

CBSE Board
Class VII Science
Sample Paper – 1
Term II

Time: 2 ½ hrs

Total Marks: 80

General Instructions:

1. The question paper consists of 34 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 15. 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 16 to 22. These are SAQs carrying two marks each.
 5. Section C comprises question numbers 23 to 31. These are SAQs carrying four marks each.
 6. Section D comprises question numbers 32 to 34. These are SAQs carrying five marks each.
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SECTION A

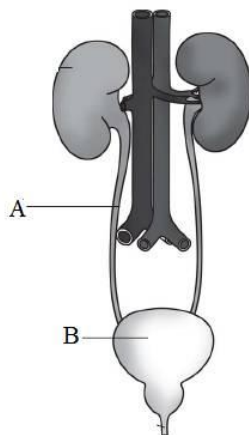
1. The vessels which carry carbon dioxide rich blood from all the parts of the body back to the heart are called [1]
(a) Veins
(b) Arteries
(c) Capillaries
(d) Valves
2. Why does the temperature increase as the day advances? (1)
(a) Due to slanting sun rays
(b) Due to perpendicular sun rays
(c) Due to inclined sun rays
(d) Due to global warming
3. What do we call the network of several food chains connecting each other? [1]
(a) Food web
(b) Food chain
(c) Food cycle
(d) Trophic level

4. We tend to feel hungrier after (1)
(a) Standing
(b) Exercise
(c) Resting
(d) Sleeping
5. In Gujarat, construction of 18 check dams is being planned by an N.G.O. and the villagers on which of the following rivers? [1]
(a) Saraswati River
(b) Ganga River
(c) Yamuna River
(d) Rukmavati River
6. 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
7. Stainless steel is an alloy of iron with [1]
(a) Zinc
(b) Aluminium
(c) Chromium and nickel
(d) Chromium and copper
8. Surgical instruments do not rust at all since they are made of [1]
(a) Iron mixed with Zinc
(b) Iron mixed with lead
(c) Iron mixed with copper
(d) Iron mixed with nickel
9. Pick a good conductor of heat from the following. (1)
(a) Aluminium
(b) Plastic
(c) Wood
(d) Rubber
10. The air near the source of heat (1)
(a) Rises away from the source
(b) Moves closer to the source
(c) Remains in the same place
(d) Moves randomly

- 11.** When the direction of current flowing through a coil is reversed, the direction of deflection in the needle compass kept near it _____. [1]
- (a) remains unaffected
 - (b) gets reversed
 - (c) points north-south
 - (d) points east-west
- 12.** Which of the following statements is true about a plane mirror? [1]
- 1. The image is larger in size than the object.
 - 2. The image is formed at the same distance as object.
 - 3. The image is laterally inverted.
 - 4. The image is virtual and erect.
- (a) 1, 2, 3
 - (b) 2, 3, 4
 - (c) 1, 3, 4
 - (d) 1, 2, 3, 4
- 13.** The phenomenon of bouncing back of light falling on a smooth polished surface is known as _____. [1]
- (a) Refraction
 - (b) Absorption
 - (c) Polarization
 - (d) Reflection
- 14.** What is the wavelength range of visible light? [1]
- (a) 1000 - 5000 Å
 - (b) 2000 - 6000 Å
 - (c) 3000-7000 Å
 - (d) 4000-8000 Å
- 15.** Formation of spectrum by a glass prism takes place because [1]
- (a) light of different colors has different intensities.
 - (b) light of different colors has different frequencies.
 - (c) light of different colors refracts with different angles of refraction.
 - (d) light of different colors has different energies.

SECTION B

16. What is the importance of the parts labeled 'A' and 'B' in the below figure? [2]



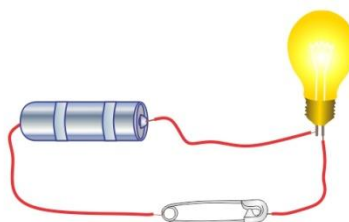
17. Why forests are called green lungs? [2]

18. What do you understand by water table? Name the factors that affect the water table. [2]

19. Explain how galvanization of an iron object prevents it from rusting? [2]

20. The same substance can undergo a physical change or a chemical change depending upon the conditions. Explain with an example. [2]

21. Draw a circuit diagram for the following electric circuit: [2]



22. Give two advantages of CFLs. [2]

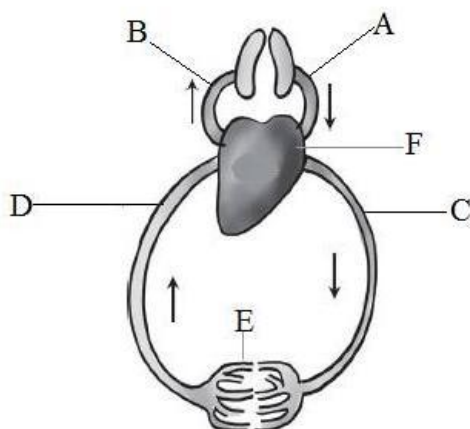
SECTION C

- 23.** [4]
- (a)
- i. What do you understand by seed dispersal?
 - ii. What happens to the seeds when fruits burst with sudden jerks?
- (b) Name the following:
- i. Two hard fruits.
 - ii. The protective structure enclosing the embryo.
- 24.**
- (i) Explain how an insect gets trapped in the pitcher plant? [4]
 - (ii) How do fungi germinate?
- 25.** [4]
- (a) Why it is essential that food must be made available to every cell of the plant?
- (b) Write the function of:
- i. Xylem
 - ii. Phloem
- 26.** Consider the following salts: [4]
- Sodium sulphate, Sodium carbonate, Ammonium sulphate
- The aqueous solution of which of these salts will:
- (a) Turn blue litmus to red?
 - (b) Turn phenolphthalein to pink?
 - (c) Turn China rose indicator to green?
 - (d) Have no effect on any indicator?
- Give reasons for your answers.
- 27.** Explain the following with reasons: [4]
- (a) Formation of clouds is a physical change.
 - (b) Melting of butter to make ghee is a chemical change.
- 28.** Explain any four methods of preventing rusting of iron. [4]
- 29.** [4]
- (i) What is difference between conduction and convection?
 - (ii) It is hotter at the same distance over the top of a fire than it is on the side of it. Why?
- 30.** [4]
- (a) If an object is placed at a distance of 10 cm in front of a plane mirror, how far would it be from its image?
 - (b) Why do different colours of light refract at different angles in the formation of a spectrum?

31. [4]
- (a) What is the function of needle in a magnetic compass?
- (b) Some electrical appliances have elements in them. How do you notice that they have become hot?

SECTION D

32. [5]
- (a) Label the parts shown as A-F in the below schematic diagram of circulation.



- (b) What is the function of the red pigment of blood? Where is this pigment present in blood?
33. When an ant stings a person, the solution of substance K is rubbed on the stung area of the skin to get relief from pain. The substance K is also used in kitchen for cooking purposes. Another substance L is sour in taste and contains an organic acid M. It is pungent smelling and is used as a preservative in foods. When a solution of K is mixed with L, then a change N takes place to produce bubbles of gas O. [5]
- (a) Identify K.
- (b) What is substance L?
- (c) Name the acid M.
- (d) What type of change is N?
- (e) Name the gas O.
34. Give reasons for the following. [5]
- (a) Which mirrors are used as side mirrors in scooters? Give reason.
- (b) Mention any three uses of concave mirrors.