



CLASS - IX
02-02-16

INDIAN SCHOOL SOHAR
FORMATIVE ASSESSMENT- 1
SCIENCE

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

Answer the following:-

1. Identify the Phylum from the given features:
 - i) Marine organisms with peculiar water driven tube system.
 - ii) Organisms with holes or pores all over their body. (1)
2. The electronic configuration of an element 'X' is 2, 8, 2 :
 - (a) Find the number of electrons present in the atom of element X.
 - (b) Write its atomic number. (1)
3. Write the electronic configuration and draw the atomic structure of Phosphorous atom. (1)
4. Identify the energy possessed by a running athlete. (1)
5. State the energy conversions in a dry cell. (1)
6. State any two differences between acute and chronic diseases. (2)
7. Calculate the following:
 - (i) The mass of 1.0505×10^{23} molecules of CO_2 .
(Atomic mass of C=12u, O=16u)
 - (ii) The number of moles in 34g of NH_3 .
(Atomic mass of N=14u, H=1u) (2)
8. Calculate the time taken by a water pump of power 500W to lift 20Kg of water to a tank, is at a height of 10m from the ground. (Take $g=10\text{m/s}^2$). (2)
9. What is a notochord? List any four features of Chordates. (3)
10. (i) What are the postulates of Thomson's model of an atom?
(ii) What are the drawbacks of Rutherford's model of an atom?
(iii) Why the chemical properties of isotopes are same? (3)
11. a) State the law of conservation of energy.
b) A body of mass 10Kg is moving with a velocity of 20m/s. Calculate its kinetic energy when
 - i) mass is tripled.
 - ii) velocity is doubled. (3)