Exercise Question 04

ABC Corp acquired debt securities issued under the following conditions on January 1, 2021.

Face value	**₩1,000,000**
Interest payment	Interest is paid at 4% per annum on December 31.
Repayment at maturity	Principal is repaid on December 31, 2023

(1) Calculate the initial recognition amount (present value of future cash flows) of the debt securities when the effective interest rate on the acquisition date is 6% per annum.

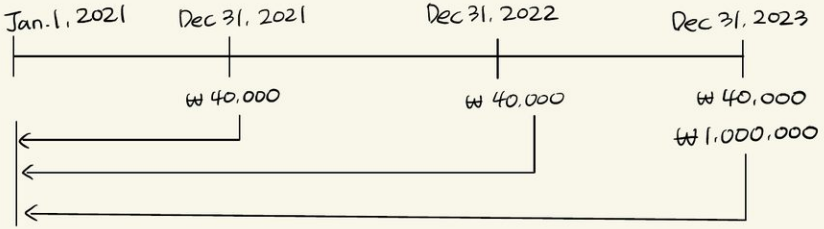
(2) Prepare a schedule of carrying amount adjustments of the debt securities using the effective interest rate from 2021 to 2023.

(3) Assume that the debt instrument is classified as an FVOCI financial asset and prepare the accounting treatment related to the fair value evaluation at the end of 2021 and 2022. The fair values at the end of 2021 and 2022 are ₩965,000 and ₩980,000, respectively.

(4) In relation to Question (3), assume the debt instrument is classified as an FVPL financial asset and answer again. Interest expense for the FVPL financial asset is recognized using the effective interest rate method.

(5) In Question (4), assume that the interest expense for the FVPL financial asset is recognized as coupon interest and answer again.

(1) Issue price at Jan 1, 2021



$$\text{Issuance price} = \frac{I}{r} \times \frac{(1+r)^n - 1}{(1+r)^n} + \frac{P}{(1+r)^n} = \frac{₩40{,}000}{0.06} \times \frac{1.06^3 - 1}{1.06^3} + \frac{₩1{,}000{,}000}{(1.06)^3} = ₩946{,}540$$

(2) A schedule of carrying amount adjustments (effective interest rate method)

Date	Effective interest (6%)	Stated interest (4%)	Adjustments	Carrying amount
Jan 1, 2021				₩ 946,540
Dec 31, 2021	₩ 56,792	₩ 40,000	₩ 16,792	963,332 → ₩ 965,000
Dec 31, 2022	57,800	40,000	17,800	981,132 → ₩ 980,000
Dec 31, 2023	58,868	40,000	18,868	1,000,000
		120,000		

FV

(3)

① Dec 31, 2021

Dr. cash 40,000 Cr. Interest Revenue 56,792
FVOCI financial asset 16,792

Dr. FVOCI financial asset 1,668 Cr. Gain on financial asset valuation (OCI) 1,668

↳ ₩ 965,000

② Dec 31, 2022

↗ ₩ 982,800

Dr. cash 40,000 Cr. Interest Revenue 57,800
FVOCI financial asset 17,800

Dr. Gain on financial asset valuation (OCI) 1,668 Cr. FVOCI financial asset 2,800
Loss on financial asset valuation (OCI) 1,132

(4) ① Dec 31, 2021

Dr. cash 40,000 Cr. Interest Revenue 56,792

FVOCI financial asset 16,792

Dr. FVOCI financial asset 1,668 Cr. Gain on financial asset valuation (OCI) 1,668

② Dec 31, 2022

Dr. cash 40,000 Cr. Interest Revenue 57,800

FVOCI financial asset 17,800

Dr. Loss on financial asset valuation (P/L) 2,800 Cr. FVPL financial asset 2,800

(5) ① Dec 31, 2021

₩946,540 → ₩965,000

Dr. cash 40,000 Cr. Interest Revenue 40,000

Dr. FVPL financial asset 18,460 Cr. Gain on financial asset valuation (P/L) 18,460

(= ₩965,000 − ₩946,540)

② Dec 31, 2021

Dr. Cash 40,000 Cr. Interest Revenue 40,000

Dr. FVPL financial asset 15,000 Cr. Gain on financial asset valuation (P/L) 15,000