LORVEN PUBLIC SCHOOL

(Affiliated to CISCE, New Delhi)
Anekal Road, Chandapura, Bangalore - 99

Annual Exam – 2020

Class: IX

SCIENCE

Time: 3 hrs **Total Marks: 80**

I. Choose one correct answer and write the complete answer **8×1=8**

1. Rate of change of velocity is called as
   a. Speed b. Acceleration c. Power d. Time
2. What is the energy possessed by the flying bird?
   a. Potential energy b. Kinetic energy c. Electrical energy d. None
3. _____ are known as suicide bags
   a. Mitochondria b. Lysosome c. Golgi body d. Centrosome
4. _____ is an example of Infectious disease
   a. Malaria b. Diabetes c. Scurvy d. All the above
5. _____ is a type of simple permanent tissue
   a. Parenchyma b. Collenchyma c. Sclerenchyma d. All the above
6. Naphthalene balls disappear in size because of
   a. melting b. condensation c. sublimation d. freezing
7. Which of the following is an element?
   a. Soil b. calcium c. carbon dioxide d. water
8. The particle which is neutral in an atom
   a. Electron b. proton c. neutron d. lepton

II. Answer the following questions. **8×1=8**

1. What is power?
2. In which of the three media air, water or iron does the sound travel the fastest at a given temperature?
3. State Newton's third law of motion?
4. How do Poriferan animals differ from Coelenterate animals?
5. How do Annelid animals differ from Arthropods?
6. Define condensation?
7. Name the technique used to separate salt from sea water?
8. Name the three subatomic particles of ana atom?

III. Answer the following questions. **8×2=16**

1. Write the importance of the universal law of gravitation.
2. Which wave property determines a) loudness, b) pitch?
3. A lamp consumes 800 Joules of electrical energy in 5 seconds. what is its power?
4. What are the different means by which infectious diseases are spread?
5. Explain the structure and function of Endoplasmic reticulum?
6. Mention the causes of crop damage?
7. Differentiate between homogeneous mixture and heterogeneous mixture?

8. Draw a neat labelled diagram of separation of immiscible liquids (water + kerosene oil) using separating funnel.

IV. Answer the following questions 9×3=27

1. Write three applications of ultrasound.

2. (a) A force of 18 N acts on a body to displace the object through 5m. Find the work done by the force.
(b) Define velocity.

3. Differentiate between Plant cell and Animal cell.

4. With the help of a neat labelled diagram explain the structure of a neuron.
5. Give an outline classification of animals.
6. Describe the Bohr's model of atom.
7. Classify the following as physical and chemical change.
   a) cooking of rice b) burning of paper c) melting of wax
8. Calculate the molecular mass of the following
   a) $CaCO_3$ b) HCl c) $C_6H_{12}O_6$
   Atomic weight Ca = 40; C = 12; O = 16; H = 1; Cl = 35. 5.
9. Write the chemical formula of the compounds using crisscross method.
   a) sodium sulphate b) calcium chloride c) aluminium hydroxide

V. Answer the following questions. 4×4=16

1. Cite an experiment to show that sound needs a material medium for its propagation.
2. Explain the different kinds of Irrigation and its advantages.
3. A solution contains 50 g of (solute) sodium chloride in 250 g of water. Calculate the mass percentage of the solution?
4. a) Give reasons
   i) Why should a wooden table be called as a solid?
   ii) Why does ice float on water?
   b) Draw a neat labelled diagram of sublimation of ammonium chloride?

VI. Answer the following questions. 1×5=5

1. A train travels from Mumbai to Delhi in 3 hours again from Delhi to Mumbai in 5 hours. If the distance between Delhi and Mumbai is 3000 km. Find
   a) The displacement of the train
   b) Speed from Mumbai to Delhi
   c) Speed from Delhi to Mumbai
   d) When is the speed of the train maximum travelling from Mumbai to Delhi or Delhi to Mumbai?
   e) The velocity of the train