## INTERNATIONAL INDIAN SCHOOL, RIYADH

## SA-1 WORKSHEET

## CLASS-IX

## SUBJECT-PHYSICS

1-Define the terms rest and motion. Give one example of each.
2-What is meant by uniform motion? Give one example.
3-When is a body said to have
a) uniform velocity?
b) uniform acceleration?

4-Distinguish between speed and velocity.
5-What do you mean by the term retardation? Give one example.
6-Deduce an expression for distance travelled by a body with a uniform acceleration in a given time.

7- Draw a distance-time graph of a body
a) moving with uniform velocity
b) moving with variable velocity.

8 -A circular track has a circumference of 3140 m with AB as one of its diameters. A scooter moves from $A$ to $B$ along a circular path with uniform speed of $10 \mathrm{~m} / \mathrm{s}$. Find
a) distance covered by the scooterist
b) displacement of the scooterist
c) time taken by the scooterist in reaching from $A$ to $B$.

9-Describe balanced and unbalanced forces.
10-State the various effects produced by a force.

11-State Newton's three laws of motion.
12-What is the relationship between mass and inertia? Give the SI units of mass and inertia.

13-Define inertia of direction. Give one example.
14-Name the physical quantity which has the combined effect of mass and velocity and give its SI units.

15-A body of mass 5 kg moving with a uniform velocity of $10 \mathrm{~m} / \mathrm{s}$. It is acted upon by a force of 20 N . What will be its velocity after 1 s ?

16-State Law of conservation of momentum.
17-A toy car of mass 250 g is moving with a velocity of $5 \mathrm{~m} / \mathrm{s}$. Find its momentum.
18-Distinguish between gravitation and gravity.
19-State Newton's universal Law of gravitation, hence define universal gravitational constant. Give the value of G .

20-Calculate the force of gravitation between two bodies each of mass 70kg and placed 14 cm apart. (Take $G=6.67^{-11} \mathrm{Nm}^{2} / \mathrm{kg}^{2}$ )

