



PROVINCIAL DEPARTMENT OF EDUCATION - NORTH WESTERN PROVINCE

SECOND TERM TEST - 2019

Grade 06

SCIENCE

Two Hours

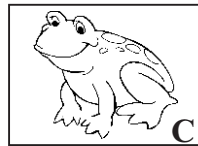
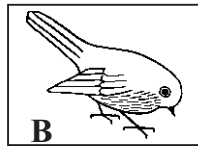
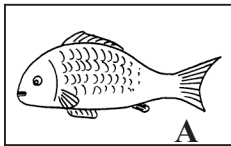
Name / Index No. :

Part I

- Answer all questions in this paper. Underline the most suitable answer.

01. An organism indirectly depends on plant is,
(1) Deer (2) Cow (3) Butterfly (4) Lion
02. Not a factor required for photosynthesis is,
(1) Carbondioxide gas (2) Oxygen gas
(3) Water (4) Chlorophyll

03. The locomotive appendages of animals given below in respectively are,



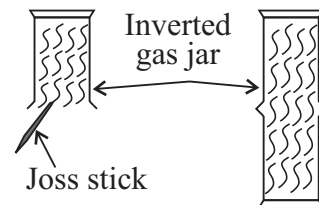
- (1) Fins, feathers, limbs
(2) Gills, wings, limbs
(3) Fins, wings, limbs
(4) Legs, wings, fins

04. The inhaling gas and exhaling gas in the process of respiration of organisms in respectively is,
(1) Oxygen and carbondioxide (2) Carbondioxide and oxygen
(3) Oxygen and nitrogen (4) Nitrogen and carbondioxide
05. Substances that can be seen in solid state and liquid state in room temperature is in,
(1) Mercury, Iron (2) Iron, mercury
(3) Petrol, Aluminium (4) Mercury, coconut oil

06. Give below is a two steps of an activity done in school laboratory.

Which of the following is a conclusion of the above activity

- (1) A gas has a definite volume
(2) A gas has not a definite volume
(3) A gas has not a definite mass
(4) The colour of the gas can be changed.



07. A living characteristic that can be found only in plants is,
(1) Reproduction (2) Growth (3) Respiration (4) Photosynthesis
08. The ability of a metal to be drawn into thin wires without breaking is called,
(1) Elastic nature (2) Conductivity (3) Ductility (4) Malleabilites
09. An example for brackish water is,
(1) sea water (2) ocean water (3) water in lagoon (4) water in rivers
10. Given below are three statements related with adding of waste materials to water,
A - Water can be polluted by adding of polythene and plastic.
B - Pollution of surface water affected to ground water too.
C - The amount of consumable water has been limited due to water pollution.

The correct statements are,

- (1) A and B (2) B and C (3) A and C (4) A, B and C

11. Select the answer contains **only** fossil fuels.
- (1) Coal, saw dust, fire wood
 - (2) Petroleum oil, fire wood, petroleum gas
 - (3) Coal, active carbon (polkatu aguru), petroleum gas
 - (4) Coal petroleum oil, petroleum gas
12. The amount of matter in an object is referred as,
- (1) mass
 - (2) volume
 - (3) weight
 - (4) energy
13. Given below are there statements related with light.
- A - Light is an energy B - Light is transmitted in a straight line.
 C - The narrow path in which light is transmitted is known as a light beam.
- The correct statements are,
- (1) A and B
 - (2) B and C
 - (3) A and C
 - (4) A, B and C
14. The couple of musical instruments which produce sound in the same way is,
- (1) Rabana and violin
 - (2) Guitar and flute
 - (3) Violin and guitar
 - (4) Rabana and flute
15. Which of the following is an incorrect statement about sound and hearing,
- (1) sound is produced due to vibrations
 - (2) sound that are sung or played rhythmically are known as music
 - (3) The excess music sound are not disturbance to ears
 - (4) Unrhythmic sounds are knows as noises
16. When hang a bar magnet steadily from the string to the stand and let it to be still,
- (1) Poles of the magnet stay still in East and West
 - (2) Poles of the magnet stay still in North and South
 - (3) Magnetic south stay sill in north direction
 - (4) Can not be said about the direction
17. Given below are two instances of placing two bar magnets kept closer to each other.
- The observation can be gained by the instances of A and B are,

N	S
---	---

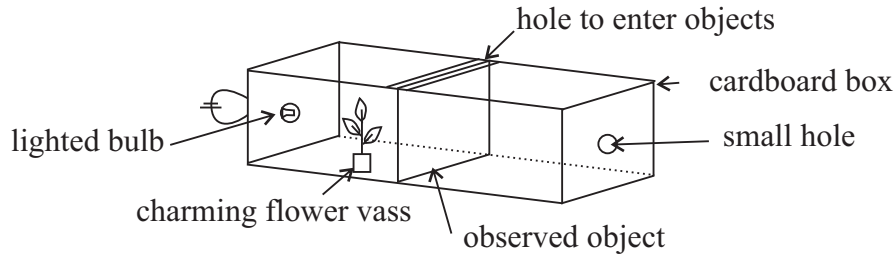
N	S
---	---
- (1) Attracted in A, repelled in B
 - (2) Repelled in A, Attracted in B
 - (3) Attracted in A and B
 - (4) Repelled in A and B
- | | |
|---|---|
| N | S |
|---|---|

S	N
---	---

B
18. In which instance can be used a magnet to separate only one substance from it,
- (1) Sand and iron powder
 - (2) Salt and sand
 - (3) Aluminum and copper
 - (4) Iron pins and needles
19. A procedure that can be followed to sustainable use of energy sources is,
- (1) Provide facilities to every family to buy a motor vehicle
 - (2) Generate electricity using solar panels
 - (3) Construct more diesel power stations.
 - (4) Using bottle lamps to illuminate houses
20. Kidney diseases are most abundant among humans. The reason for it is,
- (1) Using of much agro chemicals in agricultural field.
 - (2) Addition of industrial waste materials to water resources
 - (3) Do not drink of adequate amount of water
 - (4) All above

- Question No. 1 is compulsory.
- Answer only four questions out of question no 02 to 06.
- Question no. 1 carries 16 marks and 11 marks for other questions.

01. A) A student made following setup to investigate the property of light transmission through objects in different ways. Therein bulb is lighted and looking through the small hole.



Following objects are used to observe in three instances.

In 1st instance - A piece of colourless plane glass

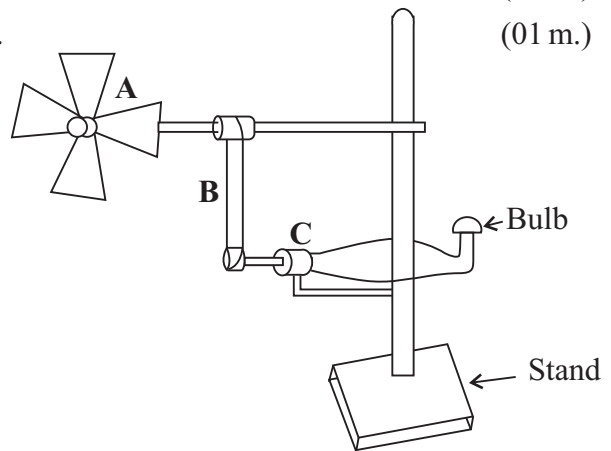
In 2nd instance

- An oil paper

In 3rd instance - A piece of cardboard

- Write down the correct instance, where following observations can get
 - Can be seen flower vass
 - Can be seen light, but flower vass not clearly seen
 - Cannot be seen both light and flower vass (03 m.)
- Mention the suitable object from above three, which presence of following properties
 - Translucent object
 - Transparent object (02 m.)
- Flower vass cannot be seen when switch off the bulb and did not place an observed object. Give reason for it. (01 m.)
- Name the luminous object in this set-up (01 m.)
- Write two main factors needed for vision. (01 m.)

B A group of students assigned to make a model of a wind power station as an assessment. That model is given in below.

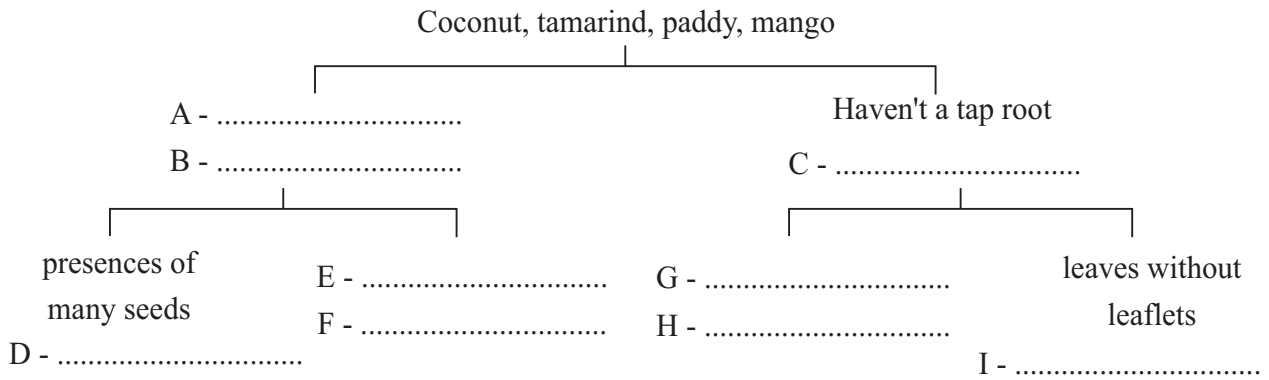


- Name A, B and C parts in above model. (03 m.)
- Write a change done to "A" part as a strategy to increase light of the bulb. (01 m.)
- Write an advantage of using wind to produce electricity. (01 m.)
- What is our main natural energy source. (01 m.)
- Write two instances of using solar panels to generate electricity. (02 m.)

02. Given below are some observations of groups of students who engage to an environmental field trip.

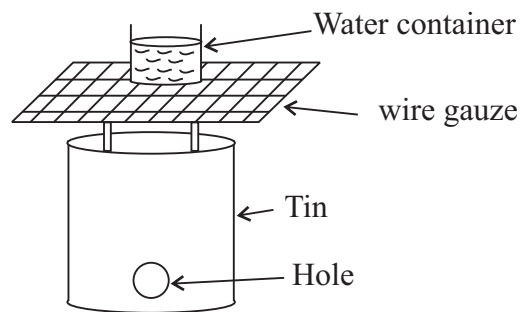
- 1 The leaves of the mimosa plant shows a sleeping movement.
- 2 A plant kept on a window sill bending towards sunlight.
- 3 Shaking of branches due to wind.
- 4 A butterfly sucking of flower nectar.
- 5 Waving a flag of a flag post.

- (i) What is the observation related to a non-living thing? (01 m.)
- (ii) Write 02 plant movements given in above observations. (02 m.)
- (iii) What is the name of process satisfying the food requirement of butterfly. (01 m.)
- (iv) Mention the locomotion organ of butterfly. (01 m.)
- (v) What is the main difference between plants and animals in growth. (01 m.)
- (vi) Complete the blanks of following dichotomous key. (05 m.)



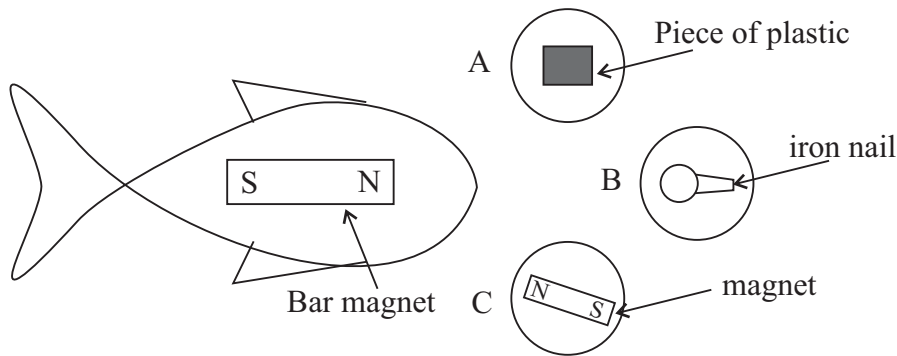
03. A saw dust stove (kudu lipa) is prepared by using a tin. A water container is heated by putting it over the stove.

- (i) Mention 02 bio masses can be put into the tin to get heat. (02 m.)
- (ii) Define the term of "bio mass" (01 m.)
- (iii) Give the reason for not suitable of a plastic container instead of a tin. (01 m.)
- (iv) What is the energy contained in bio masses. (01 m.)



- (v) Even a saw dust stove can be make in easily, it did not use mostly in houses. Give a reason for it. (01 m.)
- (vi) Name a fossil fuel used in each of these occasions.
 - (a) To light a bottle lamp
 - (b) To run of a lorry
 - (c) To work of a gas cooker (03 m.)
- (vii) Write 02 energy sources suitable to generate electricity in Sri Lanka. (02 m.)

04. A paper model of a fish is pasted on a bar magnet. In three paper circles as A, B and C pasted a piece of plastic, an iron nail and a magnet.



- (i) When fish hold to near of circles, to which circle does it get attracted? (01 m.)
- (ii) Which circle does repelled the fish? (01 m.)
- (iii) To attract above repelled circle, in which way does the circle should be replace?(01 m.)
- (iv) You have given following materials. What are the materials attracted to a magnet from those.

A piece of copper

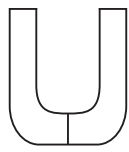
A brass nail

A piece of iron wire

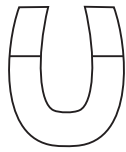
A piece of steel sheet

(02 m.)

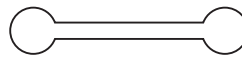
- (v) Name the magnets given as A, B and C. (03 m.)



A



B



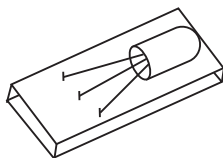
C

- (vi) What is the name given for two ends with more magnetic power in a bar magnet?(01 m.)
- (vii) Write a main difference to identify a ring magnet and a tabular magnet in separately.(02 m.)

05. A child taken equal glasses and put different amounts of water. Then the strike to each glass with a metal rod and play it.



- (i) What is the strategy used to produce sound from this set-up (01 m.)
- (ii) Give the reason for filling glasses with different amounts of water. (01 m.)
- (iii) What is the common name for objects which use to produce sound. (01 m.)
- (iv) Given below is a tin guitar produced by a student. Mention 04 materials used to produce it. (02 m.)



- (v) Mention another music instrument produce sound as a tin guitar. (01 m.)
- (vi) What is the organ which senses to sound. (01 m.)

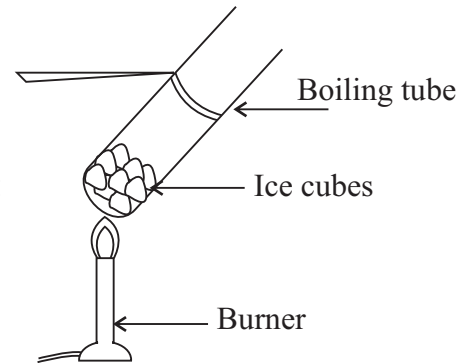
(vii) Select and write natural sounds from the given list.

Sound of birds, sound made by a guitar, sound of a waterfall, sound of a car. (02 m.)

(viii) Rabbits can hear even fine sounds too. What is the adaptation of its sensory organ for it?

(02 m.)

06 Given figure shows the heating of some ice cubes in a boiling tube to identify the states of water.



(i) What is the first observation while heating? (01 m.)

(ii) What happened, when further heating the boiling tube after the first observation? (01 m.)

(iii) Write the three physical states of water due to this activity. (01 m.)

(iv) Mention the state of water in following instances.

(a) In glaciers (b) In river (c) In steam (03 m.)

(v) What is the consumable percentage of water on the earth. (01 m.)

(vi) Write an agricultural activity that cause for water pollution. (01 m.)

(vii) What is meant by "salinity of water" (01 m.)

(viii) Arrange followings in order to increase salinity. (02 m.)

Water in lagoons, water in well, water in sea.

07. Following materials are given to identify the specific properties of solid matter.

Chalk, a rubber band, an iron nail, a piece of sand paper, talc powder.

(i) Mention a material can be drawn into thin sheets without breaking by hammering. (01 m.)

(ii) Write a material with elastic nature. (01 m.)

(iii) Write in separately the feeling of texture when touching the sand paper and talc powder with your hand. (02 m.)

(iv) A student said that 'the chalk piece has the brittleness'. How do you show it? (01 m.)

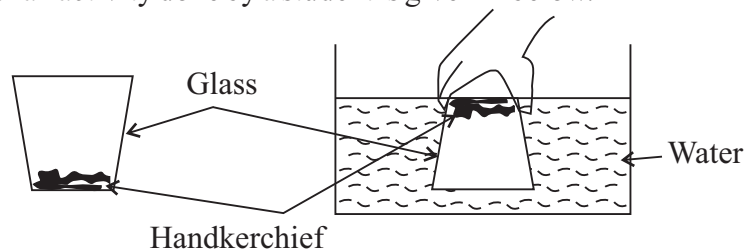
(v) Mention the main two properties of matters. (02 m.)

(vi) State the property important to following applications.

(a) Use of diamond to cut glass

(b) Use of rubber to make baby teats. (02 m.)

(vii) A figure of an activity done by a student is given in below.



(a) Does the handkerchief is wet when take out the glass vertically from the water?

(b) What is the conclusion according to it? (02 m.)

Answer Sheet - Part I

01. (4) 02. (2) 03. (3) 04. (1) 05. (2) 06. (2) 07. (4) 08. (3) 09. (3) 10. (4)
 11. (4) 12. (1) 13. (1) 14. (3) 15. (3) 16. (2) 17. (1) 18. (1) 19. (2) 20. (4)

Part II

- 01.A (i) 1. Instance 1 2. Instance 2 3. Instance 3 (3 m.)
 (ii) 1. Oil paper 2. colourless thin glass plate. (2 m.)
 (iii) absence of light / Light need for vision (1 m.)
 (iv) lighted bulb (1 m.)
 (v) light and eye (1 m.) (1 m.)
- B (i) A - Turbine B - Belt C - Dynamo (3 m.)
 (ii) Increasing the blades of turbine. (1 m.)
 (iii) Reduce environmental pollution / No expenses of fuel / Do not emit harmful gases. (1 m.)
 (iv) Sun (1 m.)
 (v) in artificial satellites, in calculators, to get current in houses etc. (2 m.)
- (Total marks -16 m.)
02. (i) Waving a flag of a flag post. (1 m.)
 (ii) 1st and 2nd observations. (2 m.)
 (iii) Nutrition (1 m.)
 (iv) Wings (1 m.)
 (v) Plant grow during the entire life span / unlimited
 Growth of animal stops after certain period / limited (1 m.)
 (vi) A - Having tap root B - Tamarind, mango C - Coconut paddy
 D - Tamarind E - Not having lot of seeds in fruit F - Mango
 G - Divided into leaflets H - Coconut I - paddy (5 m.)
- (Total marks -11 m.)
03. (i) Saw dust, rice brans (2 m.)
 (ii) plant and animal materials used as fuel (1 m.)
 (iii) melting due to heat (1 m.)
 (iv) Solar power (1 m.)
 (v) can not control the flame / Environmental pollution (1 m.)
 (vi) 1. Kerosine oil 2. Diesel 3. LP gas (3 m.)
 (vii) Solar energy, Tidal waves, sea waves, wind. (2 m.)
- (Total marks -11 m.)
04. (i) B (1 m.)
 (ii) C (1 m.)
 (iii) Change the poles of magnet (1 m.)
 (iv) Iron wire and steel sheet (2 m.)
 (v) A - U magnet B - horse shoe magnet
 C - Ball ended magnet (3 m.)
 (vi) Magnetic poles (1 m.)
 (vii) Explanation of location of magnetic poles (2 m.)
- (Total marks -11 m.)

05. (i) Tap by strings (1 m.)
(ii) get different sounds / change the vibration (1 m.)
(iii) source of sound (1 m.)
(iv) piece of wood, nails, wires, A tin (2/3 answers) (2 m.)
(v) Guitar/ sitar (1 m.)
(vi) Ear (1 m.)
(vii) Birds sing / sound of water fall (2 m.)
(viii) Having long ear lobes (2 m.)
(Total marks -11 m.)
- 06 (i) Melting of ice (1 m.)
(ii) evaporation of water / Emit steam (1 m.)
(iii) Ice (solid) Water (liquid) Water vapour (Gas) (1 m.)
(iv) 1. Solid state 2. liquid state 3. Gasous state (3 m.)
(v) 0.01% (1 m.)
(vi) Addition of pesticides / fertilizers to water (1 m.)
(vii) Amount of salt dissolve in water (1 m.)
(viii) Well water, lagoon water, sea water (2 m.)
(Total marks -11 m.)
- 07 . (i) Iron nail (1 m.)
(ii) Rubber bond (1 m.)
(iii) Sand papers - rough texture
Powder - soft texture (2 m.)
(iv) Brake into pieces due to hitting (1 m.)
(v) Occupies space
Having mass (2 m.)
(vi) 1. Hardness
2. Elastic nater (2 m.)
(vii) a) No
b) Gas - has occupies a space (2 m.)
(Total marks -11 m.)