

2. Velocity and Acceleration Analysis.

Coriolis component of Acceleration exists whenever a point move Along a Path that has. (chatt-08)

- a) Tangential Acceleration
- b) Centripetal Acceleration
- c) Linear motion
- d) Rotational motion.

2. A slider on a link rotating with angular velocity ' ω ' have linear velocity ' v '. The magnitude of Coriolis component of Acceleration is.

- a) $v\omega$
 - b) $2v\omega^2$
 - c) $2v\omega$
 - d) $\frac{v\omega}{2}$
- (chatt-08)

3. The Coriolis component of Acceleration acts. (chatt-08)

- a) Along the sliding surface
- b) Perpendicular to the sliding surface
- c) At 45° to the sliding surface
- d) None

4. When an object simultaneously rotates about a point and move relative to that point, an acceleration results from this, this is (UP-14)

- a) Dobbler
- b) Coriolis
- c) Sequential
- d) Tangential

5. Determine the No of ~~I.C~~^{link} when link are 10. (UP RVUNL-14)

- a) 4
- b) 5
- c) 6
- d) None

6. The Total No of Instantaneous centre for a mechanism consisting of 'n' link are. (SSC-14) + (ONGC-14)

- a) n
- b) $\frac{(n-1)}{2}$
- c) $\frac{n(n-1)}{2}$
- d) $\frac{n}{2}$

7. In 4 Bar mechanism the following I.C of Rotation is not Present

- a) fixed
- b) Permanent
- c) Neither fixed nor Permanent (MP-11)
- d) Perpendicular to the link joining centre of Rotation of crank & lever at infinity.

- 1-d
- 2-c
- 3-b
- 4-b
- 5-b
- 6-c
- 7-d
- 8-c
- 9-a
- 10-a

8. A slider sliding at $10 \frac{cm}{s}$ on a link which is rotating at 60 rpm subjected to Coriolis acceleration of magnitude, in cm^2/s . (SSC-10)

- a) 40π b) 10π c) 40π d) 90π

9. Name of mechanism in which the Coriolis component of acceleration is to be considered. (SSC-14)

- a) Quick return motion mechanism b) 4-bar mechanism
c) slider crank mechanism d) beam engine

10. If two rigid body A & B are moving in the same plane relative to a third body C. Then the instantaneous centre of A relative to C, of B relative to C and B relative to A, all lies.

(PTCUL-AE-17)

- a) In a straight line b) on a same line
c) on a circle d) none

**Future Secure
Institute**

your future begins here...