

65. No candidate will be allowed to work out his problems on a slate or on waste-paper, or to write on the blotting-paper supplied for his use in the examination-room. Violation of this rule will subject the candidate to all the penalties of a failure. All worked papers must be signed and dated, and the name of the port of examination inserted by the candidate. Additional sheets of paper will be supplied by the Examiner if required, but they must be attached to, and form part of, the examination-papers.

66. All books necessary for the use of candidates under examination will be provided by the Examiners, and candidates are prohibited from bringing into the examination-room books or papers of any kind whatever. The slightest infringement of this regulation will subject the offender to all the penalties of a failure, and he will not be allowed to present himself for re-examination for a period of three months.

67. Candidates for first-class certificates have to pass an examination in rough working-drawing, which may, in the candidate's option, be either hand-sketches clearly dimensioned, and complete in the necessary views and sections, or drawings to a scale. Drawing-boards and T squares will be provided by the Examiners, but the applicants will have to bring with them any drawing-instruments they may require.

68. Candidates should be so placed as to prevent one copying from another, and no communication whatever between the candidates should be allowed.

69. In the event of any candidate being discovered referring to any book or paper or copying from another, or affording any assistance or giving any information to another, or communicating in any way with another during the time of examination, or copying any part of the problems for the purpose of taking them out of the examination-rooms, he will subject himself to all the penalties of a failure, and will not be allowed to be examined for a period of six months.

70. No candidate may leave the examination-room without permission, and without giving up the paper (if any) on which he is engaged. Under no circumstances will the same paper be returned to him, but the Examiner may substitute other data or another question.

71. If a candidate defaces, blots, writes in, or otherwise injures any book or form belonging to the Marine Department, his papers will be retained until he has replaced the damaged book or document. He will not be allowed to remove the damaged book or document, and will be subjected to all the penalties of a failure.

72. Perfect silence is to be preserved in the examination-room.

73. Any candidate violating any of the regulations, or being guilty of insolence to the Examiner, or of disorderly or improper conduct in or about the room, will render himself liable to the postponement of his examination, or, in the event of his having passed, to the detention of his certificate, for such period as the Marine Department may direct.

74. The examination of candidates for second-class certificates consists of three parts—arithmetic, elementary questions, and *viva voce*; and that of candidates for first-class certificates of four parts—arithmetic, drawing, elementary questions, and *viva voce* (see paragraphs 47 and 49).

75. When the number of marks obtained in arithmetic amounts to 28—that is, two-thirds of the

maximum—the candidate passes in arithmetic. If the marks obtained amount to 21 but not to 28, and if the applicant has had long experience, his testimonials and service should be taken into account, and his examination continued, if deemed advisable by the Examiner, and he may be passed or failed, having due regard to his practical knowledge and to whether he is being examined for third class, second class, or first class.

76. All engineer applicants presenting themselves for examination will be required to give written answers to ten questions selected from "Elementary Questions," shown in Appendix B. These questions are intended to furnish a record to some extent of the candidate's knowledge at the time of his examination, and also to induce the candidates to pay more attention to their handwriting and spelling.

77. Examiners will require all candidates to fill up a form (Exn. 15B), and they will forward it to the Chief Examiner of Engineers with the report of the examination.

The elementary questions will, as a rule, be given on the second day of the examination to candidates for second class, and on either the second or third day to candidates for first class; but candidates who have time after working the arithmetical papers on the first day, or the drawing on the second day, may be allowed to go on with the elementary questions.

The questions for both classes of engineers will be taken from the same series of elementary questions; and candidates for first-class certificates are expected to show their superiority by giving answers more complete than those of the other candidates.

78. Having regard to the fact that when the verbal examination is held, the candidate has already passed in arithmetic and (if a first-class candidate) in drawing, and has also written answers to the elementary questions, the Examiners will deal with practical rather than theoretical questions in this division of the examination; and no candidate should be failed in the verbal examination without having been well cross-questioned on the points for which failure takes place. Candidates may, however, be failed in the written elementary paper without being examined *viva voce*.

In cases where the Examiner approves of the elementary paper, but fails the candidate for lack of either practical or elementary knowledge, a written account of the points on which he failed must be forwarded to the Chief Examiner of Engineers with the elementary papers and the report (Exn. 15).

The elementary questions to be answered on form Exn. 15B are good starting-points in *viva voce* examinations. With the candidates' written answers before the Examiner, the same question can be put in a way requiring an answer in another form. Each question may be developed into several, according to the circumstances of the case, *e.g.* :—

- (1.) What is made of? Of what parts does it consist?
- (2.) What is its use?
- (3.) What attention does it require at sea?
- (4.) What attention does it require in port?
- (5.) When it becomes defective, what is it that principally goes wrong with it?
- (6.) How is it repaired?
- (7.) What alteration may prevent a recurrence of the defect?

It is considered of great importance that engineers presenting themselves for examination should have an extensive knowledge of the particulars of actual casualties which have occurred at sea, and