



ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD

**Class : 8****Subject : PHYSICAL
SCIENCE****Term : FIRST TERM****Max Marks : 60****Q 1 :** The turning effect of force about a fixed pointis called moment of force.**Marks : 1**

- 1 . Pivot
- 2 . fulcrum
- 3 . effort
- 4 . load

 (This Answer is Correct)**Q 2 :** Mathematical representation of moment of force is given by**Marks : 1**

- 1 . F/A
- 2 . F-d
- 3 . FXd
- 4 . F/d

 (This Answer is Correct)**Q 3 :** The S.I. unit of pressure is**Marks : 1**

- 1 . Nm
- 2 . Pa
- 3 . Newton
- 4 . Nm/sec

 (This Answer is Correct)**Q 4 :** The pressure will If the force applied on a large area.**Marks : 1**

- 1 . increase
- 2 . equal
- 3 . decrease
- 4 . none of these

 (This Answer is Correct)**Q 5 :** Scissors have sharp edges to reduce the surface area so the pressure exerted**Marks : 1**

- 1 . equal to force applied
- 2 . increases
- 3 . decreases
- 4 . none of these

 (This Answer is Correct)

Q 6 : The factors which affect lateral pressure is/are-

Marks : 1

- 1 . increase in depth
- 2 . density of liquid
- 3 . type of liquid
- 4 . all of these**

(This Answer is Correct)

Q 7 : Lorries have big wheels to Pressure on the ground.

Marks : 1

- 1 . reduce**
- 2 . increase
- 3 . equalise
- 4 . none of these

(This Answer is Correct)

Q 8 : The working of a fountain pen is possible because of-

Marks : 1

- 1 . Capillary action
- 2 . atmospheric pressure**
- 3 . lateral pressure
- 4 . hydrostatic pressure

(This Answer is Correct)

Q 9 : Work is said to be done only when

Marks : 1

- 1 . force acts on the object
- 2 . the object moves in the direction of force
- 3 . the object may change in the direction of application of force
- 4 . all of these**

(This Answer is Correct)

Q 10 : The kinetic energy increases with the increase in

Marks : 1

- 1 . only mass
- 2 . height and mass
- 3 . mass and velocity**
- 4 . only velocity

(This Answer is Correct)

Q 11 : Water stored in overhead tank possesses Energy.

Marks : 1

- 1 . heat
- 2 . solar
- 3 . kinetic
- 4 . potential**

(This Answer is Correct)

Q 12 : The energy possessed by a stationary object due to it's height Energy. **Marks : 1**

- 1 . Mechanical
- 2 . potential
- 3 . gravitational potential energy** (This Answer is Correct)
- 4 . elastic potential energy

Q 13 : A stretched bow possesses Energy. **Marks : 1**

- 1 . kinetic
- 2 . elastic potential** (This Answer is Correct)
- 3 . gravitational potential energy
- 4 . static

Q 14 : In a photo cell light energy is converted to **Marks : 1**

- 1 . Electric** (This Answer is Correct)
- 2 . magnetic
- 3 . kinetic
- 4 . potential

Q 15 : The speed of lighton passing through an optically denser medium. **Marks : 1**

- 1 . increase
- 2 . decrease** (This Answer is Correct)
- 3 . remain unchanged
- 4 . increases 10 times

Q 16 : Refractive index of diamond with respect to vaccum is **Marks : 1**

- 1 . 1.4
- 2 . 2.4** (This Answer is Correct)
- 3 . 1.8
- 4 . 2

Q 17 : The duration of day increases byminutes due to refraction. **Marks : 1**

- 1 . 2
- 2 . 10
- 3 . 4** (This Answer is Correct)
- 4 . 1

Q 18 : When a ray of light passes from a denser medium to a rarer medium it bends

Marks : 1

1 . away from normal (This Answer is Correct)

2 . towards the normal

3 . anywhere

4 . infinity

Q 19 : In concave mirror the principal focus is the point where the rays of light parallel to principal axis

Marks : 1

1 . appears to meet

2 . pass undeflected

3 . appears to converge

4 . converge at focus (This Answer is Correct)

Q 20 : Concave mirror is not used in the following :

Marks : 1

1 . torches

2 . floodlights

3 . rear view mirrors (This Answer is Correct)

4 . shaving mirrors

Q 21 : When the object is kept at the centre of curvature C then the size of image formed by concave mirror is

Marks : 1

1 . magnified

2 . equal (This Answer is Correct)

3 . diminished

4 . highly enlarged

Q 22 : When the object is kept between infinity and pole in front of a convex mirror the image formed is

Marks : 1

1 . Enlarged

2 . highly diminished

3 . diminished (This Answer is Correct)

4 . equal size

Q 23 : The major cause of dispersion of white light is

Marks : 1

1 . different colours

2 . different wavelength of each colour

3 . different speed of each colour

(This Answer is Correct)

4 . different wavelength and speed of each colour

Q 24 : The formula for sodium carbonate is

Marks : 1

- 1 . Na₂CO₃
- 2 . NaCO₃
- 3 . NaHCO₃
- 4 . NaHCO₂

 (This Answer is Correct)

Q 25 : A radicle is a kind of entity which has behaving as a single atom with a charge.

Marks : 1

- 1 . an atom only
- 2 . group of atoms only
- 3 . both an atom or group of atom
- 4 . positive ions

 (This Answer is Correct)

Q 26 : The formula for sulphite radicle is

Marks : 1

- 1 . SO₃²⁻
- 2 . SO₄²⁻
- 3 . SO₃²⁺
- 4 . SO₄²⁺

 (This Answer is Correct)

Q 27 : The symbol to represent a precipitate in a chemical equation is -

Marks : 1

- 1 . ↑
- 2 . ↓
- 3 . ←
- 4 . →

 (This Answer is Correct)

Q 28 : What is value of x in the following equation - 2H₂ + O₂ = > x H₂O

Marks : 1

- 1 . 2
- 2 . 1
- 3 . 3
- 4 . 4

 (This Answer is Correct)

Q 29 : What is the unit of measurement of force?

Marks : 1

- 1 . Kgf
- 2 . Newton

3 . m/sec²

4 . Both Kgf and Newton

(This Answer is Correct)

Q 30 : The factor/s on which turning effect of force depends:

Marks : 1

1 . weight of the object

2 . weight of the effort

3 . perpendicular distance of the force from pivot

4 . magnitude of pressure

(This Answer is Correct)

Q 31 : Force acting on a unit area of a surface is called:

Marks : 1

1 . pressure

2 . acceleration due to gravity

3 . Moment of force

4 . Thrust

(This Answer is Correct)

Q 32 : Pressure exerted by the molecules of water on the walls of the container is called

Marks : 1

1 . hydrostatic pressure

2 . air pressure

3 . lateral pressure

4 . none of these

(This Answer is Correct)

Q 33 : The following is the factor affecting pressure:

Marks : 1

1 . magnitude of the force

2 . direction of force

3 . surface area in contact

4 . all of these

(This Answer is Correct)

Q 34 : Atmospheric pressure is measured by using-

Marks : 1

1 . manometer

2 . thermometer

3 . barometer

4 . sphaerometer

(This Answer is Correct)

Q 35 : The perpendicular force acting on the surface is called-

Marks : 1

1 . thrust

(This Answer is Correct)

- 2 . pressure
 - 3 . jerk
 - 4 . work
-

Q 36 : The S.I. unit of energy is:

Marks : 1

- 1 . Newton
- 2 . Joule**
- 3 . Nm
- 4 . dyne

(This Answer is Correct)

Q 37 : The energy possessed by an object by virtue of it's position or state of motion is Energy

Marks : 1

- 1 . Mechanical**
- 2 . solar
- 3 . physical
- 4 . physiological

(This Answer is Correct)

Q 38 : In a doorbell energy is converted to sound energy.

Marks : 1

- 1 . electrical**
- 2 . magnetic
- 3 . chemical
- 4 . Thermal

(This Answer is Correct)

Q 39 : The rate of doing work is called

Marks : 1

- 1 . moment of force
- 2 . power**
- 3 . energy
- 4 . force

(This Answer is Correct)

Q 40 : The angle between the incident ray and refracted ray is called angle of

Marks : 1

- 1 . incidence
- 2 . refraction
- 3 . deviation**
- 4 . none of these

(This Answer is Correct)

Q 41 : The ratio between the speed of light in the incident medium and speed of light in the refracted medium is called.....

Marks : 1

- 1 . reflected index
- 2 . refractive index
- 3 . refractive coefficient
- 4 . linear coefficient

(This Answer is Correct)

Q 42 : The geometric centre of a spherical mirror is called

Marks : 1

- 1 . focus
- 2 . aperture
- 3 . centre of curvature
- 4 . pole

(This Answer is Correct)

Q 43 : The distance between the pole of the mirror and the centre of curvature is called

Marks : 1

- 1 . centre of curvature
- 2 . radius of curvature
- 3 . pole
- 4 . aperture

(This Answer is Correct)

Q 44 : The relationship between the focal length and radius of curvature in a spherical mirror is

Marks : 1

- 1 . $R=f$
- 2 . $R=f/2$
- 3 . $R=2f$
- 4 . $R=f-2$

(This Answer is Correct)

Q 45 : The following in the characters of a real image:

Marks : 1

- 1 . inverted in nature
- 2 . obtained on screen
- 3 . image formed after intersection of rays
- 4 . all of these

(This Answer is Correct)

Q 46 : The band of colours formed after dispersion is called

Marks : 1

- 1 . Spectrum
- 2 . beam
- 3 . prism
- 4 . none of these

(This Answer is Correct)

Q 47 : The formula of a molecule gives the number of atoms of the elements in the molecules.

Marks : 1

1. same
2. different wavelength of each colour
- 3. same or different**
4. both same and different

(This Answer is Correct)

Q 48 : The valency for Aluminium is

Marks : 1

1. Al +1
2. Al +2
3. Al +4
- 4. Al +3**

(This Answer is Correct)

Q 49 : A chemical equation in which the number of atoms of each element on the reactant side and product side is a balanced equation.

Marks : 1

1. More on product side
2. mlre on reactant side
- 3. same**
4. unequal

(This Answer is Correct)

Q 50 : The combining capacity of an element with other element is called

Marks : 1

1. Symbol
2. formula
- 3. valency**
4. compound

(This Answer is Correct)

Q 51 : The substance that accelerates the speed of a reaction is

Marks : 1

1. Enzyme
2. promoter
- 3. catalyst**
4. stepper

(This Answer is Correct)

Q 52 : Following is an example of application of moment of force:

Marks : 1

1. wheel of a bicycle
2. bottle opener
3. spanner
- 4. all of these**

(This Answer is Correct)

- Q 53 :** Find the moment of force of a body to which a force of 10N is applied at a distance of 0.5m from the pivot. **Marks :** 1
1. 10N
 2. 5N
 3. 20N
 4. 15N
- (This Answer is Correct)
-

- Q 54 :** Where do we find the pressure is reduced when we increase the surface area? **Marks :** 1
1. tip of the nails
 2. foundation of buiding
 3. walls of dams
 4. Both foundations of the buidings and walls of the dams
- (This Answer is Correct)
-

- Q 55 :** What is the K.E. of a 1kg ball moving with the velocity of 8 m/sec² ? **Marks :** 1
1. 32J
 2. 16J
 3. 48J
 4. 64J
- (This Answer is Correct)
-

- Q 56 :** A man weighing 50 kg is standing at a height of 10 metres.(g=10 m/sec²).What is the P.E. of man? **Marks :** 1
1. 500J
 2. 250J
 3. 50J
 4. 5000J
- (This Answer is Correct)
-

- Q 57 :** Refractive index of water with respect to vaccum is **Marks :** 1
1. 1.5
 2. 0.6
 3. 1.3
 4. 1
- (This Answer is Correct)
-

- Q 58 :** Calculate the focal length of a convex mirror which has radius of curvature as 8 cm. **Marks :** 1
1. 8 cm
 2. 4 cm
 3. 16 cm
 4. 6cm
- (This Answer is Correct)
-

Q 59 : What is the value of x in the following equation- $\text{CaCO}_3 + x\text{HCl} = \text{H}_2\text{O} + \text{CO}_2$

Marks : 1

1 . 1

2 . 2

3 . 3

4 . 4

(This Answer is Correct)

Q 60 : What is the valency N in the compound Mg_3N_2 ?

Marks : 1

1 . 1

2 . 2

3 . 3

4 . 4

(This Answer is Correct)