

CHOITHRAM SCHOOL MANIKBAGH INDORE**CLASS IX Session: 2016-17****Subject: Science****Assignment No: IV****Allotment Date: 03/02/2017****Submission Date: 07/ 02/2017**

| S.No | QUESTION | MARKS | LEVEL |
|-----------------------------|--|-------|------------------|
| OBJECTIVE TYPE | | | |
| 1. | What is the source of α particles in Rutherford scattering experiment? | 1 | Knowledge |
| 2. | Establish the relation between kWh and Joules. | 1 | Understanding |
| 3. | Which group Pisces or Amphibia is advanced? Give reason. | 1 | hot |
| SHORT ANSWER TYPE I | | | |
| 4. | What conventions are followed while writing the scientific names? | 2 | knowledge |
| 5. | Draw well labeled diagrams of – a) Low pitched sound wave b) High pitched sound wave c) Soft sound d) Loud sound | 2 | understanding |
| 6. | A boy standing in front of wall at a distance of 85m produces 2 claps per second. He notices that the sound of clapping coincides with the echo. The echo heard only once when clapping is stopped. Calculate the speed of sound. | 2 | logic |
| 7. | What do you think would be the observations if the α particle scattering experiment is carried out using a foil of a metal other than gold foil? | 2 | Hot |
| SHORT ANSWER TYPE II | | | |
| 8. | i) Name two characteristics of phylum Annelida. ii) Name the three germ layers. Which group of animals are diploblastic and why? | 3 | understanding |
| 9. | Differentiate between- i) Echinodermata and Chordata on the basis of notochord. ii) Platyhelminthes and Echinodermata on the basis of body cavity or Coelom | 3 | Multi conceptual |
| 10. | Sanjeev 9 class student was studying diversity chapter. He thought all fungi are harmful and spoil food. However his elder brother Rajeev told that fungi are used for preparing bakery items and medicines. i) Name the fungus which is used in bread making.. ii) Name the fungus which is used in preparation of antibiotics. iii) What values are reflected by Rajeev? | 3 | Value based |
| LONG ANSWER TYPE | | | |
| 11. | In the gold foil experiment, what observation led Rutherford to conclude that: a) Most of the space inside the atom is hollow. b) Volume occupied by the nucleus is very small as compared to the total volume of the atom c) Almost entire mass of the atom is concentrated at its centre. | 5 | Logic |
| 12. | a) A stone is dropped from the top of tower 500m high in to a pond of water. When is the splash heard at the top? Given $g=10\text{m/s}^2$ and speed of sound = 340m/s b) When a sound is reflected from a distant object, an echo is produced. Let the distance between the reflecting surface and the source production remains same. Do you hear echo sound on hotter day? Justify mathematically. | 5 | Hot |