

Goa Board
Class VII Science
Sample Paper – 5
Term II

Time: 3 hrs**Total Marks: 100****General Instructions:**

1. The question paper consists of 44 questions and is divided into **four sections, A, B, C and D.**
2. All questions are compulsory.
3. Section A comprises question numbers 1 to 20. These are multiple choice questions carrying one mark each. You are to select one most appropriate response out of the four provided options.
4. Section B comprises question numbers 21 to 30. These are SAQs carrying two marks each.
5. Section C comprises question numbers 31 to 40. These are SAQs carrying four marks each.
6. Section D comprises question numbers 41 to 44. These are SAQs carrying five marks each.

SECTION A

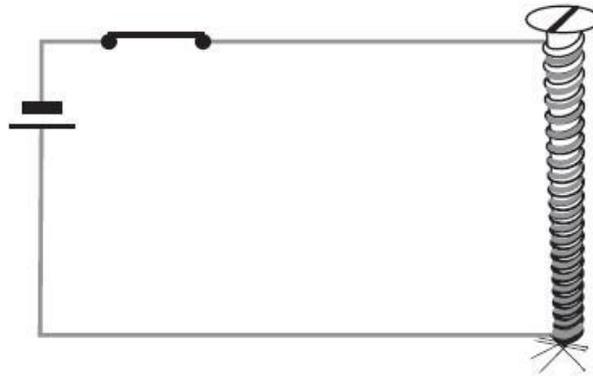
Attempt all questions from this section.

1. Name the muscular tube which eliminates the urine out of the body. [1]
(a) Kidneys
(b) Ureters
(c) Urethra
(d) Urinary bladder
2. Which of the following is used to remove organic waste from sludge? [1]
(a) Clarifier
(b) Skimmer
(c) Scrubber
(d) Scraper
3. What gets blown off in case of grass? [1]
(a) Seed
(b) Flower
(c) Fruit
(d) Stem

4. What do we call the branches of tall trees which look like the roof over the other plants? [1]
(a) Crown
(b) Canopy
(c) Cap
(d) Under storey
5. Name the state in India where people suffer from drought. [1]
(a) Haryana
(b) Punjab
(c) Rajasthan
(d) Himachal Pradesh
6. The mechanism which cools plants is [1]
(a) Excretion
(b) Transport
(c) Transpiration
(d) Translocation
7. Select the change in which chemical properties do not change. [1]
(a) Physical change
(b) Chemical change
(c) Both physical and chemical changes
(d) Chemical reaction
8. Magnesium burns in oxygen to form [1]
(a) Magnesium oxide
(b) Magnesium hydride
(c) Magnesium hydroxide
(d) Magnesium carbonate
9. Which of the following would *not* be a physical change? [1]
(a) Inflating a balloon
(b) Breaking of glass
(c) Hammering wood
(d) Burning of gasoline in the car
10. Identify the chemical change: [1]
(a) Cutting a log of wood
(b) Stretching of metals to form wires
(c) Formation of clouds
(d) Formation of manure

11. Slow oxidation of iron to form hydrated iron oxide is called [1]
(a) Rusting
(b) Galvanising
(c) Rust proofing
(d) Dip plating
12. How are tools and machine parts made of iron protected from rusting? [1]
(a) Applying grease on it
(b) Heating the articles
(c) Storing the articles at low temperature
(d) Coating the articles with zinc
13. Select a chemical change from the given examples: [1]
(a) Breaking of glass
(b) Washing of grains
(c) Baking a cake
(d) Sugar solution
14.  This is a symbol of [1]
(a) Battery
(b) Electric bulb
(c) Electric bell
(d) Electric switch
15. When electric current passes through the filament of a bulb, it gives [1]
A. Sound
B. Heat
C. Magnetism
D. Light
(a) A and D
(b) A and B
(c) B and C
(d) B and D

16. Some pins are placed near the end of a nail shown in the circuit diagram. Now the current is switched on for some time and then switched off. What will happen? [1]

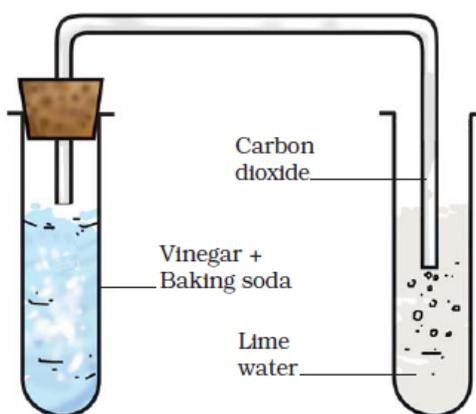


- (a) As the current is switched on, the pins cling to the tip of the nail and remain clung even after the current is switched off.
- (b) As the current is switched on, the pins cling to the tip of the nail, but when it is switched off, the pins drop back.
- (c) The pins do not cling to the tip of the nail.
- (d) The pins get repelled by the tip of the nail.
17. Power of a lens is measured in [1]
- (a) centimetres
- (b) degrees
- (c) Ohms
- (d) Dioptre
18. A mirror can form both real and virtual images. The mirror is likely to be a _____ mirror. [1]
- (a) Plane
- (b) Concave
- (c) Convex
- (d) Parabolic
19. The branch of Physics which deals with the study of the nature and properties of light is called [1]
- (a) Electromagnetism
- (b) Optics
- (c) Mechanics
- (d) Thermal Physics

20. A reflection at a surface which is not smooth is called [1]
 (a) Diffuse reflection
 (b) Regular reflection
 (c) Total internal reflection
 (d) Sharp reflection

SECTION B

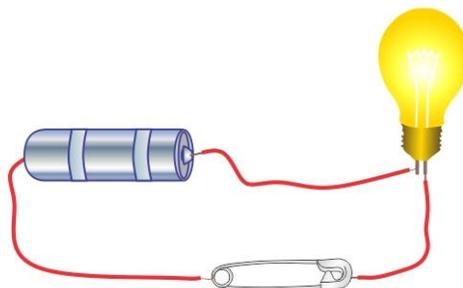
21. Forests must be preserved because they are very important to us. Discuss how forests are important. [2]
22. During wastewater treatment, [2]
 (a) How is the sludge obtained further treated?
 (b) What are the uses of biogas produced in this process?
23. [2]
 (a) What do you understand by rainwater harvesting?
 (b) Mention any two habits to save water at home.
24. What is the need for excretion in our body? [2]
25. Explosion of a cracker is a chemical change. Explain. [2]
26. Which type of change is observed in the given picture? Explain. [2]



27. Formation of clouds is a physical change. Explain. [2]
28. What is the characteristic of fuse wire? [2]
29. What is the difference between a virtual image of an object formed by a convex lens and that formed by a concave lens? [2]

30. Draw a circuit diagram for the following electric circuit:

[2]



SECTION C

31.

[4]

- (a) What is the function of the red pigment of blood? Where is this pigment present in blood?
- (b) How is the pulmonary artery different from any other artery?

32. What is self-pollination? Diagrammatically represent self-pollination.

[4]

33.

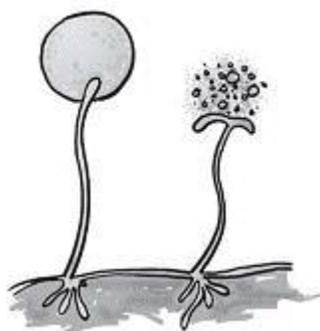
[4]

- (a)
 - i. Where is food synthesised in plants? How do the other plant parts receive this food?
 - ii. Name the factors responsible for transpiration.
- (b) What is the importance of root hair for absorption?

34.

[4]

- (a) Name the process of reproduction occurring below.



What is the advantage of this mode of reproduction? Write the names of two plants which reproduce this way.

- (b) Why is vegetative propagation so called?

35. [4]
(a) The reddish flaky substance is formed when an iron article is left exposed in an open area. Name the process and explain it. What is its effect on the object? Write the chemical equation to show the process of rusting of iron.
(b) Why is rusting of iron considered a chemical change?
36. Identify the following changes as a physical or chemical change. [4]
(a) Log of wood burns to form ash.
(b) Steam condenses to form water.
(c) A bicycle chain rusts.
(d) Water is absorbed by a paper towel.
(e) A piece of a mango rots on the ground.
(f) Dissolving sugar in water.
(g) Eggs turn into omelette.
(h) Stretching metals to form wires.
37. A magnesium strip is burnt in air. The ash so obtained is dissolved in water. What kind of changes are these? Write the chemical equations for these changes. What is the nature of magnesium oxide solution? How will you test it? [4]
38. [4]
(a) Draw a circuit diagram which includes the following:
A cell, a bulb, an open switch
(b) Some electrical appliances have elements in them. How do you notice that they have become hot?
39. [4]
(a) Give one similarity and one difference between a plane mirror and a convex mirror.
(b) Which lens is called diverging lens and why?
40. [4]
(a) Why is it that the same current produces enormous heat in the tungsten filament of an electric bulb but almost negligible heat in the connecting wires?
(b) Give two uses of electromagnets.

SECTION D

- 41.** [5]
(a) By which method do algae reproduce asexually? Diagrammatically represent it and discuss how it occurs.
(b) Name two plants which can be propagated through
i. Stem cutting
ii. Roots
- 42.** Describe an activity to show the transport of water through cells. [5]
- 43.** [5]
(a) Why is the change in the colour of a cut apple slice kept in air considered a chemical change?
(b) List some examples to show the importance of chemical changes in our lives.
- 44.** [5]
(a) Give an activity to show that light travels in a straight line.
(b) Can an image formed by a convex mirror be taken on screen? Give reason for your answer.