




भारत सरकार / GOVERNMENT OF INDIA  
पत्तन, पोत परिवहन और जलमार्ग मंत्रालय  
MINISTRY OF PORTS, SHIPPING AND WATERWAYS  
नौवहन महानिदेशालय, मुंबई  
DIRECTORATE GENERAL OF SHIPPING, MUMBAI

**DGS Circular No. 07 of 2026**

<b>File No. 25-104/60/2025-NT – DGS Comp. No 38050</b>		<b>Date: 21.02.2026</b>
<b>Authorised By:</b> Chief Examiner of Master & Mates	<b>Subject:</b> Preparatory Course for Oral Examination leading to Nautical Grade Certificate of Competency under the STCW Convention- reg.	
<b>Issued by:</b> Nautical Wing, EAC Branch	<b>NT Exam Circular No. 01 of 2026</b>	
<ol style="list-style-type: none"><li>1. The Directorate General of Shipping is the competent authority under the Merchant Shipping Act, 1958 and the Merchant Shipping (Standards of Training, Certification and Watchkeeping for Seafarers) Rules, 2016, as amended, for the conduct of written and oral examinations for the assessment of the knowledge and competence of seafarers. Such examinations are conducted in accordance with the provisions of the STCW Convention, 1978, as amended.</li><li>2. The oral examination constitutes a pivotal component of the certification process and is designed to assess the practical knowledge, decision-making ability, professional judgement, and applied competence of candidates through viva voce assessment. These examinations are conducted by panels comprising Internal Examiners from the Directorate General of Shipping and Mercantile Marine Departments, as well as External Examiners drawn from a pool of industry professionals, faculty members of Maritime Training Institutes, and experienced Masters or Ex-Master Mariners, thereby ensuring a rigorous, objective, and holistic assessment framework.</li><li>3. An analysis of oral examination results for the years 2024 and 2025 indicates that overall candidate performance in oral examinations has not been satisfactory. It has been observed that a significant number of candidates are required to undertake multiple attempts in order to successfully clear the oral examination, despite having met the eligibility requirements and cleared the written examinations.</li><li>4. Upon deliberation, it has emerged that candidates do not receive adequate exposure to structured and standardised preparation specifically oriented towards oral examinations. At present, there exists no dedicated institutional mechanism for focused oral-examination preparation aligned with examination expectations, competency assessment standards, articulation requirements, and viva-based evaluation dynamics.</li></ol>		

5. In view of the above, the Directorate General of Shipping hereby introduces a Structured Oral Examination Preparatory Programme, to be conducted in a hybrid mode in collaboration with the Company of Master Mariners of India (CMMI). The programme is designed as a mentor-led, structured preparatory intervention aimed at enhancing candidate preparedness, improving articulation and applied reasoning, and strengthening overall examination outcomes. Participation in the programme shall ordinarily be Voluntary and recommendatory in nature.
6. Notwithstanding the above, participation in the Structured Oral Examination Preparatory Programme may be made mandatory for candidates showing poor performance in any oral examination despite multiple attempts.
7. The programme shall function strictly as a preparatory and facilitative mechanism towards the statutory oral examination process. Participation in the programme shall not be construed as a guarantee of examination success, nor shall it influence examiner independence or discretion during the conduct of statutory oral examinations.
8. The detailed scope, syllabus, methodology, monitoring framework, standardised evaluation sheets, and indicative timetable for implementation of the Structured Oral Examination Preparatory Programme are annexed to this Circular and shall be read as an integral part thereof.
9. The oral-examination preparatory syllabi for Second Mate (Foreign Going/ NWKO NCV), Chief Mate (Foreign Going/NCV), and Master (Foreign Going/NCV) are annexed to this Circular as Annexure II, Annexure III, and Annexure IV, respectively.
10. The Course Schedule will be released by CMMI on [www.cmmi.co.in](http://www.cmmi.co.in) , and will commence from March 2026 onwards.

This Circular is issued with the approval of the Competent Authority.

  
21.02.26  
(Capt. Ravi Singh Sikarwar)  
Nautical Surveyor-cum- DDG (Tech.)

To:

1. DGS Secretariat.
2. Nautical Advisor to the Govt. of India
3. All Maritime Training Institutes
4. INSA/FOSMA/MASSA/ICCSA
5. CMMI.
6. Computer Cell

Copy to:

1. All Mercantile Marine Department.

## ANNEXURE – I

### SCOPE OF THE STRUCTURED ORAL

#### EXAMINATION PREPARATORY PROGRAMME

##### 1. Overall Scope and Purpose

The Structured Oral Examination Preparatory Programme shall comprise a comprehensive, two-week, mentor-led intervention aimed at improving candidate performance in competency oral examinations conducted by the Directorate General of Shipping. The programme addresses systemic deficiencies observed among candidates who repeatedly fail oral examinations despite having successfully cleared the written examinations.

The scope focuses on strengthening articulation, applied reasoning, confidence, examination readiness, and the ability to translate technical knowledge into structured, coherent oral responses under viva voce conditions. The programme shall function as an institutionalised preparatory mechanism aligned with the statutory examination framework, without substituting or diluting prescribed examination standards or syllabi.

##### 2. Coverage and Applicability

The programme shall be applicable to candidates appearing for oral examinations for Second Mate (Foreign Going / NWKO NCV), Chief Mate (Foreign Going / NCV), and Master (Foreign Going / NCV), following successful completion of the written examinations.

Participation may be voluntary or mandatory, as notified by the Directorate General of Shipping, particularly in cases involving repeated unsuccessful attempts in any function of the oral examination.

**Table 1: Applicability Framework**

Parameter	Description
Certificates Covered	Second Mate (FG/ NWKO NCV), Chief Mate (FG/NCV), Master (FG/NCV)
Stage of Examination	Oral examination following written examination
Nature of Participation	Voluntary or mandatory, as may be specified.
Alignment	Notified oral examination syllabi

##### 3. Batch Configuration and Candidate Management

Each batch shall comprise a maximum of forty candidates to ensure effective mentoring, interaction, and individual attention. Batch constitution may be undertaken function-wise or competency-wise based on examination failure trends and candidate profiles.

The scope includes identification, grouping, scheduling, and monitoring of candidates to ensure uniformity of standards and targeted preparation.

Faculty engaged for the programme shall be **independent of the DGS/MMD examination system**, and any external examiners, where involved, shall be **restricted strictly to guidance and mentoring sessions**, with no role in assessment or evaluation.

**Table 2: Batch Configuration**

Aspect	Specification
Maximum batch size	40 candidates
Basis of batch formation	Function-wise or competency-wise
Priority candidates	Candidates with three or more unsuccessful attempts
Monitoring	Attendance and participation tracking

**4. Programme Duration, Intensity, and Delivery Model**

The programme shall be conducted over a continuous two-week period with engagement spanning five days per week and sessions of five to six hours per day. A high-intensity, high-interaction delivery model shall be adopted, prioritising active participation, oral practice, discussion, and mentor feedback over lecture-based instruction.

**Table 3: Programme Intensity**

Parameter	Requirement
Total duration	Two weeks
Weekly engagement	5 days
Daily session length	1000-1700 hrs
Delivery approach	Interactive and mentor-led

**5. Mock Oral Examinations and Continuous Feedback**

The programme shall include multiple mock oral examinations replicating actual viva conditions. Immediate, structured feedback shall be provided after each mock viva, followed by targeted corrective guidance.

**Table 4: Mock Viva and Feedback Mechanism**

Element	Description
Mock oral exams	Multiple rounds under simulated conditions
Feedback	Immediate and structured
Corrective action	Targeted mentoring sessions
Documentation	Evaluation sheets per candidate

- Mock oral assessments shall be conducted in a structured manner, with a minimum allocation of ten (10) to fifteen (15) minutes per candidate.
- Additional mock oral assessments may also be conducted during weekends and after completion of the two-week programme for interested candidates, subject to administrative feasibility.

## 6. Assessment, Documentation, and Outcome Classification

Continuous formative assessment shall be conducted throughout the programme. Each candidate shall receive documented evaluations capturing diagnostic findings, interim progress, and final readiness.

Candidates shall be classified based on preparedness at programme conclusion.

**Table 5: Outcome Classification**

<b>Classification</b>	<b>Meaning</b>
<b>Ready for examination</b>	Adequate articulation and confidence
<b>Requires limited revision</b>	Minor gaps identified
<b>Requires extended preparation</b>	Significant gaps remain

## 7. Quality Assurance and Continuous Improvement

Feedback from candidates and mentors shall be collected and analysed to assess programme effectiveness. Comparative analysis of oral examination outcomes before and after programme participation shall inform continuous improvement.

**Table 6: Quality Assurance Measures**

<b>Measure</b>	<b>Purpose</b>
Feedback collection	Programme refinement
Performance comparison	Effectiveness assessment
Reporting	Institutional learning

## ANNEXURE I - APPENDIX A

### Standardised Evaluation Rubrics for Mock Oral Assessments

#### 1. General Principles Applicable to All Rubrics

1. The rubrics shall be used only for preparatory and formative assessment and shall not influence statutory oral examination outcomes.
2. Evaluation shall focus on articulation, reasoning, professional judgement, and communication, independent of topic selection.
3. A five-point scale shall be uniformly applied to ensure consistency and comparability.
4. Mentors shall record brief qualitative observations in addition to numerical scores.

#### 2. Diagnostic Mock Oral Assessment Rubric

*(To be applied during Week 1)*

##### Purpose

To establish a baseline assessment of the candidate's oral articulation, reasoning structure, and examination readiness at the commencement of the programme.

##### Diagnostic Evaluation Table

Criterion	Descriptor	Rating (1–5)
Articulation clarity	Ability to express ideas clearly and audibly, without ambiguity	
Logical sequencing	Ability to structure answers in a coherent and logical flow	
Conceptual understanding	Demonstrates understanding rather than memorised recall	
Application mindset	Ability to relate responses to practical or operational context	
Confidence and composure	Calmness, confidence, and presence during questioning	
Examiner interaction	Ability to listen, respond appropriately, and seek clarification	

##### Rating Scale Guidance

1 – Unsatisfactory, 2 – Below expected standard, 3 – Acceptable baseline, 4 – Good & 5 – Very good / confident

## Diagnostic Output

- Identification of individual articulation and reasoning gaps
- Classification of primary improvement areas
- Basis for personalised preparation plan

### 3. Interim Mock Oral Assessment Rubric

*(To be applied during Week 2)*

#### Purpose

To measure progress in articulation, reasoning, and confidence following guided preparation and interactive learning.

#### Interim Evaluation Table

Criterion	Descriptor	Rating (1–5)
Improvement in articulation	Demonstrated improvement from diagnostic baseline	
Answer structuring	Ability to present answers with introduction, explanation, and conclusion	
Depth of reasoning	Ability to justify responses logically	
Responsiveness under questioning	Ability to handle follow-up and probing questions	
Professional judgement	Demonstrates safety-oriented and compliant thinking	
Confidence progression	Improved confidence and reduced hesitation	

#### Interim Progress Classification

Status	Interpretation
Improved	Clear positive progression observed
Stable	Limited change from diagnostic
Needs attention	Regression or persistent weakness

#### Interim Output

- Identification of areas requiring targeted mentoring
- Adjustment of preparation strategy and mock viva focus

#### 4. Final Mock Oral Assessment Rubric

*(To be applied during Week 2)*

##### Purpose

To assess overall readiness for statutory oral examination under near-real viva conditions.

##### Final Evaluation Table

Criterion	Descriptor	Rating (1–5)
Overall articulation quality	Clear, confident, and structured oral responses	
Logical coherence	Answers demonstrate sound reasoning and flow	
Application and judgement	Responses reflect applied understanding and professional judgement	
Stress handling	Ability to maintain composure under examination pressure	
Examiner engagement	Mature interaction and effective communication	
Examination readiness	Overall preparedness for statutory oral examination	

#### 5. Final Readiness Classification Framework

Classification	Interpretation
Ready for examination	Demonstrates consistent articulation, confidence, and judgement
Requires limited revision	Minor gaps remain, manageable with short revision
Requires extended preparation	Significant articulation or reasoning gaps persist

#### 6. Documentation and Record Keeping

1. Separate evaluation sheets shall be maintained for Diagnostic, Interim and Final assessments.
2. Each evaluation sheet shall include:
  - Candidate identification details
  - Date and stage of assessment
  - Numerical scores and brief mentor remarks
3. Records shall form part of the Batch Outcome Report.

ANNEXURE I – APPENDIX B

EVALUATION SHEETS

**A. Diagnostic Mock Oral Assessment Sheet (Week 1)**

**Candidate Name:** \_\_\_\_\_

**Certificate Level:** \_\_\_\_\_

**Date:** \_\_\_\_\_ **Mentor:** \_\_\_\_\_

<b>Evaluation Criterion</b>	<b>Descriptor</b>	<b>Score (1–5)</b>	<b>Mentor Remarks</b>
Articulation clarity	Clarity and audibility of oral responses		
Logical sequencing	Structured flow of answers		
Conceptual understanding	Understanding beyond rote recall		
Application mindset	Relating responses to operational context		
Confidence and composure	Calmness during questioning		
Examiner interaction	Listening and responding effectively		

**Overall Diagnostic Observations:**

\_\_\_\_\_



**B. Interim Mock Oral Assessment Sheet (Weeks 2)**

**Candidate Name:** \_\_\_\_\_

**Certificate Level:** \_\_\_\_\_

**Date:** \_\_\_\_\_ **Mentor:** \_\_\_\_\_

<b>Evaluation Criterion</b>	<b>Descriptor</b>	<b>Score (1-5)</b>	<b>Mentor Remarks</b>
Improvement in articulation	Progress since diagnostic stage		
Answer structuring	Intro-body-conclusion format		
Depth of reasoning	Logical justification of responses		
Responsiveness	Handling follow-up questions		
Professional judgement	Safety-oriented reasoning		
Confidence progression	Reduced hesitation		

**Interim Progress Status: Improved / Stable / Needs Attention**



**C. Final Mock Oral Assessment Sheet (Week 2)**

**Candidate Name:** \_\_\_\_\_

**Certificate Level:** \_\_\_\_\_

**Date:** \_\_\_\_\_ **Mentor:** \_\_\_\_\_

<b>Evaluation Criterion</b>	<b>Descriptor</b>	<b>Score (1–5)</b>	<b>Mentor Remarks</b>
Overall articulation quality	Clear and confident expression		
Logical coherence	Consistency and flow of reasoning		
Application and judgement	Applied professional thinking		
Stress handling	Composure under pressure		
Examiner engagement	Effective communication		
Examination readiness	Overall preparedness		

**Final Readiness Classification:**

- Ready for Examination
- Requires Limited Revision
- Requires Extended Preparation



## ANNEXURE-II

### ORAL SYLLABUS FOR 2<sup>nd</sup> MATE (F.G.) / NWKO (NCV)

**Function: Navigation at the operational level**

Sr. No.	Knowledge, understanding & proficiency	Criteria for evaluating competence
1	<p><b>Competence: Plan and conduct a passage and determine position</b></p> <p><b>Celestial navigation</b> Ability to use celestial bodies to determine the ship's position</p> <p><b>Terrestrial and coastal navigation</b> Ability to determine the ship's position by use of:</p> <p>.1 Landmarks</p> <p>.2 aids to navigation, including lighthouses, beacons and buoys</p> <p>.3 dead reckoning, considering winds, tides, currents and estimated speed.</p>	<p>The information obtained from nautical charts and publications is relevant, interpreted correctly and properly applied. All potential navigational hazards are accurately identified. The primary method of fixing the ship's position is the most appropriate to the prevailing circumstances and conditions. The position is determined within the limits of acceptable instrument/system errors. The reliability of the information obtained from the primary method of position fixing is checked at appropriate intervals.</p> <p>Calculations and measurements of navigational information are accurate.</p>
2	<p><b>Charts and Publications</b></p> <p>Thorough knowledge of and ability to use nautical charts, and publications, such as sailing directions, tide tables, notices to mariners, radio navigational warnings and ships' routeing information.</p>	<p>The charts selected are the largest scale suitable for the area of navigation and charts and publications are corrected in accordance with the latest information available.</p> <p>Chart correction, T &amp; P Notices, Corrections to Sailing Directions</p>
3	<p><b>Electronic systems of position fixing and navigation</b></p> <p>Ability to determine the ship's position by use of electronic navigational aids.</p>	<p>Performance checks and tests to navigation systems comply with manufacturer's recommendations and good navigational practice. Difference between GPS and DGPS</p>
4	<p><b>Echo-sounders</b></p> <p>Ability to operate the equipment and apply the information correctly</p>	<p>Operation and Errors of Echo Sounder</p>
5	<p><b>Compass – Magnetic And Gyro</b></p> <p>Knowledge of the principles of magnetic and gyro compasses. Ability to determine errors of the magnetic and gyro compasses, using celestial and terrestrial means, and to allow for such errors</p>	<p>Principles of and errors in magnetic and gyro compasses are determined and correctly applied to courses and bearings</p> <p>Obtaining and applying Gyro error</p>
6	<p><b>Steering control system</b></p> <p>Knowledge of steering control systems, operational procedures and change-over from manual to automatic control and vice versa. Adjustment of controls for optimum performance</p>	<p>The selection of the mode of steering is the most suitable for the prevailing weather, sea and traffic conditions and intended manoeuvres</p> <p>Manoeuvring characteristics, Testing of Main and Emergency steering, control test before departure / prior arrival</p>

7	<p><b>Meteorology</b> Ability to use and interpret information obtained from shipborne meteorological instruments Knowledge of the characteristics of the various weather systems, reporting procedures and recording systems. Ability to apply the meteorological information available.</p>	<p>Measurements and observations of weather conditions are accurate and appropriate to the passage.</p> <p>Meteorological information is correctly interpreted and applied Whirling p s y c h r o m e t e r , errors of Aneroid barometer.</p>
8	<p><b>Competence: Maintain a safe navigational watch Watchkeeping</b> Thorough knowledge of the content, application and intent of COLREG, 1972.</p> <p>Thorough knowledge of the principles to be observed in keeping a navigational watch. The use of routeing in accordance with the General Provisions on Ships' Routeing. The use of information from navigational equipment for maintaining a safe navigational watch.</p>	<p>The conduct, handover and relief of the watch conforms with accepted principles and procedures. A proper look-out is maintained at all times and in such a way as to conform to accepted principles and procedures.</p> <p>Lights, shapes and sound signals conform with the requirements contained in COLREG, 1972 and are correctly Recognized.</p> <p>The frequency and extent of monitoring of traffic, the ship and the environment conform with accepted principles and Procedures. A proper record is maintained of the movements and activities relating to the</p>
9	<p>Knowledge of blind pilotage techniques. The use of reporting in accordance with the General Principles for Ship Reporting Systems and with VTS procedures</p>	<p>navigation of the ship</p> <p>Responsibility for the safety of navigation is clearly defined at all times, including periods when the master is on the bridge and while under pilotage.</p> <p>Taking over bridge watch at sea and at anchorage</p>
10	<p><b>Bridge Resource Management</b> Knowledge of bridge resource management principles, including:</p> <ul style="list-style-type: none"> <li>.1 allocation, assignment, and prioritization of resources.</li> <li>.2 effective communication.</li> <li>.3 assertiveness and leadership</li> <li>.4 obtaining and maintaining situational awareness</li> </ul>	<p>Resources are allocated and assigned as needed in correct priority to perform necessary tasks Communication is clearly and unambiguously given and received. Questionable decisions and/or actions result in appropriate challenge and response.</p> <p>Effective leadership behaviours are identified. Team member(s) share accurate understanding of current and predicted vessel state, navigation path, and external environment</p>
11	<p><b>Competence: Use of radar and ARPA to maintain safety of navigation</b></p>	<p>Assessment of evidence obtained from approved radar simulator and ARPA simulator training</p>
12	<p><b>Competence: Use of ECDIS to maintain the safety of Navigation</b></p>	<p>Assessment of obtained from evidence approved ECDIS Simulator Training</p>

13	<p><b>Competence: Emergency procedures</b> Precautions for the protection and safety of passengers in emergency situations. Initial action to be taken following a collision or a grounding; initial damage assessment and control. Appreciation of the procedures to be followed for rescuing persons from the sea, assisting a ship in distress, responding to emergencies which arise</p>	<p>The type and scale of the emergency is promptly identified.</p> <p>Initial actions and, if appropriate, manoeuvring of the ship are in accordance with contingency plans and are appropriate to the urgency of the situation and nature of the emergency</p> <p>Action by duty officer at sea and in port in case of emergency.</p>
14	<p><b>Competence: Respond to a distress signal at sea</b></p> <p><b>: - Search and rescue</b> Knowledge of the contents of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual.</p>	<p>The distress or emergency signal is immediately recognized Contingency plans and instructions in standing orders are implemented and complied with</p> <p><b>Comply with IAMSAR as required.</b></p>
15	<p><b>Competence: Use the IMO Standard Marine Communication Phrases and use English in written and oral form</b></p>	<p>English language nautical publications and messages relevant to the safety the ship are correctly interpreted or drafted communications are clear and understood</p>
16	<p><b>Transmit and receive information by visual signalling</b></p>	<p>Assessment of evidence obtained from practical test</p>
17	<p><b>Competence: Manoeuvre the Ship Ship manoeuvring and handling</b> Knowledge of:</p> <p>.1 the effects of deadweight, draught, trim, speed and under-keel clearance on turning circles and stopping distances</p> <p>.2 the effects of wind and current on ship handling manoeuvres and procedures for the</p>	<p>Safe operating limits of ship propulsion, steering and power systems are not exceeded in normal manoeuvres <b>taking into account the factors affecting them.</b> Adjustments <b>to be</b> made to the ship's course and speed <b>to</b> maintain safety of navigation</p>



**Function: Cargo handling and stowage at the operational level**

Sr. No.	Knowledge, understanding and proficiency	Criteria for evaluating competence
1	<p><b>Competence: Monitor the loading, stowage, securing, care during the voyage and the unloading of cargoes</b></p> <p>Cargo handling, stowage and securing Knowledge of the effect of cargo, including heavy lifts, on the seaworthiness and stability of the ship.</p> <p>Knowledge of safe handling, stowage and securing of cargoes, including dangerous, hazardous and harmful cargoes, and their effect on the safety of life and of the ship.</p> <p>Ability to establish and maintain effective communications during loading and unloading</p>	<p>Cargo operations are carried out in accordance with the cargo plan or other documents and established safety rules/regulations, equipment operating instructions and shipboard stowage limitations ISGOTT.</p> <p>CSS Code. Timber Code. Type of ships and information in Cargo Securing Manual</p> <p>The handling of dangerous, hazardous and harmful cargoes complies with international regulations and recognized standards and codes of safe practice. Information regarding segregation in IMDG, various classes,, MFAG, EMS, Reporting &amp; documents. Communications are clear, understood and consistently successful.</p>
2	<p><b>Competence: Inspect and report effects and damage to cargo spaces, hatch covers and ballast tanks</b></p> <p>*Knowledge and ability to explain where to look for damage and defects most commonly encountered due to:</p> <p>.1 loading and unloading operations .2 corrosion .3 severe weather conditions</p> <p>Ability to state which parts of the ship shall be inspected each time in order to cover all parts within a given period of time. Identify those elements of the ship structure which are critical to the safety of the ship.</p> <p>State the causes of corrosion in cargo spaces and ballast tanks and how corrosion can be identified and prevented. Knowledge of procedures on how the inspections shall be carried out. Ability to explain how to ensure reliable detection of defects and damages. Understanding of the purpose of the “enhanced survey programme”</p>	<p>The inspections are carried out in accordance with laid-down procedures, and defects and damage are detected and properly reported.</p> <p>IMSBC code, BLU code, IGC Grain code</p> <p>Where no defects or damage are detected, the evidence from testing and examination clearly indicates adequate competence in adhering to procedures and ability to distinguish between normal and defective or damaged parts of the ship. Precaution while loading concentrates (high density cargoes)</p>

## ORAL SYLLABUS FOR 2<sup>ND</sup> MATE (F.G.)

**Function: Controlling the operation of the ship and care for persons on board at the operational level.**

	<b>Knowledge, understanding and proficiency</b>	<b>Criteria for evaluating competence</b>
<b>1</b>	<p><b>Competence: Ensure compliance with pollution prevention requirements</b></p> <p><b>Prevention of pollution of the marine environment and anti-pollution procedures</b></p> <p>Knowledge of the precautions to be taken to prevent pollution of the marine environment. Anti-pollution procedures and all associated equipment. Importance of proactive measures to protect the marine environment</p>	<p>Procedures for monitoring shipboard operations and ensuring compliance with MARPOL requirements are fully observed. Discharge criteria of the various Annexes Actions to ensure that a positive environmental reputation is maintained</p>
<b>2</b>	<p><b>Competence: Maintain seaworthiness of the ship, Ship stability</b></p> <p>Working knowledge and application of stability, trim and stress tables, diagrams and stress-calculating equipment. Understanding of fundamental actions to be taken in the event of partial loss of intact buoyancy. Understanding of the fundamentals of watertight integrity.</p>	<p>The stability conditions comply with the IMO intact stability criteria under all conditions of loading. Stability Criteria and grain stability criteria</p>
<b>3</b>	<p><b>Ship Construction</b></p> <p>General knowledge of the principal structural members of a ship and the proper names for the various parts</p>	<p>Actions to ensure and maintain the watertight integrity of the ship are in accordance with accepted practice</p>
<b>4</b>	<p><b>Competence: Prevent, control and fight fires on board</b></p>	<p><b>Assessment of evidence obtained from approved fire-fighting training and experience as set out in section A-VI/3</b></p>
<b>5</b>	<p><b>Competence: Operate life-saving appliances</b></p>	<p><b>Assessment of evidence obtained from approved training and experience as set out in section A- VI/2, paragraphs 1 to 4</b></p>
<b>6</b>	<p><b>Competence: Apply medical first aid on board ship</b></p>	<p>Assessment of evidence obtained from approved training as set out in section A-VI/4, paragraphs 1 to 3</p>

7	<p><b>Competence: Monitor compliance with legislative requirements</b></p> <p>Basic working knowledge of the relevant IMO conventions concerning safety of life at sea and protection of the marine environment</p>	<p>Legislative requirements relating to safety of life at sea and protection of the marine environment are correctly identified</p>
8	<p><b>Competence: Application of leadership and teamworking skills</b></p> <p>Working knowledge of shipboard personnel management and training</p> <p>A knowledge of related international maritime conventions and recommendations, and national legislation.</p> <p>Ability to apply task and workload management, including:</p> <ol style="list-style-type: none"> <li>.1 planning and co-ordination</li> <li>.2 personnel assignment</li> <li>.3 time and resource constraints</li> <li>.4 prioritization</li> </ol> <p>Knowledge and ability to apply effective resource management:</p> <ol style="list-style-type: none"> <li>.1 allocation, assignment, and prioritization of resources</li> <li>.2 effective communication onboard and ashore</li> <li>.3 decisions reflect consideration of team experiences</li> <li>.4 assertiveness and leadership, including motivation</li> <li>.5 obtaining and maintaining situational awareness</li> </ol> <p>Knowledge and ability to apply decision-making techniques:</p> <ol style="list-style-type: none"> <li>.1 Situation and risk assessment</li> <li>.2 Identify and consider generated options</li> <li>.3 Selecting course of action</li> <li>.4 Evaluation of outcome effectiveness</li> </ol>	<p>The crew are allocated duties and informed of expected standards of work and behaviour in a manner appropriate to the individuals Concerned MLC 2006, latest amendments Training objectives and activities are based on assessment of current competence and capabilities and operational requirements.</p> <p>Operations are demonstrated to be in accordance with applicable rules.</p> <p>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.</p> <p>Necessary team member(s) share accurate understanding of current and predicted vessel and operational status and external environment.</p> <p>Decisions are most effective for the situation.</p>
9	<p><b>Competence: Contribute to the safety of personnel and ship</b></p> <p>Knowledge of personal survival techniques Knowledge of fire prevention and ability to fight and extinguish fires</p> <p>Knowledge of elementary first aid</p> <p>Knowledge of personal safety and social responsibilities</p>	<p>Assessment of evidence obtained from approved training A ND EXPERIENCE as set out in section A- VI/1, paragraphs 2</p>

**Function: Controlling the operation of the ship and care for persons on board at the operational level.**

	<b>Knowledge, understanding and proficiency</b>	<b>Criteria for evaluating competence</b>
<b>1</b>	<p><b>Competence: Ensure compliance with pollution prevention requirements</b>  <b>Prevention of pollution of the marine environment and anti-pollution procedures</b></p> <p>Knowledge of the precautions to be taken to prevent pollution of the marine environment.                      Anti-pollution procedures and all associated equipment. Importance of proactive measures to protect the marine environment</p>	<p>Procedures for monitoring shipboard operations and ensuring compliance with MARPOL requirements are fully observed. Discharge criteria of the various Annexes Actions to ensure that a positive environmental reputation is maintained</p>
<b>2</b>	<p><b>Competence: Maintain seaworthiness of the ship, Ship stability</b></p> <p>Working knowledge and application of stability, trim and stress tables, diagrams and stress-calculating equipment.                      Understanding of fundamental actions to be taken in the event of partial loss of intact buoyancy.                      Understanding of the fundamentals of watertight integrity.</p>	<p>The stability conditions comply with the IMO intact stability criteria under all conditions of loading.                      Stability Criteria and grain stability criteria</p>
<b>3</b>	<p><b>Ship Construction</b></p> <p>General knowledge of the principal structural members of a ship and the proper names for the various parts</p>	<p>Actions to ensure and maintain the watertight integrity of the ship are in accordance with accepted practice</p>
<b>4</b>	<p><b>Competence: Prevent, control and fight fires on board</b></p>	<p>Assessment of evidence obtained from approved fire-fighting training and experience as set out in section A-VI/3</p>
<b>5</b>	<p><b>Competence: Operate life-saving appliances</b></p>	<p>Assessment of evidence obtained from approved training and experience as set out in section A- VI/2, paragraphs 1 to 4</p>
<b>6</b>	<p><b>Competence: Apply medical first aid on board ship</b></p>	<p>Assessment of evidence obtained from approved training as set out in section A-VI/4, paragraphs 1 to 3</p>
<b>7</b>	<p><b>Competence: Monitor compliance with legislative requirements</b></p> <p>Basic working knowledge of the relevant IMO conventions concerning safety of life at sea and protection of the marine environment</p>	<p>Legislative requirements relating to safety of life at sea and protection of the marine environment are correctly identified.</p>

<p><b>8</b></p>	<p><b>Competence: Application of leadership and teamworking skills</b>  Working knowledge of shipboard personnel management and training  A knowledge of related international maritime conventions and recommendations, and national legislation.  Ability to apply task and workload management, including:  .5 planning and co-ordination  .6 personnel assignment  .7 time and resource constraints  .8 prioritization  Knowledge and ability to apply effective resource management:  .1 allocation, assignment, and prioritization of resources  .2 effective communication onboard and ashore  .3 decisions reflect consideration of team experiences  .4 assertiveness and leadership, including motivation  .5 obtaining and maintaining situational awareness  Knowledge and ability to apply decision-making techniques:  .1 Situation and risk assessment  .2 Identify and consider generated options  .3 Selecting course of action  Evaluation of outcome effectiveness</p>	<p>The crew are allocated duties and informed of expected standards of work and behaviour in a manner appropriate to the individuals Concerned MLC 2006, latest amendments 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.</p> <p>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.</p> <p>Necessary team member(s) share accurate understanding of current and predicted vessel and operational status and external environment.  Decisions are most effective for the situation.</p>
<p><b>9</b></p>	<p><b>Competence: Contribute to the safety of personnel and ship</b>  Knowledge of personal survival techniques  Knowledge of fire prevention and ability to fight and extinguish fires    Knowledge of elementary first aid  Knowledge of personal safety and social responsibilities</p>	<p>Assessment of evidence obtained from approved training AND EXPERIENCE as set out in section A- VI/1, paragraphs 2</p>

### ANNEXURE - III

#### ORAL SYLLABUS FOR CHIEF MATE (F.G.) / NCV

##### **Function: Navigation at the management level**

	<b>Knowledge, understanding &amp; proficiency</b>	<b>Criteria for evaluating competence</b>
<b>1</b>	<p><b>Competence: Plan a voyage and conduct navigation</b> Voyage planning and navigation for all conditions by acceptable methods of plotting ocean tracks, taking into account, e.g.:</p> <ul style="list-style-type: none"><li>.1 restricted waters</li><li>.2 meteorological conditions</li><li>.3 ice</li><li>.4 restricted visibility</li><li>.5 traffic separation schemes</li><li>.6 vessel traffic service (VTS) areas</li><li>.7 areas of extensive tidal effects</li></ul> <p>Routeing in accordance with the General Provisions on Ships' Routeing Reporting in accordance with the General principles for Ship Reporting Systems and with VTS Procedures</p>	<p>The equipment, charts and nautical publications required for the voyage are enumerated and appropriate to the safe conduct of the voyage</p> <p>The reasons for the planned route are supported by facts and statistical data obtained from relevant sources and publications.</p> <p>Positions, courses, distances and time calculations are correct within accepted accuracy standards for navigational equipment.</p> <p>All potential navigational hazards are accurately identified</p> <p>Polar Code, Precautions prior entering ice, Polar Water Operation Manual</p>
<b>2</b>	<p><b>Competence: Determine position and the accuracy of resultant position fix by any means</b> Position determination in all conditions:</p> <ul style="list-style-type: none"><li>.1 by celestial observations.</li><li>.2 by terrestrial observations, including the ability to use appropriate charts, notices to mariners and other publications to assess the accuracy of the resulting position fix.</li><li>.3 using modern electronic navigational aids, with specific knowledge of their operating principles, limitations, sources of error, detection of misrepresentation of information and methods of correction to obtain accurate position fixing.</li></ul>	<p>The primary method chosen for fixing the ship's position is the most appropriate to the prevailing circumstances and conditions.</p> <p>The fix obtained by celestial observations is within accepted accuracy levels.</p> <p>The fix obtained by terrestrial observations is within accepted accuracy levels.</p> <p>The accuracy of the resulting fix is properly assessed.</p> <p>The fix obtained by the use of electronic navigational aids is within the accuracy standards of the systems in use.</p> <p>The possible errors affecting the accuracy of the resulting position are stated and methods of minimizing the effects of system errors on the resulting position are properly applied</p>

3	<p><b>Competence: Determine and allow for compass errors</b>  Ability to determine and allow for errors of the magnetic and gyro compasses.  Knowledge of the principles of magnetic and gyro compasses. An understanding of systems under the control of the master gyro and a knowledge of the operation and care of the main types of gyro compass</p>	<p>The method and frequency of checks for errors of magnetic and gyro compasses ensures accuracy of information</p>
4	<p><b>Competence: Coordinate search and rescue operations</b>  A thorough knowledge of and ability to apply the procedures contained in IAMSAR Manual</p>	<p>The plan for coordinating search and rescue operations is in accordance with international guidelines and standards. Radiocommunications are established and correct communication procedures are followed at all stages of the search and rescue operations. Complying with IAMSAR as required.</p>
5	<p><b>Competence: Establish watchkeeping arrangements and procedures</b>  Thorough knowledge of content, application and intent of COLREG 1972.  Thorough knowledge of the content, application and intent of the principles to be observed in keeping a navigational watch.</p>	<p>Watchkeeping arrangements and procedures are established and maintained in compliance with international regulations and guidelines so as to ensure the safety of navigation, protection of the marine environment and safety of the ship and persons on board</p>
	<p><b>Competence: Maintain safe navigation using information from navigation equipment and systems to assist command decision making</b></p> <p>An appreciation of system errors and thorough understanding of the operational aspects of navigational systems.  Blind pilotage planning.  Evaluation of navigational information derived from all sources, in order to make and implement command decisions for collision avoidance and for directing the safe navigation of the ship.  The interrelationship and optimum use of all navigational data available for conducting navigation.</p>	<p>Information obtained from navigation equipment and systems is correctly interpreted and analysed, considering the limitations of the equipment and prevailing circumstances and conditions. Action taken to avoid a close encounter or collision with another vessel is in accordance with COLREG 1972</p>
	<p><b>Competence: Maintain the safety of navigation using ECDIS and associated navigation systems to assist command decision making</b></p>	<p>Operational procedures for using ECDIS are established, applied, and monitored Actions taken to minimize risk to safety of navigation</p>



6	<p><b>Competence: Forecast weather and oceanographic conditions</b>          Ability to understand and interpret a synoptic chart and to forecast area weather, taking into account local weather conditions and information received by weather fax.          Knowledge of the characteristics of various weather systems, including tropical revolving storms and avoidance of storm centres and the dangerous quadrants.          Knowledge of ocean current systems. Ability to calculate tidal conditions.          Use all appropriate nautical publications on tides and currents</p>	<p>The likely weather conditions predicted for a determined period are based on all available information.          TRS signs and avoiding action Actions taken to maintain safety of navigation minimize any risk to safety of the ship.</p> <p>Reasons for intended action are backed by statistical data and observations of the actual weather conditions.          Navigational warnings, Synoptic and Prognosis charts</p>
7	<p><b>Competence: Respond to navigational emergencies</b>          Precautions when beaching a ship          Action to be taken if grounding is imminent, and after grounding          Refloating a grounded ship with and without assistance          Action to be taken if collision is imminent and following a collision or impairment of the watertight integrity of the hull by any cause Assessment of damage control          Emergency steering          Emergency towing arrangements and towing procedure</p>	<p>The type and scale of any problem is promptly identified and decisions and actions minimize the effects of any malfunction of the ship's systems          Communications are effective and comply with established procedures          Decisions and actions maximize safety of persons on board          Action in case of grounding, collision requirements for Emergency Towing Arrangement (ETA) / procedures and action</p>
8	<p><b>Competence: Manoeuvre and handle a ship in all conditions</b>          Manoeuvring and handling a ship in all conditions, including:          .1 manoeuvres when approaching pilot stations and embarking or disembarking pilots, with due regard to weather, tide, head-reach and stopping distances.          .2 handling ship in rivers, estuaries and restricted waters, having regard to the effects of current, wind and restricted water on helm response          .3 application of constant rate- of-turn techniques          .4 manoeuvring in shallow water, including the reduction in under-keel clearance caused by squat, rolling and pitching          .5 interaction between passing ships and between own ship and nearby banks (canal effect)          .6 berthing and unberthing under various</p>	<p>All decisions concerning berthing and anchoring are based on a proper assessment of the ship's manoeuvring and engine characteristics and the forces to be expected while berthed alongside or lying at anchor.          Anchoring terms, dragging anchor          While under way, a full assessment is made of possible effects of shallow and restricted waters, ice, banks, tidal conditions, passing ships and own ship's bow and stern wave so that the ship can be safely manoeuvred under various conditions of loading and weather.</p>

	<p>conditions of wind, tide and current with and without tugs</p> <p>.7 ship and tug interaction</p> <p>.8 use of propulsion and manoeuvring systems</p> <p>.9 choice of anchorage; anchoring with one or two anchors in limited anchorages and factors involved in determining the length of anchor cable to be used</p> <p>.10 dragging anchor; clearing fouled anchors</p> <p>.11 dry-docking, both with and without damage</p> <p>.12 management and handling of ships in heavy weather, including assisting a ship or aircraft in distress; towing operations; means of keeping an unmanageable ship out of trough of the sea, lessening drift and use of oil</p> <p>.13 precautions in manoeuvring to launch rescue boats or survival craft in bad weather</p> <p>.14 methods of taking on board survivors from rescue boats and survival craft</p> <p>.15 ability to determine the manoeuvring and propulsion characteristics of common types of ships, with special reference to stopping distances and turning circles at various draughts and speeds</p> <p>.16 importance of navigating at reduced speed to avoid damage caused by own ship's bow wave and stern wave.</p> <p>.17 practical measures to be taken when navigating in or near ice or in conditions of ice accumulation on board</p> <p>use of, and manoeuvring in and near, traffic separation schemes and in vessel traffic service (VTS) areas</p>	
<p>9</p>	<p><b>Competence: Operate remote controls of propulsion plant and engineering systems and services</b></p> <p>Operating principles of marine power plants Ships' auxiliary machinery General knowledge of marine engineering terms</p>	<p>Plant, auxiliary machinery and equipment is operated in accordance with technical specifications and within safe operating limits at all times</p>

**Function: Cargo handling and stowage at the management level**

	<b>Knowledge, understanding &amp; proficiency</b>	<b>Criteria for evaluating competence</b>
1	<p><b>Competence: Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes</b></p> <p>Knowledge of and ability to apply relevant international regulations, codes and standards concerning the safe handling, stowage, securing and transport of cargoes.</p> <p>Knowledge of the effect on trim and stability of cargoes and cargo operations.</p> <p>Use of stability and trim diagrams and stress-calculating equipment, including automatic data-based (ADB) equipment, and knowledge of loading cargoes and ballasting to keep hull stress within acceptable limits.</p> <p>Stowage and securing of cargoes on board ships, including cargo-handling gear and securing and lashing equipment.</p> <p>Loading and unloading operations, with special regard to the transport of cargoes identified in the Code of Safe Practice for Cargo Stowage and Securing.</p> <p>General knowledge of tankers and tanker operations.</p> <p>Knowledge of the operational and design limitations of bulk carriers.</p> <p>Ability to use all available shipboard data related to loading, care and unloading of bulk cargoes.</p> <p>Ability to establish procedures for safe cargo handling in accordance with the provisions of the relevant instruments such as IMDG Code, IMSBC Code, MARPOL 73/78 Annexes III and V and other relevant information.</p> <p>Ability to explain the basic principles for establishing effective communications and improving working relationship between ship and terminal personnel</p>	<p>The frequency and extent of cargo condition monitoring is appropriate to its nature and prevailing conditions.</p> <p>Unacceptable or unforeseen variations in the condition or specification of the cargo are promptly recognized and remedial action is immediately taken and designed to safeguard the safety of the ship and those on board.</p> <p>Cargo operations are planned and executed in accordance with established procedures and legislative requirements. Procedure and requirement for loading Grain in bulk Stowage and securing of cargoes ensures that stability and stress conditions remain within safe limits at all times during the voyage</p>



2	<p><b>Competence: Assess reported defects and damage to cargo spaces, hatch covers and ballast tanks and take appropriate action</b></p> <p>Knowledge of the limitations on strength of the vital constructional parts of a standard bulk carrier and ability to interpret given figures for bending moments and shear forces.</p> <p>Ability to explain how to avoid the detrimental effects on bulk carriers of corrosion, fatigue and inadequate cargo handling</p>	<p>Evaluations are based on accepted principles, well-founded arguments and correctly carried out.</p> <p>The decisions taken are acceptable, taking into consideration the safety of the ship and the prevailing conditions</p>
3	<p><b>Competence: Carriage of dangerous goods</b></p> <p>International regulations, standards, codes and recommendations on the carriage of dangerous cargoes, including IMDG Code and IMSBC Code.</p> <p>Carriage of dangerous, hazardous and harmful cargoes; precautions during loading and unloading and care during the voyage.</p>	<p>Planned distribution of cargo is based on reliable information and is in accordance with established guidelines and legislative requirements.</p> <p>Information on dangers, hazards and special requirements is recorded in a format suitable for easy reference in the event of an incident</p> <p>Monitoring of cargo during voyage</p>



**Function: Controlling the operation of the ship and care for persons on board at the management level**

	<b>Knowledge, understanding &amp; proficiency</b>	<b>Criteria for evaluating competence</b>
1	<p><b>Competence: Control trim, stability and stress</b> Understanding of fundamental principles of ship construction and the theories and factors affecting trim and stability and measures necessary to preserve trim and stability. Knowledge of the effect on trim and stability of a ship in the event of damage to and consequent flooding of a compartment and countermeasures to be taken. Knowledge of IMO recommendations concerning ship stability</p>	<p>Stability and stress conditions are maintained within safe limits at all times</p>
2	<p><b>Competence: Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea and the protection of the marine environment</b></p> <p>Knowledge of international maritime law embodied in international agreements and conventions. Regard shall be paid especially to the following subjects:</p> <ul style="list-style-type: none"> <li>.1 certificates and other documents required to be carried on board ships by international conventions, how they may be obtained and their period of validity</li> <li>.2 responsibilities under Load Line Convention</li> <li>.3 responsibilities under SOLAS</li> <li>.4 responsibilities under MARPOL</li> <li>.5 maritime declarations of health and the requirements of the International Health Regulations</li> <li>.6 responsibilities under international instruments affecting the safety of the ship, passengers, crew and cargo</li> <li>.7 methods and aids to prevent pollution of the marine environment by ships</li> <li>.8 national legislation for implementing international agreements and conventions</li> </ul>	<p>Procedures for monitoring operations and maintenance comply with legislative requirements</p> <p>Potential non-compliance is promptly and fully identified</p> <p>Planned renewal and extension of certificates ensures continued validity of surveyed items and equipment Harmonised System of Surveys (H.S.S.), Latest amendments to regulation. Enhanced Survey Programme.</p>



<p>3</p>	<p><b>Competence: Maintain safety and security of the ship's crew and passengers and the operational condition of lifesaving, fire-fighting and other safety systems</b>  Thorough knowledge of life-saving appliance regulations (SOLAS).  Organization of fire drills and abandon ship drills  Maintenance of operational condition of lifesaving, fire-fighting and other safety systems  Actions to be taken to protect and safeguard all persons on board in emergencies  Actions to limit damage and salve the ship following a fire, explosion, collision or grounding</p>	
<p>4</p>	<p><b>Competence: Develop emergency and damage control plans and handle emergency situations</b>  Preparation of contingency plans for response to emergencies  Ship construction, including damage control  Methods and aids for fire prevention, detection and extinction  Functions and use of life-saving appliances</p>	<p>Emergency procedures are in accordance with the established plans for emergency situations</p>
<p>5</p>	<p><b>Competence: Use of leadership and managerial skill</b>  Knowledge of shipboard personnel management and training  A knowledge of related international maritime conventions and recommendations, and national legislation  Ability to apply task and workload management, including:  .1 planning and co-ordination  .2 personnel assignment  .3 time and resource constraints  .4 prioritization  Knowledge and ability to apply effective resource management:  .1 allocation, assignment, and prioritization of resources  .2 effective communication on board and ashore  .3 decisions reflect consideration of team experiences  .4 assertiveness and leadership, including motivation</p>	<p>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 understanding of current and predicted vessel 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</p>

	<p>.5 obtaining and maintaining situation awareness Knowledge and ability to apply decision-making techniques:</p> <p>.1 situation and risk assessment .2 identify and generate options .3 selecting course of action</p> <p>evaluation of outcome effectiveness Development, implementation, and oversight of standard operating procedures</p>	
6	<p><b>Competence: Organize and manage the provision of medical care on board</b></p> <p>A thorough knowledge* of the use and contents of the following publications:</p> <p>.1 International Medical Guide for Ships or equivalent national Publications .2 Medical section of the International Code of Signals</p> <p>Medical First Aid Guide for Use in Accidents involving Dangerous Goods</p>	<p>Actions taken and procedures followed correctly apply and make full use of advice available</p>



## ANNEXURE – IV

### ORAL SYLLABUS FOR ASM MASTER (FG) / NCV

DURATION:2 WEEKS

Sr. No.	<b>Competency Topics: Includes 2<sup>nd</sup> Mate (FG) First Mate(FG) and the following topics of ASM</b>
1.	<p><b>INDIAN MERCHANT SHIPPING ACT - 2025</b></p> <p>Registration of ships, Engagement discharge and management of seafarers including CBA/NMB/other agreements, Entries in Official Log book, Hygiene of the ship, Crew and passengers, Masters duties and responsibilities to render assistance and reporting dangers Unseaworthy ship, Pollution, Liability and Compensation Wreck and Salvage, Investigations <b>and</b> Inquiries. Awareness of Merchant Shipping Rules. Latest amendments to MS Act.</p>
2.	<p><b>PRINCIPLES AND PRACTICE OF MODERN SHIP MANAGEMENT ISM CODE, ISPS CODE, Leadership , Teamwork and Managerial skills, Bridge resource Management, Taking over ship as Master, Management of change, leadership and resilient Audits , Certification, Inspections, Risk Assessment, Guidelines on Fatigue, Occupational Health and Safety on ships, Lessons learnt from casually investigation reports(i.e. latest <b>Indian and</b> international casualty ) Casualty Investigation Code. Drug and Alcohol policy. Mentoring of junior officers and trainees Amendments in STCW</b></p>
3.	<p><b>SURVEY AND CERTIFICATION</b></p> <p>Certificates and documents required on a passenger bulk, oil chemical or gas carrier and other cargo as per the Conventions Surveys procedures to obtain these certificates and to maintain its validity including MLC inspections and certification. Surveys and Certificates for Special Trade Passenger Ships/ River Sea vessels and Indian Coastal vessels and others. Dry- docking/underwater hull surveys and requirements.</p> <p>Enhanced Survey Programme. Preparing Repairs specification for Dry-dock. Dry – docking both intact and damaged condition. Other trading certificates (Panama canal/ Suez canal/Others/CFR/etc.) required to be carried. Role of Recognized organizations. Classification surveys. Latest amendments in SOLAS LOADLINE , TONNAGE Conventions.</p>
4.	<p><b>CONTROL MEASURES</b></p> <p>Port State Control &amp; Flag State inspection and procedures, vetting inspections, terminal inspections, Condition surveys, Insurance surveys, etc. Various MOUs on PSC, Ship Risk Profile, Black list /grey lists by MOUs.</p>



5.	<p><b>EMERGENCY RESPONSE PROCEDURES</b>  Fire /explosion in port &amp; at sea Grounding, Collision, Pollution, Flooding, Engine/ Steering failure, Listing, MOB, Leakage and spills of dangerous cargoes, emergency anchoring, Anti-piracy ( contingencies as per BMP as amended) and medical emergency including death on board (As per International Health Regulations including COVID-19), etc., International obligations upon Collision and reporting instances. Rescue of victims from enclosed spaces &amp; Rescue of survivors from another vessel or sea. Musters and Drills. Damage Control Plans.  Abandon ship procedures. Method of refloating vessel. Precautions when Beaching. Damage Stability Criteria by Damage Stability Booklet. Emergency Technical Assistance Service by Classification Societies in damage assessment and survival capability.</p>
6.	<p><b>LIFE SAVING &amp; FIGHTING APPLIANCES</b>  Knowledge of chapter II &amp; III of the SOLAS &amp; MS (LSA &amp; FFA ) Rules with regards to various LSA &amp; FFA items and its usage on board different ships including knowledge on LSA/FFA approved service stations. Knowledge on Prototype on certification procedures as per applicable national and international regulation. Onboard maintenance and operational readiness of LSA &amp; FFA. Various Fire Fighting Appliances: Maintenance and ready availability, fire control plan, fire drills, fixed firefighting systems and testing procedures.</p>
7.	<p><b>RADIO COMMUNICATION, SEARCH &amp; RESCUE</b>  Knowledge of chapter IV of the SOLAS and MS Rules on functional requirements. Radio installations, Radio personnel I and Radio records Distress/ urgency/ Safety messages. A voidance of false distress alerts. Search and Rescue procedures, ALRS/ ADRS for GMDSS (i.e. Volume V). Steps to be taken when disable and in distress. Assisting ship or aircraft in manual. Radio medical advice, Indian regional navigational satellite system and Indian ship reporting systems.</p>
8.	<p><b>SAFETY OF NAVIGATION &amp; COLREGS</b>  Through Knowledge of Chapter V of SOLAS and MS Rules regarding Distress Messages Obligation and procedures, Safe Manning Navigating in Ice <b>and Polar regions</b>, Ships Reporting System, Ships Routing Vessel Traffic Services, Navigational Equipment's VDR and LRIT. Masters discretion. Navigation Bridge, Visibility. Master-Pilot relationship. Pilot Boarding arrangements including other applicable regulations (IMO Resolutions., BPG, ISO standards, etc. ) Watch keeping Principles as per STCW. Ocean Towing Emergency Towing Arrangements. Maritime Assistance Service. BMP to deal with Piracy and Armed Robbery against Ships including ship security alert system. Polar Code and High Latitude Navigation. Weather Routing services and Voyage planning including weather charts and detailed procedures on avoidance of TRS.  COLREGS application, identification of vessels by day/ night Action to be taken in various situations including Restricted visibility.  Amendments to COLREGS  Knowledge on technical design. Operation and maintenance of the Maritime autonomous surface ships (MASS ships)</p>

9.	<p><b>SHIP HANDLING</b></p> <p>Maneuvering and handling ships in all conditions. Maneuvering characteristics/criteria and Wheel House Poster. Emergency Stopping Mane covers Crash, stop. Rudder cycling. A voidance of dangerous situation in following and quartering sea. Synchronous rolling /parametric rolling, Wing heeling criteria for high freeboard ships, Picking up pilot including bad weather, Maneuvering in and near TSS and VTS areas. Navigation in special area such as straits of Malacca, Singapore, Magellan (Chile), and structures. STS operations. Anchoring and berthing for berthing and anchoring in strong current /tides /winds deep water. Anchor cables various loads, squat, transverse thrust, Pivot Point, interaction between ships/shore. Turing the ship short round. Dragging /dredging anchors. Different types of tugs and its usage and limitation. Berthing with or without Tug in various conditions of wild , current and tide Effectiveness of bow and stern thrusters. Various case studies /Rules/ Synchronous/ parametric rolling tec.</p>
10.	<p><b>CHARRIAGE OF CARGOES</b></p> <p>Economics of sea Transport. Contract of Affreightment Charter parities, Bills of Lading and its main clauses Conditions of carriage of cargoes. AFRA, WORLDSCALE &amp; INCOTERMS. Voyage Estimates. Hague rule, Hague- Visiby Rules, Hamburg Rules Rotterdam Rules, COGSA, Containerization and Multi – Modal Transport Act. Handling of claims and disputes pertaining of Cargo carriage. Knowledge of standards (Related to carriage cargoes)for ship carrying Oil cargoes , Chemical in bulk , Liquid gas bulk, Containers, Solid bulk cargoes with chemical properties that may entail hazard during transport. Safety in container transport and VGM. Additional Safety Measures for bulk carriers. Grain loading and carriage of dangerous packaged goods (IMDSGs). Care/ stowage and securing of cargoes. Latest amendment in IMDG/ electronic cargo documents including Bill of lading and LOI and LOC Knowledge on various cargo/ cheater party frauds and legal implications</p>
11.	<p><b>ENVIROMENTAL PROTECTION</b></p> <p>Knowledge of Annex I to VI of MARPOL 73/78, Requirements for reporting incidents involving dangerous harmful substances and / or marine pollutants,<b>alternate fuel system.</b></p> <p>SOPEP/SMPEP/SEEMP. Oil/ Cargo/ Garbage RECORD book. Energy Efficiency measures. Latest Amendments in MARPOL OPRC Convention and OPRC-HNS protocol, Vessel Response plan &amp; OP</p> <p>90. Knowledge on Intervention Convention. Ballast Water Convention <b>and BWMS</b>, Ship Recycling Convention etc. Global Warming, Climate Change, Carbon Credit and Kyoto Protocol . National and international Liability for oil pollution CLC, Bunker CLC FUNF Convention International compensation fund Revision in Limits of Liability</p>

12. MISCELLANEOUS PROVISIONS

FAL Convention, Inward outward customs clearance Immigration Clearance Quarantine.  
Clearance Dealing with Stowaways. H & M Marine Insurance. Conditions & Warranties Particulars / General Average. York & Antwerp Rules P & I Clubs. Port of Refuge. Salvage & Towage Lloyds Open Form. Scopic salvage Convention Wreck Removal Convention. LLMC Convention. Features of Polar Code. IGF Code & III Code, IMO /ILO Structure, Cargo and personnel insurance, UNCLOS-82, Indian reporting requirements , Mental health of seafarers, Maritime cyber security , IGF Code.



## ANNEXURE – V

YEARLY ORALS CLASSES SCHEDULE																										
MONTHS	JAN 2026*		FEB 2026*		MARCH 2026*		APRIL 2026*		MAY 2026*		JUN 2026*		JULY 2026*		AUG 2026*		SEPT 2026*		OCT 2026*		NOV 2026*		DEC 2026*		JAN 2027*	REMARK
GRADES	1ST & 2ND WEEK	3RD & 4TH WEEK	1ST & 2ND WEEK	3RD & 4TH WEEK	1ST & 2ND WEEK	3RD & 4TH WEEK	1ST & 2ND WEEK	3RD & 4TH WEEK	1ST & 2ND WEEK	3RD & 4TH WEEK	1ST & 2ND WEEK	3RD & 4TH WEEK	1ST & 2ND WEEK	3RD & 4TH WEEK	1ST & 2ND WEEK	3RD & 4TH WEEK	1ST & 2ND WEEK	3RD & 4TH WEEK	1ST & 2ND WEEK	3RD & 4TH WEEK	1ST & 2ND WEEK	3RD & 4TH WEEK	1ST & 2ND WEEK	3RD & 4TH WEEK		
2nd Mate / NWKO (NCV)																										
CHIEF MATE (F.G. + NCV)																										
ASM (F.G.+ NCV)																										



## ANNEXURE – VI

### NOTES FOR FACULTIES

1. It is not possible to complete all the syllabi of orals point by point in such a short time. Main points are to be explained by the faculties and based on students questions, replies can be given.
2. The feedbacks of faculties and students are to be constantly taken, analysed and weak points of students to be discussed to induce improvement.
3. Guest faculty to explain how to prepare for orals, how to conduct, how to dress, how to reply the questions and what books to refer.



## NOTES FOR STUDENTS

1. Revise the portions of competency classes before coming to the oral classes.
2. Oral classes are to be done after written classes.
3. Attend classes regularly to have attendance of  $\geq 90\%$  and obtain an attendance certificate.
4. Keep past questions of external and Internal examiners ready with you in the class and ask oral questions relevant to the topics being done in the oral class.
5. Mock orals will be conducted by the faculties & assessments prepared to show your strong & weak points and how to improve?
6. Students to give the feedback of the oral program & faculties.
7. Ask for time table, syllabi & yearly schedule of the oral program after your enrolment in the oral classes.
8. Oral classes will be in hybrid mode i.e. offline + online.

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