#### EXAM 8 - FALL 2014

# 19. (2.75 points)

A company is considering options for a workers compensation policy with the following parameters:

Item		Value	Applicable to:
Standard Premium		\$1,000,000	
Expected Loss and ALAE		900,000	
Per Occurrence Deductible		250,000	Loss and ALAE
Aggregate Limit		1,000,000	Loss and ALAE
ULAE		7.0%	Loss and ALAE
Loss Based Assessment		5.0%	Loss and ALAE
General Overhead		5.0%	Standard Premium
Credit Risk		4.0%	Standard Premium
Acquisition Expense		5.0%	Net Premium
Profit and Contingency		2.5%	Net Premium
Tax and Assessment		8.0%	Net Premium
Limit	ELPPF	Entry Ratio	Insurance Charge
\$250,000	0.20	1.11	0.18
500,000	0.09	1.25	0.13
750,000	0.06	1.39	0.09

# a. (1 point)

1,000,000

Calculate the premium for a large dollar deductible (LDD) policy.

0.03

# b. (0.75 point)

Identify three reasons why an employer might choose an LDD Plan.

<< QUESTION 19 CONTINUED ON NEXT PAGE>>

1.50

0.06

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# c. (0.5 point)

Assume the following revised assumptions for an excess workers compensation (WC) policy:

- Profit and Contingency = -1.5%
- Tax and Assessment = 3%

Calculate the revised premium.

# d. (0.5 point)

Describe the difference in profit and tax assumptions for LDD and excess WC policies.

## **EXAM 8 FALL 2014 SAMPLE ANSWERS AND EXAMINER'S REPORT**

## **QUESTION 19**

**TOTAL POINT VALUE: 2.75** 

**LEARNING OBJECTIVE:** 

#### **SAMPLE ANSWERS**

Part a: 1 point

Sample 1

Entry Ratio = \$1M / 900K (1 - .20) = 1.39 which the table corresponds to an insurance charge of 0.09.

LDD Premium = 
$$\frac{900,000 \left[0.20 + 0.09 + 0.07 + 0.05\right] + 1,000,000(.05 + .04)}{1 - .05 - .08 - .025}$$
$$= 543,195$$

Sample 2

LDD Premium = 
$$\frac{900,000 \left[0.20 + 0.8 \left(0.09\right) + 0.07 + 0.05\right] + 1,000,000(.05 + .04)}{1 - .05 - .08 - .025}$$
$$= 524,024$$

Part b: 0.75 point

Sample 1

A medium-sized employer may be allowed to purchase an LDD plan even if it doesn't qualify for self-insurance.

Sample 2

If the company already has a full coverage policy, it is already familiar with the insurer's service if it decides to purchase an LDD policy.

Sample 3

LDD still services all losses (even those below the deductible) and insured can be comfortable with an experienced insurer handling the claims.

## **EXAM 8 FALL 2014 SAMPLE ANSWERS AND EXAMINER'S REPORT**

Sample 4

Employer gets to keep savings from tax and assessments for premium from losses under the deductible

Sample 5

Cash flow benefits as employer will get to hold onto cash longer since insurer will pay losses first and then seek reimbursement from the employer.

Sample 6

There is a tax incentive since the insured can deduct a tax liability for an unpaid deductible but not on a liability for a loss reserve.

Sample 7

Give employer more control of losses under the large deductible.

Part c: 0.5 Point

Sample 1

Excess Premium = 
$$\frac{900,000 (0.20+0.09)(1.07) + 1,000,000(.05)}{1 - .05 - 0.03 + .015} = 352,160$$

Sample 2

Excess Premium = 
$$\frac{900,000 [0.20 + (0.80) 0.09](1.07) + 1,000,000(.05)}{1 - .05 - .03 + .015} = 333,621$$

Part d: 0.5 Point

Sample 1

	LDD Plan	Excess WC
Profit	Profit is higher since company	Profit is lower since company
	competes on excess price as	competes only on price
	well as quality of service	
Tax	Tax rate on premium is WC tax	Tax rate charged on premium
	rate	is GL tax rate

# Sample 2

Profit – More ability for investment income due to longer payout period on XS vs. LDD → profit can be lower

Tax – XS uses GL taxes whereas LDD uses WC – WC taxes and assessments are higher

## **EXAM 8 FALL 2014 SAMPLE ANSWERS AND EXAMINER'S REPORT**

# Sample 3

LDD policies compete mostly on service while XS compete on profit. Therefore CS policies have lower profits than LDD.

Taxes are less on XS policies since they are not subject to certain tax based assessments while LDD is.

#### **EXAMINER'S REPORT**

#### Part a

The most common error candidates made was forgetting to use limited losses in the denominator of the entry ratio calculation. Since it was not specified whether the insurance charge would apply to limited or unlimited losses, both answers were accepted.

#### Part b

A variety of answers were accepted if they were explained correctly.

#### Part c

The most common errors were ULAE not being applied to the total excess loss and only to either the insurance charge or the losses above the per occurrence deductible. Some candidates also forgot to exclude credit risk or loss based assessments. Errors made on part A were not penalized further on part C.

## Part d

The majority of candidates were able to identify the differences between these two assumptions but we include a few varieties of acceptable answers above.