

MCA Yacht 3 - Statutory & Operational Requirements - Exam November 2007

1. With reference to MARPOL 73/78 Annex I that stipulates that an oil record book must be maintained on board:
 - a) List FOUR circumstances under which an entry must be made; (4)
 - b) List SIX items of information that must be recorded following the transfer of a substance containing oil. (6)

2. With reference to the International Load Line Convention:
 - a) sketch and label a typical load line marking for a vessel certificated to operate in all zones; (6)
 - b) define freeboard. (4)

3. With reference to the classification survey of a vessel in dry-dock:
 - a) List SEVEN separate items of the hull and associated equipment that would be examined by the surveyor; (7)
 - b) State THREE ways in which the thickness of a steel hull may be determined. (3)

4. The Code of Safe Working Practices for Merchant Seamen gives guidelines to individuals regarding their own personal health and safety:
 - a) List SIX precautions that should be taken to ensure personal health and safety; (6)
 - b) List FOUR items of personal protective equipment (p.p.e.). (4)

5. With reference to the maintenance of machinery on board a vessel:
 - a) State why unscheduled (breakdown) maintenance is considered unacceptable; (4)
 - b) List SIX examples of condition monitoring that could be applied to a planned maintenance system. (6)

6. a) A vessel with two main engines, each with a working sump lubricating oil capacity of 750 litres and an average daily consumption each of 3.5 litres at full power, has bunkered 1000 litres of oil. Calculate the steaming range of the vessel when the engines are operated at full power delivering a speed of 15 knots to the vessel. (6)
- c) State the factors that should be considered when determining the fresh water requirements for a voyage. (4)
7. a) list THREE types of portable fire extinguisher that could be found in the machinery spaces of a vessel; (3)
- c) State TWO applications for EACH of the fire extinguishers listed under Q7(a); (6)
- d) State ONE type of fixed fire fighting installation. (1)
8. A) list SIX statutory certificates that are required to be carried in order to demonstrate compliance with the various IMO Conventions; (6)
- c) Describe the rules in phase for carrying out renewal surveys for the certificates listed in Q8(a) (4)
9. With reference to the International Safety Management Code (ISM):
- a) State the purpose of having a designated person ashore (d.p.a.); (6)
- b) State the TWO certificates that are required to be carried on a vessel in order to demonstrate compliance with the code. (4)
10. With reference to crankcase explosions:
- a) Describe how the conditions that may lead to a crankcase explosion can be detected; (5)
- b) Describe how the engine is protected from a secondary explosion occurring. (5)