**Grade 6** 



## PROVINCIAL DEPARTMENT OF EDUCATION - NORTH WESTERN PROVINCE

## Second Term Test 2018 SCIENCE

Time: 2 hours

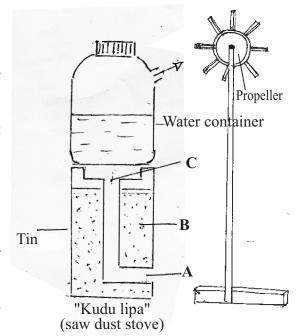
| Na  | Name / Index No.  |                 |                   |                               |                         |        |                          |
|---|---|-----------------|-------------------|-------------------------------|-------------------------|--------|--------------------------|
|   |   |                 | Par               | t I                           |                         |        |                          |
| •   | Answer all questions  | in Part         | 1.                |                               |                         |        |                          |
| •   | Two marks for each o  | <b>luestion</b> | . Underline the r | nost s                        | uitable answer f        | or que | estion 1 to question 15. |
| 01.   | The process of produc   | ing ener        | gy by reacting st | ored f                        | ood with Oxyger         | in the | Organisms is,            |
|   | (1) Growth  | (2)             | Reproduction      | (3)                           | Respiration             | (4)    | Nutrition                |
| 02.   | The ability of an object to the drawn into thin sheets without breaking by hammering is,        |                 |                   |                               |                         |        |                          |
|   | (1) Brittleness   | (2)             | Malleability      | (3)                           | Hardness                | (4)    | Ductility                |
| 03.   | The place of a magnet where the magnetic power more concentrated is,                            |                 |                   |                               |                         |        |                          |
|   | (1) North Pole  |                 |                   | (2)                           | South Pole              |        |                          |
|   | (3) The Center of the magnet  |                 |                   | (4)                           | Two poles of the magnet |        |                          |
| 04. The water that dissolved many salts is,                   |   |                 |                   |                               |                         |        |                          |
|   | (1) Brackish water  | (2)             | Fresh water       | (3)                           | Marine water            | (4)    | Muddy water              |
| 05.   | The answer which contains examples only for fossil fuel is,                                     |                 |                   |                               |                         |        |                          |
|   | (1) Coal, Diesel, Kerosine  |                 | (2)               | ) Coal, Kerosine, Coconut oil |                         |        |                          |
|   | (3) Coal, Diesel, Coconut oil   |                 | (4)               | Coal, Kerosine, Diesel        |                         |        |                          |
| 06. The percentage of water that can be consumed is,          |   |                 |                   |                               |                         |        |                          |
|   | (1) 1.01%   | (2)             | 0.01%             | (3)                           | 0.1%                    | (4)    | 0.001%                   |
| 07. The matter that can be considered as an energy source is, |   |                 | e is,             |                               |                         |        |                          |
|   | (1) Coconut oil   | (2)             | Coal              | (3)                           | Diesel                  | (4)    | Fossil Fuel              |
| 08.   | Four Statements are given below that have been expressed by a child about few energies. What is |                 |                   |                               |                         |        |                          |
|   | the correct statement among them?   |                 |                   |                               |                         |        |                          |
|   | (1) There are benefits and harms of light.  |                 |                   |                               |                         |        |                          |
|   | (2) There are only benefits of sounds.  |                 |                   |                               |                         |        |                          |
|   | (3) There are only benefits of light.   |                 |                   |                               |                         |        |                          |

(4) Light and sound are the useful energies for us.

|     | (1) Ductility (2) Malleability (3) Softness (4) Elasticity                                      |  |  |  |  |
|-----|---|--|--|--|--|
| 10. | What is the Parallel light beam?  |  |  |  |  |
|     | (1) (2) (3) (4)   |  |  |  |  |
|     |   |  |  |  |  |
|     | $\longrightarrow$   |  |  |  |  |
| 11. | The most suitable energy to produce electricity in Sri Lanka is,                                |  |  |  |  |
|     | (1) Hydro power and Nuclear energy (2) Tidal Waves and Solar energy                             |  |  |  |  |
|     | (3) Solar energy and Wind energy (4) Geothermal energy and Nuclear energy                       |  |  |  |  |
| 12. | What is the correct statement about water?  |  |  |  |  |
|     | (1) Rain water contains salts.  |  |  |  |  |
|     | (2) Sea water is salt in taste due to dissolve many salts in it.                                |  |  |  |  |
|     | (3) The amount of salts dissolved in marine water is less than the amount of salts dissolved in |  |  |  |  |
|     | brackish water.   |  |  |  |  |
|     | (4) No any salts dissolved in fresh water.  |  |  |  |  |
| 13. | The substance which can be used to identify the Carbon dioxide gas in exhailed air is,          |  |  |  |  |
|     | (1) Limestone (2) Copper Sulphate   |  |  |  |  |
|     | (3) Cobolt chloride (4) Colourless lime water   |  |  |  |  |
| 14. | Why are plants known as autotrophs?   |  |  |  |  |
|     | (1) Due to absorb food needed from the soil.  |  |  |  |  |
|     | (2) Due to Contain pigments called chlorophyll in the plant.                                    |  |  |  |  |
|     | (3) Due to supply food for biosphere.   |  |  |  |  |
|     | (4) Due to produce their own food by them selves.   |  |  |  |  |
| 15. | What is not a movement of plants?   |  |  |  |  |
|     | (1) Shrinking of leaves of tamarind when dark falls.  |  |  |  |  |
|     | (2) Shrinking of leaves of Mimosa when stimulus is touched.                                     |  |  |  |  |
|     | (3) Dying of a plant due to without water.  |  |  |  |  |
|     | (4) Growing of shoot apex towards the light.  |  |  |  |  |
| •   | Select the most suitable answer from the words given in brackets and fill the blanks from       |  |  |  |  |
|     | question 16 to 20.  |  |  |  |  |
|     | (Autotrophs / Heterotrophs / Matter / Transparent / Sound / Energy)                             |  |  |  |  |
| 16. | The things that occupy space and have a mass are  |  |  |  |  |
| 17. | The Organisms which depend directly or indirectly on plants are                                 |  |  |  |  |
| 18. | The media which light travels in regular manner is  |  |  |  |  |
| 19. | A vibration of an object causes to produce a  |  |  |  |  |
| 20. | The ability to do a work is   |  |  |  |  |
|     |   |  |  |  |  |

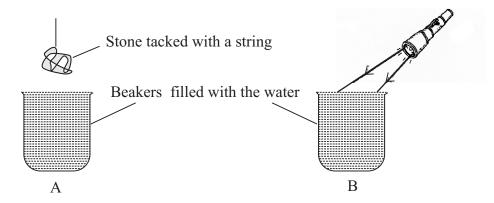
09. The Physical Property of the powder is,

- First question is compulsory. Answer only for four (4) questions from other five questions.
- 16 marks have been given for first question and 11 marks for each others.
- 01.A Following image shows a setup prepared to prove that a work can be done by using energy.
  - (1) Write the letter of the place of "Kudu lipa" / saw dust stove where enters the fire? (01m.)
  - (2) How can light the "Kudu lipa" / saw dust stove? (01m.)
  - (3) The fuel used in Kudu lipa / saw dust stove is shown in letter "B". Write the most suitable two things for "B". (02m.)
  - (4) Write two observations when boiling water in the Container. (02m.)
  - (5) Mention two energy sources that have been used in this system. (02m.)



Part II

- B (1) Mention two physical states of water which can be identified in this process. (02m.)
  - (2) What is the physical property of metal used in producing the tin? (01m.)
  - (3) Write two equipments that need to fix to this propeller to produce electricity? (02m.)
  - (4) Write two methods can be used to increase the speed of the propeller without changing its initial position. (02m.)
  - (5) Give an example for a instance of wastage of energy in your school. (01m.)
- 02. Two simple activities are given below which have done to compare the characteristics between matter and energy.

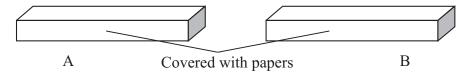


These beakers are identical and they are completely filled with water.

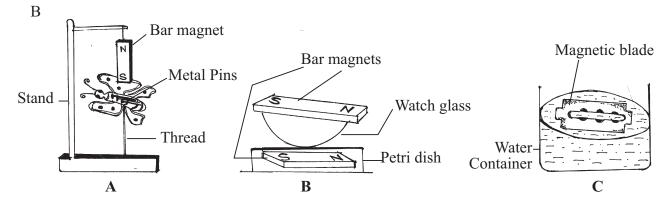
**Activity:** The stone is gradually sunken in the water in A container.

The light of the torch is directed to the water in B Container.

- (1) Mention the changes happened if take place of the water levels of A and B containers when starting of these activities. (02m.)
- (2) Write the reasons for each observations. (02m.)
- (3) Write the conclusion can be obtained from those observations. (02m.)
- (4) Write two examples for each matter and energy considering the stuffs used for this activity. (02m.)
- (5) Write another characteristics of matter except you identified before. (01m.)
- (6) Draw a labeled diagram of an activity which can be done to identify the character mentioned in question 5. (02m.)
- 03. A Below diagrams show two identical metal bars completely covered with papers. One is a normal bar and other one is a magnetic bar.



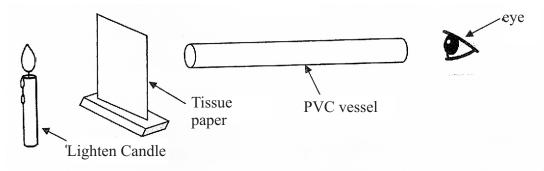
- (1) Write how to identify A and B separately by using a bar magnet in two steps. (02m.)
- (2) Draw a labeled diagram of an activity which can be done to identify the poles of the magnetic metal bar. (02m.)
- (3) How can you identified its north and south poles? (02m.)



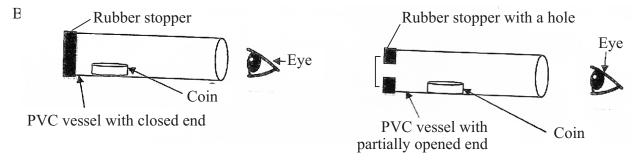
(1) Select and write the suitable actives from aboves which involve to prove below characteristics of magnets. (02m.)

| Characteristics of magnets                                   | Letter relevant to the activity |
|--|---------------------------------|
| 1. Direct to the north and south when in rest.               |                                 |
| 2. Attract the iron or iron mixed alloys.                    |                                 |
| 3. Repulsion of equal poles and attraction of unequal poles. |                                 |

- (2) a) What is the observation can be obtained when watch glass rotates slowly on the Petri dish? (01m.)
  - b) What is the relevant conclusion for it? (01m.)
- (3) Write examples for the equipment made by magnets which come across in following places.
  - a) Laboratory ...... b) Home ...... (02m.)
- 04. Following diagram shows a simple activity based on light and vision.



- A (1) What is the observation can be obtained when look at the candle flame through the P.V.C. vessel? (01m.)
  - (2) Write the reason for that observation. (01m.)
  - (3) According to the traveling of light in which type of medium tissue paper is an example for? (01m.)
  - (4) a) What will be the observation when replace tissue paper by a Cardboard sheet? (01m.)
    - b) What is the reason for that? (01m.)



- (1) When looking at the coin through the vessel in activity 'X'.
  - a) What is the observation? (01m.)
  - b) What is the reason for observation? (01m.)
- (2) When looking at the coin through the vessel in activity 'Y'.
  - a) What is the observation? (01m.)
  - b) What is the reason for observation? (01m.)
- (3) What is the conclusion can be obtained according to those observations? (01m.)
- (4) Write an instance where light use in medical field. (01m.)

- O5. Following diagrams shows the two musical instrument which have made by the students of grade 6.

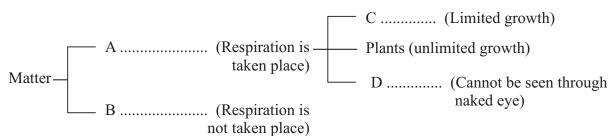
  Tin The whistle which drive away the cattle

  Coconut leaf whistle

  Thread P Q

  (1) Mention the methods have to use to produce sound from P and Q instruments. (02m.)

  (2) A students says that above instruments are sources of sounds. What is the reason for that? (01m.)
  - (3) a) What is the observation you can obtain when put some styrofoam balls on the bottom of the tin after it starts to function? (01m.)
    - b) What is the reason for above observation? (01m.)
  - (4) a) Write the names of another two instruments that you have made in your class room. (01m.)
    - b) What are the stuffs you used to produce those instruments? (02m.)
  - (5) What is the name of sound produced when a musical instrument play rhythmically? (01m.)
  - (6) a) What is the name of sound produced a musical instrument donot play rhythmically? (01m.)
    - b) Give an example for above types of sound in the environment. (01m.)
- 06. Following shows the chart of classification of matter.
  - (1) Fill in the blanks using the words in brackets (Energy, Plants, Animals, Non-living things, Living things, Micro-organisms) (04m.)



- (2) Write an example for "D". (01m.)
- (3) Write the name of the instrument that have to use to observe "D". (02m.)
- (4) Reproduction can be observed in 'A'.
  - a) What is meant by reproduction? (01m.)
  - b) What is the benefit earned for organisms by reproduction. (01m.)
- (5) What is the function done by plants for the existence of biosphere? (01m.)
- (6) Which source given energy for that process? (01m.)

| Grade 6   |       | Answer Sheet - Part I   |                       | SCIENCE            |  |  |
|---|-------|---|-----------------------|--------------------|--|--|
| 01.(3) 02.(2)   |       | 2. (2) 03. (4) 04. (3) 05. (1) 06. (2) 07. (4)  | 08. (1) 09. (3)       | 10. (2)            |  |  |
| 11.   | Light | rays 12. Fossil fuel 13. Fresh water 14.  | Precipitation         | 15. Energy         |  |  |
| 16. Matter 17. Heterotrophs 18. Translucent 19. Sound |       |   | und                   | 20. Autotrophs     |  |  |
| Part II   |       |   |                       |                    |  |  |
| 01.A  |       | Place A  Putting fire from the Place A  | (01m.)                |                    |  |  |
|   | (2)   | Putting fire from the Place A Saw dust & rice bran  | (01m.)                |                    |  |  |
|   | (3)   |   | (02m.)                |                    |  |  |
|   | (4)   | Emitting steam & rotating the propeller   | (02m.)                |                    |  |  |
|   | (5)   | Bio mass & steam (don't give marks for examples)  | (02m.)                |                    |  |  |
|   | В     | (1) Liquid & Gases  | (02m.)                |                    |  |  |
|   | (2)   | Malleability or hardness  | (01m.)                |                    |  |  |
|   | (3)   | A motor & a bulb  | (02m.)                |                    |  |  |
|   | (4)   | Increase the amount of fans of the propeller and Broad the size                                     | •                     | opeller. (02m.)    |  |  |
|   | (5)   | The correct answers   | (01m.)                |                    |  |  |
| 02.   | (1)   | A Over flow the water of container / Decrease the volume of   | water of A container. | (01m.)             |  |  |
|   |       | B Do not overflow the water of B container. / Do not decrea (01m.)                                  | se the volume of wat  | er of B Container. |  |  |
|   | (2)   | A Stone / Mater has occupied the space in A.  | (01m.)                |                    |  |  |
|   |       | B Light / Energy has not occupied the space in B.   | (01m.)                |                    |  |  |
|   | (3)   | A stone is mater & occupy space   | (01m.)                |                    |  |  |
|   |       | B Light is an energy & do not occupy space  | (01m.)                |                    |  |  |
|   | (4)   | Suitable answer   | (01m.)                |                    |  |  |
|   | (5)   | Have a mass   | (01m.)                |                    |  |  |
|   | (6)   | Correct diagram of the setup.   | (02m.)                |                    |  |  |
| 03.A  | (1)   | 1st step - Carrying the magnet along the covered metal bars.  | (01m.)                |                    |  |  |
| . ,   |       | 2nd step - Every place of the normal metal bar attract to the magnet. only one pole of the magnetic |                       |                    |  |  |
|   |       | metal bar is attracted and other pole is repelled.  | (01m.)                |                    |  |  |
|   | (2)   | Correct answer  | (02m.)                |                    |  |  |
|   | (3)   | Correct answer  | (02m.)                |                    |  |  |
| В   | (1)   | 1. C  | (01m.)                |                    |  |  |
|   |       | 2. A  | (01m.)                |                    |  |  |
|   |       | 3. B  | (01m.)                |                    |  |  |
|   | (2)   | a) suitable answer (01m.)   |                       |                    |  |  |
|   |       | h) suitable answer (01m)  |                       |                    |  |  |

| Grade 6  |     | Answer Sheet - Part II  | SCIENCE                    |  |
|--|-----|---|----------------------------|--|
| 04.A   | (1) | Flame of the candle cannot be clearly seen.   | (01m.)                     |  |
|  | (2) | Light travels in irregular manner   | (01m.)                     |  |
|  | (3) | Translucent media   | (01m.)                     |  |
|  | (4) | a) Flame of the candle cannot be seen.  | (01m.)                     |  |
|  |     | b) Light do not travel across the cardboard.  | (01m.)                     |  |
| В  | (1) | a) The coin cannot be seen.   | (01m.)                     |  |
|  |     | b) Due to light don't fall on to the coin.  | (01m.)                     |  |
|  | (2) | a) The coin can be seen.  | (01m.)                     |  |
|  |     | b) Due to light fall on to the coin.  | (01m.)                     |  |
|  | (3) | Light is needed to see  | (01m.)                     |  |
|  | (4) | Correct answer  | (01 <b>m</b> .)            |  |
| 05.  | (1) | p - stretch the thread from top to bottom of P.                                     | (01m.)                     |  |
|  |     | q - blow the terminal of P by mouth   | (01m.)                     |  |
|  | (2) | Due to sound producing object   | (01m.)                     |  |
|  | (3) | a) Balls of styrofoam moving here and there.  | (01m.)                     |  |
|  |     | b) Due to Vibration of the bottom of the tin.                                       | (01m.)                     |  |
|  | (4) | a) Suitable answer  | (01m.)                     |  |
|  |     | b) Suitable answer  | (02m.)                     |  |
|  | (5) | Music   | (01m.)                     |  |
|  | (6) | a) Noise  | (01m.)                     |  |
|  |     | b) Suitable answer  | (01 <b>m</b> .)            |  |
| 06.  | (1) | A - living things B - Non living things C - Animals                                 | D - Micro-oganisims (04m.) |  |
|  | (2) | Two correct answers $(2x1 = 02m.)$  |                            |  |
|  | (3) | Microscope  | (02m.)                     |  |
|  | (4) | (4) a) Production of a new generation for the continuation of their species. (01m.) |                            |  |
| b) for the continuity of the species / existance of the species (01m.) |     |   | (01m.)                     |  |
|  | (5) | Photosynthesis  | (01m.)                     |  |
|  | (6) | From sun  | (01m.)                     |  |
|  |     |   |                            |  |