## POSTGRADUATE INSTITUTE OF MEDICINE **UNIVERSITY OF COLOMBO**

# **SELECTION EXAMINATION FOR MSc (COMMUNITY MEDICINE) -SEPTEMBER 2016**

Date: 21st September 2016

**Time:** 9.30 a.m. - 12.30 p.m.

Answer all five questions

Answer each question in a separate book

#### PART A

- 1.
- 1.1. As a Medical Officer of Health (MOH), while carrying out an inspection in a garment factory having 100 workers, you suspect that the background noise level of the factory is too high. Describe how you would manage this issue. (40 marks)
- 1.2. List the five (5) major categories of hazards in an occupational setting. (15 marks)
- 1.3. Name one occupational health issue faced by medical officers under each category you mentioned above. (15 marks)
- 1.4. Explain the importance of workplace mental health promotion. (30 marks)
- 2.
- 2.1. It has been observed that, during the past three (3) years large number of teenage pregnancies has been reported in few villages in a MOH area. Describe the activities that you would carry out to reduce the number of teenage pregnancies in this MOH area. (70 marks)
- 2.2. Explain the role of the Public Health Inspector in control of Tuberculosis (30 marks)
- 3.
  - 3.1. Define the term screening

(20 marks)

- 3.2. Discuss the problems identified in the current chronic Non Communicable Diseases (NCD) screening programmes in Sri Lanka? (40 marks)
- 3.3. A researcher wants to collect information on incidence of Diabetes Mellitus in Sri Lanka using Indoor Morbidity Mortality Report (IMMR). Discuss the validity of the information given in the IMMR on incidence of Diabetes Mellitus. (40 marks)

### PART B

4.

- 4.1. In a study, a comparison of ulcer complications in the Celecoxib and NSAIDS groups showed a p- value of 0.09 while comparison of diameter of ulcers in the Celecoxib and NSAIDS groups showed a p-value of 0.02.
  - 4.1.1 Indicate the statistical tests used to find out the significance of the findings. (20 marks)
  - 4.1.2 Explain the results giving reasons.

(20 marks)

- 4.2. Comment on the following statements.
  - 4.2.1 Median is a better measure to describe the income of a population than the Mean. (20 marks)
  - 4.2.2 Crude Birth Rate (CBR) is not a good indicator of fertility.(20 marks)
  - 4.2.3 Coefficient of variation does not have units of measurement.
    (20 marks)
- 5. A study is to be conducted to determine the risk factors for fall among the elderly in a province in Sri Lanka.
  - 5.1. What type of a study design would you recommend? (20 marks)
  - 5.2. Give reasons for selecting the study design stated above in 5.1 (30 marks)
  - 5.3. Describe the advantages and the disadvantages of the above study.

    (30 marks)
  - 5.4. Describe the measure of association that you would select for the above

2-9%