

Sample Paper – 2008
CLASS – X
Subject - Science

Time : 2½ Hours

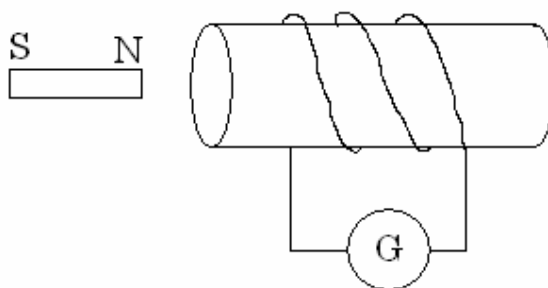
Max. Marks : 60

General Instructions

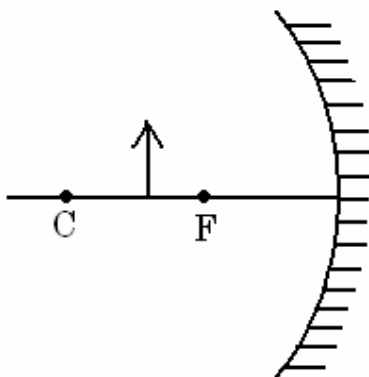
1. The question paper comprises of two sections A and B. You are to attempt both the sections.
2. All questions are compulsory.
3. There is no overall choice However, internal choice has been provided in all the three questions of five marks category. Only one option in such questions is to be attempted.
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.

SECTION A

1. Why is baking soda applied on the body of a person stung by bee? 1
2. An ophthalmologist told Manu that his grandfather's eye lens has become milky and cloudy. What is this condition termed as? 1
3. The atomic numbers of three elements are shown below:
X – 13 Y – 7 Z – 15
Which of the above belong to the same (i) group? (ii) period? 1
4. What happens when the magnet is moved into the coil shown in the below figure? 1



5. How much work is done in moving 1 C of charge through a 6V battery? 1
6. Write down the chemical reaction when iron reacts with dilute sulphuric acid. 1
7. Convert ethanol to sodium acetate. 2
8. Complete the following ray diagram and write down the characteristics of the image produced. 2

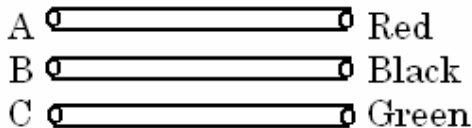


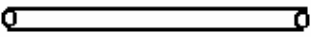
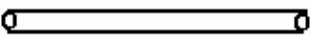
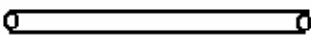
9. A student placed a watch glass containing silver chloride near the window of the laboratory on a sunny day. Later he observed that the colour of the chemical turned grey.
 - a. Write chemical equation for the above situation 1
 - b. Identify the type of chemical reaction 1

Or

- a. Write the chemical formula and chemical name of Plaster of Paris. 1
 - b. What happens when it is mixed with water? 1
10. Draw the magnetic field lines in and around a current carrying solenoid. 2
11. An object 5 cm long is held 40cm away from a converging lens of focal length 10cm. Using ray diagram, find the position, nature and size of the image. 3

Or

- i. Write the relation between commercial and S.I. unit of energy.
ii. 180J of heat are produced in a 5Ω resistor per second. What is the potential difference across the resistor. 3
12. What were the limitation of Newland's Law of Octaves? 3
13. Three wires are labeled as shown below
- 

A  Red
B  Black
C  Green
- i. Identify A, B and C 1
ii. Overloading is said to occur when two of the above wires meet. Which are they? 1
iii. What happens to the current in the circuit when the above condition occurs? 1
14. Why are decomposition reactions called the opposite of combination reactions. Explain with examples. 3

Or

- a. Ionic compounds have high melting and boiling points. Why? 1
b. What is thermit process? Give its any one application 2
15. What are the raw materials used for Chlor-alkali process? Write the balanced chemical equation for the process. What are the products formed? Give two uses of each of these products. 5
16. i. Draw a neat diagram to show the refraction of a ray of light through a prism. Mark the following angles in the above figure 2
(a) angle of incidence (b) angle of refraction
(c) angle of emergence (c) angle of deviation.
ii. If the angle of incidence is 45° and angle of refraction is 60° , calculate the refractive index of the glass of which the prism is made. 1
iii. What happens when white light is made to pass through a prism. Why? 2

SECTION B

17. Salivation is an involuntary action. Name the part of the brain that controls this action. 1

18. The colour of mice selected for an experiment were brown and black. Two parents BB and bb were selected and the genotype of F1 progeny obtain in an experiment on mice was brown. What is the colour of the mouse with genotype BB?

1

19. How is ozone layer useful to humans though ozone is itself a deadly poison?

1

20. (a) Write any one point of difference between lymph and blood plasma. 1

(b) State any one function of lymph in our body 1

21. When you eat a toffee, the sugar level in your blood rises. Describe how it is brought back to the normal level? 2

22. Study the following figure:



a) Write a suitable caption for the above figure 1

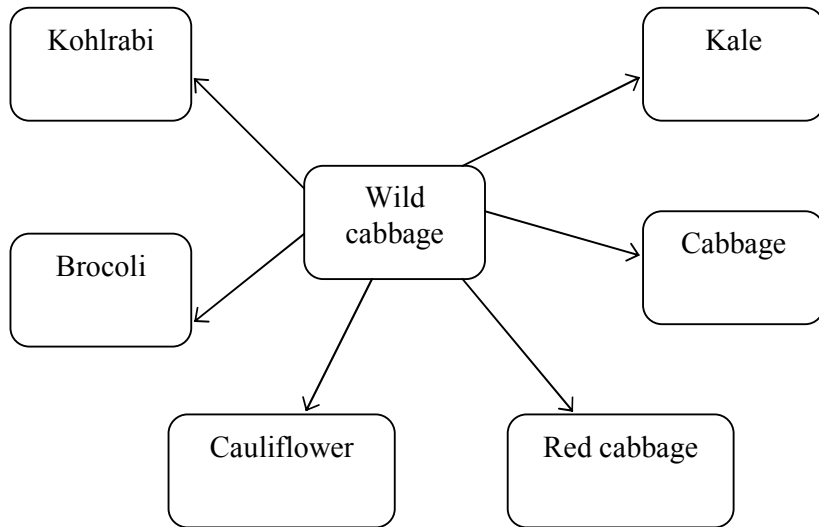
b) Identify the mode of reproduction in the above 1

23. Mention any 2 problems addressed in criticisms about large dams. 2

24. List out any 4 characteristics of a good fuel. 2

25. Write down the three events that occur during photosynthesis in proper sequence. Also write down the chemical equation for photosynthesis? 3

26. Study the following figure



How were the above plants generated by selection by farmers from wild cabbage?
 What is this type of selection called? Explain. 3

27. a) Draw a labeled diagram of the longitudinal section of a flower. 2
 b) How does the uterus in female adults prepare itself every month to receive the zygote? 1
 c) What changes occur in the uterus when the released egg is not fertilized? 2

* * * * *