

(4) SECTION B EXAMINATIONS

41. Section B contains the subjects which cover the special branch of engineering which the candidate is taking, and there is accordingly little that is common to them all. The details are set out in Appendix 6.

42. The basic conditions to be complied with before sitting Section B of the Engineers Registration Board examination are set out in the following extract from a leaflet issued by the Board:—

Section B is to test practical knowledge in fundamental engineering subjects and in specialized applications of Civil and Structural, Mechanical, and Electrical Engineering. It is open to any applicant who (a) has passed in or is exempt from Section A and (b) has satisfied the Board that he is receiving or has received satisfactory regular training in professional engineering. The general requirements are as follows:—

- (a) The continuous period of training received or arranged for shall in general be not less than four years.
- (b) Training received or arranged for under Articles of Training accepted and approved by the Council of the New Zealand Institution of Engineers will be recognized if any application to enter for examination is appropriately endorsed by the Secretary of the Institution; otherwise applicants must give full particulars of their training and experience, together with an undertaking from their employer and teaching engineer
- (c) The following classes of training alone are not acceptable: Purely trade apprenticeship in mechanical or electrical trades such as fitting and turning, boiler making, electrical wiring, &c.; purely draughting and tracing experience without opportunity for engineering design and for experience in construction or fabrication or erection; purely survey work whether under the Land Transfer Act or for engineering purposes.

43. This statement of policy may be regarded as setting a middle course. It is more liberal than that of either the Institution of Civil Engineers or the Institution of Mechanical Engineers, each of which adheres strictly to the policy that candidates may not proceed beyond the Common Preliminary Examination without giving evidence of practical training. On the other hand, the Board's practice of allowing reasonable latitude in sitting for examinations is not so open as that of the Institution of Electrical Engineers, which permits candidates to take both Sections A and B without giving evidence of training. The Institution of Electrical Engineers would, of course, expect that the corporate member supporting a student's proposal to sit the examination would use discretion as to whether the opportunities ahead of the student justified his proposal. The specific requirements for practical training and the age-limits for corporate membership in each of the branches are set out in Appendix 7.

(5) SECTION C

44. Candidates who have passed Sections A and B then take Section C. Quoting again from the Board's leaflet:—

Section C is in the nature of an inquiry into a candidate's practical training and experience, to ascertain if he has made full use of the opportunities available and has profited therefrom and to determine whether he has had the necessary responsible engineering experience required for registration. It consists of the submission of a written report covering the candidate's engineering history together with samples of work or a thesis, followed by oral and possibly written questioning on the report and submissions. For entry an applicant must have passed in or be exempt from Sections A and B and have received regular training and instruction in professional engineering and also have had practical experience subsequently.

45. The practical experience subsequent to training and instruction required for entry for Section C must, unless otherwise approved by the Board, involve at least one year on design and at least one year on supervision of construction, erection, or fabrication. The total period required is normally a minimum of three years, but two years in the case of a B.E. (Hons.), (five-year course) or a B.E. with one year approved post-graduate research. Experience gained under agreements which have been accepted and approved by the Council of the New Zealand Institution of Engineers will be recognized if the application to enter for Section C is appropriately endorsed by the