UNIVERSITY OF RUHUNA
FACULTY OF MEDICINE

THIRD EXAMINATION FOR MEDICAL DEGREES   PART II, 27th December 2010
COMMUNITY MEDICINE PAPER I

Answer **ALL FIVE** questions   *Time* : 09.00am – 12noon
Answer each part in a **SEPARATE** book. Begin each answer in a **New Page.**   *Duration: Three Hours*

Part A

1.

1.1   Describe the demographic transition cycle in detail using a graph.   (50 marks)

1.2

1.2.1   What is a maternal death? (20 marks)

1.2.2   Describe giving examples the "Three Delays" in a maternal death. (30 marks)

Part B

2.

Devi, a 24 year old tea plucker from Citrus Estate, presented at Antenatal Clinic, Meepawala for the booking visit in the second trimester of her 3rd pregnancy.
On examination, the Medical Officer of Health noticed that she was pale. Her haemoglobin level was 10g /dL.

2.1   What is the most likely diagnosis? (10 marks)

2.2   What are the possible reasons that may have lead to the development of such a condition in this mother? (30 marks)

2.3   Explain the nutritional advice that should be given to this mother. (40 marks)

2.4   List the possible adverse outcomes on her pregnancy if this condition is not managed properly. (20 marks)

Part C

3

3.1   Briefly describe

3.1.1   the role of primary care physician in occupational health. (35 marks)

3.1.2   the human factors that contribute to accidents. (35 marks)

3.2

3.2.1   List three social determinants of health. (15 marks).

3.2.2   Explain the difference between preventive health behavior and Illness behavior. (15 marks)

Part D

4.

4.1 Describe the different levels and strategies in the prevention of blindness in Sri Lanka. (50 marks)

4.2 Explain a propagated epidemic using a diagram. (15 marks)

4.3 Describe the sanitation methods to be imposed in the hospital and the infected area in a case of death from Cholera (35 marks)

Part E

5.

5.1 List three measures of central tendency of a data set. (9 marks)

5.2 List three measures of dispersion of a data set. (9 marks)

5.3 The sample mean of the weight of 60 students was 30 .5Kg and the 95% confidence interval of the sample mean was 30.5 ± 2.5 Kg. Explain this statement. (12 marks)

5.4 List three probability and two non-probability sampling methods. (10 marks)

5.5 Literacy of a group of 200 randomly selected people was obtained. Results are given below.

	Male	Female
Literate	100	70
Illiterate	20	10

The researcher is interested in identifying whether there is a gender difference in literacy level of this target population.

5.5.1 State the null and alternative hypothesis. (20 marks)

5.5.2 Test the null hypothesis at 5% significance level. (40 marks)

Critical values for Chi -square

df	P=0.05	P=0.01
1	3.841	6.635
2	5.991	9.210