



Part -I

- Answer all the questions. Choose the most suitable answer and underline it.

01. What is the standard International unit of measuring length ?
(1) millimeter (2) nanometer (3) meter (4) kilometer

03. A power station is shown in this figure. It is operated by,

- (1) sea waves
- (2) Tidal waves
- (3) Nuclear power
- (4) geo thermal energy



04. A plant which is adapted to grow in mangrove environment is ;

(1) kirala (*sonnaratia*) (2) diya kaduru
(3) kumbuk (4) bamboo

06. Select the answer which contains only natural sounds,

(1) sound of bells, birds singing (2) sound of lightning, sound of sea waves
(3) sound of breeze, sound of drums (4) sound of horns, sound of cicadas

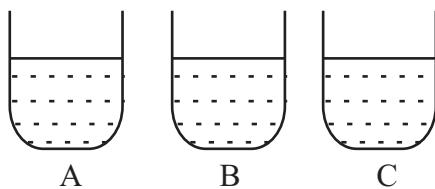
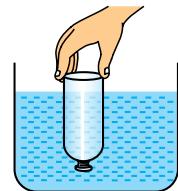
07. Below is a statement and a reason made by a student.

Statement - Diamond is used to cut glass.

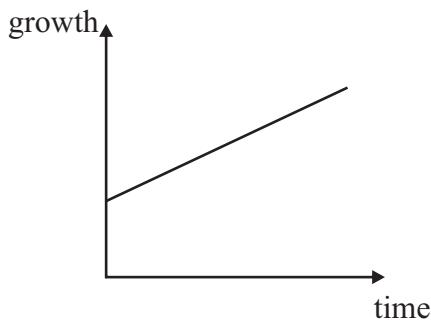
Reason - diamond is a material with high hardness.

According to the statement and the reason,

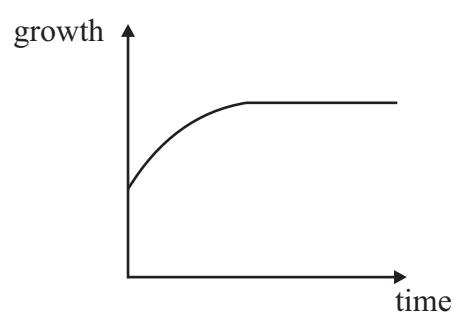
(1) Reason is true and statement is false. (2) Statement is true and reason is false.
(3) Both statement and reason are false. (4) Both statement and reason are true.



16. Following A and B graphs show the growth of organisms.



A



B

Select the true statement about above graphs.

- (1) Graph A shows the growth of plants and the growth is constant after a certain period of time.
- (2) Graph B shows the growth of animals and the growth is visible during the entire lifespan
- (3) Graph A shows the growth of plants and the growth is visible during entire lifespan
- (4) Graph B shows the growth of animals and the growth is constant after a certain period of time.

17. Select the answer that contains only monocotyledonous plants.

- (1) Bamboo, jak, coconut
- (2) arecanut, kitul, love grass
- (3) Cashew, mango, bread fruit
- (4) long beans, green gram, beans

18. An animal who swallows without chewing is,

- (1) frog
- (2) deer
- (3) cow
- (4) tiger

19. An instrument that can be used measure the growth (height) of a plants is,

- (1) Hygrometer
- (2) Auxanometer
- (3) Barometer
- (4) Potometer

20. Not a step that can be followed for conserving energy is,

- (1) Switching off unnecessary bulbs.
- (2) Usage LED bulbs.
- (3) Opening the door of the refrigerator number of times.
- (4) Fixing doors and windows to get natural light.

Instructions:

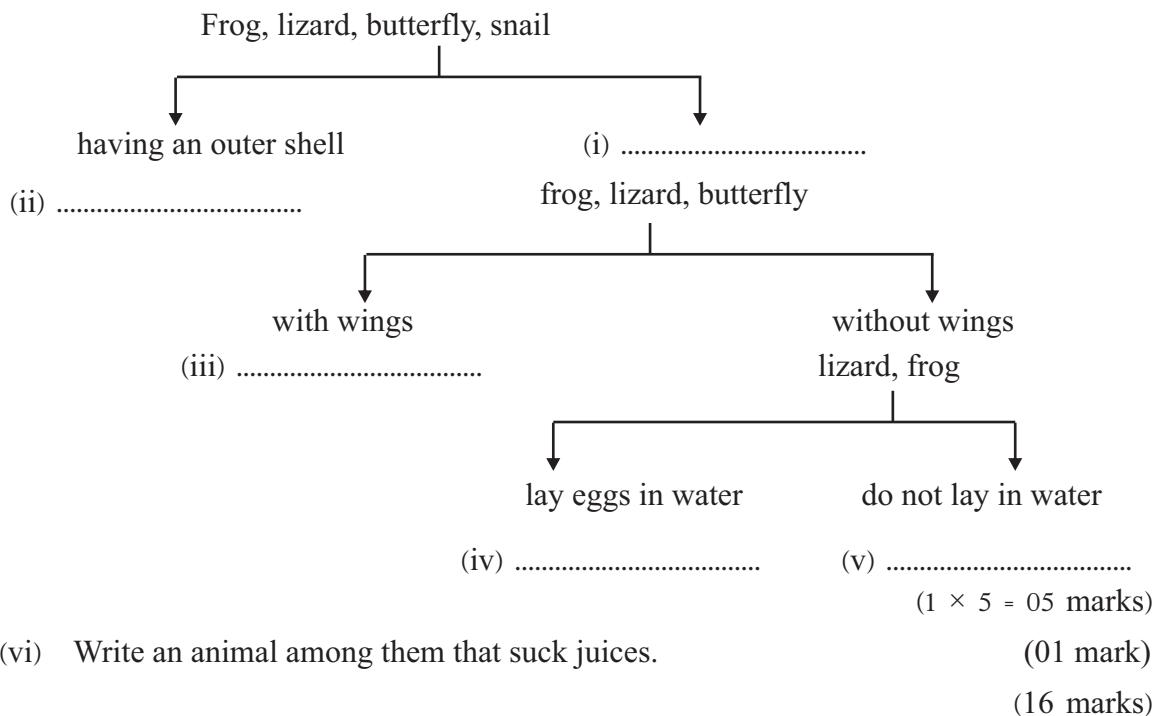
- **First questions is compulsory. (16 marks) and write another 4 questions more.**
- **Use a separate paper for writing answer.**

01. (A) A group of students have observed the surrounding area in the school laboratory. They observed living organisms, characteristics of organism, non-living things and their physical properties as well as the temperature at different places. Imagine that you are a member of the group and write answers regarding the observations.

- (i) Write a non - living thing that you have found. (01 mark)
- (ii) Write an instrument that should be brought when you are observing the environment. (01 mark)
- (iii) Write a characteristic **only** common for living organisms. (01 mark)
- (iv) Write a difference between plants and animals that you have observed. (01 mark)
- (v) Write an autotrophic organism that you have observed. (01 mark)
- (vi) When observing a pond water sample through an equipment in the school laboratory, Minute organisms can be observed.
 - (a) What is the common name referred for above mentioned organisms ? (01 mark)
 - (b) Name such an organism that you have observed. (01 mark)
 - (c) What is the equipment used to observe above (vi) mentioned organisms ? (01 mark)
 - (d) What is the equipment used to measure the temperature of pond water ? (01 mark)
- (vii) Write an instruction given by the teacher during the field visit. (01 mark)

(B) Few organisms found during the field visit have been classified using a dichotomous key.

Fill the blanks.



02. (A) There are different properties in different solid materials.

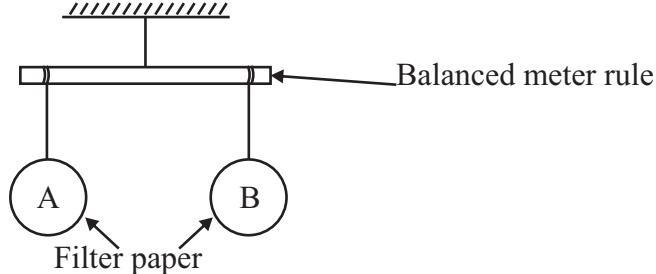
Name a material from the list for given physical properties.

(a piece of Charcoal, a copper wire, some talc, a piece of elastic, an iron nail, a piece of granite)

(a) Malleability	-
(b) ductility	-
(c) hardness	-
(d) brittleness	-
(e) elasticity	-
(f) soft texture	-

(1 × 6 = 06 marks)

(B) An activity done by the teacher to demonstrate a characteristic of liquid water is given below.



Activity : *some water is sprayed only to filter paper A.*

- Write an observation in the set up after spraying water. (01 marks)
- What is the property of water that is demonstrated in this activity ? (01 marks)
- Some properties of matter and some examples for them are given below. Accordingly Match A with B.

A

- Has a definite shape and definite volume
- No definite shape and no definite volume
- has only a definite volume

B

- ★ water
- ★ brick
- ★ smoke of a joss stick.

(03 marks)

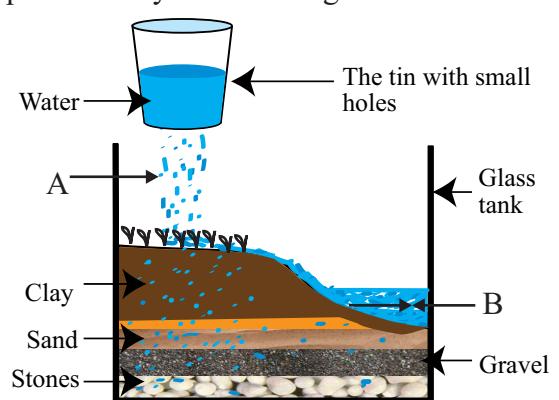
(11 marks)

03. An activity done to demonstrate the behavior of rain drops when they fall down is given below.

(A) (i) Name A and B. (02 marks)

(ii) Write a use of having a grass cover on soil. (01 mark)

(iii) What is the name of water which flows through stones, gravel and sand? (01 mark)



(B) Water can be categorized based on the salinity.

(i) Which type of water exists in nature that the highest amount of salt is dissolved ? (01 mark)

(ii) A useful product can be obtained by evaporating above mentioned water. What is that product ? (01 mark)

(C) (i) Write one use of water for human activities. (01 mark)

(ii) Write a way of importance of water for the survival of plants. (01 mark)

(iii) Write a place in the school where the wastage of water takes place. (01 mark)

(iv) Write a method a water pollution. (01 mark)

(v) Write an illness caused by polluted water. (01 mark)

(11 marks)

04. Fill in the blanks with suitable words from the brackets.

(Sun, pumping water, nuclear power, reducing, coal, energy, renewable, fossil, tsunami, geo thermal energy, bio mass)

(i) Ability to do work is called

(ii) The main source of energy is

(iii) fuel is going to be over nearby future.

(iv) energy sources will be the highly consumable energy sources for the world in nearby future.

(v) Firewood, hay and saw dust are some examples for

(vi) In ancient times, people used wind power for

(vii) An adverse phenomenon which causes due to large amount of energy stored in sea waves is

(viii) Hot water springs are located in some areas in Sri Lanka. Because there is higher in these areas.

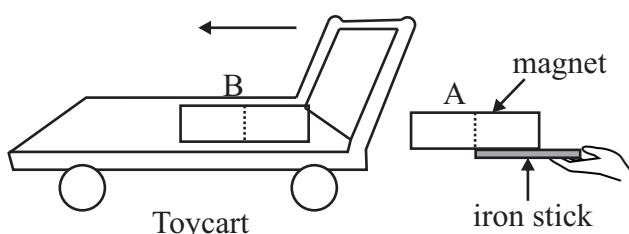
(ix) is a form of fossil fuel used in thermal power stations in Sri Lanka.

(x) The energy generated during the nuclear reactions among atoms under the controlled conditions is

(xi) We can conserve energy by the consumption energy.

(1 × 11 = 11 marks)

05. (A) A figure of a toy cart made by a student for an exhibitions is given below.



(i) What are the type of magnets used here as A and B ? (01 mark)

(ii) How are the poles of these two magnets placed to move the cart forward ?(01 mark)

(iii) Name the given magnets.

(03 mark)



A



B



C

(iv) Write a use of magnets.

(01 mark)

(B) Fill the given flow chart by using your knowledge of magnets.

Plastic ruler, iron nail, brass nail, knife blade

↓
Attract towards magnets

↓
(i)

(ii) (iii)

(iv) (v)

(05 marks)

(11 marks)

06. (A) We can hear sound of fire crackers, sound of cuckoo bird as well as sound of 'raban' during new year season.

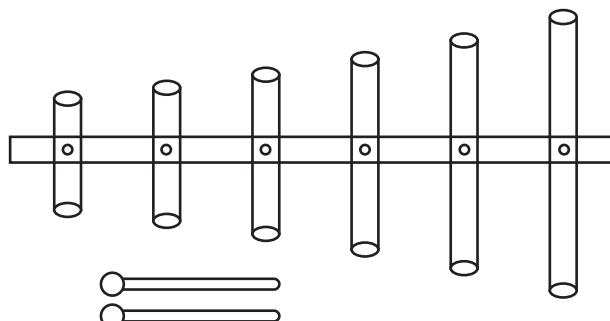
(i) Write natural sounds and artificial sounds separately from above description.

(03 marks)

(ii) Write a strategy to make a sharp sound in rabana.

(01 mark)

(B) A musical instrument made using metal pipes is given below.



(i) How can we produce a sound in this instrument ?

(01 mark)

(ii) Which metal pipe gives the sharpest sound ?

(01 mark)

(C) There are two forms of sound as musical tones and noises.

(i) How does a noise make ?

(01 mark)

(ii) write an example for such noise.

(01 mark)

(iii) When the sound of music is increased, it too can be a disturbance. Our ears may damage due to these loud noises. Write a precaution should be taken to protect ear from loud noises.

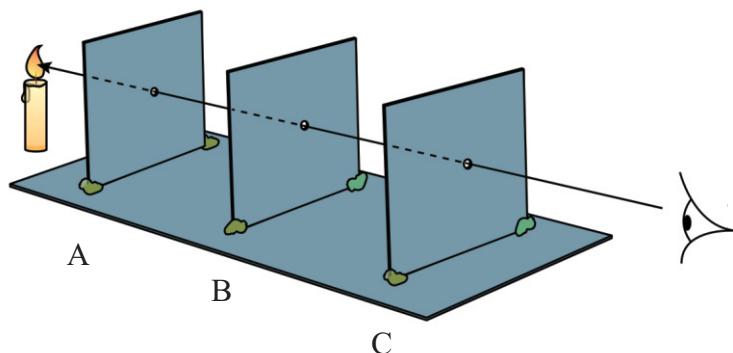
(01 mark)

(iv) Musical instrument can be classified into many groups according to the way of producing sounds. Write two musical instruments for each for producing sound by vibrating air column and vibrating membrane.

(02marks)

(11 marks)

07. (A) We need light to see. An activity done to observe the pathway of the light is given below.



(i) How are the holes of card boards arranged to see candle flame ? (01 mark)

(ii) Card board B was moved apart. What would happen then ? (01 mark)

(iii) Write the conclusion that can be arrived. (01 mark)

(B) Objects can be classified based on the transmission of light through them. Separate given materials based on the property of transparent, translucent and opaque. (03 marks)
(decorated glass, mud water, plane glass, black paper, soapy water, optic fibers)

Transparent	Translucent	Opaque

(C) Put a (✓) if true and a (✗) if false in given brackets for the following statements.

(i) Light is necessary for the photosynthesis in plants. ()

(ii) Moon is luminous object. ()

(iii) Laser rays are used in some surgeries. ()

(iv) Electric bulbs are natural sources of light. ()

(v) Light is used for transmission of messages. ()

(05 marks)

(11 marks)

Answer Paper - Part I

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

Part - II

01. (i) Any non living matter (01 m)
 (ii) hand lens, pair of scissors, forceps like any suitable answer. (01 m)
 (iii) growth, nutrition, movement, reproduction, respiration 01 mark for any 01
 (iv) any basic difference. (01 m)
 (v) any name of a plant. (01 m)
 (vi) (a) micro organisms (01 m) (c) light microscope (01 m)
 (b) amoeba, chlamydomonas, paramecium any (01 m) (d) thermometer (01 m)
 (vii) any suitable instruction. (01 m)
 (viii) (1) without a shell (2) snail (3) butterfly (4) frog
 (5) lizard (6) butterfly (one mark for each) total = 16 marks

02. (A) give marks for correct answers. (06 m)
 (B) (i) side with filter paper A goes down (01 m)
 (ii) water has a mass (01 m)
 (iii) (a) brick (b) smoke of joss stick (c) water (03 marks) total = 11 marks

03. (A) (i) A - precipitation (01 m) B - surface water (01 m)
 (ii) Prevent soil erosion / prevent washing away top soil (01 m)
 (iii) Underground water (01 m)
 (B) (i) marine water or sea water (01 m) (ii) salt (01 m)
 (C) (i) for one suitable use (01 m) (ii) For suitable use (01 m)
 (iii) Well, near tap lines any suitable answer (01 m)
 (iv) For one method of water pollution. (01 m)
 (v) For the disease (01 m) total = 11 marks

04. (i) energy (ii) sun (iii) fossil (iv) renewable (v) bio mass
 (vi) Pumping water (vii) Tsunami (viii) geothermal energy (ix) coal
 (x) nuclear power (xi) reducing (1 x 11 = 11 marks)

05. (A) (i) bar magnet (01 m) (ii) as like poles (01 m)
 (iii) A - U shaped magnet B - Horse shoe magnet C - tabular magnet (03 m)
 (iv) for one use. (01 m)
 (B) (i) do not attract to the magnet (01 m) (ii) iron nail, knife blade (02 m)
 total = 11 marks

06. (A) (i) Natural sounds - sound of cuckoo bird
 artificial sound - sound of fire crackers / sound of drum (03 m)
 (ii) by heating (01 m)
 (B) (i) by tapping onto metal pipes (01 m) (ii) shortest metal pipe (01 m)
 (C) (i) Sound that are unrhythmic to ears. (01 m)
 (ii) any example (01 m)
 (iii) wearing ear protectors (01 m)
 (iv) for correct names (01 m)

07. (A) (i) as a straight line (01 m)
 (ii) the candle flame cannot be seen (01 m)
 (iii) light travels along straight line. (01 m)
 (B) for correct answers (03 m)
 (C) (i) ✓ (ii) ✗ (iii) ✓ (iv) ✗ (v) ✓ (05 m)
 total = 11 marks