

Sample Paper – 2008
Class – X
Subject – Science

Time: 2 ½ Hrs

Maximum Marks: 60

General Instructions:

- i) The question paper comprises of two sections A and B. You are to attempt both the sections.
- ii) The candidates are advised to attempt all the questions of Section A separately and Section B separately.
- iii) All questions are compulsory.
- iv) There is no overall choice. However, internal choice has been provided in two questions of five marks category in Section A and one question of 2 marks category and one question of 3 marks category in Section B. You are to attempt only one option in such questions.
- v) Marks allocated to each question are indicated against it.
- vi) Questions 1 to 6 in Section A and 17 to 19 in Section B are very short answer questions. These are to be answered in one word or one sentence only.
- vii) Questions 7 to 10 in Section A and 20 to 24 in Section B are short answer questions. These are to be answered in about 30 - 40 words each.
- viii) Questions 11 to 14 in Section A and 25 to 26 in Section B are also short answer questions. These are to be answered in about 40 - 50 words each.
- ix) Questions 15, 16 in Section A and 27 in Section B are long answer questions. These are to be answered in about 70 words each.

Section- A

1. Write the product formed when Ferrous Sulphate is heated?
2. What is the relationship between angle of Incidence & angle of Reflection?
3. What will happen if the solution Hydrogen Carbonate is heated? Give the equation of the reaction involved?
4. How can Presbyopia be corrected?
5. What is the Composition of Aqua regia?
6. Why are copper wire used as connecting wire?
7. An element X on burning in air form an oxide XO_2 which when dissolved in water turns blue litmus red. Identify if X is a metal or non – metal Justify your answer?
8. What is the cause of resistance offered by a conductor?
9. The near point of a hypermetropic eye is 1m. What is the power of the lens required to correct this defect? Assume that the near point of normal eye is 25cm.

10. What are the two methods of producing magnetic field? Which of these is better and why?
11. Classify the element of third period into metal & non – metal of the modern periodic table?
12. What do you mean by scattering of light? Describe the arrangement for observing scattering of light by colloidal solution.
13. A metal X acquires a green colour coating on its surface on exposure to air
 - (a) Identify the metal X and name the process responsible for this change
 - (b) Name the green coating formed on the metal?
14. A potential difference V is maintained across a conductor of length L & cross section area A how is the resistance R of conductor affected when only V is halved only L is halved and only A is halved?
15. Describe an experiment in detail to study refraction of light through a prism Draw with a ray diagram too. What do you mean by angle of deviation?

OR

Describe an experiment to study refraction of a light ray through a rectangular glass slab what are the important results obtained from the experiment?

16. The reaction metal X and Fe_2O_3 is highly exothermic and is used to join railway
 - (a) Identify metal X and name the reaction
 - (b) Write the chemical equation of its reaction with Fe_2O_3

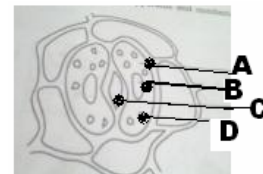
OR

An organic Compound A is widely used as a preservative in pickles and has a molecular formula $\text{C}_2\text{H}_2\text{O}_2$. This compound reacts with ethanol to form a sweet smelling Compound B

- (a) Identify the Compound A
- (b) Write the chemical equation with ethanol to form compound B
- (c) How can we get compound A back from B
- (d) Name the process and write equations?
- (e) Which gas is produced when compound A reacts with washing Soda? Write the chemical equations?

SECTION B

17. When bile is stored?
18. Name the plant hormone which inhibits growths?
19. What is genetic drift?
20. What contribution forest officer Sh., A.K. Banerjee made in protection of environment?
21. What is the function of receptors & effector organ?
22. What is blood pressure? What is the value in a healthy person name the instrument used to measure it?
23. How information passes through neurons?
24. How do we know how old fossils are?
25. What is meant by pollination? Describe its various types along with name of various pollination agents?
26. Draw a diagram of Human Brain?
27. [i] what is meant by pollination? Name its various types of pollination agents?



(ii) Label the diagram given, and explain how exchange of gases occurs in leaf of a plant.

(iii) Draw cross-section of human heart; label it **arrow** path of circulation by arrows only.

OR

Describe the working of artificial Kidney?