A

INDIAN SCHOOL MUSCAT
THIRD PERIODIC TEST

SCIENCE

CLASS: IX   Sub. Code: 086   Time Allotted: 50 mts

08.01.2019   Max. Marks: 20

GENERAL INSTRUCTIONS:
- All Questions are compulsory.
- Draw diagrams if necessary.

PHYSICS

1. What type of energy transformation takes place in photosynthesis?   1

2. How do you differentiate kilowatt from kilowatt hour?   2

3. 300 J of work is done in sliding a 2Kg block up in an inclined plane of height 10m. What is the work done against force of friction? Take $g = 10m/s^2$ 2

4. a) What is meant by gravitational potential energy?   2

   b) At which point in the swing of an ideal simple pendulum (ignoring force of friction) is the gravitational potential energy is maximum?

CHEMISTRY

5. What are polyatomic ions? Give one example   1

6. (a)Show the formation of chemical formulae of a compound using ammonium ion and sulphate ion.   2

   (b)Calculate the ratio by mass of atoms present in a molecule of carbon dioxides (Given: C=12, O=16)

7. How would you differentiate between a molecule of element and molecule of compound? Write one example of each type.   2

8. In a reaction 4.6 gm of barium chloride reacted with 3.4 gm of sodium sulphate. The products were 2.8gm of sodium chloride and 5.2gm of barium sulphate. The reaction takes place as follows: 2

   Barium chloride + Sodium sulphate----------> Sodium chloride + Barium sulphate

   Show that the above reaction is in agreement with law of conservation of mass.

   State the law.

BIOLOGY

9. How do gymnosperms and angiosperms differ from each other with reference to the nature of seeds?   1

10. Explain or define the following terms in a sentence   1
    a) Cotyledon
    b) Notochord

11. Tape worm is triploblastic. What does it mean?   2

    How is hydra different from tape worm in this aspect?

12. What is the scientific name of human? Which class of vertebrate does he belong?   2

    Write two unique characteristics of this group.

End of the Question Paper