

### Applied Mechanics Quiz Questions with Answers Pdf Download

1. The moment of a force is

- a. equivalent to the sum of the moments acting on a body
- b. equivalent to the vertical sum of the moments acting on a body
- c. equivalent to the algebraic sum of the moments acting on a body
- d. equivalent to the sum of horizontal components of the moments on a body

Ans: C

2. The units of moment of inertia are

- a. cm
- b.  $\text{cm}^2$
- c.  $\text{cm}^3$
- d.  $\text{cm}^4$

Ans: B

3. Polar moment of inertia is

- a. same as moment of inertia
- b. applicable to masses whereas moment of inertia is applicable to area only
- c. the moment of inertia for an area relative to a line or axis perpendicular to the plane of the area
- d. the moment of inertia for an area relative to a line or axis parallel to the centroidal axis

Ans: C

4. Coulomb friction is

- a. friction between electrically charged bodies
- b. friction between bodies having relative motion
- c. friction between solids and liquids
- d. friction between dry surfaces

Ans: D

5. The angle of friction is

- a. the angle which frictional force makes with the normal
- b. the angle at which the force applied from external source will cause movement

- c. the angle at which frictional force is inclined to external force
- d. the angle between the normal reaction and the resultant of normal reaction and the limiting friction

Ans: D

6. Kinetic friction is

- a. maximum value of frictional force when a body is about to move
- b. friction between two well lubricated bodies
- c. friction force acting when the body is in motion
- d. friction force which keeps a body in motion

Ans: C

7. The coefficient of friction is

- a. the angle between the normal reaction and the resultant of normal reaction and the limiting friction
- b. the tangent of the angle between the normal reaction and the resultant of the normal reaction and the limiting friction
- c. the tangent of the angle of the net resultant force with the direction of motion
- d. the tangent of the angle between the normal reaction and direction of limiting friction

Ans: D

8. The shape of a suspended cable under its own weight is

- a. semi-circle
- b. parabolic
- c. cycloidal
- d. catenary

Ans: D

9. The slope on the road generally provided on the curve is known as

- a. Angle of repose
- b. Angle of friction
- c. Angle of banking
- d. Angle of reaction

Ans: C

10. Which of the following is scalar quantity

a. displacement of a particle

b. velocity of a gear

c. acceleration of car

d. area of triangle

Ans: D

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