ME 222: Kinematics of Machines and Mechanisms
Practical 10: Velocity and Acceleration Analysis using MATLAB
IIT-Jodhpur

Date: 12th April 2019
Time: 1 pm to 4 pm

Solve the following using MATLAB:

For the forubar mechanism analysed in Practical 8-9 (for problem in Fig. 1), perform the following analysis using MATLAB for the input joint angle varying with time as $\vartheta_2 = \omega t$, $\omega_2 = 2\pi$ rad/s and t varying from 0 to 2s:

a. Plot $\omega_2, \omega_3, \omega_4$ v/s t
b. Plot velocity of point *A*, *B* and *C* v/s t (both X and Y components)
c. Plot $\alpha_2, \alpha_3, \alpha_4$ v/s t
d. Plot accelerations of point *A*, *B* and *C* v/s t (both X and Y components)

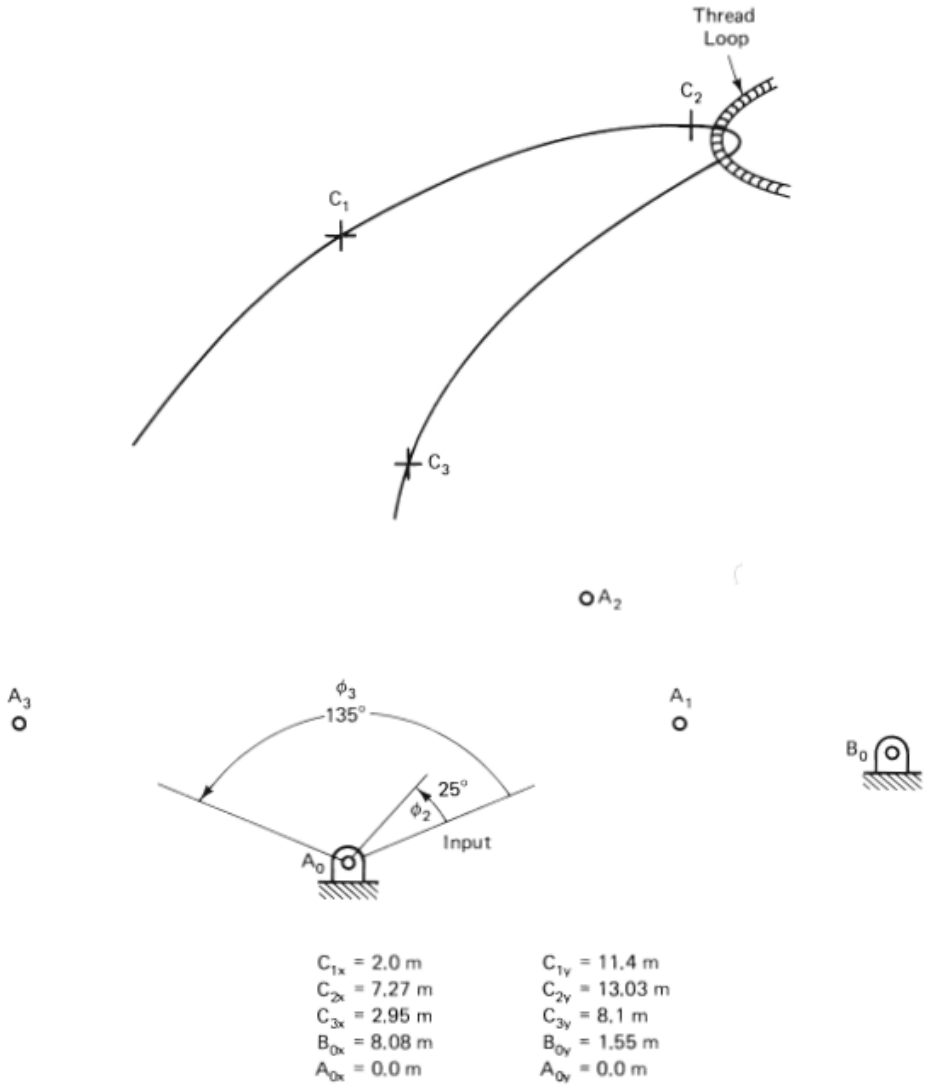

Fig. 1