

UNIVERSITY OF RUHUNA  
FACULTY OF MEDICINE



08/12/2015  
34 repeat

THIRD EXAMINATION FOR MEDICAL DEGREES PART II, DECEMBER 2015  
COMMUNITY MEDICINE PAPER I

Answer **ALL FIVE** questions.  
Answer each part in a **SEPARATE** book.

Time: 09.00 am – 12.00 noon  
Duration: 3 hours

**PART A**

1. ✓ 1.1
- 1.1.1. List the different categories of water related diseases, giving examples for each category. (08 marks)
- 1.1.2 Give a brief description of the mechanisms of spread in each category. (12 marks)
- 1.1.3 Outline the measures for prevention of **ONE** category of water related Diseases described above. (30 marks)

Envi

- 1.2 Briefly describe
- 1.2.1 Total fertility rate. (15 marks)
- 1.2.2 Life expectancy. (15 marks)
- 1.2.3 measures taken to minimize diseases spread due to international migration (20 marks)

Demo

**PART B**

2. ✓ A seven month old baby girl was found to have growth faltering and was brought to the Medical Officer of Health. On examination, she appeared to be otherwise healthy with a normal development and age appropriate immunization.
- 2.1 What is the most likely cause for the growth faltering in this baby? <sup>causing pto</sup> <sub>ill cause</sub> (10 marks)
- 2.2 What other alternatives would you consider as possible reasons for this finding in addition to the above? <sub>ill treat, poor food habits, stop BF</sub> (20 marks)
- 2.3 What specific information you would like to know, in order to come to a decision on the cause for growth faltering in this baby? <sub>height, weight</sub> (30 marks)
- 2.4 Briefly describe the management of this baby to ensure an adequate weight gain. (40 marks)

nutri

**PART C**

3. 3.1
- 3.1.1 Define the 3 delays contributing to maternal deaths. (5 marks)
- 3.1.2 How are you going to prevent the third delay as an intern medical officer working in an obstetric ward? (35 marks)
- 3.2
- 3.2.1 List the occupational health problems of Cement factory workers. (15 marks)
- 3.2.2 How would you prevent above mentioned occupational health problems of Cement factory workers? (35 marks)

MCH

occu

**PART D**

4.

A doctor wishes to know whether there is a gender difference of cognitive impairments in older people. He examined 100 older women and 100 older men, using the Mini Mental State Examination (MMSE). The maximum score is 30. A score of 23 or lower is indicative of cognitive impairment. The mean score of MMSE in men was 18 (SD = 5) and in women it was 21 (SD = 4).

4.1 What are the variables used in this study and their level of measurements? (20 marks)

4.2 State null and alternative hypotheses of this study. (20 Marks)

Stat

4.3 Test the null hypothesis at 5% significant level. (40 marks)

4.4 What is the conclusion that you can draw based on the results? (20 marks)

(Z table value for  $\alpha = 0.05$  is 1.96)

**PART E**

5. 5.1

5.1.1 What is a randomized clinical trial? Explain with a diagram. (25 marks)

5.1.2 Describe the sequence of a clinical trial in the development of a new drug. (45 marks)

5.2 Enumerate the factors that influence the prevalence of a disease in a population. (30 marks)

Epid