ASSIGNMENT FOR CLASS IX(SA-1) 2014 Sub: physics

1. How will the equations of motion for an object moving with a uniform velocity change?
2. Obtain a relation for the distance travelled by an object moving with a uniform acceleration in the interval between 4th and 5th seconds.

3 On the earth, a stone is thrown from a height in a direction parallel to the earth's surface while another stone is simultaneously dropped from the same height. Which stone would reach the ground first and why?

4. The weight of any person on the moon is about 1/6 times that on the earth. He can lift a mass of 15 kg on the earth. What will be the maximum mass, which can be lifted by the same force applied by the person on the moon?

5..Distinguish between mass and weight.

6. An object of mass 2 kg is sliding with a constant velocity of 4 m s–1 on a frictionless horizontal table. The force required to keep the object moving with the same velocity is

(a) 32 N (b) 0 N (c) 2 N (d) 8 N

7. water tanker filled up to2/3 of its height is moving with a uniform speed. On sudden application of the brake, the water in the tank would

(a) move backward (b) move forward (c) be unaffected (d) rise upwards

8. The value of acceleration due to gravity

(a) is same on equator and poles

(b) is least on poles

(c) is least on equator

(d) increases from pole to equator