

**SAMPLE PAPER – 2008**

**Class – X**

**Subject - Science**

Time: 2:30hrs

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**General Instructions**

1. The question paper comprises of two sections A and B. You are to attempt both the sections.
2. All questions are compulsory.
3. There is no overall choice However, internal choice has been provided in all the three questions of five marks category. Only one option in such questions is to be attempted.
4. All questions of section A and all questions of section B are to be attempted separately.
5. Questions 1 to 6 in section A and 17 to 19 in section B are short question. These carry one mark each.
6. Questions 7 to 10 in section A and 20 to 24 in section B are short answer type questions and carry two marks each.
7. Questions 11 to 14 in section A and 25 to 26 in section B are also short answer type questions and carry three marks each.
8. Questions 15 and 16 in section A and question 27 in section B are long answer

type questions and carry five marks each.

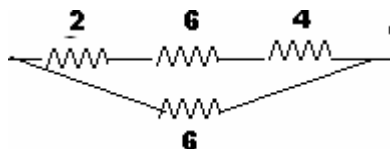
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### SECTION A

1. Write the byproduct formed during the formation of soap? Also write its formula 1
2. Write the chemical formula of Bleaching powder. Why is it stored in air-proof containers? 1
3. Although silver is uncreative metal, but it becomes blackish after sometime Why? 1

4. Find the total resistance in fig.



5. What is the roll of pupil in the eye? 1
6. Write the focal length of lens of power 1.5 D 1
7. Draw structures of  $\text{AlCl}_3$ ,  $\text{C}_6\text{H}_6$ ,  $\text{CO}_2$ , and  $\text{HCl}$  2
8. Define ph of solution. What will be the Ph of oxides of non-metals 1+1
9. Define Resistivity? What factors does it depend. What happens on resistivity if temperature is increased? [1/2+1+1/2]
10. [i] Which uses more energy, a 250W TV set in 1Hr, or a 1200w toaster in 10 minutes.  
[ii] How does the resistance of a wire vary with its area of cross section? 1+1
11. [i] It is advised in traffic rules pedestrians should be wear white cloths during night. why?  
[ii] Define in spherical mirror the terms, Radius of curvature, and Focal length  
[iii] Draw ray diagram when objects is placed at C in front of concave mirror 1+1+1
12. [i] Why is a normal eye not able to see clearly the objects placed closer than 25cm?

[ii] The change in focal length of an eye lens is caused by the action of the ----- 2+1  
13 [i]. Why does micelle formation take place when soap is added to water? Will a micelle be formed in other solvents such as ethanol also?

[ii] Name two elements that have a single electron in their outermost shells 2+1

14 [i] Explain why the atomic number of an element is more important for a chemist as compared to its atomic mass.

[ii] Name the two elements whose atomic masses were corrected on the basis of their position in the Mendeleev's periodic table.

[iii] Explain why argon atom bigger in size than a Chlorine atom? 1x3

15. [i] Explain the formation of scum when hard water is treated with soap.

[ii] How would you distinguish experimentally between an alcohol and a carboxylic acid?

[iii] What are oxidizing agents [2+2+1]

Or

[i] What is functional group? Name the functional group which always occurs in the middle of a carbon chain?

[ii] Explain why, diamond is hard where as graphite is soft?

[iii] Carbonate and sulphide ores are usually converted into oxides during the process of extraction.

[iv] What are amphoteric oxides? Give two examples.

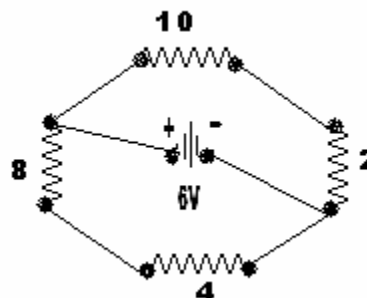
[v] Write the formula and chemical name of plaster of Paris [1x5=5]

16 [i] Draw the magnetic field due to a current through a circular loop. Compare the pattern of the field with the magnetic field around a bar magnet. Are they similar, justify your answer.

[ii] What is the function of an earth wire? Why is it necessary to earth metallic apparatus?

[iii] What is the function of brushes in an electric generator? 2+2+1

Or



Find in this fig.

[i] [a] Total resistance in the circuit.

[b] Current flow in 10 ohms resistance

[c] Total voltage across 4 ohms resistance

[ii] Imagine that you are sitting in a chamber with your back to one wall, an electron beam, moving horizontally from back wall towards the front wall, is deflected by a strong magnetic field to your right side. What is direction of magnetic field? 3+2

### SECTION B

- 17 Write the balanced chemical equation for photosynthesis. 1
- 18 Why is the iodised salt advisable? 1
- 19 Write two disadvantages of using a solar cooker. 1
20. What are the different ways in which glucose is oxidized to provide energy in various organisms? 2
- 21 Write animals' hormones and which of them is responsible for sugar in human 2
22. What would be the consequences of a deficiency of haemoglobin in our bodies? 2
23. Hydrogen gas has been used as a rocket fuel. Would you consider it a cleaner fuel than CNG? Why or why not? 2
- 24 What is biomagnifications? Will the levels of this magnification be different at different levels of the ecosystem? 2
- 25.[i] Suggest four approaches towards the conservation of forests
- [ii] Write the three R's to save the environment 2+1
26. Draw the labeled diagram of human brain .What is the role of brain in reflex action 2+1
- 27.[i] What are the components of the transport system in highly organized plants?
- [ii] Draw the labeled diagram of human heart.
- [iii] What is the function of digestive enzymes? 2+2+1

Or

[i] Draw a labeled diagram of artificial kidney (Hemodialysis)

[ii] What are the functions performed by the testis in human beings?

[iii] Why does menstruation occur?

2+2+1