

DETAILED SYLLABUS OF PART A

Particulars	Syllabus - General (Part A)
General Knowledge	<ul style="list-style-type: none"> • Facts about India and other countries: Basic facts / Geography / Tourism / Transport systems / Personalities / Places / History / Constitution / Economy / Writers / Literatures / Indian States & Union Territories / International Organizations. • General Science : Branches of studies / Scientific instruments and appliances / Physics / Chemistry / Biology • Sports & Games • Important Events/ Movements / Leaders / Places / Years • Writers – Authors – Biography - Autobiography • Abbreviations
General English	<ul style="list-style-type: none"> • Spotting Errors / Vocabulary usage / Sentence Completion / Synonyms / Antonyms / Reconstruction of sentences / One word substitution / Idioms & Phrases / Grammar / Correct usage of Articles / Prepositions / Singular and Plural
Reasoning	<ul style="list-style-type: none"> • Analogy / Classification / Series Completion / Coding-Decoding / Blood Relation / Direction Sense Test / Alphabet Test / Number and Ranking / Puzzle Test / Odd Man out / General Intelligence / Numerical ability & knowledge in Microsoft excel.
Quantitative Aptitude	<ul style="list-style-type: none"> • Number system / Fraction and Decimals / Simplification / Volume and surface areas / Square roots and Cube roots / Problems based on numbers, Speed, Time and Distance, Simple Interest / Compound Interest / Boats and Streams / Problems on Trains / Percentage - Interest / HCF and LCM / Average / Ratio and Proportion / Time and Work / Problems based on ages / Profit, Loss and Discount, Statistics / Permutations & Combinations / Probability.

DETAILED SYLLABUS OF PART B

Name of Posts	Syllabus - Discipline related (Part B)
For all posts	<ul style="list-style-type: none"> • Organisational Skills- Role of a supervisor – Manpower management & resource planning – Work force motivation – Grievance handling at shop floor level – Code of Conduct & Discipline - Importance of time keeping & productivity. • Basic knowledge of computer applications. • Supervisory Duties:- <ul style="list-style-type: none"> ➤ Principles of Organization – Principles of organization; authority; responsibility; accountability; delegation; span of control; centralization; unity of command. ➤ Motivation – Meaning of motivation; understanding human behavior; factors of motivation; levels of motivation; methods of motivating people; brief on motivation theories. ➤ Communication – Purpose of communication; communication process; methods of communication written, oral, audio – visual; report writing; channels of communication namely formal and informal; art of giving instructions; barriers of communication; guidelines for effective communication. • HSE & IMS- Awareness on Industrial safety & PPEs – Importance of housekeeping – Knowledge of IMS – Quality Standards – 5 S – management of industrial hazardous wastes.

In addition to the above, following are the topics included for various posts:-

Sl No.	Name of Posts	Syllabus - Discipline related (Part B)
1.	Assistant Engineer (Commercial)	<p>Theoretical and application knowledge on</p> <p>Basic ship building and ship repair concepts –</p> <ul style="list-style-type: none"> • Docking and undocking related activities, • Hull Fabrication, • Stability concepts, • Material used in ship building and ship repair, • IHOP, Accommodation & Outfitting – deck machineries, marine engines, shafting system, • HVAC systems, • Hydraulic machineries, • Boilers, • Refrigeration and Air Conditioning, • Installation and commissioning of marine equipments, • Concepts about overhauling of Pumps, valves, motors and other machineries, • Basic concepts of surface preparation and painting, • Marine piping system and piping standards, • Quality control in ship building and ship repair • Classification societies, • Basic concepts about electronics/ communication/ navigational equipments in marine field. <p>Basic concepts of commercial activities in ship repair –</p> <ul style="list-style-type: none"> • Estimation of various ship repair scenarios like repair/ renewal of hull, piping, machinery, accommodation, electrical and electronics equipments etc.,

Sl No.	Name of Posts	Syllabus - Discipline related (Part B)
		<ul style="list-style-type: none"> • Preparation of budgets / quotations / invoices, • Basic concepts of GST, • Cost control, monitoring and scheduling, • Estimation based on WBS / tariff / historical data / labour & material /back up offers etc. • Tenders & Contracts, • Budget Vs Actuals and Profit analysis.
2.	Assistant Engineer (Mechanical)	<p>Theoretical and application knowledge on</p> <ul style="list-style-type: none"> • Thermodynamics, Energy cycles, IC Engines, Four stroke & two stroke engines • Refrigeration & Air conditioning, Psychrometrics • Welding – types & defects, Gas flames, Soldering & Brazing • Manufacturing processes & Machine tools. • Corrosion & its prevention. • Renewable & Non- renewable energy sources • Pumps & its types