

**UNIVERSITY OF JAFFNA, SRI LANKA**  
**UNIT OF ALLIED HEALTH SCIENCES**  
**FIRST YEAR SECOND SEMESTER EXAMINATION – March 2019**  
**AHSBS 1211 BASIC STATISTICS**

**Date: 22.03.2019**

**Time: 02 hours**

**Answer all questions.**

1. A recorded research of 15 participants are given in the table 1.

**Table 1.**

Patient.ID	Gender	Age group	Cost of treatment(Rs.)	Distance from home (km)	Income level
1	M	P	100	2	1
2	F	A	110	25	2
3	F	E	200	6	2
4	F	E	170	27	1
5	M	E	100	85	2
6	F	E	190	2	2
7	F	E	160	4	2
8	M	E	140	10	2
9	F	E	150	26	1
10	F	P	150	5	2
11	F	P	180	3	2
12	M	A	100	2	2
13	F	E	120	4	1
14	M	E	200	1	2
15	M	E	150	1	2

M=Male, F=Female, P=paediatric, A= Adult, E= Elderly, 1=Rich, 2= poor

- 1.1 Name type of scales used to measure each variable. (10 Marks)
- 1.2 Calculate the central tendency of each variable? (20 Marks)
- 1.3 Calculate the standard deviation of cost of treatment? (20 Marks)
- 1.3 Draw more appropriate **one graph** for gender and cost of treatment variable. (50 Marks)
- 2 Assume a normal distribution, 500 nursing graduates selected for new appointment,

had average height of 5 feet and 8 inches with standard deviation of 6.67 inches.

- 2.1 What is the 50<sup>th</sup> percentile value of nursing graduate and give the reason for the calculation. (20 Marks)
- 2.2 Calculate the z value for the nursing graduates' height of 6 feet and 6 inches? (20 Marks)
- 2.3 Find the number of nursing graduate height fall above 6 feet and 6 inches. (20 Marks)
- 2.4 How many nursing graduates' height are fall below 5 feet? (20 Marks)
- 2.5 The cut off Z score for nursing appointment in Ministry of Health is 1. Calculate the number of nursing graduate will be selected for appointment. (20 Marks)