**NAME: ENO SUSAN AMAR**

**MATRIC NO: 17/MHSO1/116**

**COURSE CODE: CHEM 102**

**DEPT: MEDICINE AND SURGERY**

**COLLEGE: MBBS**

**Question 1:**

1. Suggest possible formulas for a molecular ion (m/z) of 105.

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| m/z= 105. It is odd, therefore, it has Nitrogen  Taking Nitrogen= 14amu  105 – 14= 91  To find the mass number of Carbon  91 ÷ 12= 7.6  Therefore, 7 is the number of mole of carbon  For Hydrogen: 7\*12=84  91 – 84 = 7, therefore, 7 is the number of mole of hydrogen  The formula is C7NH7  Oxygen was introduced: 105 – 14 = 91  Taking O = 16: 91 – 16 = 75  75 ÷ 12 = 6.25  6\*12 = 72  Therefore, 72 is the number of carbon atoms  75 – 72 = 3  Therefore, 3 is the number of hydrogen atoms  The formula is **C6NOH3** | To find hydrogen deficiency:  = (2N + 2 – H)  2  = {2(7.6) + 2 – 7}  2  = 15.2 - 5  2  = 5.1  To find hydrogen deficiency:  = (2N + 2 – H)  2  = {2(6.25) + 2 – 3}  2  = 12.5 – 1  2  = 5.75 |

1. What are the importance of organic compounds
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**NAME: EHIGHAWAGUAN OMOLEFE**

**MATRIC NO: 17/MHSO1/104**

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