

INDIAN MARITIME UNIVERSITY
(A Central University Government of India)
END SEMESTER EXAMINATIONS-June/July 2019
B.Sc Nautical Science
Semester-V
Marine Environmental Protection - I
(UG21T2508)

Date: 15-07-2019

Maximum Marks: 70

Duration: 3 hrs.

Pass Marks: 35

Note: Attempt any 7 questions.

Scientific Calculator is permitted if required.

1.
 - a) Explain OPA – 90 Legislation (2 Marks)
 - b) Explain Special Area (2 Marks)
 - c) Explain Particularly Sensitive Sea Area (PSSA) (2 Marks)
 - d) Explain SMPEP for Noxious Liquid Substances and Equipments (2 Marks)
 - e) Explain Post State Control (PSC) (2 Marks)
2.
 - a) Explain the history of MARPOL 73/78 Convention in brief (5 Marks)
 - b) List out the equipments that should be available in SOPEP locker (5 marks)
3.
 - a) What is IOPP Certificate and what is its validity? (5 Marks)
 - b) List the salient features of National Pollutant Discharge Elimination System (NPDES) of the US Clean Water Act (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 ODMCS (5 Marks)
- b) Explain Crude Oil Washing (COW) (5 Marks)
7. a) Explain the various pollution categories into which Noxious Liquid substances are classified (5 Marks)
- b) Explain the following for a Chemical Tanker
- (i) Procedure & Arrangement Manual (2½ Marks)
 - (ii) Certificates Required (2½ Marks)
8. a) Explain Slop Tank (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) Write short notes on Packing, Marking, Labelling and Documentation of Harmful Substances carried in Packaged Form as per MARPOL Annex-III (5 Marks)
- b) Explain Segregated Ballast Tank (5 Marks)