Exam PA December 7, 2020 Project Report Template

**Instructions to Candidates: Please remember to avoid using your own name within this document or when naming your file. There is no limit on page count.**

**Also be sure all the documents you are working on have December 7 attached.**

As indicated in the instructions, work on each task should be presented in the designated section for that task.

## Task 1 – Select factor variables (5 points)

## Task 2 – Consider a new variable (3 points)

## Task 3 – Write an overview of the data for your actuarial manager (12 points)

## Task 4 – Select an interaction to consider for your model (6 points)

## Task 5 – Perform a k-means cluster analysis (9 points)

## Task 6 – Construct a decision tree (7 points)

## Task 7 – Construct a boosted decision tree (12 points)

## Task 8 – Compare distribution choices for a generalized linear model (10 points)

## Task 9 – Evaluate the interaction term (6 points)

## Task 10 – Evaluate the cluster variable in the GLM (4 points)

## Task 11 – Select the final model to present to the client (6 points)

## Task 12 – Write an executive summary for the client (20 points)