

**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FACULTY OF ALLIED HEALTH SCIENCES**  
**FIRST YEAR FIRST SEMESTER EXAMINATION IN BPharmHons 2020**  
**PHABS1131 BASIC STATISTICS**

Date: 15.02.2022

Time: 01 hours

Answer all questions.

1. 1.1 Define the term:
  - 1.1.1 Variable (05 Marks)
  - 1.1.2 Population (05 Marks)
- 1.2 Distinguish the
  - 1.2.1 statistics and parameter (10 Marks)
  - 1.2.2 inferential statistics and descriptive statistics (10 Marks)
- 1.3 Answer the following questions with given table

Patient.ID	Blood group	Age in months	Pain level	Body Temperature (°F)	Income level
1	A	7	Normal	98.9	1
2	O	6	Mild	102.6	2
3	B	8	Mild	102.0	2
4	B	22	Moderate	99.5	1
5	AB	14	Normal	100.3	2
6	O	19	Severe	98.3	2
7	B	20	Mild	100.5	2
8	O	14	Normal	98.8	2
9	A	20	Moderate	98.6	1
10	O	9	Moderate	99.5	2
11	A	20	Normal	98.9	2
12	O	23	Moderate	98.4	2
13	AB	21	Severe	101.8	1
14	O	19	Normal	100.1	2
15	A	13	Mild	98.0	2

Pain is measured in 3 point Likert scale, Income level 1-average 2-Rich

- 1.4 Name type of scales used to measure each variable. (10 Marks)
- 1.5 Calculate the central tendency of each variable? (20 Marks)
- 1.6 Calculate the standard deviation of age? (10 Marks)

- 1.7 Draw most appropriate **one graph** for blood group and body temperature. (30 Marks)
- 2 Fifty (250) students' average chemistry marks and standard deviation are 65 and 17.5, respectively. Assume the marks are distributed normally. Normal distribution table (Z table) is given.
- 2.1 What is the 50<sup>th</sup> percentile value of students marks and give the reason for the calculation. (20 Marks)
- 2.2 Calculate the z value for the passing the chemistry. Consider pass mark as fifty (50). (15 Marks)
- 2.3 Calculate the number of students obtain more than 85 marks. (25 Marks)
- 2.4 How many students' marks are fall below 35 (20 Marks)
- 2.5 For the chemistry Scholarship cut off Z score is 1.5. Calculate the number of students will be selected for Scholarship. (20 Marks)