

of these two groups consisted of Higher Algebra; Higher part of Theory of Equations; Higher Analytical Geometry, Plane and Solid; Hydrodynamics, including Waves and Tides; Sound; Physical Optics; Conduction of Heat; Vibrations of Springs and Bars; Elastic Solids. The other group consisted of Finite Differences; Higher Definite Integrals; Elliptic Functions; Theory of Chances, including Combination of Observations; Newton's Principia, Book I., Sections ix., xi.; Lunar and Planetary Theories; Figure of the Earth; Precession and Nutation; Electricity; Magnetism. Thus the suggestion amounted to this, that a student might entirely omit one of these groups or the other, according to the year in which he presented himself for examination.

It is obvious that many objections may be urged against this rough mechanical remedy for the unwieldy extent of the examination, and we cannot wonder that the University refused to adopt it. A more advantageous method of obtaining the end might have been proposed. Let the examination extend every year over the elementary and intermediate subjects, and in addition let certain of the most advanced subjects be taken, notice of which has been given at a previous date, say three years before. Thus if an important work were prescribed on any high mathematical subject, as for example, Probability or Electricity, this would naturally be appointed as a text-book for examination; and on the other hand University professors might arrange their lectures so as to assist students in mastering a selected subject. However, as the University rejected the proposition of a fixed cycle of subjects, the Syndicate had to devise some fresh expedient.

Accordingly, on October 25, 1878, the Syndicate made another report to the University, and the suggestions

then offered were adopted. Thus, finally, a new scheme has been constructed, which will come into operation for the first time in 1883. The main provisions of the scheme are these. The examination will in future be divided into three parts. The first part, consisting of the elementary subjects, will occupy three days; those who fail to satisfy the examiners on this part will not be allowed to proceed further. The second part, consisting of the intermediate subjects, will occupy three days. Both these parts of the examination will be carried on during the month of June; and the candidates who pass will be arranged in order of merit in the three classes of Wranglers, Senior Optimes, and Junior Optimes. Only the Wranglers will be allowed to proceed to the third part of the examination, which is to occupy three days of the following December, and to include all the advanced subjects. These subjects will be arranged in groups, and the questions so adjusted as to allow a candidate to distinguish himself on a selection of the subjects, made by himself. Candidates who satisfy the examiners in the third part are to be placed in three divisions, and each division is to be arranged *alphabetically*.

The most important point in the new scheme of examinations is that involved in the word *alphabetically*. This is the first attempt which has been made to moderate the excessive competition which has for a long time attended the higher mathematical examinations at Cambridge. At the University of Oxford, the system of placing the men in classes, and arranging each class alphabetically, has long prevailed; while at Cambridge, arrangement in order of merit has been almost universal. Each system has its disadvantages, and it has been said that Oxford examiners were often tempted to wish for the Cambridge