

NARAYANI INSTITUTE OF ENGG & TECHNOLOGY, ANGUL
INTERNAL EXAMINATION, 2ND SEMESTER-2020
SUBJECT: ENGG. MECHANICS

Answer all the questions (Tick the correct option)

Each question carries 2 marks

Total=20

1. The efficiency of lifting machine is the ratio of
 - a) Output to the input
 - b) Work done by the machine to the work done on the machine
 - c) Mechanical advantage to the velocity ratio
 - d) All of these
2. The velocity ratio of a simple wheel and axle with D and d as the diameter of effort wheel and load axle is
 - a) $D + d$
 - b) $D - d$
 - c) $D \times d$
 - d) D/d
3. If the gravitational acceleration at any place is double then the weight of a body will be
 - a) $g/2$
 - b) g
 - c) $\sqrt{2}g$
 - d) $2g$
4. The matter contained in a body is called
 - a) Impulsive force
 - b) Mass
 - c) Weight
 - d) Momentum
5. The motion of a particle round a fixed axis is
 - a) Translatory
 - b) Rotary
 - c) Circular
 - d) Translatory as well as Rotary
6. The periodic time(T) is given by
 - a) $\omega/2\pi$
 - b) $2\pi/\omega$
 - c) $2\pi \times \omega$
 - d) π/ω
7. The acceleration of a particle moving with simple harmonic motion, at any instant is given by
 - a) $W-y$
 - b) W^2
 - c) W^2/y
 - d) $W^3.y$
8. Which of the following are vector quantities?
 - a) Angular displacement
 - b) Angular velocity
 - c) Angular acceleration
 - d) All of these
9. The range of projectile is maximum, when the angle of projection is
 - a) 30°
 - b) 45°
 - c) 60°
 - d) 90°
10. The total motion possessed by a body is called
 - a) Mass
 - b) Weight
 - c) Momentum
 - d) Impulsive force

(If any doubts contact Arjun Sir: 9937977769)