

EXAM 6 – UNITED STATES, SPRING 2015

17. (3.25 points)

Given the following information for an insurance company (figures other than discount factors and tax rates are in millions of dollars):

Statutory Underwriting Profit	-6
Face Value of Taxable Bonds @ 13% Coupon Rate	200
Face Value of Tax-Exempt Bonds @ 10% Coupon Rate	250
Dividends Received from Controlled Companies	8
Realized Capital Gains	2
Unrealized Capital Gains	10
Unearned Premium Reserve (Beginning of Year)	100
Unearned Premium Reserve (End of Year)	120
Loss and LAE Reserve (Beginning of Year)	500
Loss and LAE Reserve (End of Year)	550
Average Reserve Discount Factor (Beginning of Year)	0.92
Average Reserve Discount Factor (End of Year)	0.95
Regular Income Tax Rate	0.35
Alternative Minimum Income Tax Rate	0.20
Alternative Minimum Tax Credit (Beginning of Year)	0

Calculate the insurance company's income tax.

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SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 17	
TOTAL POINT VALUE: 3.25	LEARNING OBJECTIVE: C4
SAMPLE ANSWER	
<p>RTI = UW profit + 20% UEPR + Change in loss reserve discount + taxable investment income + realized gains = $-6 + 20\%(120 - 100) + (0.05 \times 550 - 0.08 \times 500)$ + $200 \times 13\%$ + $250 \times 10\% \times 15\%$ (proration provision) + 2 = 17.25</p> <p>Dividends from controlled are 100% tax exempt => no proration provision as per the paper.</p> <p>AMTI = 17.25 + 75% income that escapes taxation = $17.25 + 75\% (250 \times 10\% \times 85\% + 8)$ = 39.1875</p> <p>RIT = $17.25 \times .35 = 6.0375$</p> <p>AMIT = $39.1875 \times .2 = 7.8375$</p> <p>AMIT > RIT => income tax = 7.8375M</p>	
EXAMINER'S REPORT	
<p>The question required the candidate to calculate the income tax for an insured. It required the candidate to know how various sources of underwriting and investment income are taxed. Additionally, it required the candidate to know what elements of income are included in statutory underwriting income and how to convert the elements to a tax basis.</p> <p>Full credit was given for</p> <ul style="list-style-type: none">• Calculating the bond income• Prorating the taxable bond income• Adjusting statutory underwriting income to a tax basis• Calculating regular taxable income• Calculating alternative minimum taxable income• Calculating regular income tax and alternative minimum income tax and determining which is the final income tax <p>Most candidates knew how to apply the tax rates to produce regular income tax and alternative minimum income tax and knew that the final tax was the maximum of the two. Most candidates knew the general concept of regular taxable income and were able to recall alternative tax formula and apply it properly.</p> <p>Common mistakes:</p> <ul style="list-style-type: none">• Candidates assumed the dividend income was only partially tax exempt, even though the question stated that it was controlled• Candidates assumed the dividend income was not tax exempt at all• Candidates adjusted statutory underwriting income by the change in discounted reserves rather than the change in reserve discount• Candidates adjusted statutory underwriting income by subtracting the change in reserve discount instead of adding it• When calculating the bond income, candidates used the bond face value instead applying the coupon rates	

SAMPLE ANSWERS AND EXAMINER'S REPORT

- Candidates included unrealized capital gains in taxable income
- Candidates mistook underwriting profit for total profit (which would include investment income)