The examination papers are described below. Each examination will be of three hours’ duration. Candidates will be allowed 10 minutes of reading time before the start of each examination.

All the questions will carry equal marks. The approximate number of marks allocated to each part of a question will be indicated on the examination papers. The rubric for each paper is shown in italics.

**Paper 1**  
*Answer all questions.*  
Three questions on Fluid Mechanics.  
Two questions on Equilibrium Thermodynamics.

**Paper 2**  
*Answer all questions.*  
Two questions on Separations.  
Two questions on Heterogeneous Reactors.  
One question on Bioprocessing.

**Paper 3**  
*Answer all questions.*  
Two questions on Process Dynamics and Control.  
Two questions on Corrosion and Materials.  
One question on Safety, Health and Environment.

**Paper 4**  
*Answer all questions.*  
The paper will contain one question on each of the following topics:  
Radiative Heat Transfer  
Particle Processing  
Process Synthesis  
Partial Differential Equations  
Statistics

Candidates will be provided with the *Chemical Engineering Tripos Data Book* for all papers.

All candidates are required to attend the classes on Engineering Ethics and complete the set work to the satisfaction of the Examiners.

The normal allocation of marks is 100 marks for each Paper, 140 marks for the Design Project, and 85 marks for the Exercises.

**R. L. Tuley**  
*Secretary of the Chemical Engineering and Biotechnology Syndicate*  
1 October 2022