



University of Ruhuna - Faculty of Medicine
Allied Health Sciences Degree Programme
B.Sc. Nursing Degree Programme
4th End Semester Examination
NSE 2216- Statistics and Epidemiology in Nursing
SEQ paper- Part A

May 2016

Duration: Half ($\frac{1}{2}$) hour

Index Number

1.

1.1. What are the uses of epidemiology in nursing practice? (50 marks)

1.2. Explain the difference between the terms *prevalence* and *incidence* using one example for each. (50 marks)

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4th 3rd Semester Examination

NSE 2216- Statistics and Epidemiology in Nursing

SEQ paper- Part B

May 2016

Duration: Half ($\frac{1}{2}$) hour

Index Number

1.

1. 1 Describe the advantages and disadvantages of case-control studies.

Advantages

(25 marks)

Disadvantages

(25 marks)

2. Explain briefly.

2.1 Cross-sectional studies

(25 marks)

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2.2 Observational studies

(25 marks)



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4 End Semester Examination
NSE 2216- Statistics and Epidemiology in Nursing
SEQ paper- Part C

May 2016

Duration: Half ($\frac{1}{2}$) hour

Index Number

1.

A researcher is interested to examine whether there is any association between obesity and hypertension. A random sample of 200 adults was surveyed. Of the total, 40 were obese. Among those obese, 20 were hypertensives. Among non-obese, 30 were hypertensives. (**Chi square table**)

1.1 State null and alternative hypothesis.

(20 marks)

1.2 Draw a 2x2 table for the above data and calculate expected frequencies (40 marks)

1.3 Test the hypothesis at 1% significance level

(20 marks)

1.4 What can you conclude from the results?

(20 marks)

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4 End Semester Examination

NSE 2216- Statistics and Epidemiology in Nursing

SEQ paper- Part D

May 2016

Duration: Half ($\frac{1}{2}$) hour

Index Number

1.

The sample mean of the cholesterol levels of 200 patients was 230 mg/dL with the standard deviation of 20 mg/dL. (Z tables)

1.1 What percentage of patients had the cholesterol level less than 200 mg/dL? (20 marks)

1.2 What percentage of patients had the cholesterol level between 200 mg/dL and 300 mg/dL? (20 marks)

1.3. Calculate the 95% confidence interval of the sample mean (60 marks)