# 24. (2 points)

a. (1 point)

The Canadian Institute of Actuaries' Standards of Practice specify the ranges of MfAD. Identify the ranges for the claims development MfAD and the investment return rate MfAD and for each, briefly describe one situation where the margin can be selected outside of these ranges.

b. (1 point)

Briefly describe four desirable risk margin characteristics.

### **QUESTION 24**

TOTAL POINT VALUE: 2 LEARNING OBJECTIVE(S): C1

#### **SAMPLE ANSWERS**

Part a: 1 point

Claims: 2.5% to 20%

Could be higher if stochastic analysis reflects volatility not identified using analysis approach.

Inv. Rate: 25bp to 200bp

Could be lower if the discount rate is already lower than 25bp.

Part b: 1 point

## Sample 1

- Should be lower with emerging information
- Should be higher if LOB is low freq. / high sev.
- Should be higher if probability distribution is wide
- Should be higher if it is a long tail line

### Sample 2

- Less information on estimate → margin higher
- Long tail line → margin higher
- Longer contract term → margin higher
- Wide loss distribution → margin higher

### **EXAMINER'S REPORT**

Candidates were expected to understand the use and characteristics of margins for adverse deviation as established by the CIA Standards of Practice.

#### Part a

Candidates were expected to know the margin ranges and understand situations in which deviation from these ranges might be allowed.

A common error included:

• Providing the incorrect margin ranges

#### Part b

Candidates were expected to know the desirable characteristics of risk margins.

A common error included:

• Listing characteristics for the risk margin methodology instead of desirable risk margin characteristics