Using R in CS1 Paper B and CS2 Paper B for 2024 Exams

For the problem-based questions in CS1 Paper B and CS2 Paper B, all candidates will need to be confident in the use of the statistical package 'R'.

It is strongly recommended that you verify and set up your R Console or R Studio prior to the examinations. The IFoA cannot offer technical support with the installation or configuration of R Console/R Studio and any associated packages and can only support with technical aspects of the online examination platform.

Versions of R, R Studio, R packages

The versions of R, R Studio and R packages required for CS1B and CS2B 2024 exams are included in the table below. The packages listed may be used in any exam across 2024 for either CS1B and/or CS2B.

No prior knowledge will be needed for any package not included in the core reading.

Version of R required	Version of R Studio required	Packages	External Data Sets for 2024?
Any release of version 4.2 (and above)	Any release of version 1.1 (32-bit operating systems) or of version 1.4 (64-bit operating systems). However, we would recommend using RStudio-2023.	base* graphics* utils* stats* glmnet markovchain Matrix survival	Yes

*these packages are loaded by default during the R installation – you are not required in install these separately

Please note:

Whilst the version of R stated above is required for sitting CS1B and CS2B for 2024, later versions may be offered at the point of download. Candidates may opt to download a later version; however, it should be noted that some functionality may differ, and output could vary from the defined marking solutions. Whilst the Examination team endeavour to mark all alternative output, it cannot be guaranteed that every variance will be recognised.

RMarkdown and knitR are not permitted to be used during the examinations.

External Data Sets

External data sets required for CS1B and CS2B will be provided by the IFoA approximately two weeks prior to the assessment date. Data files will have one of the following extensions: ".txt", ".csv" or ".Rdata.

The data set(s) will need to be loaded into R prior to the examination.

Getting started with R Guide:

For an overview on how to install R Console or R Studio, how to load packages and data sets, please refer to the Getting started with 'R' guide that can be found here:

https://www.actuaries.org.uk/studying/curriculum/actuarial-statistics.