



Faculty of Medicine, University of Ruhuna  
Third Examination for Medical Degrees (Part II) January 2022  
Community Medicine Paper II  
05<sup>th</sup> January 2022

Answer all 05 questions

(9.00 a.m. - 12.00 noon) 3 hours

Answer each question in a separate book

PART A

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- 1.
- 1.1 List **five (05)** characteristics of the Standard normal distribution. *(10 marks)*
- 1.2 List **five (05)** measures of dispersion of a data set. *(10 marks)*
- 1.3 A study was conducted to see whether there is an association between gender and healthy eating habits. Thirty two percent of men and 40% of women participated in this study were found to have healthy eating habits. Four hundred men and 200 women participated in the study.
- 1.3.1 What is the study design used in this research? *(10 marks)*
- 1.3.2 State your null and alternative hypotheses. *(20 marks)*
- 1.3.3 What is (are) the test(s) that you can use to test your null hypothesis. *(10 marks)*
- 1.3.4 Test your hypothesis at  $\alpha = 0.05$  level. *(40 marks)*

(Chi square tables and Z tables should be provided.)

PART B

2. 2.1
- 2.1
- 2.1.1 Define life expectancy. *(10 marks)*
- 2.1.2 List social, economic and health concerns of population aging. *(15 marks)*
- 2.1.3 Describe possible interventions that could be carried out to prevent the effects of population aging. *(25 marks)*

2.2

2.2.1 Define the term "Maternal Death" (05 marks)

2.2.2 List 04 leading causes for maternal deaths in Sri Lanka. (10 marks)

2.2.3 Briefly describe the measures carried out to prevent the maternal deaths occurring due to above mentioned causes in Sri Lanka. (35 marks)

### PART C

3. A 16-year-old girl was found to have an enlarged thyroid gland during a School Medical Inspection and was suspected of having iodine deficiency.

3.1 List the other features of iodine deficiency you would expect in this girl. (20 marks)

3.2 What are the probable causes of iodine deficiency in this girl? (20 marks)

3.3 How would you confirm your diagnosis? (20 marks)

3.4 Briefly describe the dietary advice you would give this girl if her iodine deficiency is due to a low dietary intake of iodine. (40 marks)

### PART D

4.1

4.1.1 Briefly describe the role of primary care physician in occupational health. (30 marks)

4.1.2 Describe the term "Healthy worker effect" (20 marks)

4.2

4.2.1 Classify water related diseases, giving an example for each type. (20 marks)

4.2.2 Describe briefly the activities carried out by primary health care team of Sri Lanka in controlling water related diseases (30 marks)

### PART E

5.

5.1 List the steps in a diseases outbreak investigation. (30 marks)

5.2 List ten (10) qualities of COVID 19 outbreak that required screening for the disease. (20 marks)

5.3 Describe the role of the Epidemiology Unit in controlling the COVID 19 outbreak in Sri Lanka. (50 marks)