# ST. LAWRENCE HIGH SCHOOL

**A JESUIT CHRISTIAN MINORITY INSTITUTION**

**Sub: Physical Science** **Class: 8** **Date: 29.03.21**

**Duration: 40 min** **Worksheet 22** **Full Marks: 15**

**ATOMIC STRUCTURE/PROTONS, NEUTRONS AND IONS**

Choose the Correct options:

1. Who discovered anode rays?

Ans (a)Rutherford (b)Goldstein (c)Chadwick (d)Thomson

2. Who renamed anode rays as positive rays?

Ans (a)Rutherford (b) Goldstein (c) Chadwick (d) Thomson

3. What was changed in the discharge tube to obtain anode rays?

Ans (a)Higher voltage (b)Lower pressure (c)Perforated cathode (d)Different gas

4. Why were anode rays assumed to be positive?

Ans (a)attracted to negative electrode (b)attracted to magnetic north (c)attracted to magnetic south (d)Attracted to positive electrode

5. The mass of the anode rays obtained from different gases in the tube were

Ans (a)same (b)different (c)not fixed (d)No mass

6. When was the neutron discovered?

Ans (a) 1929 (b)1932 (c)1941 (d) 1944

7. Which element used in the discharge tube gave protons?

Ans (a) Hydrogen (b) Helium (c) Nitrogen (d) Oxygen

8. Which element was used in the discovery of neutrons?

Ans (a)Boron (b)Beryllium (c)Bismuth (d) Bromine

9. What are alpha particles?

Ans (a) Helium ions (b)Hydrogen ions (c) Sodium ions (d) Oxygen ion

10. In which kind of a reaction can an atom change?

Ans (a) Chemical reaction (b) Nuclear reaction (c) Endothermic reaction (d) All of these

11. Who discovered neutrons?

Ans (a)Rutherford (b) Goldstein (c) Chadwick (d) Thomson

12. An ion is charged because the number of proton and electrons are

Ans (a) Same (b) Different (c) Variable (d) None of these

13. What is the charge on a proton?

Ans (a)+1 unit (b) 1.6 x 10-19 C (c) 1 C (d) Both (a) and (b)

14. Which subatomic particle plays a major role in the formation of compounds?

Ans (a)electron (b) proton (c) neutron (d) quark

15. When does an ion become negative?

Ans (a)after losing electron (b) On gaining electron (c) On being broken down to subatomic particles (d) All of these

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