

**B.C.M SCHOOL BASANT AVENUE DUGRI ROAD LUDHIANA**

**CLASS – VIII**

**SCIENCE ASSIGNMENT**

1. Two boys A and B are applying force on a block. If the block moves towards the boy A, which one of the following statements is correct?

- (a) Magnitude of force applied by A is greater than that of B.
- (b) Magnitude of force applied by A is smaller than that of B.
- (c) Net force on the block is towards B.
- (d) Magnitude of force applied by A is equal to that of B.

2. State of motion is described by

- (a) Position of rest.      (b) Position of motion
- (c) Both by the state of rest or motion.    (d) None of these

3. The stage of the embryo where all the body parts can be identified is known as

- (a) zygote.    (b) foetus.    (c) embryo.    (d) infant

4. The cells present in the retina of eye and responding to colour are:

- (a) Rod-shaped cells.    (b) Cones.    (c) Both of these.    (d) None of these

5. Friction always

- (a) opposes the motion.    (b) helps the motion
- (c) both (a) and (b).      (d) none of these

**Give answer of the following questions**

1. A gun is fired in the air at a distance of 660m from a person . He hears the sound of gun after 2s. What is the speed of sound in air?

2. Describe two characteristics and uses of coke.

3. How will you reduce the friction on carrom board?

OR

When we pour a few drops of oil on the hinges of a door, the door moves smoothly. Why?

4. Explain the process of formation of coal. Name any two products of coal.

5. Differentiate between regular and diffused reflection. Does diffused reflection mean the failure of the laws of reflection?

6. Draw a labelled sketch of the human eye.

**Case study**

Two strings X and Y are tied to the two opposite faces of the block as shown in figure. If we apply a force by pulling the string X, the block begins to move to the right. Similarly, if we pull the string Y, the block moves to the left. But, if the block

is pulled from both the sides with equal forces, the block will not move. Such forces are called balanced forces and do not change the state of rest or of motion of an object. Now, let us consider a situation in which two opposite forces of different magnitudes pull the block. In this case, the block would begin to move in the direction of the greater force. Thus, the two forces are not balanced and the unbalanced force acts in the direction the block moves. This suggests that an unbalanced force acting on an object brings it in motion.

a. Define force.

b. From above information if one person pull from Y rope with 10N force and another person pull from X rope with 5N force. In which direction box will move? Is this a case of unbalanced force or balance force?

c. write any one difference between balanced and unbalanced force