

B.Sc. (NAUTICAL SCIENCE)

Term-End Examination

June, 2012

00915

**BNA-016 : CARGO HANDLING, STOWAGE
AND SEAMANSHIP - I**

Time : 2 hours

Maximum Marks : 70

Note : Answer all questions. Non-Programmable scientific calculator is allowed.

1. Define the following : 10
 - (a) Bale and Grain Capacity
 - (b) Load Density
 - (c) Displacement and Deadweight
 - (d) Stowage factor
 - (e) Ullage and Soundings

2. Write the precautions you need to take while 10
executing the following :
 - (a) Entering Enclosed Spaces
 - (b) Working Aloft.

3. (a) Explain the care and maintenance you need 10
to carry out on synthetic fibre ropes and
wire ropes.
 - (b) What precautions need to be taken while
making fast mooring lines ?

4. Sketch and explain the following : 10
- (a) Hatch Covers
 - (b) Rise of floor
 - (c) Length between Perpendiculars
 - (d) Beam Knees
 - (e) Double bottom tanks
5. A barge of triangular cross section is 20m Long, 12m wide and 6m deep. It floats in SW at a draft of 4 m. Find its displacement. 10
6. A vessel floats in DW of Relative density of 1.007, with her winter loadline 140 mm below water on both sides. If her FWA is 220 mm, TPC 22 and summer load draft is 9.4 mtrs, find the Deadweight available. 10
7. (a) Explain what surface preparations you will carry out before painting SHIPSIDE above water-line ? 5
- (b) Draw a sketch of a stockless anchor and label the sketch. 5
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