

**Goa Board
Class VII Science
Sample Paper – 2
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 of 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 of question numbers 21 to 30. These are SAQ's carrying two marks each.
 5. Section C comprises of question numbers 31 to 40. These are SAQ's carrying four marks each.
 6. Section D comprises of question numbers 41 to 44. These are SAQ's carrying five marks each.
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SECTION A

Attempt all questions from this section

1. By which instrument is blood pressure measured? [1]
(a) Barometer
(b) Hygrometer
(c) Manometer
(d) Sphygmomanometer

2. Vegetative reproduction does not take place by [1]
(a) Cutting
(b) Seed formation
(c) Grafting
(d) Tissue culture

3. Alternate methods for sewage disposal include [1]
(a) Biogas production
(b) Fertilizer production
(c) Insecticide production
(d) Paint production

4. Name the substance present in ascent of sap other than water. [1]
(a) Lipids
(b) Minerals
(c) Vitamins
(d) Proteins
5. What term is used for cutting down more and more trees from the forest? [1]
(a) Afforestation
(b) Deforestation
(c) Conservation
(d) Harvesting
6. Which process in plants supplies oxygen continuously? [1]
(a) Photosynthesis
(b) Respiration
(c) Transportation
(d) Excretion
7. In galvanization, iron metal is coated with which metal to prevent rusting? [1]
(a) Copper
(b) Zinc
(c) Gold
(d) Nickel
8. Neutralisation of calcium hydroxide with hydrochloric acid is an example of [1]
(a) Chemical change
(b) Physical change
(c) Both chemical and physical change
(d) No change
9. Select the statement that holds true for a chemical change. [1]
(a) The original substance can be obtained back.
(b) Formation of new products.
(c) Only color change is observed in the products formed.
(d) No energy is released.
10. Which of the following is not a physical change? [1]
(a) Crushing a cola can
(b) Breaking a piece of chalk to form a small pieces
(c) Melting of ice to form water
(d) Rusting of iron

11. Magnesium burns in oxygen to form [1]

- (a) Magnesium oxide
- (b) Magnesium hydride
- (c) Magnesium hydroxide
- (d) Magnesium carbonate

12. Which of the following pictures show physical changes? [1]

I



Boiling of Water

II



Melting of Ice

III



Rusting of Iron

IV



Lightning of
Electric bulb

- (a) Pictures I, II, and IV
- (b) Picture III only
- (c) Pictures I and IV
- (d) Pictures II and III

13. Which of the following natural processes involves chemical changes? [1]

- (a) Digestion of food
- (b) Evaporation of seawater to form salt
- (c) Formation of clouds
- (d) Condensation of water vapour in clouds to form rain

14. The filament of an electric bulb is made of a thin wire of [1]

- (a) copper
- (b) aluminium
- (c) nichrome
- (d) tungsten

15. An electric bulb is used for light but it also gives heat. This is not desirable. This results in wastage of electricity. This wastage can be reduced by using [1]

- (a) Heaters
- (b) Coolers
- (c) Light emitting diodes (LEDs)
- (d) Compact fluorescent lamps

- 16.** A current carrying coil of an insulated wire wrapped around a piece of iron is called _____ [1]
(a) Permanent magnet
(b) Temporary magnet
(c) Bar magnet
(d) Electromagnet
- 17.** Most of the fuses operate due to the _____ [1]
(a) Heating effect of current
(b) Magnetic effect of current
(c) Electrostatic effect of current
(d) None of the above
- 18.** A _____ object is one that does not produce its own light, although it can still reflect light from other sources. [1]
(a) luminous
(b) non-luminous
(c) transparent
(d) opaque
- 19.** The size of the image formed by a plane mirror is _____ [1]
(a) Smaller than the object
(b) Same as that of the object
(c) Larger than the object
(d) None of the above
- 20.** The seven colors present in the rainbow are _____ [1]
(a) violet, magenta, purple, green, yellow, orange, red
(b) violet, magenta, purple, cyan, yellow, orange, maroon
(c) violet, indigo, blue, cyan, yellow, orange, maroon
(d) violet, indigo, blue, green, yellow, orange, red

SECTION- B

21. What are septic tanks? Give two examples of places where they are used. [2]
22. What is infiltration? How does it occur? [2]
23. Give two examples each of: [2]
(a) fruits which are fleshy and juicy.
(b) seeds dispersed when fruits burst with sudden jerks.
24. How are forests important for herbivores like deer and goat? [2]
25. Most physical changes are reversible. Give two examples to support this statement. [2]
26. What is rusting? Is it a physical change or a chemical change? [2]
27. How is rusting of iron prevented using chromium? [2]
28. 'Light has a dual nature'. Comment. [2]
29. What is a battery? Give some examples of devices where battery is used. [2]
30. What is a spherical mirror? How can you identify that the mirror is concave? [2]

SECTION C

- 31.** [4]
(a) Give reason:
i. Though pulmonary artery carries carbon-dioxide rich blood, it is still called an artery and not a vein.
ii. Arteries have thick, elastic walls.
iii. Blood of all humans is red in colour.
(b) Which blood cells form the clot?
- 32.** [4]
(a) What is drip irrigation? Why is this technique advantageous in regions of water scarcity?
(b) Give an example of wastage of water occurring due to the negligence of civic authorities.
- 33.** Draw the human excretory system and label any two of the following parts: kidney, urethra, ureter, urinary bladder. [4]
- 34.** [4]
(a)
i. Name three agents of seed and fruit dispersal.
ii. Which type of seeds gets dispersed by water? Give an example.
(b) What is hybridisation?
- 35.** [4]
(a) What is crystallisation?
(b) Describe the process of crystallisation of salt solution.
- 36.** [4]
(a) The brown layer 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?
- 37.** A pinch of baking soda is added to vinegar in a test tube. A hissing sound is heard and bubbles of gas are observed. This gas is passed through freshly prepared lime water. [4]
i. What is lime water?
ii. What happens to the lime water when gas is passed through it?
iii. Identify the gas evolved.
iv. Write all the reactions involved.

38. [4]

- (a) Why concave mirrors are used as reflectors?
- (b) Which color light bends the most and which the least while passing through a prism?

39. [4]

- (a) What are the causes of short circuiting and overloading?
- (b) Give two advantages of electromagnets over permanent magnets.

40. Draw a diagram to show the splitting of white light into seven colours on passing through a prism. [4]

SECTION D

41. [5]

- (a) Write any three advantages of water harvesting.
- (b) What happened to the bawris with time? Why are they being revived today?

42. [5]

- (a) How are seeds dispersed by animals? Give two examples of such seeds?
- (b) Diagrammatically represent fertilisation in plants.

43. [5]

- (a) List out any four characteristics of chemical changes.
- (b) Chemical changes are essential for our lives. Explain this statement with the help of an example.

44. [5]

- (a) Identify the given symbols.

i.



ii.



- (b) How a fuse wire prevents damages to electrical circuits and possible fires?