

Assignment-1 Robotics

Note:

- 1. Please take reference of ("Introduction to Robotics Mechanics" by John C. Craig and PDF Notes).*
- 2. Answer must be given in your own handwriting in a notebook, clearly mentioned your name, enrollment number and section there.*

Q.1 Spatial Description and Transformations: Position, Orientation and Frames.

Q.2 MAPPINGS: CHANGING DESCRIPTIONS FROM FRAME TO FRAME:

- (i) Mappings involving translated frames.**
- (ii) Mappings involving rotated frames.**
- (iii) Mappings involving general frames.**

Q.3 Design following Robotic manipulators on Paper with proper links and joints and mention DOF as well.

- (i) TRRVLO**
- (ii) PRRT**
- (iii) RRRTT**
- (iii) TRTRO**