
Indian Maritime University
(A Central University, Govt of India)

End Semester Examinations – December 2025

Programme Name: DNS

Semester: I

Subject Code: UD11T6107

Subject Name: BRIDGE EQUIPMENT AND COLREGS

Date: 05.12.2025

Max Marks: 70

Duration: 03 Hrs

Pass Marks: 35

General Instructions

- (i) All Sections (A, B & C) are to be attempted.
- (ii) Diagrams must be neatly labelled. Colouring will be applicable only for drawings as necessary.

Section A

Ten MCQs/Fill in the Blanks of 01 Mark each – Choose the correct answer as applicable.

1. The ship's primary compass is -----.
 2. ----- provides weather reports and navigational warnings close to coast.
 3. Speed indicated by GPS is called - -----
 4. Abbreviation of ROTI is -----
 5. Rules from --- to ----- are applied in any condition of visibility.
 6. Sailing vessel if propelled by machinery is called as -----
 7. By day, the visibility of light signals emitted by the Day Signaling Lamp (Aldis lamp) shall be at least
 - a) 1 nautical mile.
 - b) 2 nautical miles.
 - c) 3 nautical miles.
 - d) 4 nautical miles.
 8. All vessels must test the emergency steering system every
 - a) 1 month
 - b) 2 months
 - c) 3 months
 - d) 6 months
 9. Ships normally monitor their position in an Anchor Berth by using
 - a) Beam Bearings
 - b) Radar
 - c) GPS
 - d) All of the above
 10. When at sea, the OOW must shift from auto steering to manual steering and steer by hand
 - a) At least once every watch
 - c) Every twelve hours
-

b) Every six hours

d) Every twenty-four hours

Section B

Five Questions of 02 Marks each

11. State Rule 5.
12. How is Non-Follow Up Mode of Steering different from Follow Up Mode of Steering.
13. State equipment involved under Integrated Bridge System.
14. Define vessel constrained by her draft.
15. List any four markings which one should make on the Course Recorder Paper.

Section C

All questions are compulsory.

16.
a. List the entries required to be maintained in deck log book. (5 Marks).
b. neat label diagram of sextant & state its principle. (5 Marks)
17.
a. Draw & explain the different parts of the magnetic compass. (6 Marks)
b. Explain the pilot boarding arrangement as per 'SOLAS'. (4 Marks).
18. With the help of sketch explain the principle of EM log & state the limitations. (10 Marks)
19.
a. State how will you keep safe anchor watch. (5 Marks)
b. What are the rules regarding conduct of vessels in restricted visibility as laid down in Rule 19 of IRPCS (5 Marks)
20.
a. Draw & describe following indicating Top Mark, Shape, colour, light, Rhythm: (6 Marks)
1) Safe water Mark
2) East Cardinal Mark
b. State Rule 6(a) (4 Marks)
-