

## CBSE SAMPLE PAPER -2011

**CBSE MODEL TEST PAPER-SCIENCE**

- Q1. Name the male and female gametes in animals.What is fertilization and where does it take place in human females?
- Q2.What is Chipko Movement? why should we conserve forests?
- Q3. Write two advantages of sexual reproduction over asexual reproduction.
- Q4. Which compounds are responsible for the depletion of ozone layer?
- Q5. What is regeneration ? State a reason why a more complex organism cannot give rise to new individuals through this method.
- Q6.List any two advanatages of water harvesting.
- Q7. Why are bacteria and fungi called decomposers? Give any one advantage of decomposers to the environment.
- Q8. An old person is unable to see clearly nearby objects as well as distant objects. (a) What defect of vision is he suffering from? (b) What kind of lens will be required to see clearly the nearby as well as distant objects? Give reasons.
- Q9. Suggest any two changes that you would like to be incorporated in the life-style of students of your age to move towards a sustainable use of available resources.
- Q10. Why is DNA copying an essential part of the process of reproduction?
- Q11.What happens when a small piece of sodium is dropped into ethanol?
- Q12. What are meant by a functional group in an organic compound ?Name the funtional group present in- (a) CH<sub>3</sub>CH<sub>2</sub>OH (b) CH<sub>3</sub>COOH
- Q13. State one point of difference between soap and synthetic detergent.
- Q14. Distinguish between acquired and inherited traits giving one example of each.Why are traits acquired during the lifetime of an individual not inherited?
- Q15. (a) Distinguish between esterification and saponification reactions of organic compounds. (b) With a labelled diagram describe an activity to show the formation of an ester.
- Q16. (a) What is vinegar? (b) Describe with a chemical equation,what happens when sodium hydrogen carbonate reacts with ethanoic acid.
- Q17.What is meant by exploitation of resources with short term aims? List its four advantages.
- Q18.Sap does not work well with hard water . Name the class of compounds which can be used as cleansing agents in place of soap.Write the name of one such compound .Explain in brief the mechanism of its cleansing action when used in hard water.
- Q18. What is dam ? write two main advantages and two ill-effects of constructin a big dam.
- Q19. (a) why do we classify elements? (b)what were the two criteria used by Mendeleev in creating his periodic Table? (c) why did Mendeleev leave some gaps in his periodic Table? (d) in Mendeleev's periodic Table,why was there no mention of Noble gases like Helium,Neon and Argon? (e) would you place the two isotopes of chlorine ,cl-35 and cl-37 in different slots because of their different atomic masses or in the same slot because their chemical properties are the same? Justify your answer.
- Q20. (a) what is dispersion of white light ? what is the cause of such dispersion? Draw a diagram to show the dispersion of white light by a glass prism. (b) A glass prism is able to produce a spectrum when white light passes through it but a glass slab doesnt produce any spectrumm.Explain why it is so.
- Q21. (a) What is a homologous series of substances? (b) In an organic compound,which parts largely determine its physical and chemical properties? (c) Write a chemical equation to represent the reaction of ethanol with acidified solution of potassium dichromate.
- Q22. (a) what is meant by peridicity in properties of elements with reference to the periodic table? (b) why do all the elements of the same group have similar properties? (c) How will the tendency to gain electrons change as we go from left to right across a period ? why?
- Q23. When blue litmus solution is added to a solution of acetic acid,it turns red.What change will be observed when a few drops of concentrate NaOH is added to it? (a) The mixture turns blue (b) The mixture remains red (c) The mixture becomes colourless (d) None of the above
- Q24. On adding acetic acid to solid sodium hydrogen carbonate,a student observes the liberation of a:- (a) greenish yellow gas with a pungent smell. (b) colourless and odourless gas. (c) yellow coloured,odourless gas. (d) colourless gas with smell of rotten eggs.
- Q25. A student put five raisins each in two beakers A and B. Beaker A contained 50 ml of distilled water and beaker B had 50 ml of saturated sugar solution.After some time the student would observe that: (a) raisins in beaker A were more swollen than those in beaker B. (b) raisins in beaker B were more swollen than those in beaker A. (c) raisins in both beakers A and B were equally swollen. (d) raisins in beaker A did not swell up at all