

UNIVERSITY OF RUHUNA  
FACULTY OF MEDICINE



THIRD EXAMINATION FOR MEDICAL DEGREES PART II, August 2018  
COMMUNITY MEDICINE PAPER I

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

Time: 9.00 am – 12.00 noon  
Duration: 3 hours

PART A

**Essay Questions**

1.

1.1 A Doctor wishes to know whether there is an ethnic variation of violence exposure Among Sri Lankan Women. The doctor surveyed 200 Sinhalese, 100 Tamil and 100 Muslim women living in the district of Galle, and found that 30 Sinhalese, 30 Tamil and 30 Muslim women were exposed to violence.

- 1.1.1. What are the variables used in this study? (10 marks)  
1.1.2. Violence exposure seems to be uniform among women in different ethnic Groups. Do you agree with this statement? Give reasons for your answer (10 marks)  
1.1.3 State null and alternative hypothesis of this study (20 marks)  
1.1.4 Test the null hypothesis at 5% significant level (40 marks)  
1.1.5 What is the conclusion that you can draw based on the results? (20 marks)

2.

2.1 Maya is a 16 year-old girl interested in becoming a vegetarian. However, she has a few concerns about the vegetarian diet and its effects on health. As her family doctor, how would you address the following concerns?

- 2.1.1. What are the different types of vegetarian diets? (05 marks)  
2.2.2. What are the ways in which a vegetarian diet can be considered as 'healthier'? (15 marks)  
32.2. What are the nutritional deficiencies that are most likely in a vegetarian and how can these deficiencies be minimized? (30 marks)

2.2

- 2.2.1 Discuss, in a systematic fashion, important work related hazards, risks and exposures that three wheeler drivers are exposed to. (25 marks)  
2.2.2 What can be done to eliminate or reduce these hazards? (25 marks)

4.

- 4.1 List five emerging environmental health issues in Sri Lanka (10 marks)  
4.1.1. Discuss briefly with examples how they affect health of the population (40 marks)

or

4.2 Solid waste management is a growing problem in urban areas of Sri Lanka and cause numerous negative environmental impacts.

4.1.1. List five negative environmental impacts due to improper solid waste management

(10 marks)

4.1.2 Discuss briefly with examples how those negative environmental impacts affect health of the population

(40 marks)

5.

5.1 Explain the natural history and spectrum of disease using and explanatory diagram

(40 marks)

5.2 Describe the different steps involved in a field investigation of a community out break.

(60 marks)

3.

3.1 Following are the Fertility Rates in different sections of Sri Lanka in year 2006

Table Current fertility				
Age-specific and total fertility rates, the general fertility rate, and the crude birth Rate for the three years preceding the survey, by residence, Sri Lanka 2006-07				
Age group	Residence			Total
	Urban	Rural	Estate	
15-19	24	28	37	28
20-24	98	100	138	102
25-29	138	146	178	147
30-34	120	123	91	122
35-39	55	57	55	57
40-44	11	15	5	14
45-49	1	1	2	1
TFR	2.2	2.3	2.5	2.3
CFR	75	79	90	79
CBR	18.5	18.6	20.0	18.7

*Sri Lanka Demographic and Health Survey 2006-07*

3.1.1. Define the Crude Birth Rate (CBR), General Fertility Rate (GFR) and Total Fertility Rate (TFR) area?

(12 marks)

3.1.2. What are the conclusions that you can make with regards to fertility Levels observed in the above table

(18 marks)

3.1.3. Briefly describe the factors that might have affected this change in fertility Levels in the country.

(20 marks)

3.2

Seetha is a 37 years old mother of 3 children. The elder two are girls and they are 16 and 13 years old. The younger one is an 11 year old boy. Seetha's husband is a manual labourer and he is well known as a heavy alcoholic and a gambler. The neighbours always complain that the couple used to quarrel all the time and Seetha's husband beats her at the end of each quarrel they have. Because of the poor financial situation of the family Seetha also has started to work as a manual labourer. The eldest girl has stopped going to school and the public health midwife has got to know that she is having an affair with a three wheel driver who is also 19 years old. The other kids are also found to have irregular school attendance. Finally Seetha has decided to go

Middle East as a foreign domestic worker. She has asked her mother to take care of her kids.

**3.2.1.** Briefly discuss about the issues of the children in the family.

***(25 marks)***

**3.2.2** As the Medical Officer of Health in the area what actions would you  
Take to solve those issues?

***(25 marks)***