

UNIVERSITY OF JAFFNA  
SECOND EXAMINATION FOR MEDICAL DEGREES –April 2010

**COMMUNITY MEDICINE**

---

**Answer ALL SIX questions**

Date: 07.04.2010  
Time: 9 am – 12 noon

*Each question carries 100 marks.*

*The marks allocated for each part of the question is given against that part*

---

1. 1.1. Define the following
  - 1.1.1. Confidence limit (15 Marks)
  - 1.1.2. Reference range (15 Marks)
  - 1.1.3. Confidence interval (15 Marks)
  - 1.1.4. Relative risk (15 Marks)
- 1.2. The mean level of prothrombin in a normal population is known to be approximately 20mg/100ml plasma and the standard deviation is 4 mg/100ml. A sample of 40 patients showing vitamin k deficiency has a mean prothrombin level of 18.5 mg/100ml. How reasonable is it to assume that the true mean for the patients with vitamin K deficiency is the same as that for the normal population (40 Marks)
2. Mrs. Kalawathy Sambanthan, 38 years old, is a mother of three children. Her last child is 1 year old. She was admitted to a Private Nursing home with fever, rapid pulse and bleeding PV. After three days she was transferred to the General Hospital. She was in the ICU for one day and died of septicaemia. History revealed that she had been 8 weeks pregnant. But the PHM was not aware of it.
  - 2.1. Write down the certificate of cause of death? (20 Marks)
  - 2.2. As a House Officer what further action will you take? (20 Marks)
  - 2.3. List the points at which there was failure to prevent the maternal death (30 Marks)
  - 2.4. What action should the Medical Officer of Health of the area take to prevent similar deaths in future? (30 Marks)
3. 3.1. List the ways in which underground water could be polluted (10 Marks)
- 3.2. Describe the methods of purification of water at household and community level (50 Marks)
- 3.3. Describe how you could prevent pollution of the underground water (40 Marks)

4. Discuss the following
  - 4.1. Incidence & Prevalence (25 Marks)
  - 4.2. Specificity & Sensitivity (25 Marks)
  - 4.3. Population & Sample (25 Marks)
  - 4.4. Primary prevention & Primordial prevention (25 Marks)
  
5. After the opening of the Jaffna – Kandy road recently for free flow of traffic a large number of local tourists and pavement hawkers have been visiting Jaffna. In addition 70,000 IDPs have been temporarily resettled in the Jaffna District
  - 5.1. What are the health and social problems that you would expect (40 Marks)
  - 5.2. What action will prevent the development and increase of these problems (60 Marks)
  
6. Write short notes on
  - 6.1. Supervision of Staff (25 Marks)
  - 6.2. Cold chain (25 Marks)
  - 6.3. Case Fatality Rate (25 Marks)
  - 6.4. Sanitation at festivals & fairs (25 Marks)