

Indian Maritime University

(A Central University, Govt. of India)

End Semester Examinations - May/June 2024

Programme Name : B.Sc. Nautical Science

Semester : 2

Subject Code : UG21T5205

Subject Name : SHIP OPERATION TECHNOLOGY

Exam Date: 11-06-2024

Duration: 3 Hrs.

Max. Marks: 70

Pass Marks: 35

General Instructions

1. All Sections (A, B & C) are to be attempted.
2. Options, if any, are specified in respective section.
3. Any other tables/charts to be used.

SECTION A Answer all the questions (10 x 1 = 10)

S.No	Question
1	Which knot is used to join together two rope of equal size Over hand knot Reef knot Figure of eight knot None of the above
2	The code of safe working practice for seaman is published by Solas ISM Code Maritime Labour Convention Maritime and Coast Guard agency department
3	Courtesy flag is flown at Main mast extreme starboard Main mast extreme port side Fore mast only Anywhere it is best seen
4	Where the 'MONKEY ISLAND' is situated onboard a ship? The deck on top of the Bridge An island where 'Monkeys' locked The small platform on the Steering Gear Compartment The locker where 'Monkey Fists' are stored
5	'Safety Officer' of a ship is chosen by the Master Safety Committee Company Superintendent Designated person Ashore
6	Incident investigation includes all accidents and near misses only all accidents, unsafe acts and unsafe conditions only all accidents and non-conformities only all accidents, near misses, unsafe acts, unsafe conditions and non- conformities
7	When ship is in harbour, the hot work permit is approved by Mercantile marine department Port Company Own ship

8	Choose the Synthetic fibre rope from the following Hemp rope Manila rope Polypropylene rope Wire rope
9	Which Kind Of Ropes Used On Ships Coir, Manila , Hemp Polypropylene : Nylon Nylon : Cotton Vegetable fiber ; Synthetic rope and wire rope.
10	The residues of oil transferred in to Wing tanks Double bottom tanks Service tanks Sludge tanks

SECTION B
Answer all the questions
(5 x 2 = 10)

S.No	Question
11	What is Marline rope?
12	With respect to work permits, who is a Responsible person
13	With respect to flags, what is meant by 'at the dip' and 'close up'?
14	Collision Bulkhead
15	What is hot work?

SECTION C
Answer any 5 out of 7 questions
(5 x 10 = 50)

S.No	Question
16	What is Safety Committee Meeting? And Purpose of Safety Committee?
17	a) Find out the safe working Load of a polypropylene rope of 20mm diameter. (5 marks) b) Advantages of central heart and construction of wire rope. (5 marks)
18	a) Explain importance of personnel health and hygiene on board ship. (5 marks) b) Explain different types of permits used onboard ship. (5 marks)
19	What are the basic personal protective equipments (PPE) that are always present on board and its uses?
20	Write the meaning of following flags: a. F b. A c. Y d. B
21	a) State type of Ensigns and penalty for not using or wrongly using an Ensign. (5 marks) b) Explain Pilot Flag and Quarantine Flag. (5 marks)
22	What are the important Points to Remember during Mooring Operation on Ships?