



UNIVERSITY OF JAFFNA, SRI LANKA
SECOND EXAMINATION FOR MEDICAL DEGREES PART (II)—September 2025
Academic Year 2020/2021

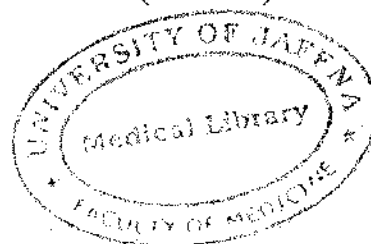
Community and Family Medicine – Paper II

Date: 16.09.2025,

9 am to 12 noon. (3 hours)

Answer all **six** questions.

Answer each question in a separate answer book.



1.

Mr. Fernando, a 72-year-old retired postmaster, has advanced chronic obstructive pulmonary disease (COPD) and is oxygen-dependent at home. He was hospitalized twice in the past month due to exacerbations. Now, he prefers to remain at home, saying he is “tired of hospital visits”. He has worsening breathlessness, fatigue, poor sleep, and occasional anxiety attacks. His wife is his primary caregiver and is struggling to cope with his increasing needs. Their only son lives in another city and visits infrequently.

- 1.1. Describe the roles and responsibilities of the family physician in providing comprehensive care to Mr. Fernando at home. (40 marks)
- 1.2. Outline the strategies you would use to address the physical, psychological, social, and spiritual needs of Mrs. Fernando and the family. (60 marks)

2. A common belief among oncologists is that a new chemotherapy drug, Drug X, has a 60% remission rate for a specific type of cancer.

- 2.1. Formulate the null and alternative hypotheses to test the oncologist's belief (20 marks)

A study of 50 patients conducted at a cancer centre shows that only 25 patients achieved remission.

- 2.2. List two (02) possible reasons for the observed difference. (20 marks)
- 2.3. Name the most appropriate statistical test to test the above hypothesis. (10 marks)
- 2.4. Mention two (02) assumptions for the above test to be applied. (20 marks)
- 2.5. Discuss the importance of not generalizing findings from a single-centred study and the need to consider the totality of evidence. (30 marks)

3. The following statistics were reported from the Non-Communicable Diseases Risk Factor Surveys conducted in the year 2015 (N=5188; males 2030 (39.1%), females 3158 (60.9%)) and in the year 2021 (N=6267; males 2447 (39.0%), females 3820 (61.0%).

	2015	2021
<i>Prevalence of tobacco use (18-69 years, %)</i>		
Males	45.7	48.9
Females	5.3	6.5
<i>Prevalence of smoking (18-69 years, %)</i>		
Males	29.4	30.2
Females	0.1	0.2
<i>Mean age of initiation of current smokers (18-69 years, years)</i>		
Males	20.5	£
Females	20.5	36.4
<i>Secondhand exposure to smoking at work (18-69 years, %)</i>		
Males	36.1	36.3
Females	11.1	11.5

Source: Non-Communicable Risk Factor Survey Sri Lanka 2015 & 2021

£ - Not reported

- 3.1.
- 3.1.1. Explain the difference in the figures reported for males and females under 'prevalence of tobacco use' and 'prevalence of smoking' in the table. (10 marks)
- 3.1.2. List four (04) diseases that are directly attributed to tobacco exposure. (20 marks)
- 3.1.3. Assuming you are a Medical Officer of Health (MOH), outline a coordinated plan to control tobacco use in your area. (40 marks)
- 3.2. Discuss the ways to prevent indoor air pollution at the household level. (30 marks)
- 4.
- 4.1. All pregnant women in Sri Lanka should have received a package of antenatal care according to the antenatal care service delivery model and package. Briefly describe how the following activities of antenatal care support achieving appropriate outcomes of pregnancy.
- 4.1.1. All pregnant women should be registered by the PHM either at home or at the clinic before 8 weeks of gestation. (20 marks)
- 4.1.2. All pregnant women should be immunised against tetanus according to the guidelines issued by the Ministry of Health. (20 marks)
- 4.1.3. All pregnant women should be screened for dental conditions at the first visit, and identified cases need to be referred to the nearest dental clinic for further management. (20 marks)



- 4.2. An essential component of Sri Lanka's maternal and child care programme is routine postnatal care for both the mother and the newborn at the field level.
- 4.2.1. Mention the frequency of care provided at the field level during the postpartum period after a normal institutional delivery. (10 marks)
- 4.2.2. Name the instrument used to assess postpartum depression among mothers in Sri Lanka. (10 marks)
- 4.2.3. Discuss the importance of continuing the iron and folic acid intake for 6 months after delivery. (20 marks)

5.

A researcher is interested in determining the association between the duration of exclusive breastfeeding and the exposure of social media advertisements among mothers with children less than six months old.

- 5.1. Recommend the most suitable study design that can be used, and mention two (02) reasons for your recommendations. (20 marks)
- 5.2. Briefly describe two (02) biases related to the study design mentioned in 5.1 (20 marks).
- 5.3. The researcher identified the following variables to be measured. State the scale of measurement for the identified variables listed below. (20 marks)
- 5.3.1. Mode of delivery (Normal vaginal delivery/assisted delivery/LSCS)
- 5.3.2. Birth weight of the child (g)
- 5.3.3. Sex of the child (Male/Female/Other)
- 5.3.4. Education status (Below Ordinary Level/Ordinary Level and above)
- 5.4. Describe briefly the potential ethical problems that might arise during the research. (40 marks)

6.

Write short notes on the following.

- 6.1 Sick role and illness behaviour (25 marks)
- 6.2 Importance of critical reflection in public health (25 marks)
- 6.3 Notification of Industrial accidents and diseases (25 marks)
- 6.4 Total fertility rate & Net reproduction rate (25 marks)