

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.
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 Post	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, Microsoft Excel. • Supervisory Duties:- <ul style="list-style-type: none"> ➤ Principles of Organization <ul style="list-style-type: none"> – Principles of organization; authority; responsibility; accountability; delegation; span of control; centralization; unity of command. ➤ Motivation <ul style="list-style-type: none"> – Meaning of motivation; understanding human behavior; factors of motivation; levels of motivation; methods of motivating people; brief on motivation theories. ➤ Communication <ul style="list-style-type: none"> – 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. • 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:-

SI No.	Name of Posts	Syllabus - Discipline related (Part B)
1	Assistant Engineer (Weapons)	<p><u>Theoretical and application knowledge on</u></p> <ul style="list-style-type: none"> • Gyros : Types of Gyros, working principles, inputs and output to/from gyros, Overhaul/ STW/ HATs of Gyros. • Navigation Aids : Working Principle of EM Log & Echo sounder, Precautions during docking of Ships, Checks of u/w appendages prior undocking of ship, Types of protocols used for communication between Nav Aids, Overhaul/ STW/ HATs of EM Log & Echo sounder. • Controls : Open Loop and Closed Loop control systems, Overhaul and Checks of Control Elements. • Data Networks & Communication Systems : Types of Data Networks, redundancy in data networks, Switches & Routers, Interfacing equipment to Network Devices, Communication Protocols, Waves and Communication Basics, Amplitude Modulation, Frequency Modulation, Computer Basics, Pulse Modulation, Communication Networks Propagation of Waves. • RADAR : Radar Principles, Radar fundamentals, CW Radar / Doppler, Advanced Radar, High Resolution Radar, Electronic scanning, Tracking Systems. • Electro- Optics : Introduction to Electro-Optics, IR Imaging, Other E-O Systems. • U/W Acoustics & SONAR : Underwater Acoustics, Environment, SONAR Performance , SONAR Performance , SONAR Systems. • Delivery Systems & Fire Controls : Introduction to Fire Control, Launching Systems/Propulsion, Navigation and Guidance, Systems Engineering Introduction, Flight Control, Ballistics, Homing. • Servo System : Servo Elements, data transmission, servo systems, Stabilizers, servo theory. • Weapons : Datum Marking for alignment of Weapons and precautions during hot work, Procedures & Precautions during Removal and Re-fitting of Gun mounts, Alignment of weapons, Checks of Firing Arcs, Control Systems & Drives for Weapon Mountings. • Combat Management System : Block Diagram of CMS, Interfacing of weapons and sensors, Precautions during switching On/Off of CMS Modules, Power Supply requirements and environmental conditions for CMS. • Drawings and Specification: Ability to read specification, circuit diagrams, technical description pertaining of weapons systems, Fundamental concepts and definition on weapons including fire control system.

SI No.	Name of Posts	Syllabus - Discipline related (Part B)
2	Assistant Administrative Officer	<ul style="list-style-type: none"> • Basic Knowledge about Personnel Management & Industrial Relations. • Work culture. • Employee coordination & Manpower Management. • Resource Planning. • Disciplinary proceedings / Grievance handling. • Time Management. • Office Management and procedures. • Familiarity with Word. • Familiarity with Excel:- <ul style="list-style-type: none"> ➤ Entering, Editing and Formatting Data ➤ Formatting Numbers ➤ Managing Worksheets ➤ Modifying Rows and Columns ➤ Understanding Formulas ➤ Changing Views ➤ AutoFill and Custom Lists ➤ Conditional Formatting ➤ Tables ➤ Data Tools ➤ Referencing Formulas ➤ Ranges and Dates ➤ Lookups ➤ Conditional Logic ➤ Text Formulas ➤ Introduction to Charts ➤ Formatting Charts ➤ Adding Graphics to Spreadsheets ➤ Outline, Sort, Filter, and Subtotal ➤ PivotTables ➤ Protecting Data ➤ Printing ➤ Saving a Workbook
