Sub: Physical Science **Class: 8** **Date: 04.07.20**
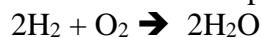**Duration: 40 min** **Worksheet Solutions 55** **Full Marks: 15**
LANGUAGE OF CHEMISTRY

Choose the Correct options:

1. What does the Law of Conservation of Mass state?
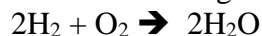   **(a) Matter cannot be gained or lost in a chemical reaction.**
   (b) Matter can only be lost in a chemical reaction.
   (c) Matter can be gained and lost in a chemical reaction.

2. What is the left part of a chemical equation called?
$2H_2 + O_2 \rightarrow 2H_2O$
   (a) Reactants
   (b) Products
   (c) Yields

3. What is the right part of a chemical equation called...
$2H_2 + O_2 \rightarrow 2H_2O$
   (a) Reactants
   (b) Products
   (c) Yields

4. What is the total number of atoms present in $5Na_3PO_4$
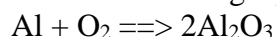   (a) 5
   (b) 40
   (c) 8

5. How many Mn atoms are found in the following compound?
$3Cr(MnO_4)_6$
   (a) 3
   (b) 6
   (c) 18
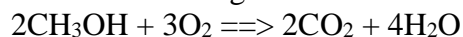
6. Is the following equation balanced?...
$Al + O_2 ==> 2Al_2O_3$
   (a) Yes!
   (b) No!
   (c) Incomplete.

7. How many elements are in $C_6H_{12}O_6$?
   (a) 1
   (b) 2
   (c) 3

8. Is the following reaction balanced?
$2CH_3OH + 3O_2 ==> 2CO_2 + 4H_2O$
   (a) Yes!
   (b) No!
   (c) Incomplete.

9. Which of the following equations are correctly balanced?
   (a) $12CO_2 + H_2O ==> C_6H_{12}O_6 + O_2$
   (b) $CO_2 + H_2O ==> 3C_6H_{12}O_6 + O_2$
   (c) $6CO_2 + 6H_2O ==> C_6H_{12}O_6 + 6O_2$

10. In which of these compounds are there twice as many oxygen atoms as hydrogen atoms?
   (a) H_3PO_4

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(b) H₂SO₄

(c) HClO₃

11. How many atoms are in the neurotransmitter serotonin? The formula for serotonin is $C_{10}H_{12}N_2O$

    (a) 20
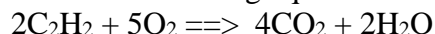
    (b) 25

    (c) 23

12. What information could a student determine from only the chemical formula of a protein?

    (a) The number of molecules in each sequence of the protein

    (b) The physical arrangement of atoms in the structure of the protein

    (c) The number of atoms of each element in the protein

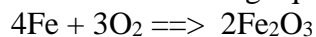13. Is the following equation balanced?

$2C_2H_2 + 5O_2 ==> 4CO_2 + 2H_2O$

    (a) Yes!

    (b) No!

    (c) Incomplete.

14. Is the following equation balanced?

$4Fe + 3O_2 ==> 2Fe_2O_3$

    (a) Yes!

    (b) No!

    (c) Incomplete.

15. Is the following reaction balanced?

$NaHCO_3 ==> Na_2CO_3 + H_2O + CO_2$

    (a) Yes!

    (b) No!

    (c) Incomplete.