

CERTIFICATES OF COMPETENCY FOR ENGINEERS (YACHT)

**EXAMINATIONS ADMINISTERED BY THE
SCOTTISH QUALIFICATIONS AUTHORITY
ON BEHALF OF THE
MARITIME AND COASTGUARD AGENCY**

**STCW 95 CHIEF ENGINEER (REG. III/2) – “YACHT 2”
STCW 95 CHIEF ENGINEER (REG. III/2) – “YACHT 3”**

051-02 STATUTORY AND OPERATIONAL REQUIREMENTS

FRIDAY, 20 JUNE 2008

1400 - 1600 hrs

Examination paper inserts:

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Notes for the guidance of candidates:

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| <ol style="list-style-type: none">1. Non-programmable calculators may be used.2. All formulae used must be stated and the method of working and ALL intermediate steps must be made clear in the answer. |
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Materials to be supplied by examination centres:

Candidate's examination workbook

STATUTORY AND OPERATIONAL REQUIREMENTS

Attempt ALL questions

Marks for each question are shown in brackets

1. With reference to the International MARPOL Convention 73/78:
 - (a) list the four annexes that apply to the operation of large motor yachts; (4)
 - (b) detail the limitations that are presently in force regarding the supply and use of hydrocarbon fuels in diesel engines. (6)

2. List TEN ways in which good engineering practices and housekeeping within the machinery spaces of a yacht may reduce the risk of fire. (10)

3.
 - (a) List FOUR reasons why the machinery of a large yacht should be covered by a planned maintenance system. (4)
 - (b) List SIX factors that should be taken into account when setting up a typical planned maintenance system. (6)

4. Classification Societies allow vessels to be examined *in-water* in lieu of normal dry-docking.
 - (a) List FOUR requirements that need to be fulfilled in order for an in-water survey to take place. (4)
 - (b) List SIX parts of the vessel's underwater hull and machinery that would receive special attention during an in-water inspection. (6)

5. The Maritime and Coastguard Agency (MCA) gives guidance to vessels by means of 'M' notices.
 - (a) Describe the THREE different types of 'M' notice, explaining the purpose of EACH type. (6)
 - (b) State the mandatory requirements for the carriage of 'M' notices on board British flagged vessels. (4)

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6. With reference to the classification of bulkheads:
- (a) list the FOUR types of Class A bulkhead; (4)
 - (b) describe the standard fire test that is applied to insulated bulkheads; (4)
 - (c) state TWO examples of where the highest class of insulated bulkhead would be used on a vessel. (2)
7. (a) A vessel has bunkered fuel for a forthcoming voyage. List the details that would need to be known in order to calculate the safe steaming range of the vessel. (6)
- (b) List the factors that would be taken into consideration when assessing the spare parts requirements for the vessel. (4)
8. The Code of Safe Working Practice for Merchant Seamen states that a *Permit to Work* must be obtained before certain tasks can be undertaken.
- (a) State the purposes of a *Permit to Work*. (4)
 - (b) List SIX items that need to be included on a *Permit to Work*. (6)
9. With reference to the classification of a vessel:
- (a) (i) state what is meant by the term *special hull survey*; (3)
 - (ii) state the time intervals over which the special hull surveys take place; (2)
 - (b) List FIVE parts of the vessel that would be examined during a special hull survey. (5)
10. With reference to the International Convention for the Safety of Life at Sea (SOLAS'74) Chapter XI section 2 – the *International Ship and Port Security Code*:
- (a) list the FOUR basic requirements for ships in order to comply with the code; (4)
 - (b) list the basic procedures that will be required to be put in place in order for the vessel to operate at security level one. (6)