INDIAN SCHOOL SOHAR
PERIODIC TEST III (2018 -19)
SUBJECT: SCIENCE
SET 1

CLASS: IX **Max. Marks: 20**
DATE: 13/01/2019 **Duration:45mins**

General Instructions:

*(i) The question paper consists of 11 questions. **All** questions are **compulsory.***
(ii) Question numbers 1 to 5 are one- mark questions. These are to be answered in one word or one sentence.
(iii) Question numbers 6 to 8 are two- marks questions. These are to be answered in about 30 words each.
(iv) Question numbers 9 to 11 are three- marks questions. These are to be answered in about 50 words each.
(v) There is no overall choice. However, an internal choice is provided in one question of 2marks and two questions of 3 marks each.
(vi) Wherever necessary, the diagrams drawn should be neat and properly labelled.

1. State any two factors on which the buoyant force depends. 1
2. Name the following:
   a) Site from where lysosomes arise.
   b) A cell organelle without cell membrane. 1
3. Write the chemical formulae of the following.
   a) Magnesium phosphate b) Aluminium nitride. 1
4. Why does a desert cooler cool better on a hot dry day? 1
5. What would be the acceleration of a body if its velocity–time graph is a line parallel to the time axis? 1
6. A stone is thrown vertically upwards with an initial velocity of 40m/s. Taking g=10m/s², find the maximum height reached by the stone. What is the net displacement covered by the stone? 2
7. In our country majority of children are already immune to hepatitis A without giving its vaccine to them. Justify the statement. (Any two reasons.)

   OR

   State one difference between: a) Tendon and ligament.
   b) Chlorenchyma tissue and aerenchyma tissue. 2
8. Calculate the number of atoms present in 48g of Mg? (At. Mass of Mg = 24u) 2
9. a) What is the relationship between the commercial unit and SI unit of energy?
   b) What kind of energy transformation takes place when a body is dropped from a certain height?
   c) Calculate the work done in lifting 200kg of a mass through a vertical distance of 6m. Assume g=10m/s².

   OR

   Define acceleration due to gravity. Derive an expression for acceleration due to gravity in terms of mass of the earth (M) and universal gravitational constant (G). 3
10. a) Mention the technique and principle in separation of colours in a dye.
    b) State and illustrate the law of constant proportion using H_2O.

    OR

    a) Which property of gases makes it possible to fill large volume of gases in small cylinders?
    b) Justify by mentioning two points, that CO_2 is a compound and not a mixture? 3
11. a) Fish is cold blooded. What does it mean?
    b) How is whale different from fish? Mention one important feature.
    c) Name the class to which fish and whale belong. 3

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INDIAN SCHOOL SOHAR
PERIODIC TEST III (2018 -19)
SUBJECT: SCIENCE

CLASS: IX **SET 2** **Max. Marks: 20**
DATE: 13/01/2019 **Duration: 45mins**

General Instructions:

*(i) The question paper consists of 11 questions. **All** questions are **compulsory.***
(ii) Question numbers 1 to 5 are one- mark questions. These are to be answered in one word or one sentence.
(iii) Question numbers 6 to 8 are two- marks questions. These are to be answered in about 30 words each.
(iv) Question numbers 9 to 11 are three- marks questions. These are to be answered in about 50 words each.
(v) There is no overall choice. However, an internal choice is provided in one question of 2marks and two questions of 3 marks each.
(vi) Wherever necessary, the diagrams drawn should be neat and properly labelled.

1. When do the displacement and distance of a moving object have the same magnitude? 1
2. When an object is immersed in a fluid, name the two forces acting on it. 1
3. Write the chemical formulae of the following.
   a) Zinc nitrate b) Sodium sulphide. 1
4. Why do people sprinkle water on the roof after a hot sunny day? 1
5. (a) Where are proteins synthesized inside the cell?
   (b) What is the nuclear region of the prokaryotic cells called? 1
6. A ball is thrown vertically upwards with a velocity of 49m/s. Calculate
   (a) the maximum height to which it rises.
   (b) the total time it takes to return to the surface of the earth. 2
7. "Making antiviral medicines are more difficult than making antibacterial medicines." Justify the statement by stating two reasons.

   OR

   State one difference between- (a) Adipose and areolar tissue.
   (b) Collenchyma and sclerenchyma. 2
8. Calculate the number of atoms present in 120g of Ca? (At. Mass of Ca = 40u) 2
9. a) Mention the technique and the principle in separation of butter from cream.
   b) State and illustrate the law of constant proportion using CO_2.

   OR

   a) A gas cylinder cannot be half filled. Give reason.
   b) Justify by mentioning two points, that water is a compound and not a mixture. 3
10. a) Tapeworm is triploblastic. What does it mean?
    b) How is tapeworm different from hydra? Mention one important feature.
    c) Name the phylum to which tapeworm and hydra belong. 3
11. a) A body thrown at a certain angle to the ground moves in a curved path and falls back to the ground. The initial and final points of the path of the object lie on the same horizontal line. What is the work done by the force of gravity on the object? Give reason.
    b) Define one watt of power.
    c) A body weighing 10kg is lifted to a height of 50m in 20 seconds. What is its power?

    OR

    a) State the universal law of gravitation.
    b) State two factors on which the gravitational force between two objects depend.
    c) How does the force of gravitation between two objects change when the distance between them is reduced to half? 3

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