# DETAILED SYLLABUS OF PART A

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Syllabus - General (Part A)</th>
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</table>
| General Knowledge    | - 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      | - 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            | - 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| - 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

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<tr>
<th>Name of Post</th>
<th>Syllabus - Discipline related (Part B)</th>
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| For all posts | - 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:-  
    - **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.  

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

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<th>Sl No.</th>
<th>Name of Post</th>
<th>Syllabus - Discipline related (Part B)</th>
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</table>
| 1      | Assistant Engineer (Electronics) | **Theoretical and application knowledge on**  
  - Basic Electronic Measuring Instruments & Transducers.  
  - Fundamentals of various communication & navigational systems  
  - Working principle of starters , variable frequency drives at application level  
  - Knowledge of digital control systems and automated systems  
  - Analysis of line diagrams and drawings  
  - Trouble shooting of PCB  
  - Basic knowledge of OFC, communication electronics, Amplifiers, Optoelectronics, sensors, microwave Testing & calibration techniques |
| 2      | Assistant Engineer (Information Technology) | **Theoretical and application knowledge on**  
  - System Administration and management  
  - Operating systems – UNIX, LINUX and Windows  
  - Network administration and Management  
  - Database Management systems  
  - ERP systems management  
  - Website management  
  - Management of PCs and peripheral devices  
  - Various types of IT systems management  
  - Programming languages including Scripting languages  
  - Information security practices and Cyber laws |