

MCA Yacht 3/2 - Chief Engineer Statutory and Operational Requirements - Examination June 2007

1. a) Describe the format of a safety sign used to convey EACH of the following types of information:
 - i) a prohibition; (2)
 - ii) a hazard warning; (2)
 - iii) a mandatory instruction; (2)
 - iv) a safe condition or way; (2)b) State TWO examples of where such signs would be used on board a vessel. (2)

2. The Maritime and Coastguard Agency (MCA) gives guidance to vessels by means of 'M' notices.
 - a) State the THREE different types of 'M' notice, explaining the purpose of EACH type. (6)
 - b) List FOUR examples of topics covered by current 'M' notices (4)

3. A vessel has bunkered 300 tonnes of diesel fuel. Given that the average combined sea power load of the vessel is 3000 kW and with a stated specific consumption of 0.35 kg/kWh:
Calculate EACH of the following:
 - a) the daily fuel consumption of the vessel; (4)
 - b) the safe steaming range of the vessel at a speed of 18 knots. (6)

4. With reference to a vessel's maintenance:
 - a) list FOUR reasons why it is desirable for the machinery of a large yacht to be covered by a planned maintenance system; (4)
 - b) state FOUR reasons why unscheduled maintenance may need to be performed; (4)
 - c) state ONE Example of acceptable unscheduled maintenance. (2)

5. a) State SEVEN checks that should be carried out before taking over the machinery space watch from another officer. (7)
b) State the circumstances under which it would be inappropriate for the officer in charge of an engineering watch to hand over responsibility to a relief. (5)

6. With reference to the International MARPOL Convention 73/78 Annex IV - state the restrictions placed on the handling and disposal of sewage while a vessel is:
 - a) within twelve miles from land; (5)
 - b) within three miles from land. (5)

7. With reference to the classification of a vessel:
 - a) list SIX items that would be inspected during a **special hull survey**; (6)
 - b) describe how a **continuous hull survey** could be applied. (4)

8. With reference to the periodical dry-docking of a vessel:
 - a) list FIVE services that should be made available in order to maintain the vessel while in the dock; (5)
 - b) list FIVE inspections/precautions that should be undertaken before re-flooding the dock. (5)

9. With reference to oxy/acetylene equipment:
 - a) state the dangers associated with the use of this equipment; (5)
 - b) state how the dangers listed in Q9(a) can be minimized. (5)

10. With reference to the Code of Safe Working Practices for Merchant Seamen guidance on **enclosed spaces**:
 - a) list FOUR examples of an enclosed space; (4)
 - b) state SIX precautions to be undertaken before entering an enclosed space. (6)