RESEARCH SCHOOL OF FINANCE, ACTUARIAL STUDIES AND STATISTICS

College of Business & Economics, The Australian National University

GENERALISED LINEAR MODELLING

(STAT3015/STAT7030)

Marks

Marking Sheet for Question 2 of Assignment 2 for 2015

Question 2

| (a) | Reasonable choice of model and presentation of <i>R</i> model object – 1 model only (1 mark) Brief discussion of model refinement and justification for choice of model (1 mark) | () |
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| | biret discussion of model refinement and justification for choice of model (1 mark) | (2) |
| (b) | Good, well-labelled plot of (preferably standardised) residuals vs linear predictors (1 ma Normal quantile plot (1 mark) Cook's D plot (1 mark) | ark) |
| | Testing for under- or over-dispersion (1 mark, only 0.5 mark for using rule of thumb) Identification and discussion of problem observations (2 marks) | |
| | | (6) |
| (c) | Analysis of deviance table (1 mark) Table of coefficients (1 mark) | |
| | Discussion of hypotheses tested and conclusions (1 mark) | (3) |
| (d) | Presentation of model, preferably a plot with data on original scale (2 marks) Some attempt to show relevant confidence intervals (1 marks) | (3) |
| (e) | Clear identification of research question and relevant discussion (2 marks) Correct repetition of above modelling on individual data (1 mark) Presentation of model (preferably graphically) (1 mark) Comparison with aggregate model with discussion of differences (2 marks) | |
| | | (6) |
| Stude | ent ID (1) | |
| Student ID (2) Total – (for Q2, out of | | · 20) |

Model R code with extensive comments are available on Wattle for this open-ended questions, though other approaches to the analysis could also be acceptable.

Please see Ian if you have a query re your marks or any questions about the R code.

Please note that if you wish to appeal your mark; you will need to send Ian an e-mail detailing the problem and also provide him with your marked assignment and the copy (electronic or paper) that you were supposed to keep when you submitted the assignment.

If you do request a re-mark, your entire report will be re-marked by Ian (not just the part you are querying) and your final mark for this assignment may go either up or down as a result of this re-mark.