



2023. 08 .07-Wednesday
08.00 - 10.00

Km/Km/Carmel Fatima College

National School, Kalmunai

Second Term Examination – 2024

Grade: 7

Science

2 Hours

GRADE; 07: C A R M E L T (Circle your Class) வட்டமிடுக.)

Index No :

Certify correct

Invigilator signature

Final Marks

Parent Signature

Question		Marks
Part I	20	
Part II	1	
	2	
	3	
	4	
Total		

Underline the most suitable answer.

1) Which of the following plants has compound leaves?
1) Jak tree 2) Coconut tree 3) Manioc 4) Jasmine

2) The metal used in the electric cell shown in this picture is
1) Lead 2) Zinc 3) Lithium 4) Copper



3) The colour of phenolphthalein in the presence of nitric acid is
1) Pink 2) yellow 3) Blue 4) Colourless

4) The unit used to measure energy
1) Volt 2) Ampere 3) Joule 4) Kilogram

5) A wrong statement about a capacitor is
1) The appliance that can store static electric charges
2) Polythene sheet between two aluminium sheet
3) The amount of electric charges that can be stored in a capacitor is measured in Farads.
4) Large amount of charges can be stored by reducing the area of the aluminium sheets.

6).The angle between two plane mirrors, to obtain 23 images, should be
1) 30° 2) 90° 3) 60° 4) 15°

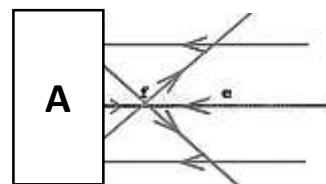
7) Which is not a benefit due to camouflage
1) Easy to find prey 2) For locomotion
3) Escape from predators 4) For the existence in its habitat.

8) Blood is a
1) Tissue 2) Organ 3) cell 4) System

9) Which instrument is similar to the vocal cord of human
1) String instrument 2) Air column instrument
3) Percussion instrument 4) All are wrong

10) The mirror "A" used for the purpose of this is

- 1) Plane mirror
- 2) Concave mirror
- 3) Convex mirror
- 4) All are wrong



11) The metals present in the mantle of the earth

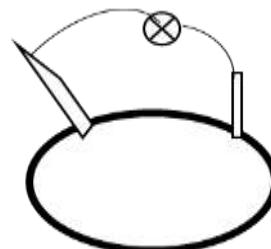
- 1) Magnesium, iron
- 2) Silicon, Aluminium
- 3) Iron, Nickel
- 4) Iron, Aluminium

12) Following are some statements about the given set up

- A) Electricity is produced by chemical change
- B) Positive terminal is zinc plate.
- C) The metal that acts as negative terminal will dissolve

Correct statement or statements from the above

- 1) A
- 2) AB
- 3) AC
- 4) A B and C



13) The reason for using water in the preparation of vaccine and saline

- 1) as a medium
- 2) as a solvent
- 2) As a coolant
- 4) All are wrong

14) Maximum resolution of an electron microscope is

- 1) 5×10^{-7} mm
- 2) 5×10^{-6} mm
- 3) 2×10^{-7} mm
- 4) 5×10^4 mm

15) The function of the special root of Kinnai is

- 1) Storage of food
- 2) Support the stem
- 3) gas exchange
- 4) Photosynthesis

16) The gas that acts as supporter of combustion is

- 1) Carbon dioxide
- 2) Hydrogen
- 3) Nitrogen
- 4) Oxygen

17) The parts produced by the androecium and gynoecium respectively

- 1) Ovary, Anther
- 2) Pollen grain, Ovum
- 3) Pollen grain, ovary
- 4) Anther, Ovule

18) Which type of energy is stored in fire wood

- 1) Chemical energy
- 2) Electric energy
- 3) Heat energy
- 4) All are wrong

19) Which is not an under ground stem?

- 1) Turmeric
- 2) Rasavalli
- 3) Leeks
- 4) Beetroot

20) What is indicated by "c" and "f" in the dichotomous key?

Fish, Snake, snail, Cock.

Presence of wings

a.....

Abscence of wings

b.....

Presence of muscular foot

c.....

Abscence of muscular foot

d.....

e.....

f.....

Fish

g.....

- 1) Cock, presence of fins
- 3) Snake, absence of fins

- 2) Snail, Abscence of fins
- 4) Snail, Presence of fin

Part II

Answer all the questions in this paper.

01)

A) On the way to school, Kasthury observed the following set up on the roof of a house.

i. Write the name of this set up.

.....(1mark)



ii. What is the basic electric source and element used here to make this set up?

.....(2marks)

iii. What is the reason for connecting many basic electric sources in series which you mentioned above in question ii?

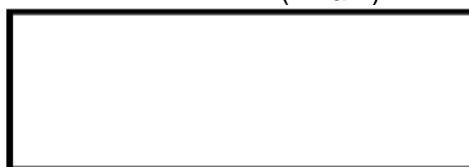
.....(1mark)

iv. Which type of electricity is produced by this set up?

.....(1mark)

v. Draw the pattern of graph when this type of current is

Plotted against time. (1Mark)



B) Energy is important for the function of this set up.

i. Write the name of the energy and energy source needed for the function of this set up.

.....(1mark)

ii. What is the energy transformation took place here?

.....(1mark)

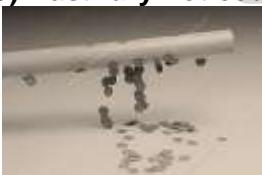
iii. What is the other form of energy present in this energy source mentioned in question i?

.....(1mark)

iv. Write a benefit of above mentioned energy form in question iii?

.....(1mark)

C) Kasthury noticed that some children were rubbing PVC rod with polythene sheet.



i. when the rubbed PVC rod is held closer to the pieces of paper, the papers were attracted by the PVC rod. What is the reason for this?

.....(1mark)

ii. One child held two rubbed PVC rods closer to each other.

a) What is observed here?

.....

b) What is the reason for this?

.....(2marks)

iii. A glass rod rubbed with silk is brought towards a PVC rod rubbed with a polythene sheet.

a) What is observed here?

.....

B) What is the reason for this?

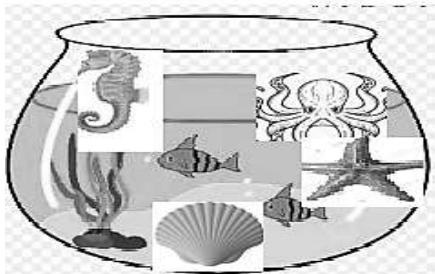
.....(2marks)

iv. Mention the charges present in rubbed glass rod and PVC rod

.....(2marks)

(17marks)

02. On her way, Kasthury saw a fish tank in a house.



A) i.What is the reason to use water as a medium of fishes?

.....(1mark)

ii.What property of water is responsible for the answer you mention above?

(1mark)

iii. Write a water plant that can be seen in the fish tank.

.....(1mark)

iv. The animals that are present in the fish tank can be classified into two groups. What are they?

(2marks)

v. List out the animals (except fish) present in the fish tank and mention their groups.

Animal	Group
--------	-------

a.....
--------	-------

b.....
--------	-------

c.....
--------	-------

(4marks) d.....
-----------------	-------

B) Water in the tank is tested with litmus paper to find out the quality of water. The observation is below.

Litmus Paper	Water
Blue	Blue
Red	Blue

i.Which property of water is observed here?

.....(1mark)

ii. Write a substance that can be seen in the laboratory, with above mention property?

.....(1mark)

iii. Write three other indicators present in the laboratory

(3marks)

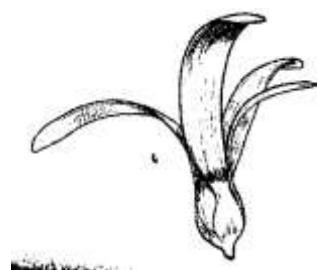
iv. Which one of your answer is more efficient than others?

.....(1mark)

(15marks)

03) Kasthury observed some pictures hanging from the wall in her class room.

A) There are some seeds and fruits in the first picture.



i. Name the seeds and fruits, and mention their dispersal methods.

Fruit/ Seed	Method of dispersion
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.....
.....
.....

(3marks)

ii. Write a reason for the dispersion of seeds and fruits.

.....(1mark)

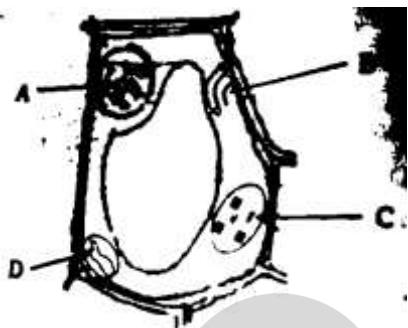
iii. Mention a seed or a fruit and write the adaptation for dispersion.

.....(1mark)

iv. Write the two types of germination.

.....(2marks)

B) The second picture she observed is a plant cell.



i. What is the instrument used to observe plant cells?

.....(1mark)

ii. What type of lens is used here?

.....(1mark)

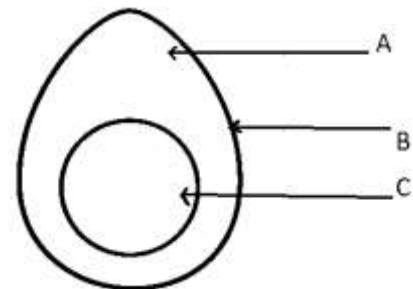
iii. What is the resolution power of this device when compared to human naked eye.

.....(1mark)

iv. Write two factors that should be considered when using a microscope.

.....
.....(12marks)

04) A) The structure of the earth is explained by the teacher to Kasthuri and other students with the help of a boiled egg.



i. Compare the internal structure of the earth with the boiled egg.

Boiled egg	Earth
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A.....

B.....

C.....

(3marks)

ii. Which part of the earth consists of soil and fossil fuel?

.....(1mark)

iii. What is the reason for the movement of tectonic plates?

.....(1mark)

iv. Which type of plate movement cause deep gulf ?

.....(1mark)

B) Kasthuri observed that a student chased a crow using a Plane mirror.



i. Which property of light is used here?

.....(1mark)

ii. Draw a diagram to show this property.

(1mark)



iii. Write two features of an image formed by a plane mirror.

.....(1mark)

iv. What is the reason for painting the word "ambulance" laterally inverted position in ambulance?

.....(1mark)

C) When Kasthuri returned home, she observed thunder and lightning on the way.

i. How is the sound produced?

.....(1mark)

ii. Write the way the following instruments produce sound.

Instrument	Part that vibrates
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Tabla

.....

Yal

.....

Mahudi

.....

(3marks)

iii. Write the descending order of the speed of sound according to the medium. (gas, liquid, solid)

.....(1mark)

iv. During lightning and thunder the sound and the light are emitted at the same time. But we hear the sound after few seconds of seeing light. What is the reason for this ?

.....(1mark)

(16Marks)