



Name :

Roll No. :

Invigilator's Signature :

CS/BNS/SEM-1/BNS-105/2011-12

2011

SHIP OPERATION TECHNOLOGY-I

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following :

10 × 1 = 10

- i) Life-boat's falls need to be replaced every
 - a) 2 years
 - b) $2\frac{1}{2}$ years
 - c) $3\frac{1}{2}$ years
 - d) 5 years or earlier if damaged.
- ii) Capacity requirement for a life-boat is
 - a) capable of carrying the total complement on board on either side
 - b) capable of carrying the total complement on board on both sides combined
 - c) capable of carrying all crew on board
 - d) capable of carrying 30 persons.



- iii) The protechnics in a life-raft are
- a) 6 rocket parachute flares, 4 hand flares, 2 buoyant smoke signals
 - b) 4 rocket parachute flares, 6 hand flares, 2 buoyant smoke signals
 - c) 6 rocket parachute flares, 2 hand flares, 2 buoyant smoke signals
 - d) none of these.
- iv) Number of sets (nut, bolt, washer) in an international shore coupling is
- a) 3 sets
 - b) 4 sets
 - c) 5 sets
 - d) none of these.
- v) What is the full form of EPIRB ?
- a) Emergency Position Indicating Radar Beacon
 - b) Emergency Position Indicating Radio Beacon
 - c) Emergency Parallel Indicating Radio Beacon
 - d) None of these.
- vi) Minimum number of parachute distress rockets kept on the bridge is
- a) 6
 - b) 8
 - c) 10
 - d) 12.
- vii) Which of the following is a synthetic fibre ?
- a) Manila
 - b) Coir
 - c) Hemp
 - d) Nylon.

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GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following.

3 × 15 = 45

7. Draw and explain electrohydraulic steering gear system.
8.
 - a) State various LSA carried on Tanker.
 - b) What is the difference between immersion suits, anti-exposure suits and thermal protective aids.
 - c) What are various types of life-boats ? Explain significant features of each.
9. Write short notes on any *three* of the following :
 - a) International shore coupling
 - b) Doppler log
 - c) Davits and their operations
 - d) LSA and FFA Plan.
10. Describe the three types of Fixed Fire Extinguishing systems. Which type is used in machinery spaces ? Which type is used outside machinery spaces ?

