

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

**End Semester Examinations – December 2025**

**Programme Name: B Sc [NS]**

**Semester: V**

**Subject Code: UG21T5505**

**Subject Name: Marine Environmental Protection**

Date: 15.12.2025	Max Marks: 70
Duration: 03 Hrs	Pass Marks: 35

General Instructions

- (i) All Sections (A, B & C) are to be attempted.  
(ii) Options, if any, are specified in respective section.

**Section A**

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

1. SOPEP is mandatory for all ships of \_\_\_\_\_ GT and above and Oil Tankers of \_\_\_\_\_ GT .
  - a) 500 GT and above and oil tankers more than 150 GT
  - b) 400 GT and above and oil tankers more than 150 GT
  - c) 150 GT and above and oil tankers more than 400 GT
  - d) 400 GT and above and oil tankers of 100 GT and above
2. Food waste which is comminuted or grinded shall be capable of passing through screen with opening not greater than -----  
(a) 15mm (b) 20mm (c) 25mm (d) 30 mm
3. Commencement of Loading/Discharging of oil cargoes are entered in the \_\_\_\_\_
  - a) Oil Record Book Part II. (b) Oil Record Book Part I. (C) Cargo Record Book
  - d) Deck Log Book.
4. As per the discharge criteria for Oil Tankers, the Instantaneous Rate of Discharge should not exceed;  
a) 30 ltrs/NM b) 20 ltrs/NM c) 40 ltrs/NM d) 25 ltrs/NM
5. Which of the following require endorsement by cargo surveyor after completion of loading/discharging as per MARPOL Regulations for

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the Control of Pollution by Noxious Liquid Substances in Bulk.

(a) Cargo record book      (b) Oil Record book      (c) P & A Manual      (d) Certificate of Fitness

6. MARPOL Convention came into force \_\_\_\_\_.
- a) On 02<sup>nd</sup> September 1978
  - b) On 03<sup>rd</sup> December 1983
  - c) On 02<sup>nd</sup> October 1983
  - d) On 01<sup>st</sup> November 1983

7. The abbreviation EEDI stands for \_\_\_\_\_
- (a) Engine Efficiency Develop Index
  - (b) Energy Efficiency Design Index
  - (c) Engine Efficiency Design Index
  - (d) Energy Efficiency Develop Index

8. Special area under Annex II
- a) Red Sea      b) Gulf area      c) Antarctica Area      d) Mediterranean Sea

9. As per Annex IV, Discharge of Sewage can be carried out while the ship is proceeding at \_\_\_\_\_ kts.
- a) Not less than 5 knots
  - b) 7 knots
  - c) Not less than 3 knots
  - d) Not less than 4 knots

10. The validity of Certificate after completion of Initial Survey shall not exceed a period of \_\_\_\_\_

(A) 3 years (B) 4 years (C) 5 years (D) 1 year

### Section B

**(All questions to be answered. Five Questions of 02 Marks each)**

**11.** Define Garbage?

**12.** What is ECA?

**13.** What is the criteria for ships to carry a Garbage Management Plan?

**14.** Briefly describe what is Particulate matter

**15.** What are the certificates issued under MARPOL Annex VI?

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### Section C

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

16. Explain Emission Control Area and give the names of Emission Control areas as per Annex VI. State the requirements for ships for the limit of sulphur content in ship's fuel outside Emission Control area? (10 marks)
- 17.(a) Briefly describe the Procedure & Arrangement Manual as per Annex II. (5 Marks)
- (b) List the entries required to be maintained in Cargo Record Book. (5 Marks)
18. Explain the following; (10 marks)
- a) Volatile Organic Compounds (VOC)
  - b) Cargo Record Book
  - c) NOx Technical Code
  - d) OPA 90 (Oil Pollution Act 1990) Notification Requirements
19. Briefly explain the following important elements of Annex VI.
- 1) NOX
  - 2) SOX
  - 3) VOC
  - 4) ODS (10 Marks)
20. What is the purpose of Ballast water Management and state the three methods of Ballast water Management?
21. a) List (any 6) the incidental discharges from vessel as identified under 2013 VGP (Vessel's General Permit) (3 Marks)
- b) Explain what is Green Passport? (3 Marks)
- c) Briefly explain how the National Response System functions? (4 Marks)
22. What are the general requirements for carrying Dangerous goods as per Annex III and explain Marking & Labelling? (10 marks)

