20. (2.5 points)

The following tables represent an insurance company's entire bond portfolio as of December 31, 2018. Assume each amount represents one bond (all figures are in thousands of dollars):

Original Cost

	NAIC Class 1	NAIC Class 3	NAIC Class 6
Available for Sale	115	82	86
Held to Maturity	81	36	63
Held for Trading	18	42	22

Amortized Cost

	NAIC Class 1	NAIC Class 3	NAIC Class 6
Available for Sale	100	75	80
Held to Maturity	85	30	60
Held for Trading	20	47	32

Fair Value

	NAIC Class 1	NAIC Class 3	NAIC Class 6
Available for Sale	90	62	78
Held to Maturity	95	23	45
Held for Trading	15	40	27

a. (0.75 point)

Calculate the value of the bond portfolio under SAP.

b. (0.75 point)

Calculate the value of the bond portfolio under U.S. GAAP.

c. (0.5 point)

Contrast the purpose of U.S. GAAP and SAP accounting.

d. (0.5 point)

Describe how the accounting treatment of bonds under SAP may conflict with its primary purpose.

CONTINUED ON NEXT PAGE

Part b
The candidate was expected to know the formula for calculating the LCF. Common errors included: • Not knowing the formula • Reversing the 0.3 factor for the largest line and the 0.7 for the total of the other lines • Calculating the HO reserve correctly but not using it to calculate the total reserves.
Part c
The candidate was expected to know enough about the R4 charge to be able to describe ways it would be impacted by introducing another line of business. Common errors included: • The two ways described were too similar. • Incorrectly describing how the R4 charge changes. As an example, "WC reserves will cause the LCF to decrease so the total R$ will increase."

FALL 2019 EXAM 6U, QUESTION 20	
TOTAL POINT VALUE: 2.5	**LEARNING OBJECTIVE: C3**
SAMPLE ANSWERS	
Part a: .75 point	

Sample 1

SAP=> Use bond class to decide

- ⇨ Class 1&2 => Amortized Cost
- ⇨ Class 3-6 => min (Amortized Cost, Fair Value)
- ⇨ Bond value = 100 + 85 + 20
  + 62 + 23 + 40
  + 78 + 45 + 27 = 480

Sample 2

SAP Bonds= 100 + 85 + 20   Class 1 @ amortized cost
+ 62 + 23 + 40   Class 3,6 @ min (amortized cost, FV)
+ 78 + 45 + 27
= 480

Sample 3

Bonds under SAP
NAIC Class 1-2 at Amortized cost
Class 3-6 min(Amortized cost, fair value)

- ➢ (100 + 85 + 20) + [min(75,62) + min(30,23) + min(47,40)] + [min(80,78) + min(60,45) + min(32,27)]
- ➢ 205 + [125} + [150]
- ➢ = 480

Sample 4
Class 1 & 2 are valued at amortized cost
Class 3-5 are valued at the lower of the fair value and amortized cost
Value = 100+85+20+62+23+40+78+45+27
= 480

Part b: .75 point

Sample 1
Under US GAAP => value depend on usage
- ⇨ Available for sale => fair value
  Held to maturity => amortized cost
  Held for trading => fair value
- ⇨ Bond value = 90 + 62 +78
  + 85 + 30 + 60
  + 15 + 40 + 27
  = 487

Sample 2
GAAP Bonds= 85 + 30 + 60 amortized cost for held to maturity
+ 90 + 62 + 78 fair value for sale, trading
+ 15 + 40 + 27
= 487

Sample 3
Bonds under GAAP
- Bonds available for sale or held for trading: fair value
  Bonds held to maturity: amortized cost
- ➢ (90 + 62 + 78) + (15 + 40 +27) + (85 + 30 +60)
  = 230 + 82 + 175
  = 487

Sample 4
AFS: fair value
HTM: Amortized
HFT: fair value
Value = 85 + 30 + 60 + 90 + 62 + 78 + 15 + 40 + 27
= 487

Part c: .5 point

Sample Responses for SAP Purpose
- SAP: Will be used by regulators:
  Sample responses – any one of the following:
  - *To evaluate solvency*
  - *To show the value of the company on a conservative basis*

- *To focus on balance sheet*
- *To focus on a liquidation view*

- SAP is mainly for regulators to view company's financial health with solvency perspective to see whether the company is able to meet policyholder obligations and is more conservative.
- SAP accounting is used by regulators to monitor the solvency of an insurer and their ability to pay claims
- SAP is for regulators and is more conservative with focus on providing early warning of insolvency

<u>*Sample Responses for GAAP Purpose*</u>

- GAAP: Will be used by investor, shareholders and company management
  Sample responses – any one of the following:
  - *To provide an accurate view of the insurer*
  - *To focus on income*
  - *To show the value of the company as a going concern*
- GAAP is for investors, company management to see the company as a going concern and one interested in profitability, earning potential of the company by matching revenue and expenses
- US GAAP is used by investors and creditors to monitor the profitability of the company on a going concern basis
- GAAP is for investors and focuses on income emergence

Part d: .5 point

<u>*Sample 1*</u>
For SAP: The primary purpose is solvency. While bond's value in SAP is depending on its class, if assume liquidation view we should use fair value for all bonds assume the insurer goes bankruptcy & assets need to be liquidated. This conflicts with current approach.

<u>*Sample 2*</u>
SAP values high class (1,2) bonds at amortized cost but in case of insolvency they will be sold at fair value which may be lower than amortized cost. This contradicts SAP's conservative valuation for solvency purpose.

<u>*Sample 3*</u>
Bonds under SAP for NAIC classes 1-2 are valued at amortized which may be higher than their fair market value. If an insurer became insolvent & needed to sell these bonds, they could only be able to sell them for their fair market value which may be less than amortized cost.

<u>*Sample 4*</u>
Classes 1-2 bonds are valued at amortized costs even if it is higher than fair value. This conflict with its primary purpose. One explanation is they are meant for holding to maturity so market fluctuation doesn't matter.

<u>*Sample 5*</u>

For SAP: While bond's value in SAP is depending on its class, if the company assumes liquidation view, we should use fair value for all bonds assume the insurer goes into bankruptcy and assets need to be liquidated.

Sample 6

SAP values high class (1,2) bonds at amortized cost but in case of insolvency they will be sold at fair value which may be lower than amortized cost.

Sample 7

Bonds under SAP for NAIC classes 1-2 are valued at amortized which may be higher than their fair market value. If an insurer became insolvent and needed to sell these bonds, they could only be able to sell them for their fair market value which may be less than amortized cost.

Sample 8

Class 1&2 Bond is valued at amortized costs even if it is higher than fair value. This conflict with its primary purpose. One explanation is they are meant for holding to maturity so market fluctuation doesn't matter

EXAMINER'S REPORT

Candidates were expected to have an understanding of definition SAP and GAAP accounting and articulate the conceptual differences between the accounting practices and conflicts with the SAP principles. Candidates were expected to demonstrate the application of the SAP and GAAP accounting practices when evaluating assets specifically to the bond portfolio.

Part a

Candidates were required to calculate the bond portfolio value based on SAP valuation principles.

Common errors include:

- The incorrect rules were applied to each NAIC class
- Looked up the wrong value on provided valuations tables
- Assumed only one bond rather than a portfolio of 9 bonds
- Applied GAAP bond category rules instead of SAP class valuation rules.

Part b

Candidates were required to calculate the bond portfolio value based on GAAP valuation principles.

Common errors include:

- The incorrect rules were applied to each bond category
- Looked up the wrong value on provided valuations tables
- Assumed only one bond rather than a portfolio of 9 bonds
- Applied SAP class valuation rules instead of GAAP bond category rules

Part c

Candidates were expected to contrast SAP versus GAAP accounting methodology. Each candidate was expected to show two points of contrast between SAP and GAAP accounting.

Common errors include: • Only providing one point of contrast • Confusion between GAAP vs SAP accounting methodology • Vague answers with limited details/explanation.
Part d
Candidates were expected to detail how the treatment of bonds under SAP accounting principles conflicts with its primary purpose of ensuring insurer solvency. Common errors include: • Not differentiating between classes 1 and 2 versus the other bond classes in their respective valuation treatments • Not articulating the basis for the conflict, i.e. insufficient to just say classes 1-2 bonds are valued at amortized cost which is greater than fair market value without reference to not holding bonds to maturity • Inferring that a deterioration in bond rating would cause the conflict

FALL 2019 EXAM 6U, QUESTION 21	
TOTAL POINT VALUE: 2.5	**LEARNING OBJECTIVE: C3**
SAMPLE ANSWERS	
Part a: 1 point	
Sample 1 Goodwill = Purchase Price – (Fair Value of Assets – Fair Value of Liabilities) GAAP so no non-admitted assets. A: 3000 – (9400-6000) = -400, so no goodwill B: 3000 – (8500 – 7000) = 1500 *Sample 2* Insurer A: Goodwill = 3000 – (9400-6000) = -400 Minimum value 0 Goodwill = 0 Insurer B: Goodwill = 3000 – (8500 – 7000) = 1500 *Sample 3* A: max(3000 – (9000+400-6000),0) = 0 B: max(3000 – (8000+500-7000),0) = 1500	
Part b: 0.5 point	
One response is needed for Insurer A and one response for insurer B.	