

Physics.

Que 1. Fill in the blanks:

- (i) A frictional force always acts to ----- the motion of a body.
- (ii) Friction is said to be a ----- evil.
- (iii) Use of wheels and bearing ----- the frictional force.
- (iv) None of the surface is perfectly -----.
- (v) Sole of the shoes are usually grooved to ----- the friction.

Que 2. State whether True or False:

- (i) Frictional force does not depend upon the types of surfaces in contact.
- (ii) Limiting friction and static friction are always equal.
- (iii) It is always easier to roll an object than to slide.
- (iv) A very smooth surface causes more wear and tear.
- (v) Streamline shape of a body helps in reducing friction faced by a moving body.

Que 3. Match the columns—

- |                                       |                            |
|---------------------------------------|----------------------------|
| (i) Friction causes wastage of energy | (a) Rubbing the palms      |
| (ii) Friction produces heat           | (b) hovercraft             |
| (iii) Using compressed air            | (c) work against friction. |

Que 4. Answer the following questions in short—

- (i) Define friction.
- (ii) Write the advantages of friction.
- (iii) Write the disadvantages of friction.

Que 5. Answer the following questions in detail—

- (i) Define frictional force. Give 3 examples from everyday life.
- (ii) Explain the following terms—
  - (a) Dynamic friction
  - (b) Static friction
  - (c) Limiting friction
  - (d) Rolling friction
- (iii) What is streamline shape? Explain with diagram.
- (iv) How can frictional force be minimized?
- (v) Give examples, explaining how force of friction can be increased.