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	8	Total = 60 [40%]
			Topic B - Comb	2	8	
		2.Multiple Answer	Topic C - Cond	2	8	
			Topic D - Turbine	2	8	
		3.Matching	Topic E - LNG	2	8	
			Topic F - Oper	2	8	
	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	10	Total = 40
			Topic C - Cond	1	10	
			Topic E - LNG	1	10	[60%]
			Topic F - Oper	1	10	
	Section D	8.Long Answer	Topic A - Boiler	1	25	Total = 50
			Topic D - Turbine	1	25	
					Total =	150

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.