**OTUAM AKWANBO INTER SCHOOLS QUIZ COMPETITION**

**FINAL CONTEST**

**PROBLEM OF THE DAY**

1.A. An atom Y has atomic number 12 and mass number 35. It loses two electrons in order to be stable.

State the proton number and neutron number of the atom before it loses electrons.

B. State the electron number of the atom before it loses electrons and after losing electrons

C. Name the type of ion formed by the atom when it loses two electrons and its valency

**2.** In a class of 36 students, 19 read Biology, 16 read Chemistry and 5 were not allowed to read both subjects. Draw a venn diagram to illustrate the above information. Find how many students read

a. Both Biology and Chemistry

b. Only Chemistry

c. Only Biology

**A. Ans:** Proton number **= 12**

Neutron number = Mass number – Atomic number

**35 – 12 =** **23**

**B. Ans:** Before losing electrons **= 12**

After losing electrons **= 12 – 2 =** **10**

**C. Ans:** When an atom with atomic number 12 loses two electrons, it forms a **cation**.

Valency **= 2**