**ME370: ADAMS LAB**

**Department of Mechanical Engineering,**

**IIT Bombay**



**Session 3 Report**

**Group / Section:** A8

**Name:** Ameya Halarnkar

**Roll Number:** 200020023



**Date:** February 6,2023

**Given Information**

|  |  |
| --- | --- |
| Roll Number | X/Offset Ratio |
| 200020023 | 1.0013 |

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| **ISOMETRIC VIEW OF CAM-FOLLOWER SYSTEM** |
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| **FRONT VIEW OF CAM FOLLOWER SYSTEM** |
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**Question 1 (In the presence of Gravity)**

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| --- | --- |
| Speed Used | 30 Degrees per second |
| Contact Settings Used |  |

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| **VERTICAL DISPLACEMENT OF FOLLOWER**  **FOR ONE COMPLETE ROTATION (SLOW) OF CAM** |
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| **VERTICAL DISPLACEMENT OF FOLLOWER**  **FOR ONE COMPLETE ROTATION (FAST) OF CAM** |
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**OBSERVATION:**

**2**

When the rotation speed is high the follower is thrown vertically upwards whereas in the

case of low rotation speed, the follower remains in contact with the CAM.

**Question 2 (In the presence of Spring)**

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| Speed Used | 30 Degrees per second |
| Contact Settings Us |  |
| Spring Properties Used |  |

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| **VERTICAL DISPLACEMENT OF FOLLOWER**  **FOR ONE COMPLETE ROTATION OF CAM** |
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| **ISOMETRIC VIEW OF CAM-FOLLOWER SYSTEM** |
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| **FRONT VIEW OF CAM FOLLOWER SYSTEM** |
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—X—X—X—X— X—X—X — X—**END**— X—X— X—X— X—X— X—X—