

# ***Measurement***

<u>S/NO</u>	<u>REF</u>	<u>Q.NO</u>	<u>OBJECTIVE</u>
<b>1</b>	5054/42 N 17	Q.1	Investigates the period of a simple pendulum.
<b>2</b>	5054/42 N 16	Q.4	Volume of blue tack
<b>3</b>	5054/42 J 16	Q1	(Pendulum) Investigate the oscillation of meter rule
<b>4</b>	5054/42 J 16	Q3	Weight and parallax error
<b>5</b>	5054/42 J 16	Q.4	Diameter of a central cylinder
<b>6</b>	5054/42 N 15	Q.2	Determine the diameter of beach ball
<b>7</b>	5054/42 N 15	Q.3	Measure the length of laboratory
<b>8</b>	5054/42 J 15	Q.1	Length of running track (trundle Wheel)
<b>9</b>	5054/42 N 14	Q.4	Diameter of a cylinder method
<b>10</b>	5054/42 J 14	Q.1	Investigate the floating wooden rod
<b>11</b>	5054/42 N 13	Q.4	Diameter of a marble balls
<b>12</b>	5054/42 J 13	Q.3	Volume of a glass stopper
<b>13</b>	5054/42 N 12	Q.3	Investigate the behavior of a pendulum
<b>14</b>	5054/42 J 12	Q.2	(Pendulum) Uses pendulum to obtain acceleration of free fall
<b>15</b>	5054/42 N 10	Q.1	(pendulum) Investigate the movement of meter rule
<b>16</b>	5054/42 J 10	Q.2	(Pendulum) Wooden rule with hole
<b>17</b>	5054/42 N 08	Q.3	Zero error on micro meter screw gauge
<b>18</b>	5054/42 J 08	Q.1	Time and height of the ball
<b>19</b>	5054/42 J 07	Q.1	Pendulum A chain of paper clip
<b>20</b>	5054/42 N 06	Q.2	Pendulum Half rotation
<b>21</b>	5054/42 N 04	Q.1	Average diameter of wire
<b>22</b>	5054/42 J 04	Q.4	Volume of metal piece
<b>23</b>	5054/42 N03	Q.2	(Pendulum) Thread support to scale
<b>24</b>	5054/42J 03	Q.4	
<b>25</b>	5054/42J 03	Q.5	pendulum bob supported by two threads. The two threads are suspended from jaws of clamps held in separate retort stands.

## ***CURRENT ELECTRICITY***

<b>1</b>	5054/42 J 18	Q.1	A student measures the resistance of a lamp when there are different currents in the lamp
<b>2</b>	5054/42 N 17	Q.4	Investigates how the resistance of a wire depends upon its length.
<b>3</b>	5054/42 J 17	Q.2	investigates the effect of three different insulating materials on the cooling of hot water in a beaker
<b>4</b>	5054/42 N 16	Q.2	Resistance of lead
<b>5</b>	5054/42 N 15	Q.4	Determine the resistance of a resistor
<b>6</b>	5054/42 J 14	Q.2	Investigate the ammeter in the circuit
<b>7</b>	5054/42 N 13	Q.3	Use a lemon to make a simple cell
<b>8</b>	5054/42 J 12	Q.3	Series and parallel combination
<b>9</b>	5054/42 J 11	Q.3	Combination of series and parallel combination
<b>10</b>	5054/42 N 09	Q.4	Measure the resistance of nichrome wire
<b>9</b>	5054/42 N 08	Q.4	Value of current and potential difference
<b>11</b>	5054/42 J 08	Q.2	Potential difference and circuit fault

<b>12</b>	5054/42 N 06	Q.4	Resistance of a wire varies with its length
<b>13</b>	5054/42 J 06	Q.3	Electrical component box
<b>14</b>	5054/42 N 03	Q.3	Determine the potential difference across the resistor
<b><i>CURRENT AND ELECTRONICS</i></b>			
<b>1</b>	5054/42 J 19	Q.4	A box contains an unknown electrical component. This component is connected to two terminals P and Q on the outside of the box.
<b>2</b>	5054/42 N18	Q.1	A student investigates how the current in a thermistor depends upon temperature.
<b>3</b>	5054/42 N16	Q.3	Investigate the current in diode
<b>4</b>	5054/42 J 15	Q.3	Use CRO to measure the voltage
<b>5</b>	5054/42 N 14	Q.3	Resistor color band and circuit combination
<b>6</b>	5054/42 J 13	Q.4	Investigate the maximum e.m.f produce by a solar cell
<b>7</b>	5054/42 N 06	Q.3	C R O Frequency and voltage
<b>8</b>	5054/42 N 05	Q.1	Resistance of LDR
<b>9</b>	5054/42 N 05	Q.2	Current in LDR
<b>10</b>	5054/42 N 04	Q.2	Resistance of thermistor change with temperature
<b>11</b>	5054/42 J 04	Q.2	Function of diode

## ***KINEMATICS***

<b>1</b>	5054/42 J17	Q.3	A student investigates the maximum height $h$ to which a ball bounces after hitting a laboratory bench.
<b>2</b>	5054/42 J17	Q.1	A student measures the acceleration of free-fall ball drop
<b>3</b>	5054/42 J15	Q.2	How area of parachute effect the time
<b>4</b>	5054/42 J 13	Q.2	Distance time graph of a journey
<b>5</b>	5054/42 J 11	Q.1	Motion of a car down the ramp
<b>6</b>	5054/42 N 07	Q.1	Terminal velocity of metal ball in an oil jar
<b>7</b>	5054/42 J 05	Q.4	Paper clipper

## ***FORCES***

<b>1</b>	5054/42 N 14	Q.2	Investigate the use of pulley to fit a load
<b>2</b>	5054/42 J 09	Q.2	Three newton meter to find the vector sum of the forces
<b>3</b>	5054/42 J 07	Q.4	Weight and volume
<b>4</b>	5054/42 J 06	Q.1	Hook's law spring

## ***Volume and density***

<b>1</b>	5054/42 J 18	Q.4	A student measures the density of copper using a balancing method.
<b>2</b>	5054/42 N 16	Q.1	Determine density of liquid
<b>3</b>	5054/42 J 14	Q.4	Density of microscope glass slide
<b>4</b>	5054/42 N 10	Q.3	Coin is made from pure copper
<b>5</b>	5054/42 J 08	Q.3	Measuring instrument and volume of air in laboratory
<b>6</b>	5054/42 J 05	Q.1	Type of glass /density based
<b>7</b>	5054/42 N 03	Q4	Volume of water

## ***Moments***

<b>1</b>	5054/42 N 09	Q.1	Balance a meter rule
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## ***PRESSURE***

<b>1</b>	5054/42 J 18	Q.3	A student measures the least pressure that a rectangular wooden block exerts on a table.
<b>2</b>	5054/42 N 08	Q.1	Variation of depth with manometer
<b>3</b>	5054/42 N 05	Q.4	Pressure change volume
<b>4</b>	5054/42 J 10	Q.1	Efficiency of motor

## ***Heat and thermal***

<b>1</b>	5054/42 J 19	Q.1	A student determines an approximate value for the specific heat capacity of water by an electrical method.
<b>2</b>	85054/42 N 17	Q.2	investigates the effect of insulation on the rate of cooling of hot water in a beaker
<b>3</b>	5054/42 J 17	Q.3	investigates the effect of three different insulating materials on the cooling of hot water in a beaker
<b>4</b>	5054/42 J 15	Q.4	Cooling curve Method (not graph)
<b>5</b>	5054/42 N 12	Q.2	Measure the specific heat of the water
<b>6</b>	5054/42 J 12	Q.1	Investigate the cooling of water
<b>7</b>	5054/42 N 11	Q.3	Convection current in water
<b>8</b>	5054/42 J 11	Q.4	Effect of surface Colour on the cooling
<b>9</b>	5054/42 N 10	Q.2	Heating curve of a water
<b>10</b>	5054/42 J 10	Q.1	Flow of oil at different temperature
<b>11</b>	5054/42 J 09	Q.1	Rate of evaporation
<b>12</b>	5054/42 J 09	Q.4	Measure the specific heat capacity
<b>13</b>	5054/42 J 08	Q.4	Thermometer
<b>14</b>	5054/42 J 07	Q.3	Cooling curve of water
<b>15</b>	5054/42 J 05	Q.3	Specific heat capacity of lead
<b>16</b>	5054/42 N 04	Q.3	Temperature of acetophone become a solid Cooling curve
<b>17</b>	5054/42 J 04	Q.3	Thermometer Length of mercury
<b>18</b>	5054/42 N 03	Q.5	Brass and water
<b>19</b>	5054/42 J 03	Q.3	Heat capacity of liquid

## ***Light***

<b>1</b>	5054/42 J 18	Q.2	A student uses a ray box to investigate the refraction of a ray of blue light as it passes through a glass prism.
<b>2</b>	5054/42N 18	Q.2	A student measures the focal length of a convex lens.
<b>3</b>	5054/42 J 18	Q.2	A student investigates the reflection of light by a plane mirror.
<b>4</b>	5054/42 N 17	Q.3	Measures the refractive index of the material of a transparent block ABCD by tracing the path of a ray of light through it.
<b>5</b>	5054/42 J 17	Q.4	Investigates how the height of the shadow cast by the object on the screen changes.
<b>6</b>	5054/42 J 16	Q.2	(prism) Ray diagram
<b>7</b>	5054/42 N15	Q.1	(lens) Focal length of converging lens
<b>8</b>	5054/42 J 14	Q.3	Investigate the refraction of light in glass block
<b>9</b>	5054/42 N 13	Q.2	Investigate the reflection of light
<b>10</b>	5054/42 J 13	Q.1	Determine the focal length of a lens
<b>11</b>	5054/42 N 12	Q.4	Investigate the deviation of ray in the glass prism
<b>12</b>	5054/42 N 11	Q.1	Measure the focal length of converging lens
<b>13</b>	5054/42 J 11	Q.2	Effect of converging lens on light from the sun

<b>14</b>	5054/42 J 10	Q.4	Ray diagram with circular glass block
<b>15</b>	5054/42 N 09	Q.3	Prism Incident ray and emergent ray
<b>16</b>	5054/42 N 08	Q.2	image on plane mirror
<b>17</b>	5054/42 N 07	Q.3	Refraction of light (glass block)
<b>18</b>	5054/42 J 07	Q.2	Ray of light on plan mirror
<b>19</b>	5054/4 N 06	Q.1	Volume of glass prism
<b>20</b>	5054/42 J 06	Q.4	Volume of glass in convex lens
<b>22</b>	5054/42 N 05	Q.3	focal length of a lens
<b>23</b>	5054/42 N 04	Q.4	Glass prism (ray diagram)
<b>24</b>	5054/42 N 04	Q.5	Converging lens used as magnifying glass
<b>25</b>	5054/42 J 04	Q.1	Ray diagram
<b>26</b>	5054/42 J 04	Q.5	Lens Distance of image /distance of object
<b>27</b>	5054/42 N 03	Q.1	Ray diagram glass block angle of incident REFRACTION
<b>28</b>	5054/42 J 03	Q.1	Plane mirror Ray diagram

## ***MAGNET ANE ELECTROMAGNET***

<b>1</b>	5054/42 N 18	Q.4	A student uses a plotting compass to plot the pattern of the magnetic field <b>between the North poles</b> of two bar magnets.
<b>2</b>	5054/42 N 14	Q.1	Investigate the magnetic field due to a bar magnet
<b>3</b>	5054/42 N 13	Q.1	Investigate how a magnetic force varies with distance
<b>4</b>	5054/42 J 12	Q.4	Investigate the old magnets' magnetic field
<b>5</b>	5054/42 N 11	Q.2	Force on a wire carrying current in a magnetic field
<b>6</b>	5054/42 N 10	Q.4	Strength of a magnet
<b>7</b>	5054/42 N 07	Q.2	Current in a straight wire
<b>8</b>	5054/42 J 06	Q.2	Strength of electro magnet depends on no of coil of wire
<b>9</b>	5054/42 J 03	Q.2	Magnetic field

## ***Waves***

<b>1</b>	5054/42 N 12	Q.1	Investigate the speed of water wav
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## ***Sound***

<b>1</b>	5054/42 N 18	Q.3	A student and her friend measure an approximate value for the speed of sound in air using echoes.
<b>2</b>	5054/42 N 09	Q.2	Speed of sound in air

## ***Radioactivity***

<b>1</b>	5054/42 N 11	Q.4	Existence of background radiation
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