APPENDIX - 6
CRITERIAN REFERENCED TEST
POST TEST
A.PRIMARY PROCESS SKILLS

SKILL – 1 OBSERVATION

ACTIVITY – 1
Convex mirror is fixed in blind corner in your class room. Observe carefully and answer the following questions.

Questions
1. The size of the image in the convex mirror is _________ than the object.
   a) bigger   b) smaller
2. The image is ________.
   a) inverted   b) vertical

ACTIVITY – 2
You are provided with tuning fork, rubber hammer, water and a beaker. Strike a tuning fork immediately dip its prongs into water. Observe carefully and answer the following questions below.

Questions
1. Splashing of water droplets caused by the __________ of the prongs.
   a) density   b) mass   c) vibration   d) temperature

SKILL – 2 SELECTION / IDENTIFICATION

ACTIVITY – 1
You are provided with some measuring instruments. Select the one, which is used to measure the thickness of a wire.

Vernier Caliper   Simple Pendulum   Thermometer   Screw Gauge

Question
The device is ____________________
ACTIVITY – 2
Marks – 2
You are provided the following mirrors. Select any one which is used in Telescope.

convex mirror  concave mirror  plane mirror
(a)           (b)             (c)

The mirror is ____________.

SKILL – 3 CLASSIFICATION

ACTIVITY – 1
Marks – 2
You are provided different types of resources of energy. Classify them as renewable and non-renewable resources of energy.

SOLAR ENERGY  SOLID FUELS  ELECTRICAL ENERGY  LIQUID FUEL

ACTIVITY – 2
Marks – 2
You are provided with kerosene, wood, petrol, coal, diesel and agricultural wastes. Classify them as solid fuels and liquid fuels.

Kerosene  Petrol  Diesel  Coal  Agricultural waste
SKILL - 4 MEASURING

ACTIVITY - 1

Marks - 4

You are provided with a vernier caliper and a small wooden object. Measure main scale reading and vernier coincidence.

Main scale reading = ____________
Vernier coincidence = ____________

SKILL - 5 INFERENCE

ACTIVITY - 1

Marks - 4

The motion of two objects 1. Ball 2. Stone of different sizes and masses are released simultaneously from the same height. Observe carefully and record your inferences.

B. INTEGRATED PROCESS SKILLS

SKILL - 6 FORMULATION OF HYPOTHESIS

ACTIVITY - 1

Marks - 2

In the verification of second law of stretched string (sonameter), the experimenter tabulated the following values.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Weight (g)</th>
<th>Tension</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>9.8</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>19.6</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>29.4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>39.2</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>49.0</td>
</tr>
</tbody>
</table>

The relation between the two variables are called hypotheses. Study the above values and write a hypotheses.

The hypothesis is ..............................
ACTIVITY – 2

The displacement of a train moving at a constant speed on straight tracks are given in table. (uniform motion).

<table>
<thead>
<tr>
<th>t(s)</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>$S_A$(m)</td>
<td>0</td>
<td>20</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>140</td>
<td>160</td>
<td>180</td>
</tr>
</tbody>
</table>

The relation between the two variables are called hypothesis. Study the above values and write a hypotheses.

The hypothesis is ________________.

SKILL – 7  DESIGNING EXPERIMENTAL SET – UP

ACTIVITY – 1

The materials needed to demonstrate the resonance are given. Design the experimental set up.

Materials:
Four pendulums, horizontal support stand and thread.

SKILL – 8  TESTING HYPOTHESIS

ACTIVITY – 1

Given below is a hypothesis “The length of the pendulum is increases the time period is also increases”.

Test the above hypothesis and record the testing steps.
You are provided with simple pendulum, stop clock and scale.
SKILL – 9 REVISION OF HYPOTHESIS

ACTIVITY – 1 

Given below is a hypothesis and few statements relating to the same. Mark ‘S’ the statement that support the hypothesis and ‘N.S’ the statement that does not support the hypothesis. Revise the hypothesis on the basis of the data supplied.

Hypothesis

“All the substances are elements”.

Statements

1. Calcium is an element S
2. Ammonia is compound NS

Revised hypothesis is

SKILL – 10 FORMULATION OF GENERALISATION

ACTIVITY – 1 

Read the following statements carefully and formulate generalisation.

1. Displacement requires both a magnitude and a direction.
2. Velocity requires both magnitude and a direction.
3. Force requires both a magnitude and a direction.
4. Momentum requires both magnitude and a direction.

Generalisation: 

l

iv
ACTIVITY – 2

Read the following statement carefully and formulate generalization.

1. Generation of electricity from water is the most important use of hydro – energy.
2. Almost all the energy resources on the earth derive energy from the sun.
3. Energy generated from the heat of the earth is called geothermal energy.
4. Windmills are operated using the kinetic energy of the wind.

Generalisation: ____________________________.
SKILL – 12 ARRANGING DATA IN A TABULATED FORM

ACTIVITY – 1  
Marks – 2

The velocity of sound in solids of Aluminium, steel, granite, glass and are found that 5100 m/s, 5000 m/s, 6000 m/s, 5000 m/s. Arrange the above data in tabular form by giving suitable heading.

ACTIVITY – 2  
Marks – 2

General formula of methane, ethane, propane, butane, are CH₄, C₂H₆, C₃H₈, C₄H₁₀,.. Arrange the above data in tabular form by giving suitable heading.

SKILL – 13 DRAWING

ACTIVITY – 1  
Marks – 4

You are provided with bean. Draw the ventral structure of the fruit.

SKILL – 14 GRAPHICAL REPRESENTATION

ACTIVITY – 1  
Marks – 4

The amount of water and time taken for boiling are given in the table. Plot a graph by keeping amount of water in x axis and time in y axis.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Amount of water (ml)</th>
<th>Time taken for boiling (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>150</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>200</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>250</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>300</td>
<td>24</td>
</tr>
</tbody>
</table>
SKILL – 15  INTERPRETATION

ACTIVITY – 1
Marks – 4
You are provided the flash card of energy pyramid. Observe carefully and give your interpretation.

Question
1. Give your interpretation on energy pyramid.