

**Syllabus For Zigzag Brick Kiln Loading Technician (RPL)**

|                                      |   |
|--------------------------------------|---|
| <b>Course Name</b>                   | <b>Zigzag Brick Kiln Loading Technician (RPL)</b>   |
| <b>Sector</b>                        | <b>CONSTRUCTION</b>   |
| <b>Course Code</b>                   | <b>CON/2024/ZKLT/301</b>  |
| <b>Level</b>                         | <b>4 (RPL)</b>  |
| <b>Occupation</b>                    | <b>Zigzag Brick Kiln Loading Technician</b>   |
| <b>Course Duration</b>               | <b>Total Duration 12 Hrs (OJT)</b>  |
| <b>Trainees' Entry Qualification</b> | <b>Class V Pass with 5 years experience in the relevant field</b>   |
| <b>Trainers Qualification</b>        | <b>BE/ B.Tech in Civil / Construction Engineering with 2 Yrs Experience in related field OR Diploma in Civil Engineering with 3 Yrs experience in related filed. OR ITI in Mason Trade Or Graduate with Level 4 Certificate in related Trade with 4 Yrs experience in Training.</b> |

**Structure of Course:**

| <b>Module No.</b> | <b>Module name</b>                                | <b>Total (Hrs)</b> |
|-------------------|---|--------------------|
| 1                 | Basic of brick loading in Zigzag kilns            | 1                  |
| 2                 | Improved brick loading process                    | 9                  |
| 3                 | Safety and Health                                 | 1                  |
| 4                 | Familiarization with Assessment Process and Terms | 1                  |
|                   | <b>TOTAL</b>                                      | <b>12</b>          |

**SYLLABUS:**

| S. No. | Topic/Module                           | Duration (in Hours) | Key Learning Outcomes   |
|--------|--|---------------------|---|
| 1      | Basic of brick loading in Zigzag kilns | 1                   | <p>The brick kiln loading technician will be able to</p> <ul style="list-style-type: none"> <li>– Understand the basics of brick loading system in zigzag kilns and the terms used               <ul style="list-style-type: none"> <li>○ Zigzag (single and double zigzag)</li> <li>○ Chamber dimension</li> <li>○ Column width</li> <li>○ Rows</li> <li>○ Jodi and bandhan</li> <li>○ Placement of fuel feeding holes</li> </ul> </li> <li>– Currently used single zig-zag setting and the problems with it and the need for improved brick setting.</li> </ul> |

| S. No.                        | Topic/Module                                      | Duration (in Hours) | Key Learning Outcomes  |
|-------------------------------|---|---------------------|--|
| 2                             | Improved brick loading process                    | 9                   | <p>The brick kiln loading technician will be able to construct</p> <ul style="list-style-type: none"> <li>– Double and triple zigzag brick setting.</li> <li>– Choose properly dried green bricks for loading in the kiln</li> <li>– Prepare kiln floor for stable brick loading</li> <li>– Understand the various components (Jodi, Bandhan, Jaali, column size, spacings) of brick setting and their functions</li> <li>– Understand the brick setting pattern in different parts of the kiln trench</li> <li>– Control air leakages in the kiln through <ul style="list-style-type: none"> <li>o Proper use of tarpaulin seal</li> <li>o proper sealing of top surface</li> <li>o proper closing of wicket gates.</li> </ul> </li> <li>– Follow the best practices (including Do's and Don'ts) for brick loading</li> </ul> |
| 3                             | Safety and Health                                 | 1                   | <p>The brick kiln loading technician will be able to</p> <ul style="list-style-type: none"> <li>– Understand health and safety risks associated with the job.</li> <li>– Follow the Do's and Don'ts, particularly during working near fall prone areas.</li> <li>– Practice of using personal protective equipment</li> <li>– Use of First-aids</li> </ul>   |
| 4                             | Familiarization with Assessment Process and Terms | 1                   | <p>The brick kiln fire technician will</p> <ul style="list-style-type: none"> <li>– Understand the assessment process and outcomes</li> <li>– Develop familiarity with the assessment schedule</li> </ul>  |
| <b>Total No of Hours – 12</b> |   |                     |  |

**List of protective equipment:**

1. Mask
2. Goggles
3. Helmet
4. Hearing protective device
5. Harnesses
6. Gloves
7. Protective footwear
8. Protective clothing
9. First-aid