LESSON-12

FRICTION AS A FORCE

1. **Tick the correct answer.**
   a. Friction is more on a
      Ans. (i) Rough Surface
   b. The shape that reduces friction is
      Ans. (ii) Streamlined
   c. Friction causes
      Ans. (iv) All of these
   d. Friction can be reduced by
      Ans. (iv) All of these

2. **Fill in the blanks.**
   a. We can walk on the road due to **Friction.**
   b. Machine parts are oiled to **Reduce** friction.
   c. Aeroplanes and rockets are made **Streamlined** in shape.
   d. Tyres of vehicles are **Corrugated** to increase friction.

3. **Write True or False.**
   a. Kabaddi players put talcum powder on their hands to increase friction. **False**
   b. Friction has no disadvantages. **False**
   c. It is easier to write on a glazed paper than a normal paper. **False**
   d. Worn out tyres will give a better grip than corrugated tyres. **False**

4. **Answer the following questions.**
   a. Define frictional force.
      Ans. The force that opposes the motion of an object is called frictional force.
   b. Write the disadvantages of friction.
      Ans. Disadvantages of friction are
      (i) It causes wear and tear between any two objects.

    (ii) Friction between parts of aa machine leads to loss of energy.

c. Explain the advantages of friction in our daily life giving two examples.

Ans. Advantages of friction are

    (i) We are able to walk on the road due to friction between the road and the soles of our shoes.

    (ii) We are able to write on a paper because of friction between the pencil and the paper.

d. Why do you sprinkle power on the carrom board before playing the game?

Ans. Talcum powder is sprinkled on the carrom board to reduce friction.

e. Why are tyres of vehicles corrugated?

Ans. The tyres of vehicles are corrugated to increase friction and have a better grip on the road.

f. Explain what causes friction between two objects in motion.

Ans. Friction occurs due to interlocking of irregularities between two surfaces.