

**UNIVERSITY OF JAFFNA, SRI LANKA**  
**SECOND EXAMINATION FOR MEDICAL DEGREES – PART II**  
**APRIL 2010**  
**PHARMACOLOGY**

**Part II**

Date: 06.04.2010

Time: 2 hours

**Answer all four questions**

**Answer each question in separate answer book**

- 1 Explain the pharmacokinetic basis of the following:
  - 1.1. Use of colestyramine as a lipid lowering agent. (25 Marks)
  - 1.2. Preference of soluble insulin to isophane insulin in the perioperative blood glucose control in diabetic patients. (25 Marks)
  - 1.3. Gastric mucosal damage with aspirin therapy. (25 Marks)
  - 1.4. Administration of high doses of antibiotics by bolus intravenous injection in bacterial endocarditis. (25 Marks)
  
2. Using your knowledge about drugs acting on the autonomic nervous system explain the pharmacological basis of using,
  - 2.1. atropine in the management of organophosphate poisoning . (30 Marks)
  - 2.2. pyridostigmine in the management of myasthenia gravis. (25 Marks)
  - 2.3. salbutamol in the management of bronchial asthma (20 Marks)
  - 2.4. adrenaline in the management of anaphylactic shock. (25 Marks)
  
3. Write a brief account on:
  - 3.1. Role of methotrexate in rheumatoid arthritis. (30 Marks)
  - 3.2. Therapeutic applications of benzodiazepines. (30 Marks)
  - 3.3. Adverse effects of corticosteroids. (40 Marks)

4. A fifty year old male was admitted to the emergency unit with the complaint of retrosternal chest pain and breathlessness of more than 30 minutes duration. On examination the patient was dyspnoeic and sweating. His heart rate was 90 beats/ min and the blood pressure was 100/70mmHg. Auscultation revealed fine crepitations at the base of the lungs. ECG showed ST elevation in the anterior leads. The diagnosis was made as myocardial infarction with left ventricular failure.

- 4.1. List the drugs that you would use in the immediate management of this patient. (20 Marks)
- 4.2. How would you administer the above mentioned drugs to this patient? (20 Marks)
- 4.3. Explain the rationale for using the drugs mentioned in 4.1 in this patient. (30 Marks)
- 4.4. What drugs would you prescribe for this patient on discharge? Give reasons. (30 Marks)