

(2) THE PRELIMINARY EXAMINATION REQUIREMENTS OF THE ENGINEERS REGISTRATION BOARD IN NEW ZEALAND

35. The Engineers Registration Board also has a preliminary examination requirement which is slightly different from the above. The Board accepts any one of the following —

- (1) A New Zealand School Certificate if passed in five subjects or a Certificate of Attainment (School Certificate Standard) provided in either case that the optional subjects include a physical science (Chemistry, or Electricity and Magnetism, or General Science, or Heat, Light, and Sound) and a technical subject (Applied Mechanics, or Heat Engines, or Technical Drawing or Technical Electricity); or
- (2) A New Zealand School Certificate endorsed in at least Mathematics and a physical science subject; or
- (3) University Entrance; or
- (4) Any other educational qualification which the Board considers at least equivalent to one of the above.

36. As the Institutions of Civil and of Mechanical Engineers accept Sections A, B, and C of the Board examinations, there is thus an alternative method of complying with the requirements of the Common Preliminary Examination in those branches.

(3) SECTION A EXAMINATIONS

37. The various examinations for Section A of the Institution examination and for those of the Registration Board are set out in detail in Appendix 5. Here it may be said that there is little real variation in the subjects to be taken.

38. It will be convenient to use, as a basis of comparison, the requirements of the Engineers Registration Board in considering the examinations of the various British Institutions. The Board, when setting its requirements in any branch, has naturally modelled them on the requirements of the British Institution controlling that branch, partly on general grounds and partly to avoid difficulties for any engineers who may pass the Board's examinations and later seek recognition by the British Institution. On the other hand, because the one Board controls all branches, it is in a position to take the best from the requirements of each branch. It is assisted in this by the attitude of the British Institutions, which view with favour the development by the Board of standards and requirements in New Zealand ranking equal to their own but with sufficient variation in detail to suit our own conditions.

39. The subjects for the Civil examination of the Engineers Registration Board are set out below as a guide :—

- (1) Mathematics.
- (2) Applied Mechanics.
- (3) Applied Heat (with Light and Sound).
- (4) (a) Principles of Electricity; or
(b) Workshop Technology.
- (5) (a) Theory of Structures; or
(b) Theory of Machines.

40. The Board's requirements for the Electrical Branch are the same as for Civil. For Mechanical they are also the same, except that Engineering Drawing takes the place of 5 (a) or 5 (b) above. The Institution examinations theoretically require English, but there are exemptions available except in the Electrical Branch. Apart from this, the Institution examination for Civil is the same as the Board's for Civil, except that Workshop Technology is not a subject. The Institution examination for Electrical is as set out above for the Registration Board, excluding subjects 4 (b), 5 (a), and 5 (b). The Institution examination for the Mechanical Branch contains all the subjects detailed above except 5 (a) and 5 (b), but allows additional subjects and so provides some options.