

INDIAN MARITIME UNIVERSITY
(A Central University, Govt. of India)
May/June 2018 End Semester Examinations
DNS (Diploma in Nautical Science)
Semester II

**NAVIGATION – IV (Advanced Bridge Equipment, Watch Keeping and Meteorology
& Oceanography)(UD11T1202)**

Date: 05.06.2018

Max.Marks: 70

Time: 2 Hrs

Pass Marks: 35

SECTION A

(Attempt any 4 questions from this section. Each carry 10 marks)

1. a) Explain with a suitable diagram, various segments of Global Position Fixing System.
b) With a suitable diagram explain the principle of Doppler speed log.
2. Explain with a suitable diagram, working of Marine Radar
3. What are the duties of a navigational watch keeping officer, when the ship is :
a) At sea
b) At anchor
4. a) How will you determine if risk of collision exists for a ship sighted?
b) Explain Rule 2 (Responsibility) of IRPCS 1972
5. Explain Rule 8 of IRPCS 1972 in your own words.

SECTION B

(Attempt any 3 questions from this section. Each carry 10 marks)

6. Describe the changes in weather condition which will indicate an approaching Tropical Revolving Storm (TRS).
7. a) Define cold front and warm front.
b) What are the various factors that affect visibility?
8. Using weather code book, decode the following weather report received:-
BBXX ATKA 18003 99402 30596 41398 73228 10183 20092
40096 56028 76364 84364 22234 00195 20808
302 // 41006
9. a) Explain Drift current and Gradient current
b) Give 2 examples each of cold current and warm current.
