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UNIVERSITY OF RUHUNA
FACULTY OF MEDICINE

THIRD EXAMINATION FOR MEDICAL DEGREES PART II, DECEMBER 2014
COMMUNITY MEDICINE PAPER I

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

Time: 09.00 a.m. – 12.00 noon
Duration : Three Hours

PART A

1.

1.1 1.1.1 List the methods available for 'household water purification'. *(10 marks)*
    1.1.2 Briefly describe the advantages/disadvantages of the methods mentioned in 1.1. *(40 marks)*

1.2 Briefly explain the following ;
    1.2.1 Factors affecting the reduction of fertility levels in developed countries *(25 marks)*
    1.2.2 Population aging *(25 marks)*

PART B

2.

2.1 What dietary advice would you give for a
    2.1.1 preschool child with an acute febrile illness? *(30 marks)*
    2.1.2 teenage girl with obesity? *(30 marks)*

2.2 How would you advice a pregnant mother regarding dietary management of following conditions?
    2.2.1 Hyperemesis gravidarum (Morning sickness) *(15 marks)*
    2.2.2 Reflux oesophagitis *(15 marks)*
    2.2.3 Constipation *(10 marks)*

PART C

3.

3.1 Briefly describe the
    3.1.1 periodic medical examination. *(25 marks)*
    3.1.2 role of public health inspector in occupational health. *(25 marks)*
    3.1.3 post-partum contraception. *(25 marks)*
    3.1.4 age appropriate immunization. *(25 marks)*

PART D

4.

4.1 Explain, briefly the following.
    4.1.1 Descriptive statistics *(15 marks)*
    4.1.2 Characteristics of normal curve *(15 marks)*

4.2 A research has been conducted to find out whether there is a gender difference in smoking. A representative sample of 600 adults (300 males and 300 females) was surveyed. Of them, 100 males and 30 females were smokers.
    4.2.1 Write the null hypothesis. *(10 marks)*
    4.2.2 Prepare a 2 x 2 contingency table. *(20 marks)*
    4.2.3 Test the null hypothesis at 5% level using chi-square test. *(40 marks)*

PART E

5.

5.1 Write brief notes on

    5.1.1 handling confounding at the design stage of study.   *(25 marks)*

    5.1.2 selection of subjects for a case control study.   *(25 marks)*

5.2 A group of scientists have recently created a screening test that they believe is very simple and effective in diagnosing prostate cancer in the early stage. The following table shows the results of 300 subjects who underwent the screening test.

Screening test result	Disease status		Total
	Positive	Negative	
Positive	124	21	145
Negative	59	156	215
	183	177	360

5.2.1 What is the specificity of the screening test? What does it imply?   *(25 marks)*

5.2.2 What is the negative predictive value of the screening test? What does it imply?   *(25 marks)*