

SAMPLE PAPER SCIENCE Class X 2005

SET 1

SECTION A

- a) Question number 1 – 5 are of one mark each
- b) Question number 6 – 10 are of 2 marks each
- c) Question number 11 – 17 are of 3 marks each
- d) Question number 18 – 20 are of 5 marks each

1. Define the term dissociation.
2. We see the object because the light is reflected from the object. Why we do not see our face while reading the newspaper?
3. What is the main difference between the various reactors used for the power generations?
4. How many elements have been discovered so far?
5. What is Fehling's reagent and what is it used for?
6. Write the name of the constituents present in baking powder. Explain the function of each.
7. What are open circuit, closed circuit and short circuit? Draw the diagrams.
8. Distinguish between presbyopia and hypermetropia.
9. What forces are known as the magnetic forces?
10. What are the harmful effects of drinking alcohol?
11. Explain the Hesselemer plant for the manufacture of the bleaching powder.
12. Draw the labeled diagram of eye.
13. What is short circuiting and overloading?
14. The heat produced on the complete combustion of 10 g of fuel can raise the temperature of 2 kg of water from 20°C to 70°C. Calculate the calorific value of the fuel, if the specific heat of water is 4.2 J/g °C.

Or

What is the most prominent model to understand the nuclear fission reaction and who proposed it? 1/9/2006

15. Explain with the diagram the hydraulic washing of the concentration of the ore.
16. What is liquor ammonia? Explain the solubility of ammonia with the experiment.
17. Explain the froth floatation process of the concentration of the sulphide ores.

Or

Ammonia is prepared from nitrogen and hydrogen by the Haber's process. This process is carried out at 200-300 atm pressure and 723-773 K temperature.

- a) Give one reason that it is not used at the lower temperature.
- b) Give one reason for not using very high pressure.
- c) How could ammonia be separated from the other two gases?
18. Why is sulphuric acid known as the "King of the chemicals"?
19. What is meant by the fractional distillation of petroleum? Draw the diagram showing the useful components after the refining.

Or

Explain the process of the extraction of the metals from the oxide ores.

20. Name the organizations which look after the space programmes in India. List some of the achievements. Distinguish between the polar and the equatorial orbits of the artificial satellites.

SECTION B

- a) Question number 21 – 23 of one mark each
- b) Question number 24 and 25 are of 2 marks each
- c) Question number 26 to 29 are of 3 marks each
- d) Question number 30 is of 5 marks

21. How the water lost through the transpiration is replenished?
22. Define the environmental pollution.

23. Name some environmental pollution.
24. What is the role of the chlorophyll in photosynthesis?
OR
What is translocation? How it takes place in the plants?
25. How is the sex of the off springs determined?
26. Explain the mechanism of breathing in humans.
27. Mention the functions of the fore brain.
28. With the help of the diagram describe the structure of the parts of the flower.
29. Describe some of the practices that must be followed in the prevention of the air pollution.
30. Draw the diagram of the human heart and label the parts.

OR

In brief describe the various movements of the plants.