ACC1701X
ACCOUNTING FOR DECISION MAKERS
SEMESTER 1 2022 / 2023

TUTORIAL 8 ANSWER SOLUTION

Property, Plant & Equipment (PPE)

Understanding Financial Statements - Samsung

(a) How do you ascertain that the amount reported on Samsung's Statements of Financial Position for PPE has considered accumulated depreciation? As of December 31, 2021, what is the total acquisition cost of Samsung's PPE and how much is the accumulated depreciation? What depreciation method(s) does Samsung use for its PPE?

From Note 10, it shows that the balance on the SFP is net of accumulated depreciation. Property, plant and equipment acquisition cost ₩377,471,994, accumulated depreciation ₩227,543,455 → carrying amount ₩149,928,539 million. From Note 2.9, Samsung uses the straight-line depreciation for property, plant and equipment.

10. Property, Plant and Equipment

(A) Changes in property, plant and equipment for the years ended December 31, 2021 and 2020 are as follows:

	2021					
(In millions of Korean won)	**Land**	**Buildings and structures**	**Machinery and equipment**	**Construction in progress**	**Other**	**Total**
Balance as of January 1	9,772,156	34,552,004	60,994,130	20,175,917	3,458,685	128,952,892
Acquisition cost	9,850,942	55,026,369	233,056,501	20,175,917	10,496,584	328,606,313
Accumulated depreciation and impairment	(78,786)	(20,474,365)	(172,062,371)	-	(7,037,899)	(199,653,421)
Acquisitions and capital expenditures[1]	117,933	6,608,620	43,862,769	(2,320,520)	1,696,362	49,965,164
Depreciation	(47,517)	(3,174,672)	(26,552,958)	-	(1,510,062)	(31,285,209)
Disposals/scrap	(49,683)	(91,964)	(18,307)	(469)	(6,200)	(166,623)
Impairment(reversal)	-	(12,135)	(131,985)	-	(7,082)	(151,202)
Other[2]	37,265	987,587	1,372,648	154,396	61,621	2,613,517
Balance as of December 31	9,830,154	38,869,440	79,526,297	18,009,324	3,693,324	149,928,539
Acquisition cost	9,943,570	62,651,459	274,909,571	18,009,324	11,958,070	377,471,994
Accumulated depreciation and impairment	(113,416)	(23,782,019)	(195,383,274)	-	(8,264,746)	(227,543,455)

(b) Refer to Note 10, the total carrying amount of disposed PPE in 2021 is ₩166,623. What are your best estimates of the total acquisition cost and total accumulated depreciation of the disposed PPE?

(In ₩'000,000)	**2021**
Beginning PPE Acquisition Cost	328,606,313
PPE Acquisition during the year	49,965,164
Other addition during the year	2,613,517
Less PPE Ending Acquisition Cost	(377,471,994)

Acquisition Cost of Disposed PPE	**3,713,000**
Beginning PPE Acuum. Depr and Impairment	199,653,421
Depreciation Expense during the year	31,285,209
Impairment during the year	151,202
Less PPE Ending Accum Depr and Impairment	(227,543,455)
Accum. Depr of Disposed PPE	**3,546,377**
Carrying Amount of Disposed PPE (Acquisition Cost - Accum. Depr)	***166,623***

(c) How much net gain/loss on disposal of PPE did Samsung recognize on its Statement of Profit or Loss in 2021?

From Note 23, gain on disposal of PPE ₩340,400, loss on disposal of PPE ₩75,586 → net gain on disposal of PPE ₩264,814.

(d) Calculate the fixed assets turnover and total assets turnover of Samsung for the financial years of 2021 and 2020. Note: You will need to search for and extract the necessary 2019 financial figures to calculate your ratios for 2020.

(In ₩'000,000)	**2021**	**2020**
Revenue	279,604,799	236,806,988
PPE - Beginning	128,952,892	119,825,474
PPE - Ending	149,928,539	128,952,892
Average PPE	139,440,716	124,389,183
Fixed Assets Turnover	**2.01**	**1.90**
Total Assets - Beginning	378,235,718	352,564,497
Total Assets - Ending	426,621,158	378,235,718
Average Total Assets	402,428,438	365,400,108
Total Assets Turnover	**0.69**	**0.65**

SSA Textbook Tutorial Assignment:

E 10-15 (LO3, LO4) Change in Estimated Useful Life

Original depreciation:

($120,000 – $10,000)/10 years = $11,000 per year

2021: $11,000 depreciation expense
2022: $11,000 depreciation expense

The change in estimate is calculated as follows:

$11,000 × 2 years = $22,000 (amount in accumulated depreciation)

($120,000 – $22,000) – $10,000 = $88,000 (new depreciable amount)

$88,000/6 years (remaining useful life) = $14,667

2023: $14,667 depreciation expense

P 10-5 (LO3) Depreciation Calculations

1. Straight-line method:

$$\frac{\$47{,}000 - \$2{,}000}{10 \text{ years}} = \$4{,}500 \text{ per year}$$

Year	Depreciation Expense	Carrying Amount				
2021	$4,500 × 2/3 year = $3,000	$47,000	–	$3,000	=	$44,000
2022	$4,500	44,000	–	4,500	=	39,500

2. Units-of-production method:

$$\frac{(\$47{,}000 - \$2{,}000)}{25{,}000 \text{ hours}} = \$1.80 \text{ per hour}$$

2021: $1.80 per hour × 1,800 hours = $3,240
2022: $1.80 per hour × 2,900 hours = $5,220

Year	Depreciation Expense	Carrying Amount				
2021	$3,240	$47,000	–	$3,240	=	$43,760
2022	$5,220	43,760	–	5,220	=	38,540

3. The straight-line method would be used in order to report the highest income in 2021 and 2022 combined. Because straight-line depreciation provides the smallest amount of depreciation expense in early years ($7,500 by straight-line method and $8,460 by units-of-production method), net income would be higher with this method than with the others.