FACULTY OF ALLIED HEALTH SCIENCES, UNIVERSITY OF RUHUNA

Department of Medical Laboratory Science

Year End Examination, Year 2 - 2016/2017 (10th) Batch

MLS 2102- Statistics, Research Methodology – SEQ

Date: 30th November 2020   Time: 10.15 a.m. – 12.15 p.m.   Duration: 02 hours

Answer all questions   **Index Number:** ....

1.

1.1. What is the difference between descriptive statistics and inferential statistics? (50 marks)

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1.2. List **five** characteristics of the Standard Normal Distribution (SND).   (50 marks)

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2. A study was conducted to determine whether there is any association between Kidney Disease (KD) and Serum Creatinine level (SC level 0.6 to 1.4 mg/dL is considered normal). A sample of 100 patients with KD and another sample of 100 people without KD were tested for their SC level. The mean value of SC in KD patients was 2.5 mg/dL. (SD = 1 mg/dL). Among people without KD the corresponding value was 1.3 mg/ dL (SD = 1.2 mg/dL)

2.1. List two variables in this example and identify the scale of measurement of each of those variables.   (40 marks)

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2.2. Calculate 95% Confidence levels of the mean SC in KD patients.   (30 marks)

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2.3. In which group you observe greater variation of SC data? Explain with reasons.
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3. Why literature review is important in scientific research.   (100 marks)

4. Discuss the differences between Qualitative and Quantitative research approaches.

(100 marks)