

UNIVERSITY OF JAFFNA, SRI LANKA
SECOND EXAMINATION FOR MEDICAL DEGREES – PART II (First)
DECEMBER 2010

PHARMACOLOGY

Paper II

Date: 13.12.2010

Time: 2 hours

Answer all four questions

Answer each question in a separate answer book

1. Explain the
 - 1.1. pharmacokinetic and pharmacodynamic basis of using cefotaxime 8hourly as empirical therapy in bacterial meningitis. (40 marks)
 - 1.2. pharmacokinetic basis for the interaction between warfarin and erythromycin and the associated adverse effects. (20 marks)
 - 1.3. terms “bioavailability” and “first-pass metabolism”. (25 marks)
 - 1.3.1. Give 3 examples of medicines where bioavailability is reduced by foods. (15 marks)
2.
 - 2.1. Describe the mechanism of action of different groups of diuretics. (40 marks)
 - 2.2. What are the adverse effects of each group of diuretics mentioned in 2.1.? (30marks)
 - 2.3. How would you prevent or minimize the above-mentioned adverse effects? (30 marks)
3. Write an account on
 - 3.1. therapeutic applications of prostaglandins. (30 marks)
 - 3.2. emergency contraception. (20 marks)
 - 3.3. drug treatment of diabetic ketoacidosis. (50 marks)

4. A 15 year old girl was admitted to the medical ward with the history of fever and migrating type of arthritis involving large joints. She was apparently well till she developed throat infection few weeks ago which subsided in a week. On examination systolic murmur was heard. On admission her ESR was 80mm in the first hour. She was diagnosed as having rheumatic fever with carditis.

4.1. Describe the drug treatment of this patient in the ward. (40 marks)

4.2. Name the drug that is commonly used in the prophylaxis of rheumatic fever. Give reasons. (25 marks)

4.3. What is the most serious adverse effect of the drug mentioned in 4.2.? (25 marks)

Mention the precautions that you would take to prevent it. (10 marks)

4.4. What are the alternatives available for rheumatic fever prophylaxis?