

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

Post Code	Name of Post	Syllabus - Trade/Discipline related (Part B)		
A1	Junior Technical Assistant (Electrical)	(i)	Basic electrical engineering	a) Network theorems and laws b) Magnetic circuits c) AC fundamentals d) RLC circuits
		(ii)	Static and rotating AC&DC machine	a) DC generators b) DC motors c) Transformers d) Synchronous generators e) Synchronous motors f) Induction motors g) Single phase motors
		(iii)	Power system	a) Generation of electrical power b) Transmission and distribution c) Circuit breakers d) Cables
		(iv)	Electrical measurements	a) Moving coil instruments b) Moving iron instruments c) Measurement of current, voltage, frequency and energy d) Bridge circuits
		(v)	Semiconductor Device	a) Semiconductors b) Diodes and power supplies c) Transistors
		(vi)	Basic Computer Applications	a) Hardware and software b) Operating systems and applications c) Internet
A2	Welder Cum Fitter (Plumber)	<p><u>Theoretical and application knowledge on</u></p> <ul style="list-style-type: none"> • Tools -Marking /Fitting / Fastening • Marking and developing • Method of joining - Welding/Soldering/Brazing • Pipe fittings/joints and their usage • Pipe Classes and Grades • Properties of Steel/Alloys • Numerical ability - Mass/Volume/Density/unit conversion/unit system/ Ratio/ Proportion/ Mensuration • Material estimation for the piping layout • Piping symbols • Template and their preparation • Hydrostatic/hydraulic testing of Piping systems • Erection of piping systems and valves • Pipe fastening methods and bending of pipes • Safety procedures /First aid • Types of material handling equipments 		

Post Code	Name of Post	Syllabus – Trade/Discipline related (Part B)
A3	Fitter (Electrical)	<p><u>Theoretical and application knowledge on Fundamentals of electricity:</u> various laws of electricity and its applications, Basic electrostatics & electro dynamics, primary and secondary cells, magnetic and capacitive circuits, power and power factor, polyphase system, measuring instruments, measurement of power and energy.</p> <p><u>Electrical appliances and wiring:</u></p> <ul style="list-style-type: none"> • domestic appliances- lighting, various types of lamps, wiring circuits. • domestic and industrial, earthing, regulated power supply, maintenance of domestic appliances, IEE rules. <p><u>Electrical machines:</u> D.C generators & DC motors- characteristics and applications, speed control and testing, transformers& autotransformers- losses and testing, alternators, single phase& 3 phase motors, starter and internal connection diagrams.</p> <p><u>Basic electronics:</u> active and passive electronic components, rectifier circuits, characteristics of transistors, amplifiers, OPAMP, oscillators, types and application of SCR,UJT, TRIAC, DIAC, microprocessor etc, digital electronics.</p> <p><u>Winding of machines:</u> fundamental terms used in windings, winding of transformers, motors, armature winding, material used, and method of connection.</p> <p><u>Electrical Switchgear:</u> principle, operation & application of Fuses, MCCB, Protective relays, ELCB.</p> <ul style="list-style-type: none"> • safety for handling electrical equipments/ wiring/ applications • Statutory requirements while handling electrical applications.
A4	Shipwright Wood	<p><u>Theoretical and application knowledge on</u> Wood working terminologies – Wood working machineries (portable & stationary) – its application & routine maintenance. Various hand tools- measuring instruments for wood working and its relative advantages – Wood preservation & seasoning- Timber identification – Defects in timber – Understanding measurements & tolerances – Knowledge of various wood working joints, furniture fabrication appropriate application and their relative merits & demerits – Knowledge of laminate material, hardware items, & its relative merits – Application of adhesives & finishing agents – Knowledge of modern modular assembly & interior architects and model developments & docking including block setting in marine field (Both new building projects & repair).</p> <ul style="list-style-type: none"> • <u>Industrial Safety</u> <p>Awareness on Safety & PPEs - Importance of housekeeping.</p>