

**UNIVERSITY OF JAFFNA, SRI LANKA**  
**SECOND EXAMINATION FOR MEDICAL DEGREES Part II–DECEMBER 2010**  
**COMMUNITY MEDICINE Paper II**

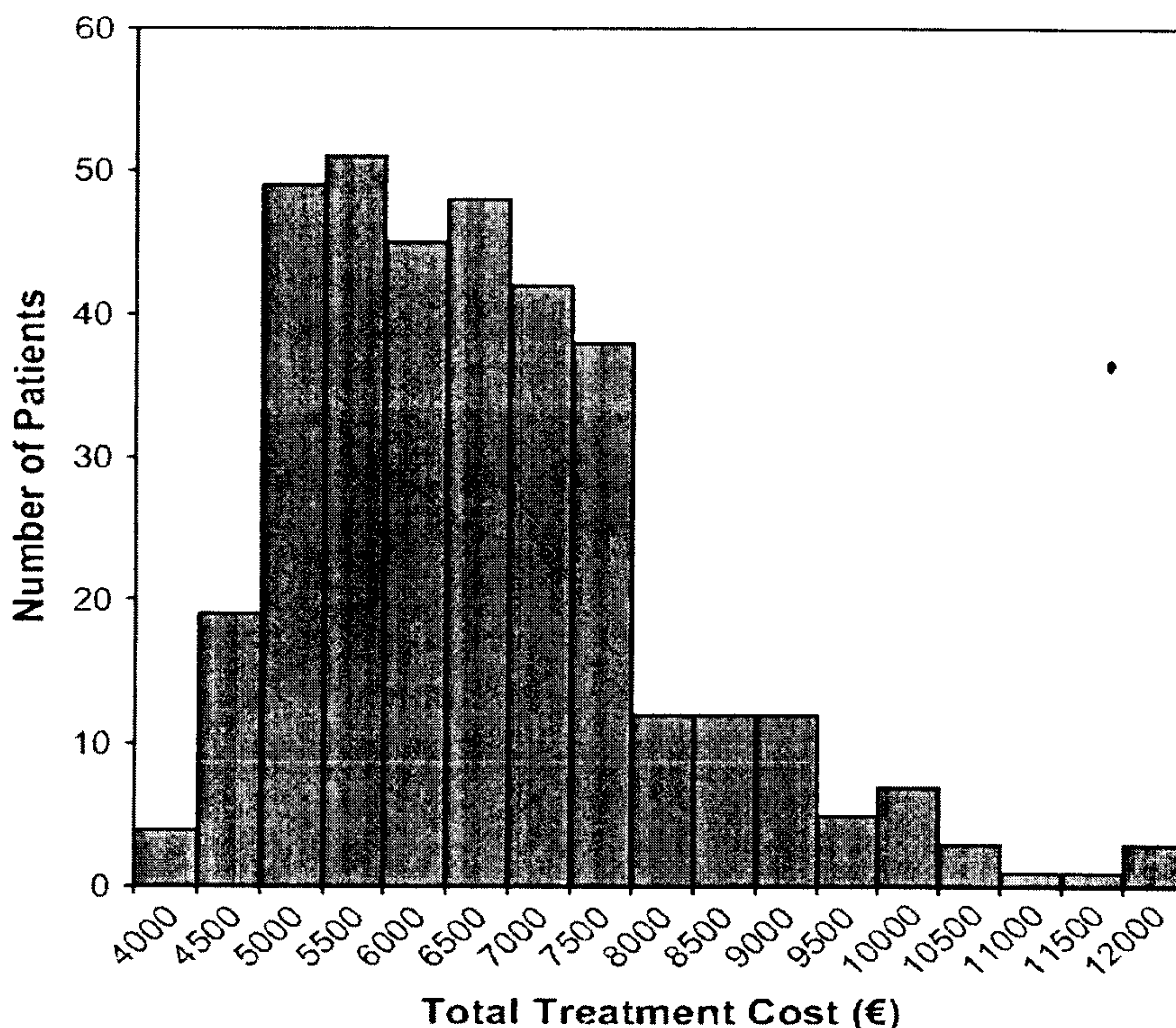
Date: 14.12.2010.

Time: 03 hours

ANSWER ALL THE SIX QUESTIONS

Answer each QUESTION in separate answer book

1. 1.1 Below is a histogram of total treatment cost of Patients treated at a hospital



1.1.1. Describe the shape of the distribution ( 10 Marks)

1.1.2. Discuss the position of mean, median, and mode in this distribution ( 20 Marks)

- 1.2. A random sample of 10,000 individuals has been selected from the population in an area X. It was found that 1000 of them are hypertensive.

1.2.1. What is the prevalence of hypertension in area X? ( 10 Marks)

1.2.2. What is the 'study design' used for above study? ( 10 Marks)

1.2.3. What is the standard error? ( 20 Marks)

1.2.4. Calculate the 95% confident interval? ( 20 Marks)

1.2.5. Another study was carried out in the same population with 10,000 Samples and it was found that there were 1200 people with Hypertension.

Explain the difference between the above two results. ( 10 Marks)

2.
  - 2.1. Draw a chart showing the organizational structure of an MOH office ( 35 Marks)
  - 2.2. List the common causes of maternal morbidity and mortality in Sri Lanka ( 30 Marks)
  - 2.3. Describe the preventive activities carried out by Public Health staff to reduce maternal morbidity & mortality (35 Marks)
  
3.
  - 3.1. Discuss the criteria for selection of a disease for screening ( 40 Marks)
  - 3.2. The prevalence of undetected diabetes mellitus in a population to be screened is approximately 1.5%. It is assumed that 10,000 people will be screened. The screening test will measure blood glucose content. The sensitivity and specificity associated with the screening test are 30% and 90% respectively
    - 3.2.1. Set up a two by two table with appropriate numbers in each cell of the table ( 30 Marks)
    - 3.2.2. Calculate the following:
      - 3.2.2.1. The percentage of false positives ( 15 marks)
      - 3.2.2.2. The predictive value of the negative test ( 15 Marks)
  
4. It has been suggested that a health problem related to road traffic accidents is a priority health problem in Sri Lanka
  - 4.1. What information will you need to assess the validity of this statement ( 20 Marks)
  - 4.2. Outline a programme to reduce this problem ( 40 Marks)
  - 4.3. Discuss the importance of Pre- placement medical examination for drivers recruited for public transport services ( 40 Marks)
  
5. Discuss
  - 5.1. Factors which influence drug compliance among the elderly (50 Marks)
  - 5.2. Ethical considerations in care of elders (50 Marks)
  
6. Write short notes on
  - 6.1. Nutritional interventions for children under 5 years ( 25 Marks)
  - 6.2. Counseling in Family Planning ( 25 Marks)
  - 6.3. Communication for Behaviour Impact (COMBI) ( 25 Marks)
  - 6.4. Eradication of Polio by OPV ( 25 Marks)