

1. **SYLLABUS OF WRITTEN EXAMINATION FOR THE POST OF SI (MASTER)**  
 (Objective type questions with multiple choice answers to be answered on OMR Answer Sheet) Time-02 Hrs (100 Questions & 100 Marks)

(a) General Knowledge & Awareness	- 25 Questions	-25 Marks
(b) Reasoning Ability	- 25 Questions	-25 Marks
(c) Numerical Ability	- 25 Questions	-25 Marks
(d) Trade Awareness	- 25 Questions	-25 Marks

**Standard and syllabus for Written Examination as under :-**

General Knowledge & Awareness - 25%	(I) Current Affairs (Events related to India its neighbouring countries) (ii) General science & Technology (iii) Indian constitution (iv) Indian History (v) Indian culture (vi) Indian geography (vii) General polity (viii) Sports: championships/ winners/number of players (ix) Other misc. issues related to General Knowledge
Reasoning Ability- 25%	(i) Coding & decoding (ii) Series (number & alphabet) (iii) Figure classification (vi) Relationship concepts (v) Distance & directions (vi) Visual memory (vii) Spiral orientation (viii) Other basic concepts of reasoning
Numerical Ability – 25%	(i) Basics ( (2X2) (3X3) multiplications) squares (ii) Mixed fractions (iii) Averages (iv) Percentages (v) Profit & loss, Discount, ratio (vi) Time & work (vii) Simple interest, compound interest (viii) Simple mensuration
Trade Awareness- 25% (2 <sup>nd</sup> Class Master Level)	(i) Management of inland vessels under all conditions. (ii) Knowledge of storm and distress signals (iii) Knowledge of the compass (iv) The rules of the road as regards to both, sailing vessels and mechanically propelled vessels, their regulation, lights, fog and sound signals. (v) The marking and use of the lead line. (vi) Steps to be taken in the event of vessel grounding. (vii) Management of inland vessels under tow or when towed or pushing. (viii) Questions on carriage of iron ore, coal, Petroleum Products, cement fly ash & containers. (ix) The provisions of the rules made by IWAI in respect of Life Saving and Fire Appliances and Conduct of vessels. (x) Provisions of the rules with regards to carriage of passengers. (xi) Knowledge of Loading Marks and Stability of Inland vessels. (xii) Knowledge of Inland Vessel act (xiii) Knowledge of GPS, DGPS, VHF, Radar and Echo sounder for safe navigation



2. **SYLLABUS OF WRITTEN EXAMINATION FOR THE POST OF SI (ENGINE DRIVER)**  
**(Objective type questions with multiple choice answers to be answered on OMR Answer Sheet) Time-02 Hrs (100 Questions & 100 Marks)**

(a) General Knowledge & Awareness	- 25 Questions	-25 Marks
(b) Reasoning Ability	- 25 Questions	-25 Marks
(c) Numerical Ability	- 25 Questions	-25 Marks
(d) Trade Awareness	- 25 Questions	-25 Marks

**Standard and syllabus for Written Examination as under :-**

General Knowledge & Awareness - 25%	(I) Current Affairs (Events related to India its neighbouring countries) (ii) General science & Technology (iii) Indian constitution (iv) Indian History (v) Indian culture (vi) Indian geography (vii) General polity (viii) Sports: championships/ winners/number of players (ix) Other misc. issues related to General Knowledge
Reasoning Ability- 25%	(i) Coding & decoding (ii) Series (number & alphabet) (iii) Figure classification (vi) Relationship concepts (v) Distance & directions (vi) Visual memory (vii) Spiral orientation (viii) Other basic concepts of reasoning
Numerical Ability – 25%	(i) Basics ( (2X2) (3X3) multiplications) squares (ii) Mixed fractions (iii) Averages (iv) Percentages (v) Profit & loss, Discount, ratio (vi) time & work (vii) Simple interest, compound interest (viii) Simple mensuration
Trade Awareness- 25% (1st Class Engine Driver Level)	(i) Principles and working of Internal Combustion Engines. (ii) Fuel system, lubrication system and cooling system of engines. (iii) Valve setting and injector setting of marine engine. (iv) Trouble shooting of engines. (v) Replacement of various lines and cylinder head of engines with appropriate knowledge of Torque. (vi) Overhauling of engine. (vii) Adjustment of working path of engine to get optimum efficiency of engine. (viii) The provisions of the Inland vessel rules for Life Saving, Fire Appliances and general discipline.



3. **SYLLABUS OF WRITTEN EXAMINATION FOR THE POST OF SI (WORKSHOP)**  
**(Objective type questions with multiple choice answers to be answered on OMR Answer Sheet) Time-02 Hrs (100 Questions & 100 Marks)**

(a) General Knowledge & Awareness	- 25 Questions	-25 Marks
(b) Reasoning Ability	- 25 Questions	-25 Marks
(c) Numerical Ability	- 25 Questions	-25 Marks
(d) Trade Awareness	- 25 Questions	-25 Marks

**Standard and syllabus for Written Examination as under :-**

General Knowledge & Awareness - 25%	(i) Current Affairs (Events related to India its neighbouring countries) (ii) General science & Technology (iii) Indian constitution (iv) Indian History (v) Indian culture (vi) Indian geography (vii) General polity (viii) Sports: championships/ winners/number of players (ix) Other misc. issues related to General Knowledge
Reasoning Ability- 25%	(i) Coding & decoding (ii) Series (number & alphabet) (iii) Figure classification (iv) Relationship concepts (v) Distance & directions (vi) Visual memory (vii) Spiral orientation (viii) Other basic concepts of reasoning
Numerical Ability – 25%	(i) Basics ( (2X2) (3X3) multiplications) squares (ii) Mixed fractions (iii) Averages (iv) Percentages (v) Profit & loss, Discount, ratio (vi) time & work (vii) Simple interest, compound interest (viii) Simple mensuration
Trade Awareness- 25%	(i) Units of measurement (ii) Internal combustion engines (iii) Cycles of 2 stroke and 4 stroke engines (iv) Components of diesel and petrol engines (v) Fuel system, lubrication system and cooling system of engine (vi) Voltage, current, resistance, Miniature circuit breakers (vii) Electronics, diode, transistor and printed circuit board (viii) Pumps, gears and clutches.



4. **SYLLABUS OF WRITTEN EXAMINATION FOR THE POST OF HC (MASTER), HC (ENGINE DRIVER), HC (WORKSHOP) AND CT (CREW)**

(Objective type questions with multiple choice answers to be answered on OMR Answer Sheet) Time-02 Hrs (100 Questions & 100 Marks)

(a) General Knowledge & Awareness	- 35 Questions	-35 Marks
(b) Reasoning Ability	- 35 Questions	-35 Marks
(c) Numerical Ability	- 30 Questions	-30 Marks

**Standard and syllabus for Written Examination as under :-**

General Knowledge & Awareness - 35%	(I) Current Affairs (Events related to India) (ii) Indian constitution (iii) Indian History and geography (iv) General polity (v) Sports: championships/ winners/number of players (vi) Other misc. issues related to General Knowledge
Reasoning Ability- 35%	(i) Coding & decoding (ii) Series (number) (iii) Alphabet (position based) (iv) Relationship concepts (v) Distance & directions (vi) Arithmetic no. series (vii) Other basic concepts of reasoning
Numerical Ability – 30%	(i) Basics (2X2) multiplications (ii) Mixed fractions (iii) Averages (iv) Percentages (v) Profit & loss (vi) Time & distance (vii) Simple interest, compound interest (viii) Simple mensuration