



INDIAN SCHOOL SOHAR
FORMATIVE ASSESSMENT- 4
SCIENCE

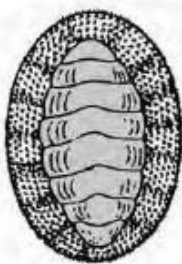
CLASS - IX
02-02-16

SET:-I
Time:- 40 Minutes
Marks:-20

Answer the following:-

1. Choose the odd one out from the animals listed below. State reason to justify your answer.
Palaemon , Neries, Musca, Aranea (1)
2. Define 1 Watt. (1)
3. The potential energy possessed by a body at a certain height is 500J. What is its kinetic energy and potential energy at halfway down? (1)
4. Composition of the nuclei of two atomic species A & B are given as under:

	A	B
protons	17	17
neutrons	18	20
- (i) What are the mass numbers of 'A&B'? (1)
- (ii) How are they related to each other? (1)
5. Write the electronic configuration and draw the atomic structure of Sulphur atom. (1)
6. Ankit is suffering from Typhoid while his friend is suffering from Tuberculosis. Which of these diseases will have long term effect on the body and why? (2)
7. (i) How many moles are present in 4g of KOH?
(Atomic mass of K=39 u, H=1u, O=16u)
- (ii) Calculate the number of particles in 48g of Mg?
(Atomic mass of Mg=24u) (2)
8. Compute the power required by a man to move a 20kg mass so as to change the speed of the mass from 10m/s to 20m/s in 5s. (2)
9. i. Identify the organism shown in the picture. (3)
- ii. Name the phylum to which it belongs and state any two characteristic features of the phylum. (3)



10. (i) State Bohr's postulates about the model of an atom. Draw a sketch of Bohr's model of an atom with three shells. (3)
- (ii) What are the conclusions of Rutherford's alpha particle scattering experiment? (3)
11. Define potential energy. Derive an expression for the gravitational potential energy. (3)