

## NTS Educators SSE (Science) Jobs Test

Sr	Questions	Answers Choice
1	What will be the duration of the day and night (in hour) if the diameter of the earth is suddenly reduced to half its original value the mass remaining constant?	A. 12 B. 6 C. 3 D. 2
2	In which case application of angular velocity is useful?	A. When a body is rotating B. When velocity of body is in a straight line C. When velocity is in a straight line D. None of these
3	A couple produces	A. Purely linear motion B. Purely rotational motion C. Linear and rotational motion D. No motion
4	Center of mass is a point	A. Which is geometric center of a body B. From which distance of particles are same C. Where the whole mass of the body is supposed to be centered D. Which is the origin of reference frame
5	If the earth were to rotate faster than its present speed the weight of an object will	A. Increase at the equator but remain unchanged at the poles B. Decrease at the equator but remain unchanged at the poles C. Remain unchanged at the decrease but decrease at the poles D. Remain unchanged at the equator but increase at the poles
6	What remains constant when the earth revolves around the sun?	A. Angular momentum B. Linear momentum C. Angular kinetic energy D. Linear kinetic energy
7	What remains constant in the field of central force?	A. Potential energy B. Kinetic energy C. Angular momentum D. Linear momentum
8	Angular momentum is	A. Vector (axial) B. Vector (polar) C. Scalar D. None of these
9	A body moving in circular motion with constant speed has	A. Constant velocity B. Constant acceleration C. Constant kinetic energy D. Constant displacement
10	A 2 kg body and a 3 kg body have equal momentum if the kinetic energy of 3 kg body is 10 J, the KE of 2 kg body will be	A. 6.66 J B. 15 J C. 22.5 J D. 45 J
11	A particle moves along a circular path under the action of a force. The work done by the force is	A. <span style="font-size: 14.4444465637207px;">Zero</span> B. <span style="font-size: 14.4444465637207px;">Positive and non-zero</span> C. <span style="font-size: 14.4444465637207px;">Negative and non zero</span> D. <span style="font-size: 14.4444465637207px;">None of above</span>
12	A man pushes a wall but fails to displace it. He does:	A. Negative work B. Maximum positive work C. Positive work but not maximum D. No work

13	A bullet is shot from a rifle. As a result the rifle recoils, The kinetic energy of rifle as compared to that of bullet is	A. Less B. Greater C. Equal D. Cannot be concluded
14	How much water a pump of 2kW can raise in one minute to a height of 10 m. take $g = 10 \text{ m/s}^2$ ?	A. 1000 liters B. 1200 liters C. 100 liters D. 2000 liters
15	Two bodies with masses $M_A$ and $M_B$ are moving with equal kinetic energy. Their linear momenta are numerically in a ratio $ P_A  :  P_B $ will be:	A. $\frac{M_A}{M_B}$ B. $\frac{M_B}{M_A}$ C. $\sqrt{\frac{M_A}{M_B}}$ D. $\sqrt{\frac{M_B}{M_A}}$