**Centurion University of Technology and Management**

**Statistical Methods (ASAS-1101)**

**First semester, 2022-2023 Assignment 1**

1. Distinguish between

1. Parameter and statistic
2. Type -I error, and Type-II error
3. Sample and population
4. Simple and composite hypothesis
5. Sample survey method and census (complete enumeration)

2. Calculate: i)Mean (A.M) ii) mean deviation from the mean, Standard deviation, variance and CV. iii) Calculate median and mode

Marks 0-10 10-20 20-30 30-40 40-50 50-60 60-70

No of students 6 5 8 15 7 6 8

3. A random sample of the heights in inches of adult males living in two

different countries gave the following results

n1 = 640 X = 67.35” and s1 = 2.56”

n2 = 160 Y = 68.56” and s2 = 2.52”

Test at 0.01 level of significance whether the average height of males in the two countries differ significantly?

4. The following information was obtained in a sample of 50 small general shops. Can it be said that there are relatively more women shop owners in the villages than in towns. Use chi square test.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Shops** | | **Total** |
| In towns | In villages |
| Run by men | 17 | 18 | 35 |
| Run by women | 3 | 12 | 15 |
| Total | 20 | 30 | 50 |

The table value of Chi-square at 5% level of significant for 1- d.f. is 3.841.