

## APPENDIX J.

## EXAMINATION-PAPERS.

(NOTE.—The following are specimen sets of examination-papers for all classes and grades of certificates of competency as master and mate.)

**185. Specimen Examination-paper for Master of a River Steamer :—**

## ARITHMETIC.

Time allowed 2 hours.

1. Express in figures—Twenty-four millions seven hundred and two thousand ; five hundred and nine thousand and four.
2. Add the following quantities together : 1402, 86, 903, 7284, 16708 ; also add together 72498, 60382, 704, 208, 7.
3. From 6840298 take 3826989 ; from 684062 take 508349 ; from 1800426 take 99849 ; from 1638072 take 899708.
4. Multiply 9886 by 37 ; multiply 98486 by 3972.
5. Divide 38409687 by 3837 ; divide 943068 by 14.
6. Add the following quantities together : £8468 9s. 4d., £1306 3s. 10d., £1608 4s. 6d., £3089 11s. 7d. Also add together 9843 tons 16 cwt. 2 qr. 14 lb., 4860 tons 13 cwt. 3 qr. 2 lb., 90 tons 18 cwt. 2 qr. 23 lb., 6028 tons 16 cwt. 1 qr. 3 lb.
7. From £6488 17s. 6½d. take £5840 3s. 9¾d. ; and from 54833 tons 16 cwt. 2 qr. 2 lb. take 9808 tons 3 cwt. 0 qr. 4 lb.
8. Multiply the following quantities by 92 : £1840 4s. 6d. ; 284 tons 16 cwt 3 qr. 4 lb.
9. Divide the following quantities by 67 : £134 2s. 10d. ; 6094 tons 3 cwt. 1 qr. 18 lb.

**186. Specimen Set of Examination-papers for Master of a Cargo-vessel under 25 tons, or for Master of a Fishing-boat :—**

## 1. ARITHMETIC AND NAVIGATION.

Time allowed 2 hours.

1. Express in figures—Thirty-eight millions nine hundred thousand and seven ; twenty-five thousand three hundred.
2. Add the following quantities together : 1706, 74, 2, 4835, 972 ; also add together 987, 22, 9044, 6298, 806.
3. From 4825726 take 3987244 ; from 8465099 take 2999847 ; from 6238429 take 5989777 ; from 78432 take 69586.
4. Multiply 9842 by 68 ; multiply 8498 by 7286.
5. Divide 94862948 by 1989 ; divide 694382 by 9.
6. Add the following quantities together : £9248 4s. 9d. ; £232 14s. 11d., £6982 3s. 7d., £63 15s. 2d. Also add together 842 tons 13 cwt. 2 qr. 1 lb., 414 tons 11 cwt. 3 qr. 14 lb., 8249 tons 3 cwt. 1 qr. 9 lb., 72 tons 16 cwt. 3 qr. 7 lb.
7. From £92486 16s. 7d. take £7829 4s. 10d. ; and from 684 tons 2 cwt. 2 qr. 4 lb. take 399 tons 16 cwt. 3 qr. 2 lb.
8. Multiply the following quantities by 27 : £1483 17s. 7d. ; 29 tons 16 cwt. 3 qr. 17 lb.
9. Divide the following quantities by 94 : £5806 4s. 8d. ; and 9663 tons 8 cwt. 1 qr. 15 lb.
10. In a ship making 12 knots on a N. 15° E. course by compass, a point was sighted bearing N. 10° W., and after continuing to make good the same course and speed for 20 minutes the point bore N. 26° W. by compass.

Required—The distance the ship will pass off the point.

## 2. CHART.

Time allowed 3 hours.

- i. Using deviation card No. 4, find the course to steer by compass from X to North Cape ; also the distance.
- ii. With the ship's head on the above-named compass course, Great Barrier Peak (2,330 ft.) bore by compass S. 48° E., and Poor Knights bore S. 50° W. by compass :  
Required—The position of the ship.
- iii. With the ship's head as above, Cape Brett bore by compass S. 56° W., and after continuing on the same course for 12 miles it bore S. 30° W. :  
Required—The position of the ship and the distance from Cape Brett at the time of taking the second bearing.