



Australian
National
University

Venue

STUDENT
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Research School of Finance, Actuarial Studies and Statistics

EXAMINATION

Semester 2 - End of Semester, 2017

STAT4030/STAT7030 Generalised Linear Models

Examination/Writing Time Duration: 180 minutes

Reading Time: 15 minutes

Exam Conditions:

Central Examination. This examination paper is not available to the ANU Library archives. Students must return the examination paper at the end of the examination.

Materials permitted in the exam venue: (No electronic aids are permitted e.g. laptops, phones)

Unannotated paper-based dictionary (no approval required),

One A4 page with notes on both side, Calculator

Materials to be supplied to Students:

Scribble Paper

Instructions to Students:

1. This examination paper comprises a total of twenty-four (24) pages and there is a separate handout of R output which has a total of twenty-four (24) pages. During the reading time preceding the exam, please check that both documents have the correct number of pages.
2. All answers are to be written on this exam paper, which is to be handed in at the end of the exam. You may make notes on scribble paper (or on the R handout) during the reading time, but **do NOT write on this exam paper until after the start of the writing time**. If you need additional space, use the rear of the previous page and clearly indicate the part of the question that your answer refers to. The R handout and any scribble paper will be collected at the end of the examination and destroyed, they will not be marked.
3. There are a total of five questions, worth a total of 60 marks. The parts of each question are of unequal value, with the marks indicated for each part. **You should attempt to answer each and every part of all five questions.** This examination counts as 60% of your final assessment.
4. **Please write your student number in the space provided at the top of this page.**
5. **Include a clear statement of the formulae you use to answer each question.**
6. Statistical tables (generated using R) are provided on pages 23 and 24 at the end of the handout of R output. Unless otherwise indicated, use a significance level of 5% and $\log x$ refers to the natural logarithm of x .

| | Q1 | Q2 | Q3 | Q4 | Q5 | Total |
|-------|--------|---------|----------|----------|----------|-------|
| Pages | 2 to 7 | 8 to 11 | 12 to 15 | 16 to 19 | 20 to 24 | |
| Marks | 15 | 11 | 9 | 10 | 15 | 60 |
| Score | | | | | | |