(a)

Declining Balance Method

Cost of the Machinery = $15,000

Salvage Value = $1,000

Depreciable Cost = $15,000 - $1,000
= $14,000

Years of useful life = 10 years

Straight-Line Depreciation Rate = $\frac{100\%}{10} = 10\%$

Declining Balance Rate = 10% × 2 = 20%

Depreciation Schedule

Jojo Ltd.

	Computation				Annual	End of Year	
Year	Book Value Beg. of Year	×	Depreciation Rate	=	Depreciation Expense	Accumulated Depreciation	Book Value
2020	$15,000	×	20%	=	$3,000	$3,000	$12,000
2021	$12,000	×	20%	=	$2,400	$5,400	$9,600

For 2020:

Book Value = Cost - Accumulated Depreciation

= $15,000 - $3,000

= $12,000

For 2021:

Book Value = Cost - Accumulated Depreciation = $15,000 - $5,400 = $9,600

∴ End of year book value for the first year is $12,000 and for the second year is $9,600 using Declining Balance Method.

(b)

Straight Line Method

From part (a) we get, Depreciable Cost = $14,000

Straight-Line Depreciation Rate = 10%.

Depreciation Schedule

Jajo Ltd.							
	Computation				Annual	End of Year	
Year	Depreciable Cost	×	Depreciation Rate	=	Depreciation Expense	Accumulated Depreciation	Book Value
2020	$14,000	×	10%.	=	$1,400	$1,400	$13,600

Book Value = Cost − Accumulated Depreciation

= $15,000 − $1,400

= $13,600

∴ End of year book value for the first year using the Straight Line method is $13,600

(c)

Units-of-Activity Method

From part (a) we get, Depreciable cost = $14,000

Estimated useful life in machine hours = 7,000 hours

$$\text{Depreciation cost per unit} = \frac{\text{Depreciable Cost}}{\text{Estimated useful life in machine hours}}$$

$$= \frac{\$14,000}{7,000 \text{ hours}}$$

$$= \$2$$

Depreciation Schedule

Jojo Ltd.							
	Computation					End of Year	
Year	Units of Activity	×	Depreciation cost per unit	=	Annual Depreciation Expense	Accumulated Depreciation	Book Value
2020	300	×	$2	=	$600	$600	$14,400

Book Value = Cost − Accumulated Depreciation

= $15,000 − $600

= $14,400

∴ End of book year book value for the first year using the Units of Activity method is is $14,400