**Project Report**

**Name of the Student: SUKRITI TRIPATHY**

**Roll No:19ME01001**

**Name of the Mechanism: Scotch-Yoke**

**Function: This setup is most commonly used in control valve actuators in high-pressure oil and gas pipelines.**

|  |  |
| --- | --- |
| Dimension of mechanism | 3D |
| Number of links | 4 |
| Drive movement | linear |
| Output movement | revolute |
| Degree of freedom | 1 |
|  |  |
| Fundamental mechanism | slider-pin, cam-follower |
| Number of inputs | 1 |
| Number of followers | 1 |
| Revolution ability | 360 |
| Revolution ability of input link | 360 |
| Relative position between drive and output | same plane |
|  |  |
| **Transfer function** | |
| Output motion | Revolving |
| Transfer function | pin-joint |
|  |  |
| **Application** | |
| Application area | **This setup is most commonly used in control valve actuators in high-pressure oil and gas pipelines.** |