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MLS 04 Library

FACULTY OF ALLIED HEALTH SCIENCES
UNIVERSITY OF RUHUNA
Department of Medical Laboratory Science



Year End Examination, Year 1 - 10th Batch - 2019
Basic Statistics (MLS 1105) – Theory II (SEQ)

Friday 08th February 2019

Time: 10.00 a.m. - 12.00 noon

Duration: 2 hours

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**** Scientific calculators are allowed to use. Provide z table and chi- square table**

Answer all 4 questions (two hours)

1. Fasting plasma glucose, Postprandial Blood Glucose and HbA1c values (mg/dL) of a group of 6 patients are given below.

FPG	PPBG	HbA1c
107.5	178.1	7.6
134.8	266.1	7.8
177.8	252.8	8.9
119.4	232.4	7.1
181.4	199.1	8.1
148.9	162.5	8.3

1.1 Calculate the range of the values of the three variables.

(20 marks)

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2.2 Identify scales of the measurements for each of the variables that you have mentioned in 2.1. (20 marks)

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2.3 What is/are the statistic/s used in the above study? (30 marks)

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2.4 What will happen to the standard error if we increase the sample size up to 400? (30 marks)

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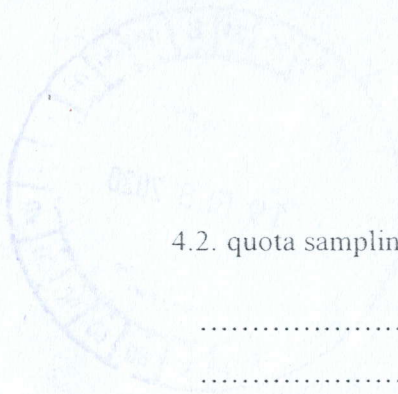
3. A study was conducted using a sample of 100 patients to see whether there is a relationship between physical exercise (PE) and high blood pressure. Results are given below.

		Blood Pressure	
		Low	High
PE	Yes	30	20
	No	20	30

3.1 State null and alternative hypotheses. (20 marks)

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4.2. quota sampling

(25 marks)

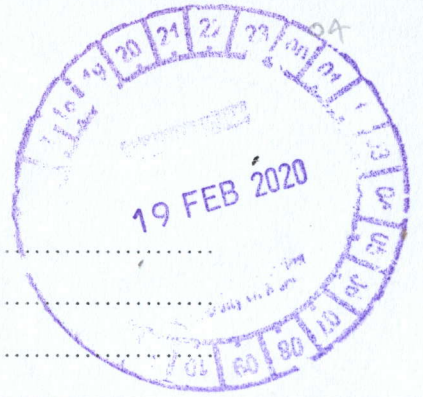
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4.3 uses of Statistics in Medical laboratory Sciences

(25 marks)

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4.4. Standard Error

(25 marks)

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