

UNIVERSITY OF RUHUNA
FACULTY OF MEDICINE



THIRD EXAMINATION FOR MEDICAL DEGREES PART II, 07TH SEPTEMBER 2010
COMMUNITY MEDICINE PAPER I

Answer **ALL FIVE** questions.

Answer each part in a **SEPARATE** book. Begin each answer in a new page.

Duration: Three Hours
(9 a.m. - 12noon)

PART A

● Imagine that you have been appointed as the MOH of a semi urban area. Before starting your work as the MOH you are in need of getting an idea about the demographic profile of your population.

1.1.1 List the main demographic indicators (data) that you would look for in your area. (20 marks)

1.1.2 If you find that 10% of the population in this area is over 65 years of age, describe how you would plan to handle the problems of this age group. (30 marks)

1.2 1.2.1 List the different components of reproductive health. (15 marks)

1.2.2 Discuss adolescent reproductive health issues in Sri Lanka. (35 marks)

PART B

2.

2.1 Describe briefly the direct health effects of air pollution and steps that need to be taken to prevent it. (35 marks)

2.2 Write a note on "Healthy worker effect". (35 marks)

2.3 Outline three activities a doctor could practice to enhance communications between a doctor and a patient. (30 marks)

PART C

- 3.
- 3.1 Describe the activities of a nutrition surveillance programme needed to control malnutrition in a community? (40 marks)
- 3.2 What are the qualities of a good complementary food? Explain with suitable examples. (40 marks)
- 3.3 What are the benefits of new WHO child growth standards? (20 marks)

PART D

- 4.
- 4.1 List two advantages and two disadvantages of case-control studies. (20 marks)
- 4.2 List four users of epidemiology. (20 marks)
- 4.3 List two reasons for the occurrence of random errors in epidemiological studies. (10 marks)
- 4.4 Papanicolau (Pap) smear screening test was done for 200 women and subsequently all of them were referred to a gynecologist for colposcopy. The colposcopy showed that only 30 women had high grade lesions. The Pap test was abnormal for 25 of the women who had high-grade lesions. The Pap smear was abnormal for 140 women who did not have high-grade lesions.
- 4.4.1 Construct a 2 x 2 table comparing Pap smear test with colposcopy. (20 marks)
- 4.4.2 Calculate the sensitivity and specificity of the Pap smear test. (20 marks)
- 4.4.3 What is the positive predictive value of the Pap smear test? (10 marks)

PART E

- 5.
- 5.1 Write short notes on
- 5.1.1 normal distribution. (20 marks)
- 5.1.2 correlation coefficient. (20 marks)
- 5.2 The mean systolic blood pressure (mm Hg) of males (N=200) in a rural area is 130 with a standard deviation of 20. The corresponding figures for a sample of 250 males living in an urban area are 140 and 25 respectively. Test the hypothesis at 5% level that there is no difference in mean systolic blood pressure of males in these two geographical areas. (60 marks)