

**DETAILED SYLLABUS OF PART A**

<b>Particulars</b>	<b>Syllabus - General (Part A)</b>
General Knowledge	<ul style="list-style-type: none"> <li>• Facts about India and other countries: Basic facts / Geography / Tourism / Transport systems / Personalities / Places / History / Constitution / Economy / Writers / Literatures / Indian States &amp; Union Territories / International Organizations.</li> <li>• General Science : Branches of studies / Scientific instruments and appliances / Physics / Chemistry / Biology</li> <li>• Sports &amp; Games</li> <li>• Important Events/ Movements / Leaders / Places / Years</li> <li>• Writers – Authors – Biography - Autobiography</li> <li>• Abbreviations</li> </ul>
General English	<ul style="list-style-type: none"> <li>• Spotting Errors / Vocabulary usage / Sentence Completion / Synonyms / Antonyms / Reconstruction of sentences / One word substitution / Idioms &amp; Phrases / Grammar / Correct usage of Articles / Prepositions / Singular and Plural</li> </ul>
Reasoning	<ul style="list-style-type: none"> <li>• Analogy / Classification / Series Completion / Coding-Decoding / Blood Relation / Direction Sense Test / Alphabet Test / Number and Ranking / Puzzle Test / Odd Man out / General Intelligence</li> </ul>
Quantitative Aptitude	<ul style="list-style-type: none"> <li>• 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 &amp; Combinations / Probability.</li> </ul>

### **DETAILED SYLLABUS OF PART B**

<b>Name of Post</b>	<b>Syllabus - Discipline related (Part B)</b>
<b>For all posts</b>	<ul style="list-style-type: none"> <li>• <b>Organisational Skills-</b> Role of a supervisor – Manpower management &amp; resource planning – Work force motivation – Grievance handling at shop floor level – Code of Conduct &amp; Discipline - Importance of time keeping &amp; productivity.</li> <li>• Basic knowledge of computer applications.</li> <li>• <b>Supervisory Duties:-</b> <ul style="list-style-type: none"> <li>➤ <b>Principles of Organization</b> – Principles of organization; authority; responsibility; accountability; delegation; span of control; centralization; unity of command.</li> <li>➤ <b>Motivation</b> – Meaning of motivation; understanding human behavior; factors of motivation; levels of motivation; methods of motivating people; brief on motivation theories.</li> <li>➤ <b>Communication</b> – 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.</li> </ul> </li> <li>• <b>HSE &amp; IMS-</b> Awareness on Industrial safety &amp; PPEs – Importance of housekeeping – Knowledge of IMS – Quality Standards – 5 S – management of industrial hazardous wastes.</li> </ul>

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

<b>Sl No.</b>	<b>Name of Post</b>	<b>Syllabus - Discipline related (Part B)</b>
1	<b>Assistant Engineer (Electronics)</b>	<b><u>Theoretical and application knowledge on</u></b> <ul style="list-style-type: none"> <li>• Basic Electronic Measuring Instruments &amp; Transducers.</li> <li>• Fundamentals of various communication &amp; navigational systems</li> <li>• Working principle of starters , variable frequency drives at application level</li> <li>• Knowledge of digital control systems and automated systems</li> <li>• Analysis of line diagrams and drawings</li> <li>• Trouble shooting of PCB</li> <li>• Basic knowledge of OFC, communication electronics, Amplifiers, Optoelectronics, sensors, microwave Testing &amp; calibration techniques</li> </ul>
2	<b>Assistant Engineer (Information Technology)</b>	<b><u>Theoretical and application knowledge on</u></b> <ul style="list-style-type: none"> <li>• System Administration and management</li> <li>• Operating systems – UNIX, LINUX and Windows</li> <li>• Network administration and Management</li> <li>• Database Management systems</li> <li>• ERP systems management</li> <li>• Website management</li> <li>• Management of PCs and peripheral devices</li> <li>• Various types of IT systems management</li> <li>• Programming languages including Scripting languages</li> <li>• Information security practices and Cyber laws</li> </ul>