

INDIAN MARITIME UNIVERSITY
(A Central University, Government of India)
END SEMESTER EXAMINATION Dec 2019
B.Sc (Nautical Science)
Semester: V
UG21T2508

Marine Environmental Protection (MARPOL, Ballast Water) Paper I

Date: 28-12-2019

Maximum Marks: **70**

Time: **3 hrs**

Pass Marks: **35**

Note: Question No.1 is compulsory.

Answer any 6 Questions from remaining 8 Questions (each of 10 marks).

Scientific Calculator is permitted if required.

1. **Fill in the blanks:** (5x2=10 marks)
- a) MARPOL Annex I mentions the Regulations for the _____ of Pollution by _____
 - b) MARPOL Annex II mentions the Regulations for the _____ of Pollution by _____ Liquid Substances in Bulk
 - c) MARPOL Annex III mentions the Regulations for the _____ of Pollution by _____ Substances in Packaged Form
 - d) The abbreviation NPDES stands for _____
 - e) The abbreviation VRP stands for _____
2. a) Explain in brief the history of MARPOL 73/78 Convention in brief (5 Marks)
b) Explain OPA – 90 Legislation (5 Marks)
3. a) List out the equipments that should be available in SOPEP locker. (5 Marks)
b) What is IOPP Certificate and what is its validity? (5 Marks)
4. a) What records are maintained in Oil Record Book Part I? (5 Marks)
b) List the special areas as per MARPOL Annex I (5 Marks)
5. a) Explain the criteria for discharge of oil from machinery spaces of a ship as per MARPOL Annex I (5 Marks)
b) What records are maintained in Oil Record Book Part II. (5 Marks)
6. a) Explain the various pollution categories into which Noxious Liquid substances are classified (5 Marks)
b) What are the requirements of SMPEP as per MARPOL Annex II. (5 Marks)

7. a) What are the requirements regarding Packing, Marking, Labeling and Documentation of Harmful Substances in Package form as per MARPOL Annex III (5 Marks)

b) Explain Port State Control (5 Marks)

8. a) What is Particularly Sensitive Sea Area (PSSA) (5 Marks)

b) Explain the criteria for discharge of oil from cargo spaces of an oil Tanker as per MARPOL Annex I (5 Marks)

9. a) Explain Segregated Ballast Tank (5 Marks)

b) Explain Special Area (5 Marks)