National University of Computer & Emerging Sciences, Karachi
Quiz 3 – BCS – 6B (Spring-2023)

Course Code: CS3009	**Course Name: Software Engineering**
Instructor Name: Dr. Syed Muazzam Ali Shah	
Student Roll No:	**Section No:**

Time: 25 minutes. **Max Marks**: 10 Points

Question: Given the following values, compute function point when the weight factors are high and essential for Unadjusted Functional Points (UFP) and Complexity Adjustment Factor (CAF) respectively.

- User Input = 50
- User Output = 40
- User Inquiries = 35
- User Files = 6
- External Interface = 4

Use the following table to calculate Unadjusted Function Point (UFP):

Function Units	Low	Avg	High
EI	3	4	6
EO	4	5	7
EQ	3	4	6
ILF	7	10	15
EIF	5	7	10

Note: Scale varies from 0 to 5 according to character of Complexity Adjustment Factor (CAF). Below table shows scale:

- 0 - No Influence
- 1 - Incidental
- 2 - Moderate
- 3 - Average
- 4 - Significant
- 5 - Essential

Solution:

`FP = UFP * CAF`

Step 1: `UFP = (50*6) + (40*7) + (35*6) + (6*15) + (4*10) = 920`

Step2: `CAF = 0.65 + (0.01 * F)`

`As we Know F = 14 * scale`

Here scale `= 5`

F = 14 * 5 = 70

CAF = 0.65 + (0.01 * 70) = 1.35

Finally, Function Point = 920 * 1.35= **1242**