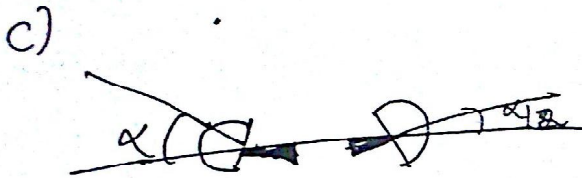
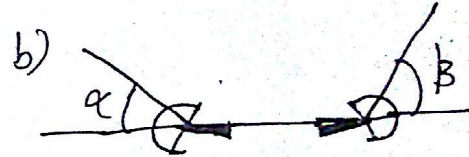
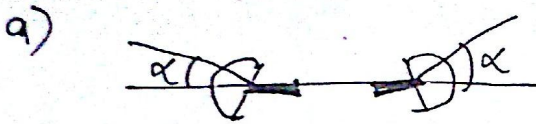


KINEMATICS OF MACHINERY

PUZZLES

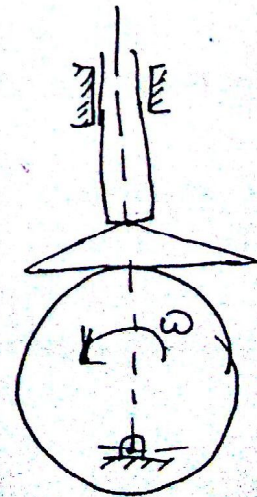
①. Which one of the following figures representing Hooke's jointed inclined shaft system will result in a velocity ratio of unity?



Ans : (a).

②. The figure shows a cam with a circular profile, rotating with a uniform angular velocity of ω rad/s, what is the nature of displacement of the follower?

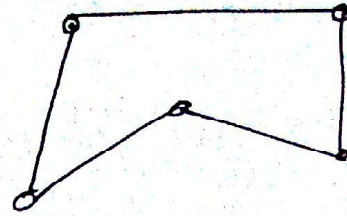
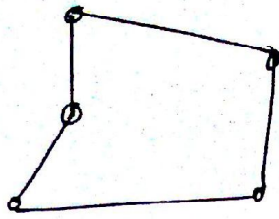
- a) Uniform
- b) parabolic
- c) simple harmonic
- d) cycloidal



Ans:-

(c) Simple harmonic.

③ The given figures represent:



(a) locked chain.

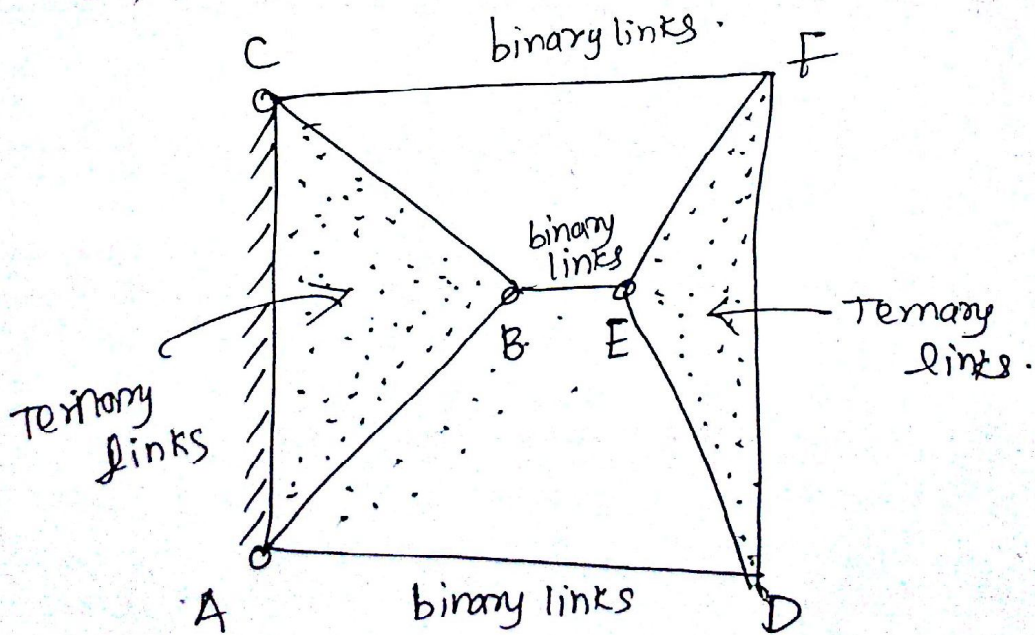
(b) constrained kinematic chain

(c) unconstrained kinematic chain.

(d) mechanism.

Ans:- (c) unconstrained kinematic chain.

④



Q. The degrees of freedom of the linkage when link ABC is fixed are,

- (a) 0 (b) 1 (c) 2 (d) 3.

Ans (a) 0.