APPENDICES
Appendix-A
Class 4th and 5th

Name:     Name of the School:     Class:    Date: 
Section:     Male/ Female     Roll Number:

This question paper is on the topics: food and nutrition, energy and materials. Each question has several options. Put tick mark (√) against choice most appropriate according to you. Read carefully and answer as directed.

Food and Nutrition

1. Study the list of items given below and answer the questions as directed. Tick (√) if you think it is a food, cross (X) if you think it is not a food.

<table>
<thead>
<tr>
<th>No</th>
<th>Substance</th>
<th>Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Insects</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>Seeds</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>Meat</td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td>Water</td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>Glucose</td>
<td></td>
</tr>
<tr>
<td>f.</td>
<td>Flowers</td>
<td></td>
</tr>
</tbody>
</table>

2. Food has important role in your body. Why do you need food? Tick the option most appropriate according to you.
   a. For growth, good health and energy
   b. To have good health
   c. To satisfy hunger
   d. For growth

3. Pulses, cheese, peas, rajma and eggs are called
   a. Energy-giving foods
   b. Body-building foods
   c. Protective foods
   d. Mineral foods

4. Calcium and iron, are examples of
   a. Vitamins
   b. Minerals
   c. Carbohydrates
   d. Proteins

5. Milk is said to be wholesome food because
   a. It contains proteins
   b. It contains a lot of fats
   c. It contains proteins, sugar, fats, minerals and water

6. What happens if a person eats only carbohydrates (in the form of polished rice) for one month? After a month, he
   a. Falls ill with deficiency
   b. Growths thin
   c. Grows fat
   d. Has no change at all

7. Which of the following is present in the bones?
   a. Iron
   b. Calcium
   c. Proteins

8. Where inside your body does the digestion of food first begin?
   a. Mouth
   b. Stomach
   c. Intestines
9. What is the function of stomach?
   a. Filtering of food    b. Giving energy    c. Digesting food    d. Storing food

10. Where inside your body does the breakdown of food finish?
   a. Small intestine    b. Stomach    c. Anus    d. Large intestine

Energy

1. Which of the following is a fossil fuel?
   a. Wood    b. Coal    c. Chicken    d. Wind

2. Which of these is a renewable energy source?
   a. Wind    b. CNG    c. Petrol    d. Diseal

3. Which of the following source of energy will you suggest to your family members to reduce air pollution?
   a. Coal    b. CNG    c. Petrol    d. Kerosene

4. In the following, tick the word which is different from the other 3:
   a. Petrol    b. Diesel    c. Wind    d. Coal

5. Which of the following is a source of energy for man?

6. Tick the most appropriate answer. The source of energy for a tiger is one of the following:
   a. Heat    b. Sun    c. Grass    d. Herbivorous animals like deer's etc
   e. All of the above

7. In a gas stove, LPG gas burns to give heat. Can you explain what gives energy/heat in a solar cooker?

8. Identify one form of energy from the following:
   a. Electrical    b. Force    c. Friction    d. Pressure

9. Do moving objects have energy?
   a. Light energy    b. Solar energy    c. Movement energy    d. Renewable energy

10. Name the form of energy used in a cell used in battery-operated toys.

11. When you exercise well what happens to your energy levels?
    a. Your energy increases    b. Your energy is low    c. don't know

12. The best definition of energy is:
    a. The ability to work
    b. Some thing you can run out of
    c. The power of force
    d. Some thing you need to live

Material

1. A student crumples up a sheet of paper. Which property of the paper has changed?
   a. Colour    b. Weight    c. State    d. Shape
2. Mayank took 20 gram of clay (plasticine) ball and made a clay house out of it. What will be the weight of the house he made?
   a. Remains the same = 20 grams
   b. Increases = 22 grams
   c. Decreases = 18 grams
   d. Increases by double = 40 grams

3. Water was kept in a freezer container of a refrigerator. What happens to the water present in the container?
   a. There is freezing
   b. There is melting
   c. There is new change
   d. There is change in vapour

4. When we put clothes in the open for some time the clothes get dried. Where does the water go?
   a. It goes into the air as very small bits of water
   b. It goes into the ropes
   c. It just dries up and no longer exists
   d. It changes into oxygen and hydrogen in the air

5. In which bowl does the water evaporate the fastest? Tick the correct answer
   a. Bowl in a refrigerator  b. Bowl in the sun  c. Bowl inside the room

6. When water boils in a container. There are large bubbles in the water. What are the bubbles made of?

7. What are clouds made up of?
   a. Cold water droplets  b. Cotton  c. Sea Water  d. Ice

8. What is steam made up of?

9. Hot air rises up because
   a. Hot air is light  b. Hot air is heavy

10. An inflated balloon does not fit into a small pencil box, because air inside the balloon
    a. has weight  b. takes up space  c. has fixed shape

11. Which of the following is not a solid?

12. Which of the following has a fixed volume?

13. Which of the following is not a material
    a. Fire  b. Water  c. Compressed Natural Gas  d. Milk
Appendix-B
Class 6th and 7th

Name:
Name of the School: Class: Date:
Section: Male/ Female Roll Number:

This question paper is on the topics: food and nutrition, energy and materials. Each question has several options. Put tick mark (√) against choice most appropriate according to you. Read carefully and answer as directed.

**Food and Nutrition**

1. What are the nutrients present in given food items? Put a tick (√) against the nutrients you think these food items have in them.

<table>
<thead>
<tr>
<th>Food Items/Nutrients</th>
<th>Fats</th>
<th>Carbohydrates</th>
<th>Proteins</th>
<th>Minerals</th>
<th>Vitamins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chana</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Pulses, cheese, and eggs are called
   a. Energy-giving foods
   b. Body-building foods
   c. Protective foods
   d. Mineral foods

3. Calcium, iron, phosphorus and iodine are examples of
   a. Vitamins
   b. Minerals
   c. Carbohydrates
   d. Proteins

4. Nina ate roti, vegetables and potatoes, for the dinner, what is missing in her food?
   a. Proteins
   b. Fat
   c. Carbohydrates
   d. Fibre

5. Is water food for plants and animals?
   a. Yes, because water is taken in by plants and animals
   b. Yes, because water is necessary for plants and animals
   c. No, because liquids are not food for plants and animals
   d. No, because water does not provide energy for plants and animals.

6. What helps the chemical breakdown of foods in the digestive organs?
   a. Salivary glands in the mouth/ stomach juice/ pancreas and gall bladder
   b. Water/ acidic drinks/salt
   c. Mouth/teeth/intestine/stomach organs
   d. Green leafy vegetables/ hajmola/ spices

7. After digestion of your lunch, where do the digested substances go?
   a. They pass from the stomach to the intestine
   b. They are eliminated finally
   c. They remain in the stomach
   d. They are absorbed by blood

8. Will our digestive system need energy to digest the food we eat?
   a. Yes
   b. No
   c. Not sure

9. Where inside your body does the breakdown of food finish?
   a. Small intestine
   b. Stomach
   c. Anus
   d. Large intestines
Energy

1. Which form of energy changes the water from a liquid to a gas as it boils?
   a. Sound  
   b. Mechanical  
   c. Light  
   d. Heat

2. What kind of energy do all moving objects have?
   a. Light energy  
   b. Solar energy  
   c. Kinetic energy  
   d. Renewable energy

3. In which of the following examples, energy is used the most?
   a. Filling water in a bucket from running tap
   b. Watching a match in the play ground
   c. Drinking a glass of water
   d. Heating a room by a room heater

4. Identify one form of energy produced in human body.
   a. Light energy  
   b. Chemical energy  
   c. Friction  
   d. Pressure

5. Plants prepare (synthesize) their own food in the presence of sun using carbon dioxide from the air and water from the soil. Since the preparation (synthesis) of food occurs in the presence of sunlight, it is called photosynthesis. Which energy is captured to prepare food for plants?
   a. Heat energy  
   b. Electrical energy  
   c. Light energy  
   d. All the above

6. The best definition of energy is
   a. The ability to work  
   b. Some thing you can run out of  
   c. The power of force  
   d. Some thing you need to live

7. Picture of a solar cooker and a gas stove
   a. Sun heats both A & B  
   b. A source of energy heats both A & B  
   c. Gas heats both A & B  
   d. Some chemical heats both A & B.

8. Which of the following is a source of energy for man?
   a. Car  
   b. Television  
   c. Drinking water  
   d. Food

9. Pick the most appropriate source of energy for a tiger from the following.
   a. Heat  
   b. Sun  
   c. Grass  
   d. Herbivorous animals like deer’s etc  
   e. All of the above
10. Which type of energy in petrol is transformed into movement in a motorcycle engine?
   a. Chemical energy
   b. Magnetic energy
   c. Sound energy
   d. Electrical energy

11. Which of these energy changes takes place in a flashlight
   a. Heat to light
   b. Chemical to electrical to light
   c. Electrical to light to heat
   d. Electrical to chemical to light

**Material**

1. Sheela took 50 grams of water in a katori (container) and kept it in the refrigerator. After 2 hours she saw that water had frozen to ice. Which of the following is correct?
   a. Weight of the frozen ice is 50 grams
   b. Weight of the ice is less than 50 grams
   c. Weight of the ice is more than 50 grams
   d. Not sure

2. If you dissolve 200 grams of sugar in 1000 grams of water, what will be the total weight of water after you stir in the sugar into it?
   a. 1000 grams
   b. 1200 grams
   c. little above 1000 grams
   d. little less than 1000 grams

3. In which of the following changes no new substances are formed after the change?
   a. Melting of butter
   b. Turning milk to curd
   c. Baking a cake
   d. Ripening of a mango

4. Which of the following is a chemical change?
   a. Melting of an ice
   b. Dissolving of sugar in water
   c. Boiling of an egg
   d. Crushing of a can

5. When an iron nail gets rusted, iron oxide is formed
   a. without any change in the weight of the nail
   b. with decrease in the weight of the nail
   c. with increase in the weight of the nail
   d. without any change in colour or weight of the nail

6. Water droplets appear on the outer surface of ice-cold Pepsi or Coke bottle? Where has the water on the outside of the bottle come from?
   a. The water from the bottle comes out
   b. The coldness causes oxygen and hydrogen in the air to form water
   c. Water in the air sticks to the cold bottle
   d. The coldness comes through the bottle and turns water

7. Why does water stick to the outside of ice-cold Pepsi or Coke bottle? It happens because of
   a. Condensation of water vapours
   b. Evaporation
c. Transpiration
d. Melting

8. Water and water vapours are alike in one of the following ways. Identify it.
   a. Both do not have a fixed shape
   b. Both have a fixed volume
   c. Both are closely packed
   d. Both have fixed size

9. Identify an example of a substance which changes its shape but not its volume at normal room temperature and pressure (without changing temperature and pressure).
   a. Oxygen gas  
   b. Liquid  
   c. Solid  
   d. Semi solid

10. Which of the following materials can be used again after the processes of melting and moulding?
    a. Coal  
    b. Aluminium  
    c. Cotton  
    d. Cement

11. Which of the following is not a material?
    a. Fire  
    b. Water  
    c. Compressed Natural Gas  
    d. Milk
Appendix-C
Class 8th

Name:
Name of the School: Class: Date:
Section: Male/ Female Roll Number:

This question paper is on the topics: food and nutrition, energy and materials. Each question has several options. Put tick mark (✓) against choice most appropriate according to you. Read carefully and answer as directed.

Food and Nutrition

1. Why do we eat food? Choose options most accurate according to you.
   a. To give energy
   b. To allow the body to function
   c. To encourage tissue growth and repair
   d. To feed the body

2. Vitamins and minerals are usually measured in which of the following measurements
   a. Kilograms
   b. Milligrams
   c. Grams
   d. Milliliters

3. What helps the chemical breakdown of foods in the digestive organs?
   a. Salivary glands in the mouth/ digestive juices in stomach, pancreas and gall bladder
   b. Water/ acidic drinks/salts
   c. Mouth/teeth/intestine/stomach
   d. Green leafy vegetables/ hajmola/ spices

4. Identify food items from the list which are made of cells?
   a. Oils
   b. Eggs
   c. Biscuits
   d. Butter

5. A man is injured in a car accident and taken to hospital in an unconscious condition. Since he cannot eat, he was put on an intravenous drip of glucose and saline (that is, a needle is inserted into a vein through which the solutions are introduced). Then can you say that he is taking in food?
   a. Yes, he is taking food
   b. Not taking food
   c. Not sure

6. What is the function of stomach?
   a. Filtering of food
   b. Giving energy
   c. Digesting food
   d. Storing food

7. Where inside your body does the breakdown of food finish?
   a. Small intestine
   b. Stomach
   c. Anus
   d. Large intestines

8. What is meant by digestion of food?
   a. Breaking down of food in the stomach and intestine and broken food entering into blood
   b. Breaking down of food into pieces in stomach partially.
   c. Food going from mouth to oesophagus, stomach, intestines and anus.
   d. Filtering of useful parts in the stomach

9. Suppose you have not eaten for 2 or 3 days. What will have happened in your blood?
   a. There will be no nutrients in the blood
   b. More or less the same quantity of nutrients will remain
   c. There will be fewer nutrients
10. Reason for your answer given above is:
   a. The nutrients are transported by blood but are not consumed or expended.
   b. The nutrients will already have been expelled through the anus.
   c. The nutrients are transported by the blood to cells for these functions.
   d. Not eating does not influence the nutrients in blood.
   e. Because the blood has distributed the nutrients through the body, leaving them in the different organs.
   f. Because the nutrients pass from the storage organs to the blood.

11. What is the sequence of process of digestion?
   Pick the correct sequence of process of digestion from the following.
   a. Breaking into soluble particles, releasing energy and swallowing
   b. Breaking into simple substances, absorption into blood stream, (release of energy) utilization of simple substances by the body.
   c. Ingestion (food intake), breaking into simple substances, absorption of simple substances, assimilation (Utilization in the body) and removal of undigested material (ejection)
   d. Absorption of simple substances, breaking into simple substance, ingestion (intake of food) and egestion (removal of undigested material)

12. How our body structures- such as do muscles, bones, and skin – grow?
   a. Our body structures grow as the particles (molecules) from food- including carbohydrates, fats, and proteins- accumulate inside our body unchanged.
   b. Our body structures grow as the smallest particles (atoms) from food are rearranged to form new particles (molecules) that become our body structures.
   c. Our body structures grow as we convert CO₂ to form body structures.
   d. Our body structures grow as vitamins and minerals are added to our body structures unchanged.

**Energy**

1. Which of these forms of energy is produced in human body?
   a. Light energy  b. Heat energy  c. Pressure  d. Force

2. Which of these energy changes takes place in a flashlight
   a. Heat to light
   b. Chemical to electrical to light and heat
   c. Electrical to light to heat

3. Which form of energy is produced when a bell rings?
   a. Magnetic  b. Electrical  c. Sound  d. Light

4. Which form of energy changes the water from a liquid to a gas as it boils?
   a. Sound  b. Mechanical  c. Light  d. Heat

5. In the following, tick the word which is different from the other 3 coal, petrol, wind diesel:
   a. Petrol
   b. Diesel
   c. Wind
   d. Coal

6. The energy which is not derived from the sun is _______.
   a. Bio-mass
   b. Fossil fuels
   c. Nuclear energy
   d. Wind energy
7. A solar cell converts _______.
   a. Heat energy into electrical energy
   b. Solar energy into electrical energy
   c. Heat energy into light energy
   d. Solar energy into light energy

8. A substance which produces a lot of heat on burning is called _______.
   a. oxidizing agent
   b. biogas
   c. biomass
   d. fuel

9. Chemical reactions triggered by ________ transform organic material into petroleum.
   a. Solar Energy
   b. Hydroelectric
   c. Elevated Temperatures
   d. Decomposition

10. Burning of which of the following fuels produces the least amount of carbon dioxide per unit of energy?
    a. Coal
    b. Oil
    c. Natural gas
    d. All of these produce the same amount of carbon dioxide

11. Which of the following problems is associated with the burning of coal?
    a. Acid rain
    b. Carbon dioxide emission
    c. Ash
    d. All of these

12. Which of the following energy sources does not produce carbon dioxide?
    a. Oil
    b. Uranium
    c. Coal
    d. Natural gas

13. Solar energy stored in material such as wood, grain, sugar, and municipal waste is called
    ________
    a. Fossil fuels
    b. Biomass
    c. Thermal energy
    d. Natural gas

Material

1. Why are cooking pots and pans made up of metals, because metals
   a. are good conductors of heat
   b. do not break
   c. are easier to clean
   d. are good conductor of electricity

2. Which of the following metals is naturally found within our body?
   a. Iron
   b. Silver
   c. Uranium
   d. Platinum

3. The route through which the metals enter our body is
   a. From air through breathing
   b. From water we drink
   c. Through the mother during birth
   d. From soil through plants

4. Which of the following materials can be used again after processes of melting and moulding?
   a. Coal
   b. Cotton
   c. Copper
   d. Cement

5. Water droplets appear on the outer surface of ice-cold Pepsi or Coke can? Where has the water on the outside of the bottle come from?
   a. The water from the bottle comes out
   b. The coldness causes oxygen and hydrogen in the air to form water
   c. Water in the air sticks to the cold bottle
   d. The coldness comes through the bottle and turns water
6. In which of the following changes new substances are formed after the change?
   a. Water evaporating to clouds
   b. Digesting food
   c. Water changing to ice
   d. Heating wax

7. A student mixes two different liquids together. After mixing the liquids, a solid substance forms. The student claims that a chemical change has occurred. Is the student correct and why?
   a. Yes, because a solid is always formed during a chemical change.
   b. Yes, because the solid cannot be turned back into the starting liquids.
   c. Yes, because the solid is a new substance that was formed during a chemical change.
   d. Yes, because a chemical change always happens when two liquids are mixed together.

8. Which of the following statements describes chemical reactions?
   a. Chemical reactions involve liquids only.
   b. Chemical reactions always produce a gas.
   c. Chemical reactions always involve a solid and a liquid.
   d. Chemical reactions occur between solids, liquids, or gases.

9. Liquids and solids are alike in one of the following ways?
   a. Both have a fixed shape
   b. Both have a fixed volume
   c. Both are closely packed
   d. Both have fixed size

10. A substance which changes its shape but not its volume

11. Which of the following has a fixed volume?

12. It has weight but no shape and no volume
    a. Gas          b. Liquid          c. Solid
# Appendix-D

## One Way ANOVA for Food and Nutrition

<table>
<thead>
<tr>
<th>Achievement Score on Food &amp; Nutrition</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 (Class 4 &amp; 5)</td>
<td>401</td>
<td>44.7905</td>
<td>11.49352</td>
<td>2</td>
<td>18.554</td>
<td>.000</td>
</tr>
<tr>
<td>Stage 2 (Class 6 &amp; 7)</td>
<td>360</td>
<td>47.8417</td>
<td>19.95719</td>
<td>954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 3 (Class 8)</td>
<td>196</td>
<td>53.1939</td>
<td>14.96571</td>
<td>956</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>957</td>
<td>47.6594</td>
<td>16.13285</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Achievement Score on Food & Nutrition

**Tukey HSD\(^{a,b}\)**

<table>
<thead>
<tr>
<th>STAGE_CD</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 (Class 4 &amp; 5)</td>
<td>401</td>
<td>1 44.7905</td>
</tr>
<tr>
<td>Stage 2 (Class 6 &amp; 7)</td>
<td>360</td>
<td>1 47.8417</td>
</tr>
<tr>
<td>Stage 3 (Class 8)</td>
<td>196</td>
<td>1 53.1939</td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td>.054 1.000</td>
</tr>
</tbody>
</table>

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 289.196.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
### Appendix-E

**One Way ANOVA for Energy**

<table>
<thead>
<tr>
<th>Achievement Score on Energy</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 (Class 4 &amp; 5)</td>
<td>401</td>
<td>47.3392</td>
<td>16.02996</td>
<td>2</td>
<td>44.071</td>
<td>.000</td>
</tr>
<tr>
<td>Stage 2 (Class 6 &amp; 7)</td>
<td>360</td>
<td>60.8806</td>
<td>28.20813</td>
<td>954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 3 (Class 8)</td>
<td>196</td>
<td>60.0102</td>
<td>16.68163</td>
<td>956</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>957</td>
<td>55.0282</td>
<td>22.49143</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Achievement Score on Energy

Tukey HSD

<table>
<thead>
<tr>
<th>STAGE_CD</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 (Class 4 &amp; 5)</td>
<td>401</td>
<td>1.000</td>
</tr>
<tr>
<td>Stage 2 (Class 6 &amp; 7)</td>
<td>196</td>
<td>60.0102</td>
</tr>
<tr>
<td>Stage 3 (Class 8)</td>
<td>360</td>
<td>60.8806</td>
</tr>
</tbody>
</table>

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 289.196.
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
Appendix-F
One Way ANOVA for Matter

<table>
<thead>
<tr>
<th>Achievement Score on Matter</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 (Class 4 &amp; 5)</td>
<td>401</td>
<td>46.1022</td>
<td>17.35042</td>
<td>2</td>
<td>73.072</td>
<td>.000</td>
</tr>
<tr>
<td>Stage 2 (Class 6 &amp; 7)</td>
<td>360</td>
<td>59.7472</td>
<td>23.55862</td>
<td>954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 3 (Class 8)</td>
<td>196</td>
<td>64.7449</td>
<td>17.83388</td>
<td>956</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>957</td>
<td>55.0533</td>
<td>21.45717</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tukey HSD

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 289.196.
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
### Appendix-G

**Difficulty Value – Food and Nutrition**

<table>
<thead>
<tr>
<th>Difficulty Value</th>
<th>Item No. Class-4th</th>
<th>Item No. Class-5th</th>
<th>Item No. Class-6th</th>
<th>Item No. Class-7th</th>
<th>Item No. Class-8th</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-.20</td>
<td>1, 6, 15</td>
<td>1, 6, 15</td>
<td>6, 7, 9, 11</td>
<td>6, 7</td>
<td></td>
</tr>
<tr>
<td>0.21-0.40</td>
<td>8, 9, 10, 11</td>
<td>8, 9, 10, 11</td>
<td>4, 5, 8</td>
<td>5, 9, 11</td>
<td>8</td>
</tr>
<tr>
<td>0.41-0.60</td>
<td>2, 4, 5, 12, 13, 14</td>
<td>2, 4, 5, 13</td>
<td>10</td>
<td>4</td>
<td>2, 7, 1, 11</td>
</tr>
<tr>
<td>0.61-0.80</td>
<td>-</td>
<td>3, 7, 12, 14</td>
<td>-</td>
<td>8, 10</td>
<td>3, 5, 6, 9, 10</td>
</tr>
<tr>
<td>0.81-1.00</td>
<td>3, 7</td>
<td>-</td>
<td></td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

### Difficulty Value – Energy

<table>
<thead>
<tr>
<th>Difficulty Value</th>
<th>Item No. Class-4th</th>
<th>Item No. Class-5th</th>
<th>Item No. Class-6th</th>
<th>Item No. Class-7th</th>
<th>Item No. Class-8th</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-.20</td>
<td></td>
<td>6, 7</td>
<td>6</td>
<td>2, 12</td>
<td></td>
</tr>
<tr>
<td>0.21-0.40</td>
<td>2, 7, 8, 10, 11, 12</td>
<td>10, 11, 12</td>
<td>2, 4</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>0.41-0.60</td>
<td>1, 3, 9</td>
<td>7, 8, 9</td>
<td>5, 9, 11, 3</td>
<td>2, 3, 4, 5, 11, 9</td>
<td>7, 11, 13</td>
</tr>
<tr>
<td>0.61-0.80</td>
<td>4, 5, 6</td>
<td>3, 5, 6</td>
<td>10</td>
<td>10, 3</td>
<td>1, 3, 8, 9, 10</td>
</tr>
<tr>
<td>0.81-1.00</td>
<td>1, 4</td>
<td>1</td>
<td>1</td>
<td>4, 5</td>
<td></td>
</tr>
</tbody>
</table>

### Difficulty Value – Matter

<table>
<thead>
<tr>
<th>Difficulty Value</th>
<th>Item No. Class-4th</th>
<th>Item No. Class-5th</th>
<th>Item No. Class-6th</th>
<th>Item No. Class-7th</th>
<th>Item No. Class-8th</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-.20</td>
<td>13</td>
<td>13</td>
<td>1, 6</td>
<td>1, 6, 9</td>
<td></td>
</tr>
<tr>
<td>0.21-0.40</td>
<td>4, 6, 7, 11, 12</td>
<td>7, 12</td>
<td>3, 4, 5, 8, 9, 10, 11</td>
<td>2, 5</td>
<td>3, 5, 6</td>
</tr>
<tr>
<td>0.41-0.60</td>
<td>1, 2, 8, 10</td>
<td>1, 2, 4, 8, 10</td>
<td>2, 7</td>
<td>3, 4, 8, 11</td>
<td>7</td>
</tr>
<tr>
<td>0.61-0.80</td>
<td>3, 5, 9</td>
<td>5, 9</td>
<td>7, 10</td>
<td>2, 4, 8, 9, 11</td>
<td></td>
</tr>
<tr>
<td>0.81-1.00</td>
<td>3</td>
<td></td>
<td></td>
<td>1, 10, 12</td>
<td></td>
</tr>
</tbody>
</table>