**Lab sheet (5)**

**Qualitative tests of lipids II**

1. **Copper acetate Test:**

1. Take two test tubes, add 3 ml of petroleum ether and 3 ml of copper acetate to both tubes.

2. Add 0.5 ml of Olive oil to one tube, and 0.5 ml of Oleic acid to the other tube.

3. Shake the tube and leave it for some time.

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| **Comments** | **Observation** | **Tube** |
|  |  | **Olive oil** |
|  |  | **Oleic acid** |

**2-Qualitative estimation of Cholesterol by Liebermann - Burchard Test:**

* Add 2 ml of chloroform in two test tubes.
* Dissolve a few crystals of cholesterol in one test tube, and olive oil in the other.
* Add 10 drops of acetic anhydride to both tubes.
* Add 2 to 3 drops of conc. sulfuric acid to both tubes.

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| **Comments** | **Observation** | **Tube** |
|  |  | **Cholesterol** |
|  |  | **Olive Oil** |

1. **Unsaturation Test:**

**Equally into 2 flasks :**

* Add 10 ml of Chloroform
* Add 10 drops of Hub’s iodine reagent, the chloroform shows pink color due to presence of iodine.
* Add olive oil sample drop by drop every 30 seconds to one flask, and saturated fat (butter) into the other flask.
* Shake the flask vigorously after addition of each drop until the pink color is discharged and **count the number of drops added in each flask**.

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| **Sample** | **Number of drops added from the sample** |  **Conclusion** |
| **olive oil** |  |  |
| **saturated fat** |  |  |