



UNIVERSITY OF RUHUNA – FACULTY OF MEDICINE

ALLIED HEALTH SCIENCES DEGREE PROGRAMME

THIRD BPHARM PART I EXAMINATION – DECEMBER 2013

PH 3153: PHARMACOLOGY III (SEQ)

TIME: 10.30 a.m. – 1.30 p.m.

INSTRUCTIONS

- Answer all questions.
- No paper should be removed from the examination hall.
- Do not use any correction fluid.

1. Bronchodilators are widely used in the treatment of bronchial asthma.

1.1 Write an example for the following categories of bronchodilators.

1.1.1 β_2 -agonist

1.1.2 Anticholinergic

1.1.3 Xanthine derivative

1.1.4 Cysteinyl-leucotrien receptor antagonist

(20 marks)

1.2 Briefly describe the pharmacological basis of using β_2 -agonist in bronchial asthma.

(25 marks)

1.3 List **five** adverse effects of β_2 -agonist.

(10 marks)

1.4 Write **two** advice you would give to a patient who was prescribed an oral form of xanthine derivative.

(20 marks)

1.5 Explain the pharmacological basis of using muscarinic receptor antagonist in an acute attack of asthma.

(25 marks)

2.

2.1 Write an example for the followings.

2.1.1 First generation sulfonylureas

2.1.2 Second generation sulfonylureas

(10 marks)

2.2 Describe the mode of action of sulfonylureas.

(30 marks)

2.3 List **five** adverse effects of sulfonylureas.

(10 marks)

2.4 Briefly explain the mechanism of reducing blood sugar by biguanides.

(25 marks)

2.5 List the new oral hypoglycaemic drugs used in clinical practice.

(25 marks)

- 3.
- 3.1 Explain the pharmacological basis of using thioamides in hyperthyroidism. (40 marks)
 - 3.2 List **five** major adverse effects of thioamides. (10 marks)
 - 3.3 Explain the importance of using lugol's iodine, before thyroidectomy in hyperthyroid multinodular goiter. (30 marks)
 - 3.4 Write the advice you would give to a patient who was prescribed thyroxine for hyperthyroidism. (20 marks)
- 4.
- 4.1 Discuss the principles of development of antibiotic resistance. (60 marks)
 - 4.2 Describe the hospital pharmacist role in the prevention of development of antibiotic resistance. (40 marks)
- 5.
- 5.1 Describe the pharmacological basis of giving
 - 5.1.1 Hydrocortisone in anaphylactic shock. (30 marks)
 - 5.1.2 Betamethasone in lung maturation of fetus. (30 marks)
 - 5.2 As a hospital pharmacist, explain the advice you would like to give to a patient who is on long term prednisolone, giving the reasons. (40 marks)
- 6.
- 6.1 List **three** types of insulin. (10 marks)
 - 6.2 Give examples for each. (15 marks)
 - 6.3 List **three** clinical indications for insulin. (15 marks)
 - 6.4 Give **five** important adverse effects of insulin. (10 marks)
 - 6.5 Discuss the precautions you take as the hospital pharmacist about proper storage of insulin. (15 marks)
 - 6.6 Describe how you would advise as the hospital pharmacist to a patient who was given an insulin therapy for the first time? (35 marks)

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