

**INDIAN MARITIME UNIVERSITY**  
(A Central University, Government of India)  
**END SEMESTER EXAMINATIONS – JUNE 2022**  
**B.Sc (Nautical Science)**  
Semester-VI  
**Voyage Planning & ECDIS UG21T4601**

**Date: 02.06.2022**

**Time: 3Hrs**

**Maximum Marks: 70**

**Pass Marks: 35**

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**Note: All questions of Part A are compulsory.**

**Attempt any 5 out of the 7 questions in Part B**

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**PART A**

Q.1 MCQ – One only correct option

(10 marks)

(a) If the position remains the same but the feature is replaced by existing feature, the word used in the notice for chart correction is

- a) Add
- b) Delete
- c) Substitute
- d) Amend

(b) While planning the passage on the chart the first thing to mark on the chart are

- a) Tentative Courses
- b) Alteration Points
- c) Radar Conspicuous Points
- d) No Go Areas

(c) During Appraisal, information of charts required for a passage along with their editions is available in

- a) NP 136
- b) NP 131
- c) NP 133
- d) NP 133A

(d) INDSAR reports should be sent over INMARSAT C using code

- a) 41
- b) 42
- c) 43
- d) 44

(e) The primary focus of BRM to ensure proper situational awareness during Ocean passages should include

- a) Weather
- b) Proximity of Navigational Hazards
- c) Tidal Information
- d) Frequent plotting of position

(f) A routing measure aimed at the separation of opposing streams of traffic by appropriate means and by the establishment of traffic lanes is called

- a) Traffic Separation Scheme
- b) Roundabout
- c) Precautionary Area
- d) Two way route

(g) Parallel Index should be planned from

- a) Land only
- b) Any Fixed object
- c) Any prominent object
- d) A fixed radar conspicuous object only

(h) This is considered to be equivalent to an up to date paper chart

- a) ENC
- b) SENC
- c) RCDS
- d) ECS

(i) Which is the frequency used to send RT Distress alert in Sea Area A1?

- a) 2182 KHz
- b) 2187.5 KHz
- c) Ch. 16
- d) Ch. 70

(j) Which of the following information is not provided by the 'Weather Ocean Routing Organization

- a) Predicted Swell Direction and Height
- b) Predicted Tidal Heights
- c) Predicted position of Highs and Lows
- d) Predicted Wind Direction and Force

Q2. Answer in brief and to the point only

(5 x 2 = 10 marks)

- a) What information is available on a Tracing?
- b) State the four principles of passage planning
- c) When should one send out the "Sailing Plan" to INSPIRES?
- d) With respect to BRM, what is understood by "Challenge & Response"
- e) What are the advantages of Simplified symbols on ENC?

## **PART B**

Q.3.

- a) Explain how T&P corrections are applied on the chart
- b) Indicate how the Admiralty List of Radio Signals were maintained up to date  
(5 x 2 =10 marks)

Q.4.

- a) What are the objectives of Bridge Resource Management?
- b) Which are the primary areas of focus to ensure proper situational awareness while on a coastal passage?  
(5 x 2 =10 marks)

Q.5.

- a) State the objectives of "Ship Routeing" Systems
- b) What was the need to set up "INDSAR" & what are its the objectives  
(5 x 2 =10 marks)

Q.6.

- a) What factors are considered by an 'Ocean Routeing organization' before recommending an ocean passage?
- b) With the help of a neat sketch, describe the use of Clearing Bearings  
(5 x 2 =10 marks)

Q.7. Describe in detail the Limitations of the ECDIS

(10 marks)

Q.8.

- a) Describe the process of sending a distress message over MF
- b) Distinguish between the 4 Sea Areas under GMDSS including the equipment required to be carried  
(5 x 2 =10 marks)

Q.9.

- a) How would you go about correcting a paper chart which has not been corrected for past 18 months
- b) List out the disadvantages of Over scale and Under Scale while using an ECDIS  
(5 x 2 =10 marks)