LUKHDHIRJI ENGINEERING COLLEGE, MORBI-2

CHEMICAL ENGINEERING DEPARTMENT

CHEMICAL REACTION ENGINEERING - 2 (3170501)

**List of Laboratory Special Assignment**

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| **Sr. No.** | **Batch No.** | **Assignment Title**  | **Mapping with CO** | **Tentative Scheduled Week for Submission** | **Marks Involved** |
| 1 | A1 | Fabrication and performance evaluation of Fluidised Bed Reactor Setup (with all required inlet and out let connections) (Material of reactor may be acrylic or glass with total reactor volume 1 litre with H/D ratio 10) (Performance with pressure drop study) | CO-1-4 |  Oct. 2022 (Presentation will be there during lab hours and all must remain present) | 10 |
| 2 | A2 | Fabrication and performance evaluation of Bubble Column Reactor Setup (with all required inlet and out let connections) (Material of reactor may be acrylic or glass with total reactor volume 1.5 litre with H/D ratio 10) (For performance carry out CO2 absorption with NaOH solution) |
| 3 | A3 | Fabrication and performance evaluation of batch/Mixed Flow Reactor Setup (with all required inlet and out let connections) (Material of reactor may be acrylic or glass with total reactor volume 0.5 litre with H/D ratio 1.5 with liquid outlet at 60% height of the vessel with outlet valve to control flow..above liquid space for gas..) (Performance evaluation with wastewater degradation reaction) |
| 4 | A4 | Fabrication and performance evaluation of Spray Tower Reactor Setup (with all required inlet and out let connections) (Material of reactor may be acrylic or glass with total reactor volume 1.5 litre with H/D ratio 10) (For performance carry out CO2 absorption with NaOH solution) |
| 5 | A5 | Fabrication and performance evaluation of fixed bed reactor Setup (with all required inlet and out let connections) (Material of reactor may be acrylic or glass with total reactor volume \_\_ litre with H = 60 cm and D = 10 cm) (For performance carry out CO2 absorption with NaOH solution) |  |  |  |
|  | As per performance of the students, 10 marks equivalent will be considered for progressive assessment part for laboratory practical internal marks. |