# Steam Ship Certificate of Competency Course
## At
## Singapore Maritime Academy (SMA)

1. **Summative Assessment**

| Type of Assessment | Sections | Type of Question | Topic Distribution | No. of Questions | Marks | Marks Distribution |
|---|---|---|---|---|---|---|
| Computer-based Assessment | Section A | 1.Multiple Choice | Topic A - Boiler | 2 | 4 | Total = 36 |
| | | | Topic B - Comb | 2 | 4 | |
| | | 2.Multiple Answer | Topic C - Cond | 2 | 4 | |
| | | | Topic D - Turbine | 2 | 4 | |
| | | 3.Matching | Topic E - LNG | 2 | 4 | |
| | | | Topic F - Oper | 2 | 4 | |
| | Section B | 4.Numeric Response | Topic A - Boiler | 1 | 2 | |
| | | | Topic B - Comb | 1 | 2 | |
| | | 5.Completion | Topic C - Cond | 1 | 2 | |
| | | | Topic D - Turbine | 1 | 2 | |
| | | 6.True/False | Topic E - LNG | 1 | 2 | |
| | | | Topic F - Oper | 1 | 2 | |
| Manual Assessment | Section C | 7.Short Answer | Topic B - Comb | 1 | 8 | Total = 32 |
| | | | Topic C - Cond | 1 | 8 | |
| | | | Topic E - LNG | 1 | 8 | |
| | | | Topic F - Oper | 1 | 8 | |
| | Section D | 8.Long Answer | Topic A - Boiler | 1 | 16 | Total = 32 |
| | | | Topic D - Turbine | 1 | 16 | |
| | | | | | **Total =** | 100 |
| Topic A – Boiler, Topic B – Combustion, Topic C – Condensate & Feed, Topic D – Steam Turbine Topic E – LNG System Topic F  - Plant Operation | | | | | | |

## 2. Means of Assessment

| Assessment Components | Type of Assessment | When Conducted | Weightage % |
|---|---|---|---|
| 1. Coursework A | Computer-based online assessment | Continuous (in-Course) | 15 |
| 2. Coursework B | 12 Assignments – 2 each for 6 main areas of coverage. (*Individual Portfolio*) | Continuous (in-Course) | 15 |
| 3. Summative Assessment | Computer-based online assessment | End of Course | 55 |
| 4. Shipboard Assignments | 6 Assignments – 1 each for 6 main areas of coverage. (Appending *Individual Portfolio)* | During steam ship attachment (preferably LNG carrier). | 15 |

**Note: Assessments** will cover

- o The knowledge components *[Subsections A, B, C, D and E in Section 12]* using knowledge-based tools and computer-based drill & practice.
- o The competency-based components *[Subsections F in Section 12]* using Steam Simulator.

## 3. Table of Specifications

| Topics – Six Main Areas of Coverage | | Abilities (%) | | | Total (%) |
|---|---|---|---|---|---|
| | | K | C | A/HA | |
| Knowledge of | **A.** Steam Boilers | 4 | 4 | 12 | 20 |
| | **B.** Combustion Theory & Practice | 2.5 | 2.5 | 2 | 7 |
| | **C.** Main Condensate & Feed Water System | 2 | 2 | 6 | 10 |
| | **D.** Steam Turbines | 4 | 4 | 12 | 20 |
| | **E.** LNG System | 2.5 | 2.5 | 2 | 7 |
| Proficiency in | **F.** Plant Operation | 6 | 6 | 24 | 36 |
| | | | | | |
| **Total** | | **23** | **23** | **54** | **100** |

Note:
1. The letters K, C, A/HA in the table of specifications denote respectively, the Knowledge, Comprehension, and Application/Higher than Application levels of Bloom's Taxonomy in the cognitive domain.