Answer **ALL FIVE** questions

Answer each part in a **SEPARAE** book

Time: 09.00- 12.00 noon

Duration: Three Hours

PART A

1.

1.1 Discuss the occupational health problems of agricultural workers in Sri Lanka. *(50 marks)*

1.2 You have been placed as a MOH in one of the health unit areas of Sri Lanka. The monthly conference is a major event that takes place in your office. Discuss the importance of this event and your role as the MOH in this conference. *(50 marks)*

PART B

2.

2.1 Write notes on,

2.1.1 3 R's of waste management. *(25 marks)*

2.1.2 water harvesting. *(25 marks)*

2.2 A 38 year old mother in her second pregnancy presents to the antenatal clinic in Godakanda. Describe how she should be provided with the necessary services according to "safe motherhood" concept. *(50 marks)*

PART C

3.

3.1 Write short notes on,

3.1.1 common nutritional problems seen among school children in Bope-Poddala Health Unit Area. *(25 marks)*

3.1.2 weight gain during pregnancy. *(25 marks)*

3.2 The Crude Death Rates(CDR) of countries A & B are 9.2 and 12.5 per 1000 mid year population respectively. Following table gives the age distribution of the above two populations along with the age specific death rates. State whether the CDRs of above two countries could be compared and draw a valid conclusion.

Give the reasons for your conclusion and proceed with the calculation of the standardized death rates for the countries A and B and compare. *(50 marks)*

Age group	Country A			Country B			Country C	
	Population		Death Rate	Population		Death Rate	Population	
	N	%	per 1000	N	%	per 1000	N	%
0-14	28798	37.6	10.2	20213	35.6	9.0	49011	36.8
15-59	43212	56.5	4.0	28622	50.4	4.7	71834	53.9
60+	4511	5.9	53.2	7932	14.0	49.8	12443	9.3
Total	76521	100.0	CDR 9.2	56767	100.0	CDR 12.5	133288	100.0

4.

4.1 A group of men aged 21 to 39 years who were free from any ocular disease previously were observed for a period of twenty years for the development of signs of Age Related Macular Degeneration (ARMD). Among 1195 subjects taken for this study, 954 were heavy smokers while 251 were non-smokers. After follow up, ARMD was observed among 606 heavy smokers and 130 of the non-smokers.

4.1.1 Describe the type of this study. Discuss the advantages and disadvantages of this study type.

(20 marks)

4.1.2 Calculate the magnitude of the association between heavy smoking and development of ARMD. Comment on your results.

(25 marks)

4.1.3 Calculate the absolute effect of this exposure and explain it.

(15 marks)

4.1.4 What is the proportion of the disease that could have been prevented by eliminating the exposure.

(15 marks)

4.2 The global plan for "health for all" by year 2000 could not be achieved. As a result another global plan to improve the quality of human existence by year 2015 has been adopted. List the goals of this plan.

(25 marks)

PART E

5. The average survival period of lung cancer patients admitted to Cancer Hospital, Maharagama from 1995 to 2002 was 10 months. After introducing a programme to reduce the psychological stress in 2003 the survival period of 20 lung cancer patients are given below.

14, 3, 22, 17, 22, 3, 2, 5, 20, 11, 6, 14, 10, 15, 14, 16, 14, 6, 32, 15

To check the effectiveness of the above programme a statistical testing is required.

5.1.1 State the null and alternative hypothesis.

(20 marks)

5.1.2 Test your hypothesis at p= 0.05 significance level.

(50 marks)

5.2 Briefly describe the following

5.2.1 normal curve with area properties.

(15 marks)

5.2.2 scales of measurements.

(15 marks)