Worksheet no.5

1.If two bodies stick together after collision will the collision be elastic or inelastic?

2. When an air bubble rises in water, what happens to its potential energy?

3. A spring is kept compressed by pressing its ends together lightly. It is then placed
in a strong acid, and released. What happens to its stored potential energy?

4.Discuss Elastic collision in 1-D. Obtain expression for velocities of two bodies
after such a collision.

5. A ball is dropped from the height h1 and if rebounces to a height h2. Find the value of coefficient of restitution?

6.By what factor the velocity of a body should be increased so that its K.E. is increased by a factor of nine?Justify.

7. Prove that bodies of identical masses incharge their velocities after head – on elastic collision.

8.. A body of mass 4 Kg. initially at rest is subject to force 16N. What is kinetic energy acquired by the body at the end of 10S?