

**Indian Maritime University**  
**(A Central University, Govt of India)**  
**End Semester Examinations – June 2025**

**Programme Name: B Sc (NS)**

**Semester: VI**

**Subject Code: UG21T5601**

**VOYAGE PLANNING & ECDIS**

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Date: 30.05.2025

Max Marks: 70

Duration: 03 Hrs

Pass Marks: 35

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**General Instructions**

- (i) All Sections (A, B & C) are to be attempted.
- (ii) Options, if any, are specified in respective section.
- (iii) English Channel Chart 2675 /5049 may be provided

**Section A**

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

1. Details of SAR coordinators are available in
  - (a) ALRS
  - (b) ALL & FS
  - (c) NP 136
  - (d) Guide to Port Entry
2. Information on Pilot Services and VTS Reporting can be obtained from
  - a) Ocean Passages of the World
  - b) Guide to Port Entry
  - c) Admiralty List of Radio Signals
  - d) Admiralty Sailing Directions
3. While selecting a suitable anchorage, which of the following is not a factor taken into account
  - (a) Draught of the vessel in relation to the available depth of water
  - (b) Stopping distance of the vessel
  - (c) Sea room available for swinging
  - (d) Nature of Seabed
4. MF Voice frequency used for Distress, Urgency, Safety and Routine Calling is
  - a) 8414.5 KHz
  - b) 2187.5 KHz
  - c) 2182 KHz
  - d) 4207.5 KHz
5. This is not a primary focus of BRM to ensure proper situational awareness during Coastal Passages

- (a) UKC Data
  - (b) Vessel Traffic
  - (c) Ocean Currents
  - (d) Vessel Reporting
6. Shore based organizations do weather routing for
- (a) Tran- Oceanic Passages
  - (b) Coastal Passages
  - (c) Only for passages in European Waters
  - (d) Only for passages in American and European Waters
7. The point beyond which the vessel should not proceed unless all is in readiness is called
- (a) Way Point
  - (b) End Point
  - (c) Termination Point
  - (d) Abort Point
8. GMDSS is required for which of the following vessels?
- a) All vessels capable of international voyages.
  - b) Vessels operating outside of the range of VHF coastal radio stations.
  - c) SOLAS Convention ships of 300 gross tonnage or more.
  - d) Coastal vessels of less than 300 gross tons.
9. Which is not true about the Safety Contour
- (a) It is alarm able
  - (b) The value input by the mariner is always selected
  - (c) Presents a clear change of colour
  - (d) Provides a visible boundary between "safe" and "unsafe" water
10. Advantages of weather routing is to provide:
- a) Fastest route
  - b) Most economic route.
  - c) Less chances of heavy weather damage
  - d) Sailing for slow steaming ships

### **Section B**

Five Questions of 02 Marks each

11. State what information is permanently shown in ECDIS IMO Base Display?
12. State why is the SENC considered to be equivalent to an up-to-date paper chart and not the ENC?
13. Name any six important information required for planning your next voyage?
14. Name the 3 different types of Notices to Mariners published by UKHO
15. Explain what is Digital Selective Calling

### **Section C**

Seven Questions of 10 Marks each of which any 05 questions to be answered.

16. a) What are the benefits of BRM when correctly practiced? (5 Marks)  
b) Explain what is meant by situational awareness with regard to BRM? (5 marks)
17. (a) State the objectives of INDSAR (5 marks)  
(b) Why do we need Bridge Resource Management (5 marks)
18. (a) While considering an Ocean Passage list out all Publications, Charts & Documents that you would refer to (5 marks)  
(b) Explain with a brief sketch the use of Clearing Bearings (5 marks)
19. What is the purpose of VTS, and services provided by VTS? (10 marks)
20. You have to plan a passage from the Scilly Isles TSS (approx. position  $49^{\circ} 38'N / 006^{\circ} 30'W$  to the Deep Sea Pilot (Deep Draught) station (approx. position  $50^{\circ} 24'N / 003^{\circ} 21'W$ ). Your vessels draught is 11m and your sea speed is 12 knots
- Clearly mark out on the chart -
- (a) The No-Go Areas between Longitudes  $003^{\circ}W$  and  $004^{\circ}W$
  - (b) The course(s)
  - (c) The Waypoint(s)
  - (d) A Parallel Index off Start Point
  - (e) 1-hour notice to Engine Room
- (10 marks)
21. List out all the Limitations of the ECDIS (10 marks)
22. What are the factors to be considered in weather routing of ship? (10 Marks)

