13. (3 points)

A property and casualty insurer was incorporated on January 1, 2016 and purchased the following three bonds. All amounts are in thousands of dollars ($000s).

Asset	Classification	Coupon Received in 2016	Amortized Value December 31, 2016	Market Value December 31, 2016
AAA Bond	Held for trading	50	4,000	3,800
BBB Bond	Available for Sale	175	2,500	3,000
CCC Bond	Held to maturity	200	7,000	6,500

Assume the insurance company is an income-tax exempt organization.

a. (0.5 point)

Calculate the total net investment income shown in the 2016 income statement.

b. (0.75 point)

Identify the value of each bond to be recorded in the 2016 statement of financial position.

c. (0.25 point)

Calculate the accumulated other comprehensive income for 2016.

d. (1.5 points)

Assume the market interest rate increases on January 1, 2017. For each of the three asset classifications, identify the impact on net income and briefly explain your reasoning.

CONTINUED ON NEXT PAGE

QUESTION 13	
TOTAL POINT VALUE: 3	**LEARNING OBJECTIVE(S): C1**

SAMPLE ANSWERS

Part a: 0.5 point

Investment income
= ∑coupons + (Market Value of AAA – amortized value of AAA)
= 50 + 175 + 200 + 3,800 – 4,000 = 225

Part b: 0.75 point

AAA: Held for trading, market value = 3,800
BBB: Available for sale, market value = 3,000
CCC: Held to maturity, amortized value = 7,000

Part c: 0.25 point

AOCI = BBB market value – BBB amortized value = 3,000 – 2,500 = 500

Part d: 1.5 points

- AAA: Market Value (MV) of AAA decreases with higher interest rate, lowering net income. MV of liabilities also decreases with the higher discount rate. The overall movement in net income is uncertain.
- BBB: MV of BBB decreases, but the impact flows to OCI instead of net income. MV of liabilities decrease with the higher discount rate. Overall net income increases as a result.
- CCC: CCC is measured at amortized value, so no impact to asset value. Liabilities are discounted at book yield, so no impact either. Net income doesn't change.

EXAMINER'S REPORT

Candidates were expected to be able to identify the classification of each type of bond, how they should be reflected in the financial statements, and the impact of market interest rate changes on net income.

Part a

Candidates were expected to consider the coupon payments as well as the difference between the market value and amortized value for the held for trading.

A common mistake was calculating only the coupon payments, without considering the unrealized gain on HFT.

Part b

Candidates were expected to demonstrate understanding of how assets need to be recorded in the statement of financial position by asset classification.

Common mistakes included:

- Mixing up amortized value and market value
- Adding coupons to bond values

Part c
Candidates were expected to know that the difference between the market value and amortized value of the available for sale bond would flow through OCI. A common mistake was not considering the appropriate asset classifications to calculate OCI.
Part d
Candidates were expected to know the impact of market interest rate changes on net income for each type of bond. Common mistakes included: • Not mentioning the unchanged value of liabilities as book yield was used for discounting for held to maturity bond (for held-to-maturity option) • Not mentioning the impact on liabilities that would flow through net income (focusing on assets only)