

**THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF PHARMACY
ACADEMIC YEAR 2018/2019 – SEMSETER I**



**BACHELOR OF PHARMACY
BPU3234 – PHARMACOLOGY II – LEVEL 5
FINAL EXAMINATION
DURATION: THREE HOURS**

DATE: 06th MARCH 2019

TIME: 9.30 A.M. – 12.30 P.M.

Index No:

Part B – Four (04) SAQs (30 marks)**01.**

1.1 Name one (01) cephalosporin from following generations. (03 marks)

a. First generation -

b. Second generation -

c. Third generation -

1.2 Write five (05) advantages of doxycycline over tetracycline in a patient with renal impairment (05 marks)

.....

.....

.....

.....

.....

.....

.....

1.3 What is the pharmacological basis of combined use of penicillin and gentamycin? (07 marks)

.....

.....

.....

.....

.....

.....

.....

.....

Index No:

02.

2.1 List four (04) drug classes used in the treatment of osteoporosis. (04 marks)

.....

.....

.....

.....

2.2 What is the mechanism of action of alendronate? (06 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

2.3 Write three (03) advices you would give as a pharmacist when dispensing alendronate. (05 marks)

.....

.....

.....

Index No:

03.

3.1 List four (04) therapeutic uses of benzodiazepines.

(04 marks)

.....

.....

.....

.....

3.2 What is the mechanism of action of diazepam at cellular level?

(07 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

3.3 Write four (04) side effects of diazepam.

(04 marks)

.....

.....

.....

.....

Index No:

04.

4.2 List four (04) disease modifying antirheumatic drugs (DMARDs) other than non-steroidal anti-inflammatory drugs (NSAIDs). (04 marks)

.....

.....

.....

.....

4.2 Write three (03) contraindications of selective COX-2 inhibitors. (03 marks)

.....

.....

.....

4.3 How aspirin can induce the peptic ulcer? (08 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Index No:

Part C – Two (02) SEQs (20 marks)**01.**

A 20 years old asthmatic women started a new job as a teacher in an urban area and she has recently started to go to a gym. She is currently on salbutamol Metered Dose Inhaler (MDI) 200 micrograms (two puffs) when required.

The pharmacist has noted that she currently uses her inhaler five to six times a day and advised to consult a doctor. She has returned a few days later with a prescription on salbutamol MDI 200 micrograms (two puffs) when required and beclomethasone MDI 50 micrograms (one puff) twice daily.

- 1.1 List three (03) factors that can trigger asthma condition of this woman (03 marks)
- 1.2 Briefly explain the pharmacological basis of salbutamol and beclomethasone in the treatment of asthma (12 marks)
- 1.3 Write three (03) adverse effects of inhaled salbutamol. (03 marks)
- 1.4 As the pharmacist, what advices you would give when dispensing beclomethasone MDI (07 marks)

02.

A 50-year-old female with family history of type 2 diabetes mellitus was presented to a medical practitioner complaining of increased fatigue, thirst and urination over the past couple of weeks with weight loss. She was diagnosed with type 2 diabetes mellitus and metformin IR 500 mg daily dose was prescribed to her. But her hyperglycaemic condition was not controlled with metformin. Then medical practitioner added a drug from sulfonylureas class to her treatment plan as follows;

- Metformin 500 mg twice daily
- Gliclazide 30 mg daily

- 2.1 Write three (03) hyperglycemic symptoms this patient may have experienced. (03 marks)
- 2.2 Briefly explain the mechanism of action of gliclazide in diabetes mellitus. (10 marks)
- 2.3 Write two (02) side effects and two (02) contraindications of gliclazide. (04 marks)
- 2.4 Discuss the appropriateness of concomitant use of metformin and trimethoprim. (08 marks)

