

4. (3.75 points)

A pricing actuary is asked to prepare a filing for a personal automobile insurer in Ontario.

a. (1.25 points)

The insurer's rating algorithm consists of three territories. Assuming the following data is actuarially sound, make a differential proposal that meets the requirements for approval.

Territory	On-Level Trended Earned Premiums (in \$million)	One-Way Analysis Indication	Current Differentials
1	52	-6.0%	0.85
2	36	1.0%	1.00
3	23	12.0%	1.05
Total	111	0.0%	

b. (0.5 point)

Briefly describe two conditions that an insurer must meet to submit a simplified filing.

c. (0.75 point)

The management of an insurer has asked the actuary to add the following discounts to its rating algorithm. Assuming the indication for each discount is actuarially sound, briefly explain whether it complies with Ontario regulation.

- i. Retiree discount on all coverages
- ii. Multi-line discount varying by property product
- iii. Good credit discount

d. (0.75 point)

Briefly describe three types of information specifically required to provide adequate support for a usage-based insurance pricing filing.

e. (0.5 point)

Describe the acceptability of a third-party provider program offering additional services using the personal information of the insured collected by the usage-based insurance device.

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QUESTION 4**TOTAL POINT VALUE: 3.75****LEARNING OBJECTIVE(S): C2****SAMPLE ANSWERS****Part a: 1.25 points**Sample

Proposed change in same direction as indicated, but to a lesser extent, maximum |10%|.

Terr	OLEP	Curr. Diff	Indicated Diff.	Capped Diff. @10%	Off-Balance
1	52	0.85	.799	.799	.7981
2	36	1.00	1.01	1.01	1.0088
3	23	1.05	1.176	1.155	1.1537
Total	111	.9401	0.9455	.9412	.9401

Part b: 0.5 pointSample 1

- The overall rate change must be 0% or less.
- Proposed territorial differential and relativities between -15% an 5%.

Sample 2

- No rating algorithm change other than new discount if new discount has been introduced by other companies
- Overall rate change $\leq 0\%$

Part c: 0.75 pointSample 1

- i) Yes, it is even required

- ii) Multi-line discount can be introduced but it should not vary by property product. Using net worth or the fact whether the insured has a home is prohibited as auto rating variable.
- iii) The fact whether insured has a credit card, the credit history and credit rating are all prohibited to be used as auto rating variable. So they don't comply with Ontario regulation.

Sample 2

- i) Yes, discounts to retirees are allowed
- ii) No, multi-line discount varying by property product is not allowed
- iii) No, cannot use credit rating in rating process

Part d: 0.75 point

Sample 1

- What data is collected from driver (acceleration, speed, etc.)
- How it is measured: threshold, frequency, occurrence.
- The period that data is being collected for

Sample 2

- What is measured (acceleration, braking)
- How is it being measured (thresholds)
- All data to support filing (including how discounts are determined)

Part e: 0.5 point

Sample 1

- Insured should not be required to join the program
- Should be actively opt-in rather than opt-out

Sample 2

It is accepted, but the insurer must make sure that the third party has at least the same privacy standards. Regarding the use of credit scores, the opt-in applies to third party also meaning that it can't use information of UBIP program without the consent of the insured.

EXAMINER'S REPORT

Candidates were expected to know the various regulatory requirements with respect to automobile insurance in Ontario.

Part a

Candidates were expected to provide a rate change proposal that is in line with regulatory requirements in Ontario.

Answers for both simplified filings and major filings were accepted.

Common errors included:

- Not rebasing of the proposed differentials before calculating the proposed changes
- Proposing rate changes that were outside the maximum change allowed by territory

Part b

Candidates were expected to know the conditions for submitting a simplified filing.

A common error was stating that the overall rate change must be below 0% when it should be less than or equal to 0%.

Part c

Candidates were expected to know required and prohibited elements of a rate and risk classification system in Ontario Automobile Insurance.

Common errors included:

- Stating that the multi-line discount is permitted. It is allowed but it cannot vary by property product.

- Stating that the retiree discount is not allowed since employment cannot be used as information.

Part d

Candidates were expected to know the types of information specifically required for submitting a filing for UBIP.

A common error was providing a response that was not being specific enough, for example, stating only “data” as an answer by itself.

Part e

Candidates were expected to know the expectations toward a third party for providing UBIP additional services.

A common error was stating that this is not allowed when it is allowed if the insured gave their consent.