

15 (b). In all cases of failure the Candidate must be re-examined *de novo*. If a Candidate fails in *Seamanship* he will not be re-examined until after a lapse of Six Months, to give him time to gain experience. If he fails three times in *Navigation* he will not be re-examined until after a lapse of Three Months from the date of the last failure.

15 (c). If an applicant is examined for a higher rank, and fails, but passes an examination of a lower grade, he may receive a Certificate accordingly, but no part of the fee will be returned.

#### QUALIFICATIONS FOR CERTIFICATES OF COMPETENCY FOR A FOREIGN-GOING SHIP.

16.—A Second Mate must be seventeen years of age, and must have been four years at sea.

*In Navigation*—He must write a legible hand and understand the first five rules of arithmetic and the use of logarithms. He must be able to work a day's work complete, including the bearings and distance of the port he is bound to, by Mercator's method; to correct the Sun's declination for longitude, and find his latitude by meridian altitude of the sun; and work such other easy problems of a like nature as may be put to him. He must understand the use of the sextant, and be able to observe with it and read off the arc.

*In Seamanship*—He must give satisfactory answers as to the rigging and unrigging of ships, stowing of holds, &c.; must understand the measurement of the log-line, glass and lead line; be conversant with the rule of the road, as regards both steamers and sailing vessels, and the lights and fog signals carried by them. He must pass a satisfactory examination in the International Code of Signals.

17.—An Only Mate must be nineteen years of age and have been five years at sea.

*In Navigation*—In addition to the qualification required for a Second Mate, an Only Mate must be able to observe and calculate the amplitude of the Sun, and deduce the variation of the compass therefrom, and be able to find the longitude by Chronometer by the usual methods. He must know how to lay off the place of the ship on the chart, both by bearings of known objects and by latitude and longitude. He must be able to determine the error of a sextant and to adjust it; also to find the time of High Water from the known time of the full and change.

*In Seamanship*—In addition to what is required for a Second Mate, he must know how to moor and unmoor, and to keep a clear anchor; to carry out an anchor; to stow a hold; and to make the requisite entries in Ship's Log.

He will also be questioned as to his knowledge of the use and management of the mortar and rocket lines in the case of the stranding of a vessel.

18.—A First Mate must be nineteen years of age and have served five years at sea, of which one year must have been as either Second or Only Mate.

*In Navigation*—In addition to the qualifications required for an Only Mate, he must be able to observe azimuths and compute the variation; to compare chronometers and keep their rates, and find the longitude by them from an observation of the sun; to work the latitude by single altitude of the sun off the meridian; and be able to use and adjust the sextant by the sun.

*In Seamanship*—In addition to the qualifications required for an Only Mate, a more extensive knowledge of seamanship will be re-