

Indian Maritime University
(A Central University, Govt of India)
End Semester Examinations – June 2026
Programme Name: DNS
Semester: II
Subject Code: UD11T6201
Subject Name: Marine Meteorology

Date: 01.06.2026

Max Marks: 70

Duration: 03 Hrs

Pass Marks: 35

General Instructions

- (i) All Sections (A, B & C) are to be attempted.

Section A

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

1. Which instrument is used to measure atmospheric pressure?
(a) Hygrometer
(b) Anemometer
(c) Barometer
(d) Psychrometer
2. An _____ (Ocean current/Tidal stream) is the general movement of a body of sea water on a permanent, semi-permanent or seasonal basis.
3. Tropical Revolving Storms (TRS) originate in latitudes between.....(50° and 65° / 5° and 20°)
4. How is the tidal range on the days of Spring tide
(a) Tidal range is maximum
(b) Tidal range is minimum
(c) Tidal range is exactly at the mean average for the month
(d) Neither Spring nor Neap tides influence the tidal range
5. Which among the following effect ocean tides:
(a) Earth and Moon
(b) Moon and Star
(c) Sun and Moon
(d) Earth and Sun

6. Hydrometer is used to measure Dew point (True/False)

7. The _____ is the rate at which a saturated air parcel cools as it rises while condensation is occurring.

- a) DALR b) SALR c) Saturation d) Evaporation

8. Basic unit of Pressure is

- a) Bar b) Millibars c) N/m² d) N/m³

9. _____ blows to land from sea during the day, as land heats faster than sea.

- a) Land breeze b) Sea breeze c) Valley breeze d) Mountain breeze

10. _____ is a strong, breaking wave front of the rising tide that moves upstream in a river or narrow estuary, often appearing as a single wall or series of waves advancing against the river current.

- a) Spring Tide
b) High Tide
c) Bore Tide
d) Neap Tide

Section B

Answer all five Questions (5 x 2 = 10 marks)

11. Explain Buys-Ballot's Law?
12. List out the ideal conditions for the formation of TRS.
13. Describe the types of information received by a facsimile machine
14. Differentiate between True and Apparent wind. Briefly explain with an example.
15. Briefly explain why cloudy nights are warmer than clear nights

Section C

Total Seven questions, attempt any five Questions. All Questions are of 10 marks each.

16. Explain the Greenhouse effect, global warming and heat exchange process
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(conduction, convection and radiation)

(3+3+4 Marks)

17. List and describe the ten basic cloud types.

(10 Marks)

18. a) Explain the formation of anabatic and katabatic winds **(6 marks)**
b) List the regions of occurrence of anabatic and katabatic winds **(4 marks)**

19. Differentiate between absolute humidity and relative humidity
(10 marks)

20. Explain the formation of radiation fog and advection fog
(10 marks)

21. What are ocean currents and how are they different from tidal streams

(10 marks)

22. Explain the procedure of finding Relative humidity and Dew Point
(10 marks)

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