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UNIVERSITY OF RUHUNA – FACULTY OF MEDICINE

MEDICAL LABORATORY SCIENCES DEGREE PROGRAMME

Statistics, Epidemiology & Research Methods – 4th Batch of Students

Year 2 Year End Examination – 24 November 2014

20 FEB 2015

INDEX NO:.....

TIME: 9.45 -11.15 AM
(one hour and 30 minutes)

4

Structured Essay Questions (SEQ). Answer all questions

1.1 Define the following terms **(10 marks)**

Endemic : .....
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Pandemic :
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Incidence :
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1.2 List five (5) uses of epidemiology in Medical Laboratory Sciences. **(15 marks)**

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2.1 List two (2) advantages and two (2) disadvantages of case-control studies **(8 marks)**

Advantages

a.....

b.....

Disadvantages

a.....

b.....

2.2 Describe the term *Descriptive Epidemiology* **(10 marks)**

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2.3 What are the characteristics of a good screening test? **(7 marks)**

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A researcher is interested in identifying whether there is a gender difference in the prevalence of asthma in children. A representative sample of 400 children (200 male and 200 female) was investigated. Fifty (50) male and 40 female children were found to be having asthma.

3.1 Write null and alternative hypothesis **(10 marks)**

3.2. Test the null hypothesis at 5% level. **(15 marks)**
(Chi square table value at 5% level is 3.84)

Describe briefly the term *Focus Group Discussion.* **(10 marks)**

4.2 What is the importance of doing a literature review when writing a research proposal? **(15 marks)**