

UNIVERSITY OF RUHUNA  
FACULTY OF MEDICINE



THIRD EXAMINATION FOR MEDICAL DEGREES PART II, 27<sup>TH</sup> JULY 2006  
COMMUNITY MEDICINE PAPER I

Answer ALL FIVE questions

Answer each part in a SEPARATE book

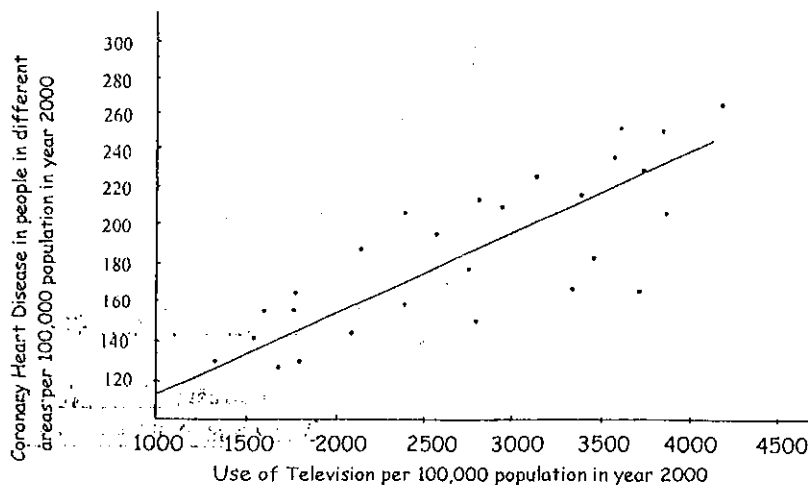
Duration: Three Hours

Part A

- 1 1.1 A mother in Bope-Poddala Health Unit Area brings her 10 month old infant (weight 6.5kg) to the Maternal and Child Health clinic.
- 1.1.1 What are the records and registers which will help you to maintain the health of the infant. (25 marks)
- 1.1.2 Describe how you would outline to the mother the diet you would recommend for this child giving reasons. (25 marks)
- 1.2 Write short notes on,
- 1.2.1 Adolescent reproductive health education. (25 marks)
- 1.2.2 Safe motherhood programme. (25 marks)
2. 2.1 2.1.1 List the different sources of environmental pollutants. (15 marks)
- 2.1.2 Briefly describe the adverse health effects of environmental pollution. (35 marks)
- 2.2 Describe occupational health problems of agriculture workers in Sri Lanka. (50 marks)

Part B

- 3 3.1 List and briefly describe the different types of descriptive studies used for epidemiological purposes. (10 marks)
- 3.2 Explain the following in relation to Descriptive studies.
- 3.2.1. The uses. (10 marks)
- 3.2.2 Different ways of collecting data. (10 marks)
- 3.2.3 Important features that are usually described (20 marks)
- 3.3 In a study performed to find out the exposure disease relationship the following results were obtained.



- 3.3.1 Identify the epidemiological study type used and describe the findings. (20 marks)
- 3.3.2 Is it possible to link this exposure with the disease directly?. If you suspect any type of limitation, explain the methods how you would control for it. (30 marks)

(PTO)

4. 4.1 Explain five specific responsibilities of a Municipality Medical Officer of Health(MOH) that differ from that of a MOH in any other health unit area. (50 marks)

4.2 Define the following

4.2.1 Total Fertility rate (10 marks)

4.2.2 Proportional Mortality Ratio (10 marks)

4.2.3 Dependency Ratio (10 marks)

4.3 Describe briefly the factors affecting the fertility of a country. (20 marks)

Part C

5 5.1 Give two examples for each of the followings,

5.1.1 a dichotomous variable (10 marks)

5.1.2 a discrete variable (10 marks)

5.1.3 a nominal scale variable (10 marks)

5.1.4 an ordinal scale variable (10 marks)

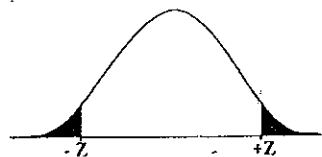
5.2 A community survey was conducted to investigate whether obesity and sedentary life style behavior are related. The following information was compiled for 220 individuals.

		<i>Obesity</i>	
		Yes	No
<i>Sedentary Life style</i>	Yes	50	40
	No	60	70

5.2.1 Write the null and the alternative hypotheses for the above research question. (20 marks)

5.2.2 Test the null hypothesis with an alpha ( $\alpha$ ) level of 0.05. (40 marks)

*Areas in the two tails of the standard normal curve*



z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
1.5	.134	.131	.129	.126	.124	.121	.119	.116	.114	.112
1.6	.110	.107	.105	.103	.101	.099	.097	.095	.093	.091
1.7	.089	.087	.085	.084	.082	.080	.078	.077	.075	.073
1.8	.072	.070	.069	.067	.066	.064	.063	.061	.060	.059
1.9	.057	.056	.055	.054	.052	.051	.050	.049	.048	.047
2.0	.046	.044	.043	.042	.041	.040	.039	.038	.038	.037
2.1	.036	.035	.034	.033	.032	.032	.031	.030	.029	.029

*Two sided critical values for Chi square distribution:*

degrees of freedom	Probability level	
	0.05	0.01
1	3.84	6.64
2	5.99	9.21
3	7.82	11.34
4	9.49	13.28