CBSE
Class VII Science
Sample Paper – 4
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

1. The scars found on potatoes are called [1]
(a) Eyes
(b) Bud
(c) Cyst
(d) Spore

2. Clarified water emerges out from which tank? [1]
(a) Sedimentation
(b) Sewage
(c) Septic
(d) Digestion

3. Where is the heart located? [1]
(a) Chest cavity
(b) Alimentary canal
(c) Below the pancreas
(d) Pleura

4. Choose the omnivore among the following: [1]
(a) Deer
(b) Crow
(c) Wolf
(d) Tiger

5. Which blood vessels have thick, elastic walls? [1]
(a) Veins
(b) Arteries
(c) Capillaries
(d) Valves

6. Which of the following does not deplete the water table at a place? [1]
(a) Increasing the number of tube-wells
(b) Increasing deforestation
(c) Scanty rainfall
(d) Increasing snowfall

7. Which of the following increases the rate of rusting? [1]
(a) Dry air
(b) Hydrogen
(c) Salts
(d) Nitrogen

8. Sulphur dioxide gas reacts with water to form: [1]
(a) Acidic solution
(b) Basic solution
(c) Neutral solution
(d) It does not dissolve in water.

9. Which of the following change can be reversed? [1]
(a) Ripening of fruits
(b) Digestion of food
(c) Breaking of bone
(d) Souring of milk

10. What type of change is writing on paper? [1]
(a) Chemical change
(b) Physical change
(c) Both chemical and physical change
(d) No change

11. For making potato fries, you slice the potatoes (process 1) and deep fry it in oil (process 2). What types of changes are observed in the two processes? [1]
(a) Process 1 - Chemical change; Process 2 - Physical change
(b) Process 1 - No change; Process 2 - Physical change
(c) Process 1 - Physical change; Process 2 - Chemical change
(d) Process 1 - Chemical change; Process 2 - Chemical change

12. Select the statement which holds true for a chemical change. [1]
(a) Original substance can be obtained back
(b) Formation of new products
(c) Only colour change is observed in the products formed
(d) No energy is released

13. Select the process/es associated with a physical change. [1]
(a) Change in colour
(b) Formation of new products
(c) Release of heat and light
(d) Change in state

14. The symbol  represents [1]
(a) Electric cell
(b) Battery
(c) Switch ON
(d) Switch OFF

15. A fuse should have [1]
(a) Low melting point and high resistance
(b) Low melting point and low resistance
(c) High melting point and high resistance
(d) High melting point and low resistance

16. Which of the following does not use electromagnets? [1]
(a) Loudspeaker
(b) Voltmeter
(c) Mixer grinder
(d) Gas oven

17. The speed of light in vacuum is [1]
(a) 3×10^6 m/s
(b) 3×10^7 m/s
(c) 3×10^8 m/s
(d) 3×10^9 m/s

18. Which of the following is not a characteristic statement of a plane mirror? [1]

(a) The magnification of the image formed is 1.
(b) The image can be formed on a screen.
(c) The image formed is erect.
(d) The image is formed at the same distance behind the mirror as the object is in front of it.

19. An inverted image can be seen by using a convex mirror [1]

(a) When the object is placed just next to the mirror.
(b) When the object is placed anywhere near the mirror.
(c) When the object is placed too far from the mirror.
(d) Under no circumstances.

20. Identify the plano–concave lens among the following: [1]

(a)

(b)

(c)

(d) None of the above

SECTION B

21. Would we see similar kinds of trees and animals in every forest? Why? [2]

22. Write any four ways how individuals waste water at home. [2]

23. Which trees should we plant near sewage ponds? Why? [2]

24. How is urine excreted? [2]

25. Write the change involved in the given examples: [2]
(a) A piece of an apple rots on the ground.
(b) A tyre is inflated with air.

26. Rusting of iron is faster in coastal areas than in deserts. Give reason. [2]

27. Classify the following as a physical or a chemical change: [2]
i. Condensation of water vapour
ii. Photosynthesis
iii. Burning of dry leaves
iv. Conversion of chalk stick into chalk dust

28. If the filament of the bulb is broken, would the circuit be complete? Would the bulb still glow? [2]

29. Give two characteristic features of the image produced by a plane mirror. [2]

30. What is the magnetic effect of electric current? [2]

SECTION C

31. Diagrammatically represent [4]

(a) Anther

(b) Pistil

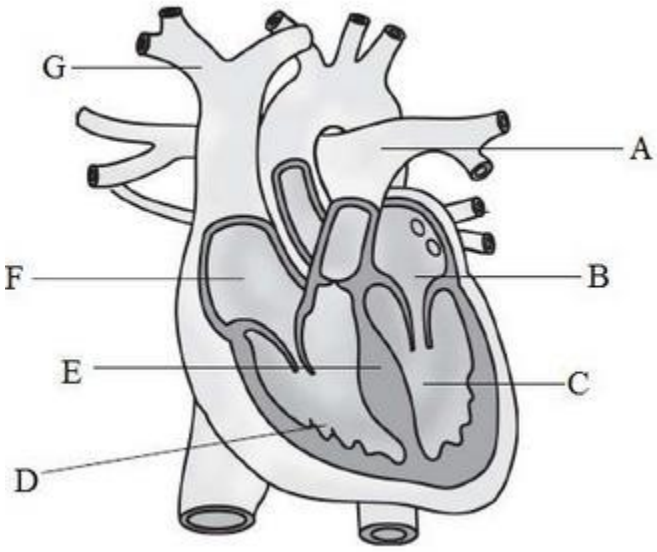
32. [4]

(a) Write any three advantages of plants produced by vegetative propagation.

(b) How is multiple fission different from binary fission?

33. [4]

(a) Label any six of the parts (A–G) of the heart in the below figure.

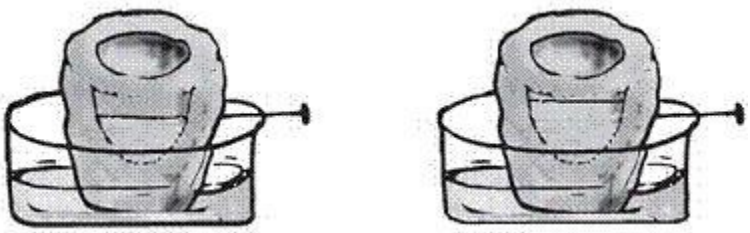


(b) Which important function is carried out by the human heart?

34. [4]

(a) What is transpiration? How is it important to plants?

(b) What does this figure show?



35. When an object made of material M is kept immersed in the blue-coloured solution N, a chemical change takes place to form a green-coloured solution O and a brown layer of substance P is deposited on the object. M is used for making nails and P is used for making electric wires. [4]

(a) What is the material M?

(b) Name the blue-coloured solution N.

(c) Name the green-coloured solution O.

(d) Name the substance P.

Answer the above questions with reasons.

36. [4]

(a) A fraction of a ship's iron has to be replaced every year. Explain.

(b) What types of iron objects are protected from rusting by painting?

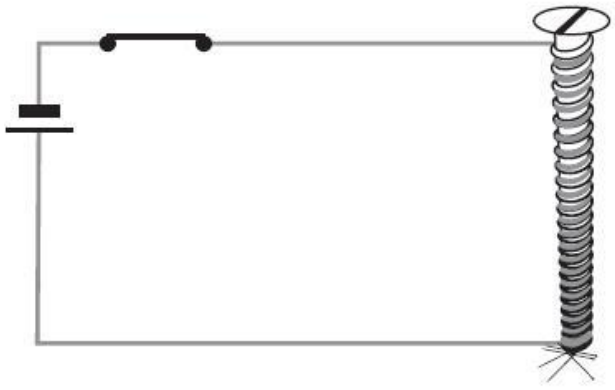
37. [4]

(a) Why is rusting of iron faster in coastal areas?

(b) Write an experiment to show that air and moisture are necessary for rusting.

38. [4]

(a) Identify the given figure. Why should we not switch on the current for more than few seconds through it?



(b) What are the causes of short circuiting and overloading?

39. [4]

(a) What is the difference between the image formed by a concave mirror and convex mirror?

(b) Why are concave mirrors used as shaving mirrors?

40. [4]

(a) What is a circuit diagram? What is its use?

(b) What is the usual name of magnets whose magnetism can be turned on or off as desired?

SECTION D

41. [5]

(a) Flowers are generally very colourful and fragrant. How is this important for pollination?

(b) What do you understand by

i. Unisexual flowers

ii. Bisexual flowers

42. [5]

(a) How is a pulse generated? What does the pulse rate indicate?

(b) How is deoxygenated blood reoxygenated?

43. [5]

(a) What is crystallisation?

(b) How are the insoluble and soluble impurities from an impure solid substance separated?

(c) Describe an activity to obtain crystals of pure copper sulphate from an impure sample.

44. [5]

(a) What is dispersion of light?

(b) How does light travel?

(c) 'Light has a dual nature'. Comment.