विद्या सर्वार्थि साधिका

ANANDALAYA

ANNUAL EXAMINATION

Class : VI

Subject: Science M.M: 80

Date : 11/03/2020 Time: 3 Hours

General Instructions:

1. The question paper comprises four sections A, B, C and D. Attempt all the sections.
2. This question paper consists of a total of 30 questions. All questions are compulsory.
3. All questions in Section A are objective type questions and carry one mark each.
5. All questions in Section B and Section C are short answer type questions and carry two and three marks respectively.
6. All questions in Section D are long answer type questions and carry five marks each.

SECTION A

1. The closed path in which current flows is called a/an _____. (1)

   (a) Electric circuit (b) Switch (c) Conductor (d) Insulator

2. Which of the following is the sure test of magnetism? (1)

   (a) Hammering (b) Repulsion (c) Attraction (d) Heating

3. We can see an image due to reflection from _____. (1)

   (a) Polished surface (b) Rough surface (c) Transparent surface (d) None of these

4. Common salt is prepared from sea water the process of _____. (1)

   (a) Decantation (b) Evaporation
   (c) Filtration (d) Handpicking

5. Which of these is a reversible change? (1)

   (a) Metal contracting (b) Baking of cake
   (c) Ripening of fruit (d) Blooming of flowers

6. Rainwater that does not seep into the ground but flows over the land is called _____ . (1)

   (a) Water table (b) Glacier
   (c) Surface water (d) Groundwater

7. The liquid that is used to test the presence of starch in bread is _____ (1)

   (a) Copper sulphate solution (b) An acid solution
   (c) Iodine solution (d) Water

8. Which of the following trees is adapted to survive in the desert? (1)

   (a) Fir (b) Maple (c) Coconut (d) Acacia

9. The functions of the stem are _____. (1)

   (a) Transportation (b) Absorption (c) Transpiration (d) Support
   (i) a and c (ii) b and c (iii) a and d (iv) b and d

10. Before the development of standard units of measurement, people used non standard or the arbitrary units of measurement. Some of them are still in use at some places. Handspan, foot, cubit are some examples of arbitrary units of measurement. This can create lot of confusion as there would be no uniformity in measurement. To maintain uniformity in measurement, standard units of measurement were introduced in different parts of the world. Length, weight and time are considered as basic quantities for measurement and other quantities are derived from them. As per SI system, the unit of length is metre, unit of weight is kilogram and the unit of time is second.

(a) Name any two arbitrary units of measurements given in the passage above. (1)

(b) Why is the non standard units of measurements not used in the current system of Measurements? (1)

(c) Weight, Time and _____ are considered as the basic quantities of measurements and other quantities are derived from them. (1)

(d) State if the statement is True or False: 'The SI unit of length is Kilometre.' (1)

11. Arjun's teacher conducted an experiment using a candle in a trough of water. She kept inverted tumbler on the lit candle. The candle went off after sometime. The water level inside the tumbler rose up.

(a) Why did the candle stop burning? (1)

(b) Why did the water level rise? (1)

(c) The major component of air is _____. (1)

12. Match the words in column A with those in column B

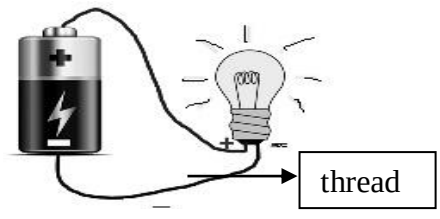
Column A	Column B	
(a) Ulna	(i) Tough but flexible tissue	(1)
(b) Marrow	(ii) X - Ray image	(1)
(c) Cartilage	(iii) a flat bone to which ribs are attached	(1)
(d) Radiograph	(iv) The soft material found inside bones	(1)
	(v) A bone in the forearm	

SECTION B

13. (a) Mention any two ways in which magnets can lose their magnetism. (2)
(b) How can the self demagnetisation of the magnets be prevented?

14. (a) The figure shows that the cell is connected to the bulb using an insulated wire. State any two reasons in which case the bulb will not glow. (2)

(b) Rahim used a piece of thread to connect one of the terminals of the bulb and the cell as shown in the figure. What will happen? Why?



15. If any of the following gases disappear from the atmosphere. (2)
(a) Nitrogen (b) Carbon dioxide
Write few sentences for this imaginary situation.

16. Give reasons. (2)
(a) Chimneys are built in factories.
(b) We breathe through our nostrils and not through our nose.

17. Can you say whether a thing is a plant or an animal only on the basis whether it moves? Why, or why not? (2)

18. How is the venation in peepal leaf different from banana leaf? (Any two differences) (2)

SECTION C

19. (a) Renu has a rectangular piece of copper and a rectangular piece of iron. She wants to create a small magnet. Explain the method of creating a magnet through an activity. (3)
(b) Imagine you are playing a police car chasing thief car with the two toy cars you have. Explain how you will fix the magnet so that it seems the police car is chasing the thief's car.

20. (a) On a sunny day when we pass under a tree covered with a very large number of leaves, we often see bright circular patches of light on the ground under the tree. (3)
(i) What are the circular patches of light?
(ii) Name the source of light in this case.
(iii) What acts as a screen in this case.
(iv) Which effect is illustrated by the everyday observation described above? Or which property of light is seen here?
(b) If you hold a mirror in front of you in a completely dark room, can you see your image in the mirror? Why?

21. (a) Seema has prepared a saturated solution of salt. Can she still dissolve more salt in it? If yes, how? (3)
(b) When water is mixed with Plaster of Paris and allowed to dry, it sets into a hard mass. State whether the change is reversible or irreversible. Explain your answer.

22. Give example and explain about the examples: (3)
(a) Physical change in which state of the substance changes.
(b) Physical change in which size of the substance changes.
(c) Physical change which is irreversible and explain all the examples.

23. (a) Will a leaf taken from a potted plant kept in a dark room for few days turn blue-black when tested for starch? Give reason for your answer. (3)
(b) Last summer vacation, Shubh visited the Botanical Garden, Kolkata with his family. They saw many exotic plants from different continents along with the Great Banyan Tree. They also saw many other small and big plants with different types of stems.
(i) How plants are classified on the basis of height and type of stem?
(ii) What kind of roots does a banyan tree have?

24. (a) Why are most small desert animals nocturnal? (3)
(b) What would happen if the leaves of plants of mountain region would be broad and thick instead of needle shaped?

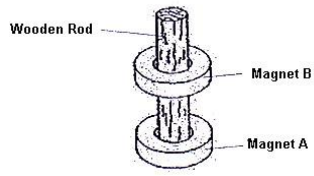
SECTION D

25. Anu set up a circuit. She completed the circuit by using small pieces of aluminium foil, a piece of glass, iron key, plastic scale, zinc sheet, a wooden block, pencil lead (graphite) and a piece of thermocol. Help her to record the observations and draw the conclusions by answering the questions given below. (5)
(a) Name the materials that make the bulb glow.
(b) Name the materials that do not make the bulb glow.
(c) What is the general name given to the (i) materials that makes the bulb glow
(ii) materials that do not make the bulb glow.

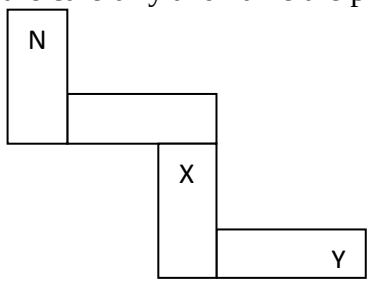
26. (a) You have been given a horseshoe magnet and a magnetic needle. The poles of the horseshoe magnet are not marked. How will you use the magnetic needle to determine the poles of the horseshoe magnet? (5)
(b) The casing of magnetic compass is usually made of aluminium. Analyse.
(c) A magnet is broken into 5 pieces. How many north poles and south poles will be present in the broken pieces?
(d) Magnetic strip is used in ATM cards. Give reason for your answer.

OR

(a) A magnet A is floating above magnet B in the picture. What is the reason for this?



(b) Look at the picture carefully and name the poles in X and Y.



(c) A freely suspended magnet always rest in North-South direction. Analyse.

27. (a) Rahul takes water in a pan and heat it on a burner for 5 minutes. He observed certain changes in the level of water. After 5 minutes, he turned the gas off and kept a plate on the pan. He observed that few drops of water on the surface of plate. (5)
(i) What could be the change in the level of water? Why?
(ii) Name the process by which the drops of water appeared on the plate.
(a) After a heavy downpour, earthworms are seen coming out of the soil. What could be the reason for this?
(b) Why do we prefer eating a fruit to a biscuit when we are thirsty and there is no water available?

28. (a) While putting away the groceries, a packet of salt and a packet of dal get torn and the contents are mixed. What would you do to get both the components back without any damage? (5)

(b) Sheela, Raima and Hari have to dissolve maximum amount of sugar in the same amount of milk, so as to win in a game. Hari took hot boiling milk, while Raima took ice cold milk. Sheela managed to get milk at room temperature. Whom do you think would win the game and why?

(c) Mani's grandmother is suffering from diabetes. Her doctor advised her to take 'lassi' with less fat content. Which of the following methods would be most appropriate for Mani to prepare it? Churning or filtration? Why?

OR

(a) Should hand picking be used to separate small, white stones mixed in a large bag of rice?

(b) Why don't we pluck seeds of cereal plants like we pluck fruits from a plant?

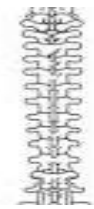
(c) Describe how can you separate a mixture of salt and iodine crystals?

29. (a) The ribcage and skul both protect internal organs. However, the bones of the ribcage can move, whereas those of the skul cannot. What are the advantages of movements and lack of movements in the ribcage and skul, respectively? (5)

(b) In the figure given below, there are two snakes of the same size slithering on sand. Can you identify which of them would move faster and why?

OR

(a) A part of the vertebral column is shown in the picture.



(i) What is the advantage of the backbone not being a single bone?

(ii) Mention a common feature of the bones that make up the vertebral column.

(b) Which type movement would have been possible if

(i) Our elbow had a fixed joint.

(ii) We were to have a ball and socket joint between our neck and head.

(c) What enables a snail to crawl unharmed over a knife's edge?

30. (a) Ashu noticed that her brother's gums were swollen and bleeding. She advised her brother to eat more fruits and vegetables like oranges, cabbage etc. Why she suggested these food items? (5)

(b) Which major nutrients are missing in a diet of bread and jam?

(c) Complete the table.

Deficiency diseases	Nutrients	Sources of nutrients
Goitre		
	Iron	
		Liver, fish oil, egg yolk