17. (1.25 points)

The following information is available for a Canadian property and casualty insurance company as of December 31, 2014. All amounts are in thousands of dollars ($000).

Appointed Actuary's Claim Liability Estimates:

Net Undiscounted Estimate	5,500
Net Discounted Estimate Excluding PfADs	4,700
PfAD – Investment Return Rate	150
PfAD – Claims Development	470
PfAD – Reinsurance Recovery	50

Excerpts from Annual Return page 20.10

Cash	30
Total Investments	12,600
Unearned Premiums - Recoverable	875
Unpaid Claims & Adjustment Expenses - Recoverable	5,650
Other Recoverable on Unpaid Claims*	200

*Comprised solely of Salvage & Subrogation Recoverable

Excerpts from Annual Return page 20.20

Borrowed Money & Accrued Interest	100
Agents & Brokers – Payables	500
Policyholder – Payables	100
Unearned Premiums	4,150
Unpaid Claims & Adjustment Expenses	12,000

Future Income Tax Rate is 35%.

Calculate the estimated effect of discounting the asset for future income taxes.

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QUESTION *17*	
TOTAL POINT VALUE: 1.25	**LEARNING OBJECTIVE: *C1 & D1***
SAMPLE ANSWERS	

Sample Solution #1

Net Claim Liability = Net Discounted Estimate excl PfADs + PfAD Investment Return Rate + PfAD Claims Development + PfAD Reinsurance Recovery = 4,700 + 150 + 470 + 50 = 5,370

Net Reported Reserve = Gross Liabilities carried by ins – S&S recoverable – Reinsurance recoverable = 12,000 – 200 – 5,650 = 6,150

Present Value Factor = (Net Discounted Estimate excl PfAD + PfAD Investment Return Rate)/Net Undiscounted Estimate = (4,700 + 150) / 5,500 = 0.8818

Estimated Effect of Discounting the Asset for Future Income Taxes = (Reported Reserve – 95% of lesser of Reported Reserve and Claim Liability) x Future Income Tax Rate x (1 – Present Value Factor)

Actuarial estimate of claim liability < reported reserve, so use 5,370 as the lesser of the two

Estimated Effect = (6,150 – 95% x 5,370) x 35% x (1 – 0.8818) = 43.38

Sample Solution #2

Net Claim Liability = (Net Discounted Estimate excl PfADs – S&S) + PfAD Investment Return Rate + PfAD Claims Development + PfAD Reinsurance Recovery = 4,700 – 200 + 150 + 470 + 50 = 5,170

Net Reported Reserve = Gross Liabilities carried by ins – S&S recoverable – Reinsurance recoverable = 12,000 – 200 – 5,650 = 6,150

Present Value Factor = (Net Discounted Estimate excl PfAD – S&S + PfAD Investment Return Rate)/Net Undiscounted Estimate = (4,700 – 200) + 150) / 5,500 = 0.8455

Estimated Effect of Discounting the Asset for Future Income Taxes = (Reported Reserve – 95% of lesser of Reported Reserve and Claim Liability) x Future Income Tax Rate x (1 – Present Value Factor)

Actuarial estimate of claim liability < reported reserve, so use 5,170 as the lesser of the two

Estimated Effect = (6,150 – 95% x 5,170) x 35% x (1 – 0.8455) = 66.98

Sample Solution #3

PV Factor = (4700 + 150)/5500 = 88.18%

Reported Claims Liability = 12000 – 5650 – 200 = 6150
Actuary's estimate of claims liability = 4700 + 150 + 470 + 50 = 5370
Minimum of above = 5370

Effect of discounting future tax asset = (6150 – 95% * 5370) * 35% * (1- 88.18%) = $43.37

EXAMINER'S REPORT

Candidates performed very well on this question. Candidates were expected to calculate the Net Claim Liability, Net Reported Reserve and the Present Value Factor before they could calculate the effect of discounting the asset for future income taxes.

The most common mistakes made by candidates involved using an incorrect formula for the Net Claim Liability and/or Net Reported Reserves. Calculation errors made by candidates were only penalized once.