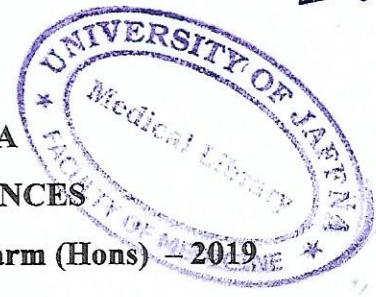


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**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FACULTY OF ALLIED HEALTH SCIENCES**  
**FIRST YEAR FIRST SEMESTER EXAMINATION IN B.Pharm (Hons) 2019**

**PHABS 1131 Basic Statistics**

**Date: 24.04.2021**

**Time: 01 Hours**

1. A researcher conducted the study regarding the waiting time of patients and relevant information which are given below:

Patient ID	Ethnic group	Age	Income level	Waiting time (Min)
1	T	P	1	5
2	T	A	1	10
3	S	E	2	15
4	S	E	3	20
5	S	P	1	12
6	M	P	1	8
7	T	P	3	10
8	T	E	2	12
9	T	A	1	9
10	T	P	1	2

**T-Tamil, S- Sinhala, M-Muslim, P-Paediatric, E-Elder, A-Adult, 1-Poor, 2-Average, 3-Rich**

- 1.1 Name the type of scale used in each variable? (20 Marks)
  - 1.2 Calculate the central tendency of each Variable? (30 Marks)
  - 1.3 Calculate the standard deviation of variable "waiting time"? (20 Marks)
  - 1.4 Draw a box and whisker plot for variable "waiting time"? (20 Marks)
  - 1.5 Draw an appropriate graph for variable "ethnic group"? (10 Marks)
2. There are 500 applications were received for the post of paramedical service. The applicants' mean height and standard deviation are 154 centimeters and 4 centimeters, respectively. Further their Mean IQ mark is 75 (SD=10).
- 2.1 The required height at present for recruiting a nurse to the service is 145 centimeters and above. Estimate the number of applicants qualifying for the post. (40 Marks)
  - 2.2 Estimate the range of applicants' height in centimeters (20 Marks)
  - 2.3 From the application, what is the minimum IQ marks required for the selection of 250 for the post of pharmacist. (40 Marks)