

## **Annexure I**

### **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>
Quantitative Aptitude	<ul style="list-style-type: none"> <li>• Number system</li> <li>• Fraction and Decimals</li> <li>• Simplification</li> <li>• Volume and surface areas</li> <li>• Square roots and Cube roots</li> <li>• Problems based on numbers</li> <li>• Speed, Time and Distance</li> <li>• Simple Interest</li> <li>• Compound Interest</li> <li>• Boats and Streams</li> <li>• Problems on Trains</li> <li>• Percentage - Interest</li> <li>• HCF and LCM</li> <li>• Average</li> <li>• Ratio and Proportion</li> <li>• Time and Work</li> <li>• Problems based on ages</li> <li>• Profit, Loss and Discount, Statistics</li> <li>• Permutations &amp; Combinations</li> <li>• Probability.</li> </ul>

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

<b>Sl No</b>	<b>Name of Post</b>	<b>Syllabus - Discipline related (Part B)</b>
1.	Fireman	<p><b><u>Theoretical and application knowledge on</u></b></p> <ul style="list-style-type: none"> <li>• Basics of Fire, Fire Prevention, Fire Fighting, Salvage</li> <li>• Physics and chemistry of fire</li> <li>• Different types of fires</li> <li>• Indian Standards relating to Fire Fighting Equipments and Appliances</li> <li>• Fire service hydraulics</li> <li>• Plan reading</li> <li>• Passive and Active fire protection systems</li> <li>• Hose and hose fittings</li> <li>• Branches and nozzles</li> <li>• Ladders</li> <li>• Pumps and primers</li> <li>• Portable fire extinguishers construction, performance &amp; maintenance</li> <li>• Foam and foam making branches</li> <li>• Fixed fire fighting installations</li> <li>• Respiratory supporting systems in fire fighting(SCBA, ELSA etc)</li> <li>• MSDS awareness ( Hydrocarbons, chemicals)</li> <li>• Storage requirements and classifications for Hazardous goods, Explosives, Petroleum etc</li> <li>• Electricity – Concepts, safety</li> <li>• Different types of extinguishing media.</li> <li>• Practical fireman ship</li> <li>• Automatic Fire detection and alarm systems</li> <li>• First aid, Resuscitation and CPR</li> <li>• Sprinklers and drenchers</li> <li>• Basic knowledge on NBC part-IV requirements.</li> <li>• Important rescue tools and its use</li> <li>• Global warming and environmental protection- green house gases, ozone depletion, new technologies in firefighting.</li> <li>• Clean agent fire fighting system – operation, maintenance &amp; salvage</li> </ul>
2.	Semi Skilled Rigger	<p><b><u>Theoretical and application knowledge on</u></b></p> <ul style="list-style-type: none"> <li>• <u>Rigging Procedures and Practices</u> – Types of loads and its lifting ,Measuring units, sign boards, lifting drawing / symbols , Tag Lines, Lifting Points, Types of lifting slings / ropes , Rope Reeving, knots and splicing.</li> <li>• <u>Different types of hoist mechanisms</u></li> </ul>

		<ul style="list-style-type: none"> <li>• <u>General awareness of Cranes</u> - Different types of Cranes, understanding of crane dynamics including swinging, raising, lowering, stopping loads and boom deflection.</li> <li>• <u>Communication</u>- Hand Signals - Communication using Walkie Talkie.</li> <li>• <u>Lifting Criteria</u> - Centre of Gravity, Effect of sling Angles, Personnel lifting, rope dimensions etc.</li> <li>• <u>Rigging Equipment and accessories</u> - Chain blocks, chain lifters, Jacks, Ropes, belts, slings and other lifting tools &amp; Tackles.</li> <li>• <u>Safety Rules and Measures</u> - Safety associated with all Rigging activities, Hazard identification and its elimination, Emergency procedures, fall protection.</li> <li>• Types of material handling equipments</li> </ul>
3.	Cook for CSL Guest House	<ul style="list-style-type: none"> <li>• Fire and safety precautions and its importance in an industrial canteen.</li> <li>• Personal safety, hygiene and health .</li> <li>• Preparation &amp; cooking method of different type of food stuffs, curries and snacks.</li> <li>• FSS Act 2006 and its implications related with an industrial canteen.</li> <li>• Concept of an industrial canteen under Kerala factories rules 1957 and its functions.</li> <li>• Procedure of dish and utensil washing both manual and machine.</li> <li>• Calculation of material quantity for different food stuffs, curries and tea.</li> <li>• Duties and responsibilities of a Cook.</li> <li>• Different type of food serving systems in industrial canteens - Merits and demerits. (Queue system, Buffet, Self-service, Table service etc.)</li> </ul>