Force

Exercise – B

Q13) What do you understand by the term friction?

Ans- Friction is that force which opposes the relative motion between the two surfaces that are in contact with each other.

Q14) Give an example to illustrate the existence of force of friction.

Ans- If we stop paddling our cycle, it gradually slows down and ultimately it stops after travelling a certain distance. This is due to frictional force between cycle and ground.

Assignment

1. List the effects of friction.

Ans. i) Friction opposes motion.
ii) Friction produces heat.
iii) Friction causes wear and tear.
iv) Friction always acts in a direction opposite to the direction of motion.

2. Explain with example how friction opposes motion.

Ans. Friction opposes motion. When two objects are in contact, friction acts in a direction opposite to the motion of the object.
Ex - When we push a heavy object it does not move. This means that there is some opposing force between the object and the ground which makes the object not to move.

3. Friction always acts in a direction opposite to the direction of motion. Justify the statement by giving an example.

Ans. The force of friction always acts on all the moving objects and its direction is

always opposite to the direction of motion. The force of friction arises due to contact between surfaces, ~~cause the~~ Ex- When we push a box to the right, the friction acts towards the left and if we move the box to the left, the friction acts towards the right.

4. How can you prove friction produces heat? Give an example.

Ans- When surfaces in contact move relative to each other, the friction between the two surfaces converts work to heat. Ex- when we rub our palms, they become warm.