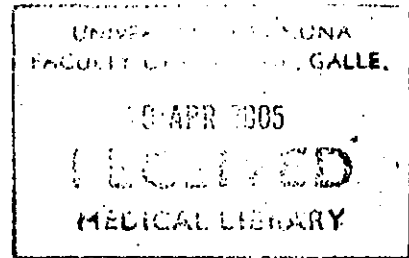UNIVERSITY OF RUHUNA
FACULTY OF MEDICINE

THIRD EXAMINATION FOR MEDICAL DEGREES PART II,   06th APRIL 2005
COMMUNITY MEDICINE PAPER I

Answer **ALL FIVE** questions .
Answer each part in a *SEPARATE* book   *Duration: Three Hours*

Part A

1. Describe the responsibilities of DDHS(MOH) in the following activities
   in a health unit area in   Sri Lanka.
   1.1 Delivery of maternal health services.   *(50 marks)*

   1.2 Control of communicable diseases   *(50 marks)*

2. 2.1 Explain the usefulness of the following activities.
       2.1.1 School medical inspections.   *(25 marks)*

       2.1.2 Pre-placement medical examinations   *(25 marks)*

   2.2
       2.2.1 List causal factors for the higher prevalence of iron deficiency
             in school children.   *(20 marks)*

       2.2.2 Describe the importance of zinc in human nutrition.   *(30 marks)*

Part B

3. 3.1 Compare population census and sample surveys as sources of
       demographic data, indicating their usefulness and limitations.   *(50 marks)*

   3.2 Describe the steps involved in purification of water in a large scale.   *(50 marks)*

4. 4.1 Define the following (write the equation for calculation of each).
       4.1.1 Point prevalence rate.   *(10 marks)*
       4.1.2 Cumulative incidence rate..   *(10 marks)*
       4.1.3 Attributable risk.   *(10 marks)*
       4.1.4 Relative risk.   *(10 marks)*

   4.2 Write short notes on the following
       4.2.1 Design of a case control study   *(30 marks)*
       4.2.2 The criteria for a disease that is suitable for screening.   *(30 marks)*

P.T.O

5. A researcher wanted to do a study to find out the relationship between the physical stature of the males and their fertility status. A random sample of 200 men was selected and they were categorized into 3 groups according to their body types. Of those 200 men, 50 were found to be of body type I (underweight and small built), 60 were of body type II (muscular and normal weight), and 90 were of body type III (overweight). Of those with body type I, 20 were found to be fertile, 20 were subfertile and 10 were infertile. Among body type II, 32 were fertile, 20 were subfertile and 8 were infertile. There were 70 fertile men, 10 subfertile men and 10 infertile men in the body type III group.

Determine the statistical significance of the findings of this research explaining all the steps involved. *(100 marks)*

df.	Probability level	
	0.05	0.01
1	3.84	6.64
2	5.99	9.21
3	7.82	11.34
4	9.43	13.28
5	11.07	15.09
6	12.59	16.81

	1	2	3	
fer.	20	32	70	122
Sub	20	20	10	50
in	10	8	10	28
	50	60	90	200