Logo, company name

Description automatically generated**COMSATS University Islamabad**

**Sahiwal Campus**

**(Department of Biosciences)**

**LAB Assignment 1# (10 marks)**

**\*Note: write and explain each and every concept in your own words and avoid direct copy pasting except names if don’t want to lose marks\***

**Q:1:**

**Gene Name**: keratin 18 [Homo sapiens (human)] **Odd Roll number**

**Gene Name:** keratin 75 [Homo sapiens (human)] **Even Roll Numbers**

1. **Describe the official name and symbol**
2. **Download its FASTA Sequence and complete dataset**
3. **Explain gene type**
4. **Describe its lineage and aliases**
5. **Summaries its function and expression in your own words**
6. **Describe the location of gene in chromosome**
7. **Name any 10 interacting genes**
8. **Give its protein information**
9. **Provide information of its reference sequences its RNA and Protein information**

**Q:2:**

1. **Protein name of your corresponding gene and its annotation status and score**
2. **Information regarding its name and taxonomy**
3. **Involvement of protein in different diseases**
4. **Details about its binary interactions**
5. **Its structural information**
6. **Domains and their description**
7. **Download its protein sequence**