Assessment Plan

STCW Code: *Section A-III/2*	Mandatory minimum requirements for certification of chief engineer officers and second engineer officers on ship powered by main propulsion machinery of 3,000 kW propulsion power or more	Table A: Table A-III/2	
Approved Training Program	Management Level Course for Marine Engineer Officers (Function 4)	Instructor:	Date Prepared:
Resources Needed		Assessor:	Approved by:

Topics	**Written Assessment**				**Practical Assessment**					
					Assessment Task					***Grading Scheme***
	No. of Test Items	**Assessment Method**	**Assessment Period**	**Grading Scheme**	1. apply the identified measure to maintain the stability and stress conditions within safety limits at all times during operation in a given scenario.	4.analyze potential non-compliance with the IMO conventions and legislative requirements in a given scenario. 5.monitor the compliance with the requirements and responsibilities with the following international agreements, conventions and instruments in given scenarios	7. develop emergency and damage control plans based on the results of the evaluation taking into consideration the best management practices. 8. evaluate the effectiveness of the methods and aids for fire prevention, detection, and extinction in	11. super vise the conduct of a planned testing and maintenanc e of life-saving appliances, fire detection, alarms, fire-fighting and other safety systems in accordance with the Planned Maintenanc	15.1 assess current personnel competencie s, capabilities and operational requirement s and recommend appropriate learning and developmen t requirement s and activities in accordance	

					2. make decision to maintain trim stability of the ship taking into consideration the appropriate countermeasures in a given scenario (e.g. flooding and ship damage of a compartment) 3. use IMO recommendations about ships stability related to issues onboard	6.apply the methods and aids to prevent pollution of the marine environment by ships in a given scenario.	accordance with emergency procedures on board 9. evaluate the effectiveness of the methods for fire prevention, detection, and extinction in accordance with emergency procedures on board 10. evaluate the effectiveness of the functions and proper use of life-saving appliances on board a ship in accordance with emergency procedures on board	e Systems (PMS) 12. plan fire and abandon ship drills in accordance with established emergency procedures, through a given scenario 13. apply appropriate measures to be taken to limit the damage due to fire and explosion in the engine room resulted to collision, in accordance with contingency plan 14. apply appropriate measures to be taken to limit damage and salve the ship following a fire, explosion, collision or grounding	with generally accepted principles. • apply task and workload management in accordance with safe working practices through a given scenario, including: - planning and coordination - personnel assignment - -time and resource constraints - -prioritization • monitor the effectiveness of task and workload management and adjust as necessary. • apply the most	

									effective decision-making techniques in accordance with the established safety procedures through a given scenario. • apply the most effective decision-making techniques in accordance with the established safety procedures through a given scenario. 15.2 develop, implement and oversee standard operating procedures for main engine preparation to depart from dry dock up to full away in accordance with operational	

									requirements and applicable rules	
Course Introduction	1				***Assessment Criteria***					Performance of required tasks based on Assessment Criteria using a Checklist
1. Fundamental principles of ship construction and the theories and factors affecting trim and stability and measures necessary to preserve trim and stability	7	Multiple Choice Questions	Written Exam must be taken before the practical assessment and administered at the end of training period	Obtain at least 75% mark from written test	Stability and stress conditions are maintained within safety limits at all times	• Procedures for monitoring operations and maintenance comply with legislative requirements • Potential non-compliance is promptly and fully identified • Requirements for renewal and extension of certificates ensure continued validity of survey items and equipment	Emergency procedures are in accordance with the established plans for emergency situations	Procedures for monitoring fire-detection and safety systems ensure that all alarms are detected promptly and acted upon in accordance with established emergency procedures	• The crew are allocated duties and informed of expected standards of work and behaviour in a manner appropriate to the individuals concerned • Training objectives and activities are based on assessment of current competence and capabilities and operational requirements	

									• Operations are demonstrated to be in accordance with applicable rules • Operations are planned and resources are allocated as needed in correct priority to perform necessary tasks • Communication is clearly and unambiguously given and received • Effective leadership behaviours are demonstrated • Necessary team member(s) share accurate understandi	

									ng of current and predicted vessel state and operational status and external environment • Decisions are most effective for the situation • Operations are demonstrated to be effective and in accordance with applicable rules	
2. The effect on trim and stability of a ship in the event of damage to and subsequent flooding of a compartment and countermeasures to be taken	7									
3. IMO recommendations concerning ship stability	2									
4. Relevant international maritime law embodied in international agreements and conventions										
4.1. Certificate and other documents required to be carried on board ships by international conventions, how	**8**									

	they may be obtained and their period of validity										
4.2.	Responsibilities under international conventions and instruments	**7**									
4.3.	Methods and aids to prevent pollution of the environment by ships	6									
4.4.	Knowledge of national legislation for implementing international agreements and conventions	**3**									
5.	Ship Construction including damage control	6									
6.	Methods and aids for fire prevention, detection and extinction	2									
7.	Functions and use of life-saving appliances	2									
8.	Life-saving appliance regulations (International Convention for the Safety of Life at Sea)	3									
9.	Maintenance of operational condition of life-saving, fire-fighting and other safety systems	5									
10.	Organization of fire drills and abandon ship drills	5									
11.	Actions to be taken to protect and safeguard all persons on board in emergencies	5									
12.	Actions to limit damage and salve the ship following fire, explosion, collision or grounding	4									

13.	Related international maritime conventions and recommendations, and national legislation	**1**									
14.	Shipboard personnel management and training	**6**									
15.	Task and workload management	**8**									
16.	Effective resource management	**4**									
17.	Decision-making techniques	**4**									
18.	Development, implementation and oversight of standard operating procedures	**6**									

Note: The MTI has the prerogative to cluster related tasks into one scenario provided that it addresses all expected learning outcomes in the achievement of the competence and can be assessed in accordance with the specified assessment criteria.