

# School of Liberal Arts

Political Science  
ETE - Jun 2023

Time : 3 Hours

Marks : 100

## Sem II - K1UA202T - Basic Research Methodology and Statistics

*Your answer should be specific to the question asked*

*Draw neat labeled diagrams wherever necessary*

1. Explain the mode and calculate the mode by given ungrouped data.....  
15,13,18,25,20,18,22,18,23 and 28. K2 CO1 (5)
2. State the meaning of the sample and listdown the types of sample. K2 CO1 (5)
3. Explain mean and its characteristics, calculate the mean by given ungrouped data.....  
45,55,35,60,70,52,45,62,67,68. K2 CO1 (5)
4. Explain the concept of range Find the range value by given data.....  
45,54,65,75,40,50,60,70,60,65. K2 CO2 (10)
5. Illustrate the meaning and nature of central tendency and its characteristics. K3 CO3 (10)
6. Write the meaning and nature of variable and its types in detail. K3 CO3 (10)
- 7) Write the concept of hypothesis and its different types in detail. K3 CO3 (10)

### OR

- Illustrate the meaning of range and calculate the range by given table.....  
45,65,44,69,75,66,49,84,55,20,26. K3 CO3 (10)
8. Explain the meaning of the observational method and its characteristics. K4 CO2 (15)
  9. Prepared frequency distribution table by given scores and calculate the mean.  
60,50,52,55,30,35,38,40,42,45  
49,48,50,50,52,54,61,65,67,69  
70,32,34,43,45,48,50,53,62,51. K4 CO4 (15)

- 10) Plot histogram of the following frequency table: K5 CO4 (15)

Class intervals	frequency
70-74	1
65-69	2
60-64	2
55-59	4
50-54	6
45-49	7
40-44	15
35-39	13
30-34	11
25-29	8
20-24	4
15-19	3
10-14	3
5-9	1

**OR**

Prepared cumulative frequency curve by given table.....

K5 CO4 (15)

Class intervals	frequency
79.5-84.5	1
74.5-79.5	2
69.5-74.5	4
64.5-69.5	5
59.5-64.5	6
54.5-59.5	10
49.5-54.5	7
44.5-49.5	6
39.5-44.5	4
34.5-39.5	3
29.5-34.5	2

N=50