

**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FACULTY OF ALLIED HEALTH SCIENCES**  
**FIRST YEAR SECOND SEMESTER EXAMINATION- 2020**  
**AHSBS 1211 BASIC STATISTICS**

**Date: 01.09.2022**

**Time: 02 Hours**

**ANSWER ALL 02 QUESTIONS**

1. Recorded research of 10 participants are given in the table 1.

**Table 1.**

| Patient.ID | Monthly income (thousand) | Type of disease | Health seeking Behaviour | Face mask protection Level | Temperature |
|------------|---------------------------|-----------------|--------------------------|----------------------------|-------------|
| 1          | 20                        | D               | P                        | P                          | 37.0        |
| 2          | 11                        | T               | G                        | N                          | 38.0        |
| 3          | 13                        | A               | G                        | P                          | 37.5        |
| 4          | 25                        | A               | P                        | N                          | 37.0        |
| 5          | 12                        | A               | G                        | N                          | 39.1        |
| 6          | 24                        | D               | P                        | N                          | 38.3        |
| 7          | 11                        | T               | P                        | N                          | 37.0        |
| 8          | 19                        | D               | G                        | N                          | 37.6        |
| 9          | 9                         | T               | G                        | H                          | 37.0        |
| 10         | 24                        | A               | P                        | N                          | 37.0        |

T=Thyroid, H=hypertension, A=Asthma G= Government Hospital, P= Private Hospital, P=Poor, N= Normal, H= High

- 1.1 Name type of scale used to measure each variable (20 Marks)  
 1.2 Calculate the central tendency of each variable (30 Marks)  
 1.3 Calculate the variation/dispersion for suitable variable. (20 Marks)  
 1.4 Draw the appropriate graph for the variable Health seeking behavior (20 Marks)  
 1.5 Comment on health seeking behavior and level of income (10 Marks)

2. A hospital pharmacist record the temperature (Celsius) of refrigerator for 30 days which 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 was 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 in more appropriately (20 Marks)  
2.4 Draw stem and leaf plot for the data (20 Marks)  
2.5 Define the term population, Sample, statistics and parameter with one example (20 Marks)  
2.6 Distinguish inferential statistics and descriptive statistics (20 Marks)