

B.Sc. (NAUTICAL SCIENCE)

Term-End Examination

00315

December, 2014

BNA-015 : NAVIGATION – II

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

Time : 2 hours

Maximum Marks : 70

Note : Answer all questions.

SECTION I

1. Explain the principle and working of an echo sounder with suitable sketches. 10
2. Describe the layout of the bridge with its navigational equipment indicating the use of the various bridge equipments. 10
3. Describe the duties of Lookout and Helmsman for a navigational watch at sea/in coastal waters. 10
4. Define the following : 10
 - (a) Vessels in sight of one another
 - (b) Making way
 - (c) Under way
 - (d) Constrained by her draught (CBD)
 - (e) Vessel not under command (NUC)

SECTION II

5. Explain the following : 10
- (a) Solar Radiation
 - (b) Terrestrial Radiation
 - (c) Isobars
 - (d) Trade Winds
 - (e) Dew Point Temperature
6. List out the various meteorological equipments onboard, with their uses. 10
7. Explain the principle and construction of Aneroid Barometer. Name the corrections to be applied to barometric readings. 8+2=10

OR

Explain with a sketch the vertical layers of the Atmosphere. Why is Troposphere important to a Meteorologist ? 10
