

FORCE AND PRESSURE

QUESTION BANK

I. SHORT ANSWER QUESTION

Question 1

Give two examples of contact force.

Answer:

- Muscular force
- Force of friction

Question 2

Name the force exerted on a ball of dough to make a flat chapati.

Answer:

Muscular force

Question 3

What kind of force is an electrostatic force?

Answer:

Non-contact force

Question 4.

What do you mean by pressure?

Answer:

Force per unit area (Force/Area)

Question 5.

Is the gravity a property of earth only?

Answer:

No

Question 6.

Name the force due to which every object falls on earth.

Answer:

Gravitational force

Question 8.

Do liquids and gases also exert pressure?

Answer:

Yes

Question 9

What is the name of the instrument used to measure atmospheric pressure?

Answer:

Barometer

Question 10.

What kind of force is friction?

Answer:

Contact force

Question 11.

What type of force is gravitational force?

Answer:

Non-contact force

Question 12.

Is it true that force acting on an object can also change its shape?

Answer:

Yes, it is true.

Question 13.

While sieving grains, small pieces fall down. Which force pulls them down?

Answer:

Gravitational force

Question 14.

How can we change the speed and the direction of a moving body?

Answer:

By applying force.

Question 15.

What is the distance moved by an object in unit time called?

Answer:

Speed

Question 16.

Does force of gravity act on dust particles?

Answer:

Yes

Question 17.

Does the force of gravitation exist between two astronauts in space?

Answer:

Yes

Question 18.

What is a force?

Answer:

A push or pull on an object is called force.

Question 19.

What is the SI unit of pressure?

Answer:

Pascal (Pa)

Question 20.

At least how many objects are needed to apply a force?

Answer:

At least two objects are needed to apply a force.

Question 21.

Give one example of gravitational force.

Answer:

An apple falling from the tree to ground.

Question 22.

What is meant by atmospheric pressure?

Answer:

The weight of air acting per unit area is known as atmospheric pressure.

Question 23.

What do you mean by magnitude?

Answer:

The strength of a force is usually expressed by its magnitude.

Question 24.

What is muscular force?

Answer:

The force resulting due to the action of muscles is known as muscular force.

Question 25.

What is contact force?

Answer:

Force that can be applied only when it is in contact with an object is called contact force.

Question 26.

What do you mean by the term atmosphere?

Answer:

The envelop of air all around us is known as atmosphere.

II. Multiple Choice Questions

Question 1.

The pressure which is exerted by air around us is known as

- (a) force
- (b) atmospheric pressure
- (c) muscular force
- (d) friction

Question 2.

Force acting on per unit area is called

- (a) non-contact forces
- (b) contact forces
- (c) force
- (d) pressure

Question 3.

A _____ exerted by an object on another is a force.

- (a) Push or pull
- (b) Contact or non-contact force
- (c) Pressure
- (d) Magnitude

Question 4.

The force exerted by the earth to pull the object towards itself is called

- (a) electrostatic force
- (b) gravitational force
- (c) muscular force
- (d) contact force

Question 5.

Muscular force is also called _____ force.

- (a) non-contact
- (b) contact
- (c) gravitational
- (d) magnetic

Question 6.

The force exerted by a charged body on another charged body is

- (a) gravitational force
- (b) electrostatic force
- (c) non-contact force
- (d) contact force

Question 7.

Force changes the

- (a) motion of body
- (b) speed of body
- (c) shape of body
- (d) all of these

Question 8.

The force exerted by our muscle is called

- (a) electrostatic force
- (b) muscular force
- (c) gravitational force
- (d) non-contact force

Question 9.

1 kilogram weight is equal to

- (a) 98 N
- (b) 9.8 N
- (c) 0.98 N
- (d) 0.098 N

Question 10.

A spring balance is used for measuring

- (a) mass
- (b) weight
- (c) pressure
- (d) speed

Question 11.

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.

Question 12.

When two forces act in opposite directions, then net force acting is the

- (a) sum of two forces
- (b) difference between two forces
- (c) both of these
- (d) none of these

Question 13.

The strength of force is expressed by its

- (a) weight
- (b) mass
- (c) magnitude
- (d) longitudinal force

Question 14.

Leaves fall down on the ground due to

- (a) electrostatic force
- (b) magnetic force
- (c) gravitational force
- (d) muscular force

Question 15.

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

Question 16.

When the hammer strikes the gong of an electric bell, which of the following force is responsible for the movement of hammer?

- (a) Gravitational force alone
- (b) Magnetic force alone
- (c) Electrostatic force alone
- (d) Frictional force alone

Question 17.

During dry weather, while combing hair, sometimes we experience hair flying apart. The force responsible for this is

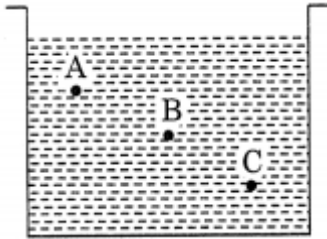
- (a) force of gravity

- (b) force of friction
- (c) electrostatic force
- (d) magnetic force

Question 18.

A container is filled with water as shown in the given figure. Which of the following statements is correct about pressure of water?

- (a) Pressure at A > Pressure at B > Pressure at C
- (b) Pressure at A = Pressure at B = Pressure at C
- (c) Pressure at A < Pressure at B > Pressure at C
- (d) Pressure at A < Pressure at B < Pressure at C



Question 19.

Two objects repel each other. This repulsion could be due to

- (a) frictional force only
- (b) electrostatic force only
- (c) magnetic force only
- (d) either a magnetic or an electrostatic force

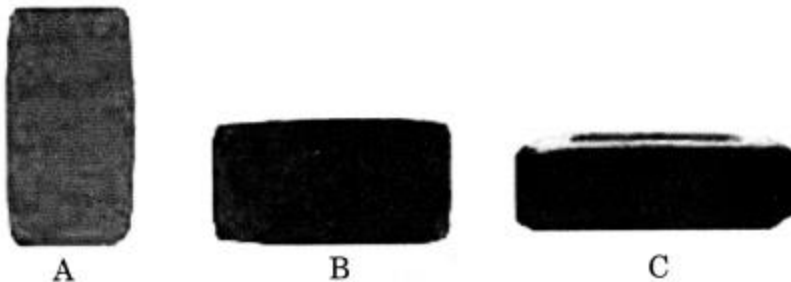
Question 20.

Which one of the following forces is a contact force?

- (a) Force of gravity
- (b) Magnetic force
- (c) Force of friction
- (d) Electrostatic force

Question 21.

A brick is kept in three different ways on a table as shown in given figure. The pressure exerted by the brick on the table will be



- (a) maximum in position A

- (b) maximum in position C
- (c) maximum in position B
- (d) equal in all cases

Answer:

- 1. (b)
- 2. (d)
- 3. (a)
- 4. (b)
- 5. (b)
- 6. (b)
- 7. (d)
- 8. (b)
- 9. (b)
- 10. (b)
- 11. (b)
- 12. (b)
- 13. (c)
- 14. (c)
- 15. (c)
- 16. (c)
- 17. (c)
- 18. (d)
- 19. (d)
- 20. (c)
- 21. (a)

III. FILL IN THE BLANKS

- 1. We _____ the bucket to take out water from well.
- 2. The strength of a force is usually expressed by its _____.
- 3. _____ force is the force resulting due to the action of muscles.
- 4. The envelop of air all around us is called _____.
- 5. To open a door we or _____ the door.
- 6. Force of friction is an example of _____ force.
- 7. Force _____ is called pressure.
- 8. Force has _____ as well as direction.
- 9. Fruits fall _____ due to the force of gravity.
- 10. The body at rest is called _____ body.
- 11. _____ and _____ forces are the two kinds of forces.
- 12. Force exerted by magnet is called _____ force.
- 13. We apply force on _____ while walking.
- 14. Force is _____ to pressure.
- 15. The _____ is measured by an instrument called barometer.

Answer:

- 1. pull
- 2. magnitude
- 3. Muscular

4. atmosphere
5. push, pull
6. contact
7. per unit area
8. magnitude
9. downward
10. stationary
11. Contact, non-contact
12. magnetic
13. ground
14. directly proportional
15. atmospheric pressure

