

90. Oral.

- (a) International regulations for the prevention of collision at sea, and everything in paras. 80 and 84 prescribed for first and second mate.
 - (b) Handling a ship under different circumstances.
 - (c) Preservation of crew and passengers in event of wreck.
 - (d) Rescuing the crew of a disabled ship.
 - (e) Construction of jury rudders and sea-anchors.
 - (f) A fuller knowledge of mechanical sounding-machines and logs.
 - (g) Best arrangement for towing vessels under different circumstances.
 - (h) Understanding the effect produced by filling and emptying ballast tanks and loading and unloading cargo on the centre of gravity of the ship as a whole; the danger of free liquid surfaces in tanks and holds.
 - (i) Law as to the engagement, discharge, and management of the crew and the entries to be made in the official log book.
 - (j) Understand the use of a mercurial barometer.
- Any question appertaining to the duties of the master of a home-trade ship which the Examiner may think necessary to ask.

MASTER OF A CARGO VESSEL UNDER 25 TONS REGISTER.

91. A candidate must be not less than twenty-three years of age, and have served—

- (a) Four years at sea, or
- (b) Two years at sea and two years in extended river limits.

In each case not less than one year must have been served in the same class of vessel as that for which the certificate is desired.

SYLLABUS.

(Read, write a legible hand, and spell correctly. This will be tested by not less than 15 minutes' dictation.)

92. Paper 1.—Arithmetic and Navigation. (Two hours.)

- (a) Same as second mate home-trade.
- (b) Find the compass deviation and error by bearings of two objects in transit.

93. Paper 2.—Chart Work. (Three hours.)

- (a) Understand the use of a Mercator's chart and be able to find on it the course to steer and the distance from one given position to another.
- (b) Find the ship's position on the chart from cross bearings of two objects, and from two bearings of the same or different objects, the course and distance run between taking the bearings being given, also the distance of the ship from the object at the time of taking the second bearing.

94. Oral.

- (a) International regulations for prevention of collisions at sea and subjects for second mate home-trade.
- (b) Handling a vessel in different circumstances.
- (c) Signals as for second mate.

Any question appertaining to the duties of the master of this class of vessel which the Examiner may think necessary to ask.

MASTER OF A FISHING-BOAT.

95. The minimum age and service for a certificate as master of a fishing-boat are identical with those prescribed for master of a cargo vessel under 25 tons register, excepting that not less than one year of the four years required must have been served in a fishing-vessel.

96. Examination.—The examination for a certificate as master of a fishing-boat is identical with that for master of a cargo vessel under 25 tons register, excepting that in the oral examination the candidate will be examined appertaining to the duties of the master of a fishing-boat.

97. Master of a River Steamer.—A candidate must be not less than twenty-three years of age and have served at least two years at sea or as deck hand under a duly certificated master on a vessel plying within extended river limits.