Date: 14.06.2023

Time: 02 Hours

**ANSWER ALL QUESTIONS.** Marks allotted to each part are given within brackets.

1. A reached recorded data of 20 patients' gender and age are given in the table.

| Age of the patient (years) | Gender | Disease level | Age of the patient (years) | Gender | Disease level |
|---|---|---|---|---|---|
| 1 | 1 | 1 | 5 | 1 | 1 |
| 12 | 2 | 3 | 5 | 2 | 2 |
| 32 | 2 | 3 | 7 | 1 | 2 |
| 2 | 1 | 2 | 6 | 2 | 3 |
| 3 | 2 | 3 | 20 | 1 | 1 |
| 10 | 1 | 3 | 16 | 2 | 1 |
| 8 | 2 | 3 | 11 | 1 | 3 |
| 9 | 1 | 3 | 15 | 2 | 1 |
| 4 | 1 | 2 | 15 | 1 | 1 |
| 5 | 2 | 3 | 14 | 2 | 1 |

1: Mild, 2: Moderate, 3: Severe

| | | |
|---|---|---|
| 1.1 | What type of scale is used in each variable? | (15 Marks) |
| 1.2 | Calculate the central tendency of each variable. | (45 Marks) |
| 1.3 | Draw a graph For the variable of | (40 Marks) |
| | 1.3.1 Age of the patient | |
| | 1.3.2 Disease level | |

2. The temperature (Celsius) of the refrigerator is given below:

| 4 | 3 | 7 | 8 | 6 | 3 |
|---|---|---|---|---|---|
| 5 | 7 | 2 | 9 | 1 | 5 |
| 2 | 6 | 5 | 5 | 2 | 9 |
| 2 | 5 | 5 | 4 | 4 | 5 |
| 3 | 4 | 5 | 7 | 8 | 9 |

| | | |
|---|---|---|
| 2.1 | Write the type of scale used to measure the variable | (10 Marks) |
| 2.2 | What is the most suitable statistic for the data | (10 Marks) |
| 2.3 | Describe the result more appropriately | (20 Marks) |
| 2.4 | Draw a graph for the data | (40 Marks) |
| 2.5 | Distinguish inferential statistics and descriptive statistics | (20 Marks) |