

INDIAN MARITIME UNIVERSITY

(A CENTRAL UNIVERSITY, GOVT. OF INDIA)

DNS LEADING TO B.SC. (NAUTICAL SCIENCE) –JUNE 2019 EXAMS

SEMESTER- II

UD11T2202- NAVIGATION IV

Advanced Bridge Equipment, Watch keeping and Meteorology

Time: 2 Hrs

Max Marks: 70

Date: 25.06.2019

Pass Marks: 28

SECTION-A

Answer any five questions out of six. All carry equal marks.

1. Explain various Errors / Limitations of 'Global Positioning System'.
(10 marks)
2. Explain the following:
 - a. Principle of Doppler speed log (5 marks)
 - b. LRIT and its purpose (5 marks)
3. Explain the use of following bridge equipment:
 - a. AIS (5 marks)
 - b. BNWAS (5 marks)
4. Explain the duties of OOW during an Anchor Watch. (10 marks)
5. Explain the 'Actions by Give Way Vessel' (Rule 16) & 'Actions by Stand on Vessel' (Rule 17) as mentioned in IRPCS,1972. (10 marks)
6. Describe the rules in regards to following, as mentioned in IRPCS,1972:
 - a. Entering or leaving a Traffic Separation Scheme. (5 marks)
 - b. Using Inshore Traffic Zone (5 marks)

SECTION-B

Answer any two questions out of three. All carry equal marks.

7. Write Short notes on: (2x5=10 marks)
 - a. Mist
 - b. Katabatic Winds
 - c. Doldrums
 - d. Coriolis Force
 - e. Fronts

8. Explain the following: (5+5=10 marks)
- a. Buy Ballot's Law
 - b. Process of formation of a 'Tropical Revolving Storm'
9. a. Explain 'True Wind' & 'Apparent Wind' (5 marks)
- b. List 5 ocean currents in the world. (5 marks)

End