UNIVERSITY OF RUHUNA
FACULTY OF MEDICINE

THIRD EXAMINATION FOR MEDICAL DEGREES PART II, FEBRUARY 2013
COMMUNITY MEDICINE PAPER I

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

Time: 09.00 am – 12.00 noon
Duration : Three Hours

PART A

1.

1.1 The people in your community attachment area are frequently suffering from diarrheal diseases.

    1.1.1 List the possible contributory factors for the above situation. *(10 marks)*

    1.1.2 How would you assess the level of environmental sanitation in your community attachment area in relation to the above problem? *(40 marks*

1.2 Population structure with fertility and mortality of country A is presented in the table below. Answer the following questions referring to the table. Mention the formulae where necessary.

Age	MYP	No. of Females	No. of Live Births	No. of deaths
0-14	20,000,000	10,000,000	10,000	20,000
15-49	60,000,000	30,000,000	280,000	15,000
50-64	40,000,000	20,000,000	20,000	40,000
>= 65	20,000,000	12,000,000	0	100,000
Total	140,000,000	72,000,000	310,000	175,000

    1.2.1 Calculate the Dependency Ratios (DR). *(10 marks*

    1.2.2 Calculate the Crude Birth Rate (CBR). *(5 marks,*

    1.2.3 Calculate the General Fertility Rate (GFR). *(5 marks*

    1.2.4 Calculate the Age Specific Fertility Rate(ASFR) of age group 0-14 yrs. *(5 marks*

    1.2.5 Calculate the Crude Death Rate (CDR). *(5 marks,*

    1.2.6 Explain, in brief, how you would compare the mortality of country A with that of another country to comment on the health status of the two countries. *(20 marks*

PART B

2.

2.1 Describe the different levels of prevention for cardiovascular diseases. *(70 marks,*

2.2 Compare the advantages and disadvantages of case-control and cohort studies. *(30 marks*

PART C

3. Briefly describe,
   3.1 the pre-placement medical examination.   *(20 marks)*
   3.2 the healthy worker effect.   *(25 marks)*
   3.3 the role of Public Health Midwife in post-natal care.   *(25 marks)*
   3.4 the usefulness of Child Health Development Record(CHDR) for the mother.   *(30 marks)*

PART D

4.
4.1 List **four** scales of measurements and give an example for each.   *(16 marks)*
4.2 List **two** characteristics of a histogram.   *(10 marks)*
4.3 List **two** probability and **two** non-probability sampling methods.   *(4 marks)*
4.4 The mean serum sodium (meq/L) of males (n=100) in a rural area was 140 with a
    standard deviation of 20 and the corresponding figures for a sample of 100 males
    living in an urban areas was 130 and 25, respectively. Test the hypothesis that there
    is no difference of mean serum sodium levels of males in these two geographical areas. *(40 marks)*

4.5 "Effective communication can enhance team work" Comment briefly on this statement. *(30 marks)*

PART E

5.

5.1 What are the types of activities that are done to control malnutrition in a community
    in a nutritional surveillance?   *(40 marks)*

5.2 What are the major dietary modifications suggested for patients with chronic kidney
    diseases?   *(20 marks)*

5.3 Describe the importance of screening and treatment of iron deficiency anaemia
    during pregnancy.   *(40 marks)*