

- (c) He must produce testimonials of sobriety for at least twelve months immediately prior to the date of application.
- (d) He must be able to read and write the English language, and must understand the first five rules of arithmetic, and, in addition, be able to work out the capacity of a tank such as is used for the carriage of oil in vessels, and must also be able to work out simple questions relating to consumption of oil, &c.
- (e) He must be able to describe any engine in ordinary use as auxiliary power or otherwise for vessels other than steam, and the use of each part of the same.
- (f) He must be able to describe in his own language the electric dynamo and connections, and describe at least one kind of cell battery that may be used in connection with the firing of the vapour in any such gasoline-engine.
- (g) He must be able to state clearly how he could overcome defects that may arise, and also how he would repair slight breakdowns to the machinery.

FIRST-CLASS CERTIFICATE (OIL, ETC.), (SMALL-POWERED VESSELS).

41. A candidate for a first-class engineer's certificate of competency under these regulations must comply with the following conditions:—

- (a) He must be at least twenty-one years of age.
- (b) He must have served for not less than three years as an apprentice at the making and repairing of engines, or at work of a similar nature, or he must have sailed for one year as engineer of a sea-going ship, outside restricted limits propelled by gas, oil, fluid, electricity, or other mechanical power than steam, which is by law required to carry a certificated engineer, with a second-class certificate of competency, and must produce satisfactory evidence of sobriety and good conduct for at least twelve months immediately prior to date of application.
- (c) He must, in addition to qualifications required by second-class engineer, be able to make a drawing of any part of the engines (as used for such ships)—not necessarily an elaborate drawing, but at least an intelligible hand-sketch showing dimensions, &c.
- (d) He must pass a thorough examination relative to the mechanical construction of engines in general use in ships propelled by gas, oil, fluid, electricity, or other mechanical power than steam.
- (e) He must be able to explain how he would overcome breakdowns that may occur, much more fully than in the second-class examination.

RESTRICTED LIMITS CERTIFICATES (OIL, ETC.), (SMALL-POWERED VESSELS).

42. A candidate for engineer's certificate of competency for auxiliary-powered vessels for restricted limits must comply with the following conditions:—

- (a) He must be at least nineteen years of age, and must be able to read and write the English language, and must produce a testimonial of good character and sobriety for at least one year immediately prior to date of application.
- (b) He must by oral examination satisfy the Examiner as to his knowledge of the class of engines in general use in ships propelled by gas, oil, fluid, electricity, or other mechanical power than steam, and employed in these limits.

43. Time served in vessels plying within restricted limits and within harbours, &c., does not count as service at sea for the purpose of obtaining a certificate of competency for a sea-going ship, with the exception stated in Rule 62.

FAILURE.

44. If the applicant for a first-class, second-class, or restricted-limits engineer's certificate fails, he may not present himself for re-examination for three months.

RULES AS TO EXAMINATIONS.

45. The general rules as to conduct of examinations (Rules 67 to 83 herein) shall, where applicable, apply to the foregoing examinations.