

**SECOND EXAMINATION FOR MEDICAL DEGREES—PART II (2<sup>nd</sup>) December 2012****PHARMACOLOGY - Paper II****Date: 13.12.2012.****Time: 02 hours****ANSWER ALL THE FOUR QUESTIONS**

1. Explain the pharmacokinetic basis for
  - 1.1. unexpected pregnancy in women on combined oral contraceptive pills following the use of broad spectrum antibiotics. (40 Marks)
  - 1.2. using probenacid in the treatment of chronic gout. (30 Marks)
  - 1.3. reduced efficacy of clopidogrel when taken with omeprazole. (30 Marks)
  
2.
  - 2.1. Classify the drugs used in the treatment of bronchial asthma. (20 Marks)
  - 2.2. Describe the mechanism of action of each group of drugs mentioned in 2.1. (40 Marks)
  - 2.3. Mention the different preparations available for each drug used in the treatment of bronchial asthma. (40 Marks)
  
3. Write an account on
  - 3.1. therapeutic applications of carbamazepine. (30 Marks)
  - 3.2. adverse effects of methotrexate. (30 Marks)
  - 3.3. drug interactions of warfarin. (40 Marks)
  
4. Twenty year old girl with diabetes was admitted to the emergency unit in confused state. On examination respiratory rate was 35/ minute and she was dehydrated. Mother said that her daughter had stopped taking the medicine for diabetes for some time. The patient was treated for diabetic ketoacidosis.
  - 4.1. List the therapeutic agents that you would use in the immediate management of this patient. (20 Marks)
  - 4.2. Explain the rationale for using the therapeutic agents mentioned in 2.1. for this patient. (40 Marks)
  - 4.3. Name the drug that you would prescribe for this patient on discharge. (10 Marks)
  - 4.4. Write the advice that you would give to this patient on discharge. (30 Marks)