

B.Sc. (NAUTICAL SCIENCE)

Term-End Examination

December, 2013

BNA-015 : NAVIGATION-II

**(BRIDGE EQUIPMENT, WATCH KEEPING
METEOROLOGY AND OCEANOGRAPHY)**

Time : 2 hours

Maximum Marks : 70

Note : Answer any four questions from section- I and all questions from section -II. All questions carry equal marks.

SECTION-I

(BRIDGE EQUIPMENT AND WATCHKEEPING)

1. List three errors of the sextant and the reason for these errors. 10
2. What is the purpose of "Gyro compass ? List four methods to find out gyro error. 10
3. Explain the working of an echo sounder with suitable sketch. 10
4. (a) List the duties of a "lookout" 5
(b) Explain the term "vessel constrained by her draught". 5
5. Describe with suitable sketch, the lights to be carried by a vessel 200m, long, underway. 10

SECTION-II

(METEOROLOGY AND OCEANOGRAPHY)

6. (a) Explain with suitable sketch, vertical layers of the atmosphere. 5
(b) Explain pressure distribution in the atmosphere. 5
7. Explain 'Global Warming' and its effect on climate change. 10
8. Describe *any four* from following : 10
(a) Green house effect
(b) Temperature inversion
(c) Dew point
(d) SALR
(e) Radiation
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