

CBSE Board
Class VII Chemistry
Term 2
Sample Paper - 1

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

Q1. The vessels which carry carbon dioxide rich blood from all the parts of the body back to the heart: (1)

- A. Veins
- B. Arteries
- C. Capillaries
- D. Valves

Q2. Which among the following is not a juicy fruit? (1)

- A. Apple
- B. Mango
- C. Orange
- D. Walnut

Q3. Which gas is produced when the sludge is digested? (1)

- A. Methane
- B. Ethane
- C. Propane
- D. Butane

- Q4. 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
- Q5. The mechanism that cools the plants is: (1)
- A. Excretion
 - B. Transportation
 - C. Transpiration
 - D. Translocation
- Q6. In Gujarat, construction of 18 check dams is being planned by N.G.O. and the villagers on the following river: (1)
- A. Saraswati River
 - B. Ganga River
 - C. Yamuna River
 - D. Rukmavati River
- Q7. 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
- Q8. Breaking of ozone to form oxygen is an example of which change? (1)
- A. Chemical change
 - B. Physical change
 - C. Crystallisation
 - D. Both chemical and physical change
- Q9. Which of the following cannot be called a physical change? (1)
- A. Grating cheese
 - B. Fermenting of cheese
 - C. Melting cheese
 - D. Mixing two cheeses in a bowl

Q10. Stainless steel is an alloy of iron with? (1)

- A. Zinc
- B. Aluminium
- C. Chromium and nickel
- D. Chromium and copper

Q11. 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

Q12. What type of change is involved in melting of copper metal? (1)

- A. Change in chemical properties of metal
- B. Change in shape of the metal
- C. Increase or decrease in temperature
- D. Change in physical properties of metal

Q13. Which of the following is NOT a physical change? (1)

- A. Tearing postcard
- B. Making curd
- C. Melting wax
- D. Mixing oil in water

Q14. The shown symbol for the battery has how many cells? (1)



Q15. The coil of wire in an electric heater used for cooking is called _____. (1)

- A. Filament
- B. Element
- C. High tension wire
- D. Electric wire

Q16. 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

Q17. 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. A, 1, 2, 3
- B. B, 2, 3, 4
- C. C, 1, 3, 4
- D. D, 1, 2, 3, 4

Q18. 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

Q19. 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

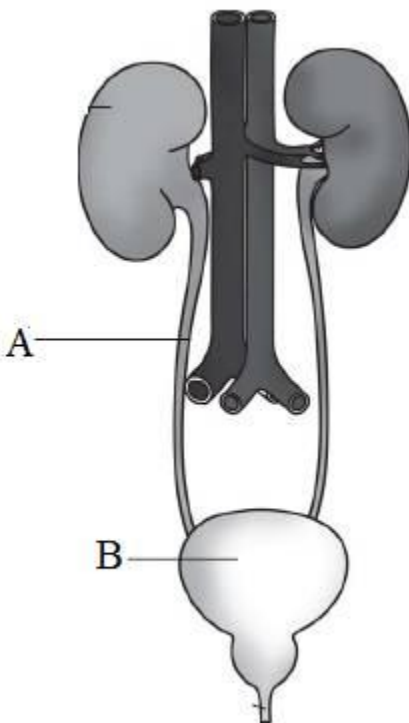
Q20. Formation of spectrum by a glass prism takes place because: (1)

- A. the light of different colors has different intensities.
- B. the light of different colors has different frequencies.
- C. the light of different colors refract with different angles of refraction.
- D. the light of different colors has different energies.

SECTION-B

Q21. Why is sewage said to be a complex mixture? (2)

Q22. What is the importance of the parts labeled 'A' and 'B' in the below figure? (2)



Q23. Why forests are called green lungs? (2)

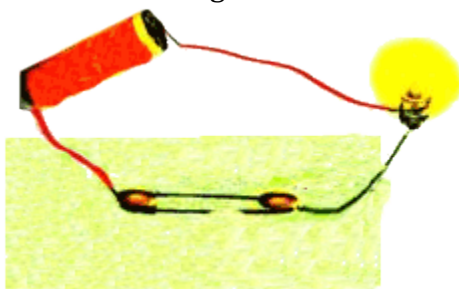
Q24. What do you understand by water table? Name the factors that affect water table. (2)

Q25. What is charring of sugar? Is it a chemical change? (2)

Q26. Explain how galvanization of an iron object prevents it from rusting? (2)

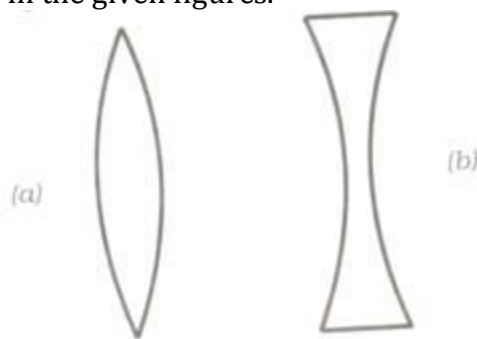
Q27. The same substance can undergo a physical change or a chemical change depending upon the conditions. Explain with an example. (2)

Q28. Draw a circuit diagram for the following electric circuit: (2)



Q29. Identify the lens shown in the given figures.

(2)



Q30. Give two advantages of CFLs.

(2)

SECTION-C

Q31.

(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:

c.

- (i) Two hard fruits.
- (ii) The protective structure enclosing the embryo.

Q32. How does kidney failure occur? What can be done to help the survival of such people?

(4)

Q33.

(4)

- a. Why do plants need water? What will happen if water is not available to plants?
- b. What is shown in the below figure?



Q34. (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

Q35. Identify the following changes as 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 omelet.
- h. Stretching metals to form wires.

Q36. Explain the following with reasons: (4)

- i. Formation of clouds is a physical change.
- ii. Melting of butter to make ghee is a chemical change.

Q37. Explain any four methods of preventing rusting of iron. (4)

Q38. (4)

- a. How can we make a battery from two or more cells?
- b. Give two applications of heating effect of electric current.

Q39. (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?

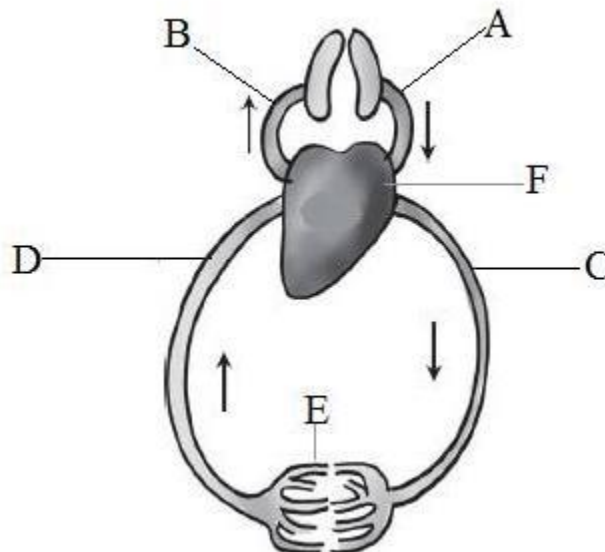
Q40.

- 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

Q41.

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



(b) What is the function of the red pigment of blood? Where is this pigment present in blood?

Q42.

(a) Name the following: (5)

- (i) Parts of a stamen.
 - (ii) The process in which the pollen of a flower lands on the stigma of another plant (of the same kind) situated far away.
 - (iii) The process of fusion of male and female gametes to form zygote.
- How the germination of seed takes place?

Q43. 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)

- i. Identify K.
- ii. What is substance L?
- iii. Name the acid M.
- iv. What type of change is N?
- v. Name the gas O.

Q44. 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.