STAT3015/STAT4030/STAT7030 Generalised Linear Models

Marking Sheet for Assignment 1 for 2016 **Marks**

Question 1

(a) Plot with comment about obvious non constant variance (1) ___

(b) Plot with clear labelling and note about transformation fixing variance
Identification of cluster as being the three smallest in group E
Discussion of potential outliers (3) ___

(c) Both of the required plots with comments
Externally studentised residuals with cut-off and discussion
Leverage values with cut-off and discussion (3) ___

(d) Correct model with descriptions, assumptions and constraints
Recognising the model as a "parallel lines" ANCOVA model (2) ___

(e) Modified model and ANOVA table output
Full details of the appropriate F test (2) ___

(f) Plot with good labels and different plotting characters
Curves correctly added and outliers identified (2) ___

(g) Analysis of Variance and Summary output
Discussion of results (worth 2 marks) (3) ___

(h) Output showing correctly specified random effects model
Description of the underlying population model
Identifying that ID can be correctly used as a blocking factor (3) ___

(i) Analysis of Variance and Summary output
Noting that even though the output looks different, nothing has really changed
Calculation of the intraclass correlation coefficient and comment (3) ___

Student ID (1) _____ **Total marks (out of 22) ___**

Student ID (2) _____ (if the assignment was done in a group of two)

Model solutions are available on Wattle, which you should compare with your solutions. Also have a good look at the R command file for this assignment which includes extensive comments. Please see Yang Yang or Ian if you have questions about the assignment or the solutions. Please approach Yang Yang in the first instance with any query re your marks (as he did the marking).

Please note that if you do 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 assignment 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.