,1	By Bank A/c	2,90,000
	II: 1,90,000		July,1	By Profit & LossA/c-Loss	1,37,500
July,1	To Bank A/c	5,00,000	Dec,31	By Depreciation	44,000
				II: 1,90,000×10% = 19,000	
				III: 5,00,000×10%×6/12 = 25,000	
			Dec,31	By Balance c/d	6,46,000
				II: 1,71,000	
				III: 4,75,000	
		11,40,000			**11,40,000**

Solution 6

Motor Truck A/c

Date	Particulars	Amount	Date	Particulars	Amount
2021			2021		
1/1	To Balance b/d	2,92,50,000	1/10	By Bank A/c	27,00,000
1/10	To P&L A/c (Profit on Settlement of Truck)	4,50,000	1/10	By Depreciation on lost assets	6,75,000
1/10	To Bank A/c	50,00,000	31/12	By Depreciation A/c	83,50,000
			31/12	By Balance c/d	2,29,75,000
		3,47,00,000			**3,47,00,000**

2022			2022		
1/1	To Balance b/d	2,29,75,000	31/12	By Depreciation A/c	91,00,000
			31/12	By Balance c/d	1,38,75,000
		2,29,75,000			**2,29,75,000**

Working Note: To find out loss on Profit on settlement of truck

Original cost as on 1.4.2019	45,00,000
Less: Depreciation for 2019	(6,75,000)
	38,25,000
Less: Depreciation for 2020	(9,00,000)
	29,25,000
Less: Depreciation for 2021 (9 Months)	(6,75,000)
	22,50,000
Less: Amount received from Insurance company	(27,00,000)
Profit	**4,50,000**

Solution 7

Buses A/c

Date	Particulars	Amount	Date	Particulars	Amount
2019			2019		
1/1	To Balance b/d	1,23,75,000	1/10	By Bank A/c	7,00,000
1/10	To Bank A/c	18,00,000	1/10	By Depreciation on lost assets	1,12,500
			1/10	By P&L A/c (loss)	4,25,000
			31/12	By Depreciation A/c	13,95,000
			31/12	By Balance c/d	1,15,42,500
		1,41,75,000			**1,41,75,000**
2020			2020		
1/1	To Balance b/d	1,15,42,500	31/12	By Depreciation A/c	15,30,000
			31/12	By Balance c/d	1,00,12,500
		1,15,42,500			**1,15,42,500**

Working Note: To find out Profit/(Loss) on settlement of Bus

Original cost as on 1.4.2017	15,00,000
Less: Depreciation for 2017	(1,12,500)
	13,87,500
Less: Depreciation for 2018	(1,50,000)
	12,37,500
Less: Depreciation for 2019 (9 Months)	(1,12,500)
	11,25,000
Less: Amount received from Insurance company	(7,00,000)
Loss	**4,25,000**

Solution 8

Motor Truck A/c

Date	Particulars	Amount	Date	Particulars	Amount
2019			2019		
1/1	To Balance b/d	3,50,00,000	1/10	By Bank A/c	35,00,000
1/10	To P&L A/c (Profit on Settlement of Truck)	7,50,000	1/10	By Depreciation on lost assets	7,50,000
1/10	To Bank A/c	60,00,000	31/12	By Depreciation A/c	93,00,000
			31/12	By Balance c/d	2,82,00,000
		4,17,50,000			**4,17,50,000**

2020			2020		
1/1	To Balance b/d	2,82,00,000	31/12	By Depreciation A/c	1,02,00,000
			31/12	By Balance c/d	1,80,00,000
		2,82,00,000			**2,82,00,000**

Working Note: To find out loss on Profit on settlement of truck

Original cost as on 1.4.2017	50,00,000
Less: Depreciation for 2017 (6 months)	(5,00,000)
	45,00,000
Less: Depreciation for 2018	(10,00,000)
	35,00,000
Less: Depreciation for 2019 (9 Months)	(7,50,000)
	27,50,000
Less: Amount received from Insurance company	(35,00,000)
Profit	**7,50,000**

Calculation of WDV of 10 Trucks as on 01.01.2019

WDV of 1 truck as on 31.12.2018 35,00,000
WDV of 10 trucks as on 01.01.2019 3,50,00,000

Calculation of Depreciation for 2019 & 2020

Depreciation for 2019

On 9 trucks (50,00,000*9*20%) 90,00,000
On new truck (60,00,000*20%*3/12) 3,00,000
93,00,000

Depreciation for 2020

On 9 trucks (50,00,000*9*20%) 90,00,000
On new truck (60,00,000*20%) 12,00,000
1,02,00,000

Solution 9

Machine A/c

Date	Particulars	Amount	Date	Particulars	Amount
2019			2019		
1/7	To Bank A/c	1,60,000	31/12	By Depreciation A/c (1,95,000*20%*6/12)	19,500
1/7	To Bank A/c	20,000	31/12	By Balance c/d	1,75,500
1/7	To Bank A/c	15,000			
		1,95,000			**1,95,000**
2020			2020		
1/1	To Balance b/d	1,75,500	31/12	By Depreciation A/c (1,95,000*20%) + (25,000*20%)	44,000
1/1	To Bank A/c	25,000	31/12	By Balance c/d	1,56,500
		2,00,500			**2,00,500**
2021			2021		
1/1	To Balance b/d	1,56,500	1/7	By Bank A/c	33,700
1/7	To Bank A/c	12,500	1/7	By Depreciation A/c (1,95,000*1/3)*20%*6/12)	6,500
			1/7	By Profit & Loss A/c (Loss on sale)	5,300

			31/12	By Depreciation A/c (1,95,000*2/3)*20%) + (25,000*20%) + (12,500*20%*6/12)	32,250
			31/12	By Balance c/d	91,250
		1,69,000			**1,69,000**

Working Note:

1) In absence of information about depreciation method to be used, Straight line method of depreciation has been used. Alternatively, written down value method of depreciation may be assumed.
2) The method of machinery sold as on 1.7.2021 may be obtained as follow:

Cost of machinery sold as on 1.7.2019	65,000
Less: Depreciation for 2019 (for ½ year)	(6,500)
Less: Depreciation for 2020	(13,000)
Less: Depreciation for 2021 (for ½ year)	(6,500)
Book Value on date of Sale	**39,000**
Less: Amount received	(33,700)
Loss on Sale	**5,300**

Solution 10

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

		₹			₹
01-04-20	To Balance b/d	95,00,000	01-09-20	By Bank (Sales)	3,75,000
01-09-20	To Bank (14,00,000+ 44,600)	14,44,600		By Depreciation (on sold machine)	73,811
				By Loss on sale	13,22,659
				By Loss on scrapping the machine	18,84,562
				By Depreciation (on Scrapped machinery)	81,938
				By Depreciation (Note iii)	6,60,471
				By Balance c/d	65,46,159
		109,44,600			**109,44,600**

Working Note:

(i)	**Calculation of loss on sale of machine on 01-09-2020**		**₹**
	Cost on 1-4-2018		21,87,000
	Less: Depreciation @ 10% on ₹ 21,87,000		(2,18,700)
	W.D.V. on 31-03-2019		19,68,300
	Less: Depreciation @ 10% on ₹ 19,68,300		(1,96,830)
	W.D.V. on 31-03-2020		17,71,470
	Less: Depreciation @ 10% on ₹ 17,71,470 for 5 months		(73,811)
			16,97,659
	Less: Sale proceeds on 01-09-2020		(3,75,000)
	Loss		13,22,659
(ii)	**Calculation of loss on scrapped machine**		
	Cost on 1-4-2019		21,85,000
	Less: Depreciation @ 10% on ₹ 21,85,000		(2,18,500)
	W.D.V. on 31-3-2020		19,66,500
	Less: Depreciation @ 10% on ₹19,66,500 for 5 months		(81,938)
	Loss		18,84,562

(iii)	**Depreciation**		
	Balance of machinery account on 1-4-2020		95,00,000
	Less: W.D.V of machinery sold	17,71,470	
	W.D.V. of machinery scrapped	19,66,500	(37,37,970)
	Balance of other machinery after sale and scrap on 1-4-2020		57,62,030
	Depreciation @ 10% on ₹ 57,62,030 for 12 months		5,76,203
	Depreciation @ 10% on ₹ 14,44,600 for 7 months		84,268
			6,60,471

Note: The figures are rounded off to nearest rupee.

Solution 11

Machine A/c

Date	Particulars	Amount	Date	Particulars	Amount
2017			2017		
1/1	To Bank A/c (19,40,000+60,000)	20,00,000	31/12	By Depreciation A/c (20,00,000*10%)+ (10,00,000*10%*6/12)	2,50,000
1/7	To Bank A/c	10,00,000	31/12	By Balance c/d (18,00,000+9,50,000)	27,50,000
		30,00,000			**30,00,000**
2018			2018		
1/1	To Balance b/d	27,50,000	31/12	By Depreciation A/c (20,00,000*10%)+ (10,00,000*10%)	3,00,000
			31/12	By Balance c/d (16,00,000+8,50,000)	24,50,000
		27,50,000			**27,50,000**
2019			2019		
1/1	To Balance b/d	24,50,000	1/7	By Bank A/c	8,00,000
1/7	To Bank A/c	15,00,000	1/7	By Depreciation A/c (20,00,000*10%*6/12)	1,00,000
			1/7	By Profit & Loss A/c (Loss on sale)	7,00,000
			31/12	By Depreciation A/c (10,00,000*10%) + (15,00,000*10%*6/12)	1,75,000
			31/12	By Balance c/d	21,75,000
		39,50,000			**39,50,000**
2020			2020		
1/1	To Balance b/d	21,75,000	31/12	By Depreciation A/c (21,75,000*20%)	4,35,000
			31/12	By Balance c/d	17,40,000
		21,75,000			**21,75,000**
2021			2021		
1/1	To Balance b/d	17,40,000	31/12	By Depreciation A/c (17,40,000*20%)	3,48,000
			31/12	By Balance c/d	13,92,000
		17,40,000			**17,40,000**

Working Note: Profit/Loss on sale of machinery on 1.7.2019 may be obtained as follow:

Cost of Machinery	20,00,000
Less: Depreciation for 2017	(2,00,000)
Less: Depreciation for 2018	(2,00,000)

Less: Depreciation for 2019 (for ½ year)	(1,00,000)
Book Value on date of Sale	**15,00,000**
Less: Amount received	(8,00,000)
Loss on Sale	**7,00,000**

Solution 12

Machine A/c

Date	Particulars	Amount	Date	Particulars	Amount
2018			2018		
1/1	To Bank A/c (37,000+3,000)	40,000	31/12	By Depreciation A/c	4,000
			31/12	By Balance c/d	36,000
		40,000			**40,000**
2019			2019		
1/1	To Balance b/d	36,000	31/12	By Depreciation A/c (5,400+750)	6,150
1/7	To Bank A/c	10,000	31/12	By Balance c/d (30,600+9,250)	39,850
		46,000			**46,000**
2020			2020		
1/1	To Balance b/d	39,850	1/7	By Bank A/c	28,000
1/7	To Bank A/c	25,000	1/7	By Depreciation A/c	2,295
			1/7	By Profit & Loss A/c (Loss on sale)	305
			31/12	By Depreciation A/c (1,388+1,875)	3,263
			31/12	By Balance c/d (7,862+23,125)	30,987
		64,850			**64,850**
2021			2021		
1/1	To Balance b/d	30,987	1/7	By Bank A/c	2,000
			1/7	By Depreciation A/c	590
			1/7	By Profit & Loss A/c (Loss on sale)	5,272
			31/12	By Depreciation A/c	3,469
			31/12	By Balance c/d	19,656
		30,987			**30,987**

Working Note:

Book Value of machines (Straight line method) & WDV from 2019

	Machine 1	Machine 2	Machine 3
Cost of Machinery	40,000	10,000	25,000
Less: Depreciation for 2018	(4,000)		
Written down value as on 31.12.2018	36,000		
Less: Depreciation for 2019	(5,400)	(750) [6 months]	
Written down value as on 31.12.2019	30,600	9,250	
Less: Depreciation for 2020	(2,295) [6 months]	(1,388)	(1,875) [6 months]
Written down value as on 1.7.2020	**28,305**		
Less: Sale Proceeds	(28,000)		
Loss on Sale	**305**		
Written down value as on 31.12.2020		**7,862**	**23,125**

Depreciation for 6 months in 2021		(590)	
Written down value as on 1.7.2021		**7,272**	
Sale proceeds		(2,000)	
Loss on sale		**5,272**	
Depreciation for 2021			(3,469)
Written down value as on 31.12.2021			**19,656**

Solution 13

In the books of A

Machinery A/c

Date	Particulars	Amount (₹)	Date	Particulars	Amount(₹)
01.04.2019	To Bank	1,50,000	31.03.2020	By Depreciation	30,000
	(1,30,000+20,000)		31.03.2020	By Balance c/d	1,20,000
		1,50,000			**1,50,000**
01.04.2020	To Balance b/d	1,20,000	31.03.2021	By Depreciation	30,000
			31.03.2021	By Balance c/d	90,000
		1,20,000			**1,20,000**
01.04.2021	To Balance b/d	90,000	01.10.2021	By Bank A/c	1,00,000
01.10.2021	To Bank	50,000	01.10.2021	By Depreciation	6,750
01.10.2021	To Profit on Sale	16,750	31.03.2022	By Depreciation	1,875
			31.03.2022	By Balance c/d	48,125
		1,56,750			**1,56,750**

Working Note: Calculation of Book Value of Machines

	Machine 1 (in ₹)	Machine 2 (in ₹)
Date of Purchase	01.04.2019	01.10.2021
Original Cost	1,50,000	
Depreciation for (2019-20) (SLM)	(30,000)	
WDV on 31.03.2020	1,20,000	
Depreciation for (2020-21) (SLM)	(30,000)	
WDV on 31.03.2021	90,000	
Depreciation for (2021-22) (WDV)	(6,750)	
WDV (original cost of Machine 2) on 1.10.2021	83,250	50,000
Sale Proceeds	(1,00,000)	
Profit on Sale	16,750	
Depreciation for 2021-22 (WDV @ 15%) (3 months)	-	(1,875)
WDV on 31.03.2022	-	48,125

Solution 14

Dr. **Machinery Account** **Cr.**

Date	Particulars	₹	Date	Particulars	₹
01.01.2019	To Bank A/c (A) – Cost	3,00,000	31.12.2019	By Depreciation (A)	40,000
	- Repairs	60,000		By Balance c/d (A)	3,60,000
	- Installation	40,000			
		4,00,000			**4,00,000**
01.01.2020	To Balance b/d	3,60,000	31.12.2020	By Depreciation	
01.07.2020	To Bank A/c (B)	2,60,000		(A) 40,000	
				(B) 13,000	53,000
				By Balance c/d	
				(A) 3,20,000	
				(B) 2,47,000	5,67,000
		6,20,000			**6,20,000**

01.01.2021	To Balance b/d	5,67,000	01.07.2021	By Machinery Disposal A/c (A)	3,00,000
01.07.2021	To Bank A/c (C)	2,50,000		By Depreciation A/c	
				(A) 20,000	
				(B) 26,000	
				(C) 12,500	58,500
				By Balance c/d	
				(B) 2,21,000	
				(C) 2,37,500	4,58,500
		8,17,000			**8,17,000**
01.01.2022	To Balance b/d	4,58,500	01.07.2022	By Machinery Disposal A/c (B)	2,08,000
				By Depreciation A/c	
				(B) 13,000	
				(C) 25,000	38,000
				By Balance c/d	2,12,500
		4,58,500			**4,58,500**

Dr. Machinery Disposal Account Cr.

Date	Particulars	₹	Date	Particulars	₹
01.07.2021	To Machinery A/c (A)	3,00,000	01.07.2021	By Bank A/c	3,20,000
	To Profit & Loss A/c (Profit)	20,000			
		3,20,000			**3,20,000**
01.07.2022	To Machinery A/c (B)	2,08,000	01.07.2022	By Bank A/c	2,30,000
	To P & L A/c (Profit)	22,000			
		2,30,000			**2,30,000**

Solution 15

Dr. Machinery Account Cr

Date	Particulars	₹	Date	Particulars	₹
01.04.2019	To Bank A/c	2,00,000	31.03.2020	By Balance c/d	3,00,000
01.10.2019	To Bank A/c	1,00,000			
		3,00,000			**3,00,000**
01.04.2020	To Balance b/d	3,00,000	01.10.2020	By Bank A/c	90,000
				By Provision for Depreciation A/c	30,000
				By Profit and Loss A/c	80,000
			31.3.2021	By Balance c/d	1,00,000
		3,00,000			**3,00,000**
01.04.2021	To Balance b/d	1,00,000	01.10.2021	By Bank A/c	85,000
01.10.2021	To Bank A/c	2,50,000		By Provision for Depreciation A/c	20,000
	To P & L A/c	5,000	31.3.2022	By Balance c/d	2,50,000
		3,55,000			**3,55,000**

Depreciation Account

Date	Particulars	₹	Date	Particulars	₹
31.03.2020	To Provision for Depreciation A/c	25,000	31.03.2020	By Profit and Loss A/c	25,000
		25,000			**25,000**

01.10.2020	To Provision for Depreciation A/c	10,000	31.03.2021	By Profit and Loss A/c	20,000
31.03.2021	To Provision for Depreciation A/c	10,000			
		20,000			**20,000**
01.10.2021	To Provision for Depreciation A/c	5,000	31.03.2022	By Profit and Loss A/c	17,500
31.03.2022	To Provision for Depreciation A/c	12,500			
		17,500			**17,500**

Dr. Provision for Depreciation Account Cr.

Date	Particulars	₹	Date	Particulars	₹
31.03.2020	To Balance c/d	25,000	31.03.2020	By Depreciation A/c (₹ 20,000 + ₹ 5,000)	25,000
		25,000			**25,000**
01.12.2020	To Machinery A/c (₹ 20,000 + ₹ 10,000)	30,000	01.04.2020	By Balance b/d	25,000
31.03.2021	To Balance c/d	15,000	01.10.2020	By Depreciation A/c	10,000
			31.03.2021	By Depreciation A/c	10,000
		45,000			**45,000**
01.10.2021	To Machinery A/c (₹ 5,000 + ₹ 10,000+ ₹ 5,000)	20,000	01.04.2021	By Balance b/d	15,000
31.03.2022	To Balance c/d	12,500	01.10.2021	By Depreciation A/c	5,000
			31.03.2022	By Depreciation A/c	12,500
		32,500			**32,500**

Solution 16

S &Co.

Dr. Machinery Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
1.1.2019	To, Bank A/c	1,00,000	31.12.2019	By Balance c/d	1,00,000
		1,00,000			**1,00,000**
1.1.2020	To, Balance b/d	1,00,000			
1.7.2020	To, Bank A/c	1,50,000	31.12.2020	By Balance c/d	2,50,000
		2,50,000			**2,50,000**
1.1.2021	To, Balance b/d	2,50,000	31.12.2021	By, Machinery Disposal A/c	1,00,000
			31.12.2021	By Balance c/d	1,50,000
		2,50,000			**2,50,000**
1.1.2022	To, Balance b/d	1,50,000			

Dr. Provision for Depreciation Account Cr.

Date	Particulars	Amount(₹)	Date	Particulars	Amount (₹)
31.12.2019	To, Balance c/d	15,000	31.12.2019	By, Depreciation A/c	15,000
		15,000			**15,000**
31.12.2020	To, Balance c/d	39,000	1.1.2020	By, Balance b/d	15,000
			31.12.2020	By, Depreciation A/c (₹ 12,750+₹11,250)	24,000
		39,000			**39,000**

31.12.2021	To, Machinery Disposal A/c (15,000+12,750+10,837)	38,587	1.1.2021	By, Balance b/d	39,000
31.12.2021	To, Balance c/d	32,063	31.12.2021	By, Depreciation A/c	20,813
			31.12.2021	By Depreciation	10,837
		70,650			**70,650**
			1.1.2022	By, Balance b/d	32,063

Dr. Machinery Disposal Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
31.12.2021	To, Machinery A/c	1,00,000	31.12.2021	By, Provision for Depreciation A/c	38,587
			31.12.2021	By, Bank A/c	50,000
			31.12.2021	By, Profit & Loss A/c (Loss on Sale)	11,413
		1,00,000			**1,00,000**

Working Notes:

Depreciation for the machine purchased on 1.7.2020.

For the year 2020 (Used for 6 months) = ₹ 1,50,000 x 15%*6/12 = ₹11250

For the year 2021 (Used for full year) = ₹ 1,38,750 x15 % = ₹ 20,813

Depreciation for the machine purchased on 1.1.2019. Depreciation = ₹ 1,00,000 x 15% = ₹ 15,000

So, Depreciation for 2nd year = ₹ 85,000 x15% = ₹ 12,750

Solution 17

(a) Fair Value : ₹ 37,00,000

Since this is an upward revaluation and the group had a balance in revaluation surplus (i.e. there was an upward movement earlier), hence this will result in an additional credit of ₹ 2,00,000 to Revaluation Surplus and hence the total Revaluation Surplus balance (part of other comprehensive income in Equity) shall increase to ₹ 5,00,000.

The Accounting journal entry shall be:

Property, Plant & Equipment A/c Dr	2,00,000	
To Revaluation Surplus A/c		2,00,000

(b) Fair Value : ₹ 33,00,000

Since this is a downward revaluation and the group had a balance in revaluation surplus (i.e. there was an upward movement earlier), hence this will result in a reduction or a debit to Revaluation Surplus to the extent of balance therein and any excess shall be debited to Profit & Loss A/c. In this case, there is a reduction in fair value of ₹ 2,00,000 (35,00,000 – 33,00,000) and hence the entire amount shall be debited to Revaluation Surplus. Hence, the total Revaluation Surplus balance (part of other comprehensive income in Equity) shall decrease to ₹ 1,00,000.

The Accounting journal entry shall be:

Revaluation Surplus A/c Dr	2,00,000	
To Property, Plant & Equipment A/c		2,00,000

(c) Fair Value : ₹ 31,00,000

Since this is also a downward revaluation and the group had a balance in revaluation surplus (i.e. there was an upward movement earlier), hence this will result in a reduction or a debit to Revaluation Surplus to the extent of balance therein and any excess shall be debited to Profit & Loss A/c. In this case, there is a reduction in fair value of ₹ 4,00,000 (35,00,000 – 31,00,000) and hence the Revaluation Surplus A/c shall be debited by ₹ 3,00,000 and the balance ₹ 1,00,000 shall be debited to Profit & Loss A/c. Hence, the total Revaluation Surplus balance (part of other comprehensive income in Equity) shall become Nil.

The Accounting journal entry shall be:

Revaluation Surplus A/c Dr	3,00,000	
Profit & Loss A/c Dr	1,00,000	
To Property, Plant & Equipment A/c		4,00,000

Solution 18

The changes in estimates would be effected in the following manner:
The asset has a carrying amount of ₹ 56,000 at the end of year 8 [₹ 2,00,000 – ₹ 1,44,000] i.e. Accumulated Depreciation.
Accumulated depreciation is calculated as
Depreciable amount {Cost less residual value} = ₹ 2,00,000 – ₹ 20,000 = ₹ 1,80,000.
Annual depreciation = Depreciable amount / Useful life = 1,80,000 / 10 = ₹ 18,000.
Accumulated depreciation = 18,000 × No. of years (8) = ₹ 1,44,000.
Revision of the useful life to 12 years results in a remaining useful life of 4 years (12 – 8).
The revised depreciable amount is ₹ 46,000. (56,000 – 10,000)
Thus, depreciation should be charged in future at ₹ 11,500 per annum (₹ 46,000/4 years).

Solution 19

The entity has charged depreciation using the straight-line method at ₹ 10,000 per annum i.e (1,00,000/10 years).
On 1st January 2020, the asset's net book value is [1,00,000 – (10,000 x 4)] ₹ 60,000.
The remaining useful life is 4 years.
The company should amend the annual provision for depreciation to charge the unamortised cost over the revised remaining life of four years.
Consequently, it should charge depreciation for the next 4 years at ₹ 15,000 per annum i.e. (60,000 / 4 years).

Solution 20

The asset has a carrying amount of ₹ 6,00,000 at the end of year 4 [₹ 10,00,000 – ₹ 4,00,000] i.e. Accumulated Depreciation.
Accumulated depreciation is calculated as
Depreciable amount {Cost less residual value} = ₹ 10,00,000 – Nil = ₹ 10,00,000.
Annual depreciation = Depreciable amount / Useful life = 10,00,000 / 10 = ₹ 1,00,000.
Accumulated depreciation = 1,00,000 × No. of years (4) = ₹ 4,00,000.

Revised carrying amount after revaluation = 6,00,000+40,000 = 6,40,000
Now remaining useful life 8 years
The revised depreciable amount is ₹ 6,40,000.
Thus, depreciation for 5th year = ₹ 80,000 (₹ 6,40,000/8 years).

Solution 21

Depreciation per year = ₹ 6,00,000 / 10 = ₹ 60,000
Depreciation on SLM charged for three years = ₹ 60,000 x 3 years = ₹ 1,80,000
Book value of the computer at the end of third year = ₹ 6,00,000 – ₹ 1,80,000 = ₹ 4,20,000.
Remaining useful life as per previous estimate = 7 years
Remaining useful life as per revised estimate = 5 years
Depreciation from the fourth year onwards = ₹ 4,20,000 / 5 = ₹ 84,000 per annum

Solution 22

Case (a)
The company considers that the residual value, based on prices prevailing at the balance sheet date, will equal the cost. There is, therefore, no depreciable amount and depreciation is zero.

Case (b)
The company considers that the residual value, based on prices prevailing at the balance sheet date, will be ₹ 9,00,000 and the depreciable amount is, therefore, ₹ 1,00,000.
Annual depreciation (on a straight line basis) will be ₹ 5,000 [{10,00,000 – 9,00,000} ÷ 20].

Solution 23

Following factors are taken into consideration for calculation of depreciation.

1. **Cost of asset** including expenses for installation, commissioning, trial run etc.- Cost of a depreciable asset represents its money outlay or its equivalent in connection with its acquisition, installation and commissioning as well as for additions to or improvement thereof for purpose of increase in efficiency.
2. **Estimated useful life of the asset** - Useful Life' is either (i) the period over which a depreciable asset is expected to be used by the enterprise or (ii) the number of production or similar units expected to be obtained from the use of the asset by the enterprise. Determination of the useful life is a matter of estimation and is normally based on various factors including experience with similar type of assets. Several other factors like estimated working hours, production capacity, repairs and renewals, etc. are also taken into consideration on demanding situation.
3. **Estimated scrap value** (if any) is calculated at the end of useful life of the asset. If such value is considered as insignificant, it is normally regarded as nil. On the other hand, if the residual value is likely to be significant, it is estimated at the time of acquisition/installation, or at the time of subsequent revaluation of asset.

Solution 24

Cost of Property, Plant and Equipment comprise of any cost directly attributable to bring the asset to the location and condition necessary for it to be capable of operating in a manner intended by the enterprise.
Examples of directly attributable costs are:

a) cost of employee benefits arising directly from acquisition or construction of an item of property, plant and equipment.
b) cost of site preparation
c) initial delivery and handling costs
d) installation and assembly costs
e) cost of testing whether the asset is functioning properly, after deducting the net proceeds from selling the items produced while testing (such as samples produced while testing)
f) professional fees e.g., engineers hired to help in the installation of a machine.
g) transportation cost
h) trial run expenses

Thus, all the expenses which are necessary for the asset to bring it in condition and location for desired use will become part of cost of the asset.