QUESTION 3: AUTOCOIDS/INFLAMMATION/HAEMATOLOGY

A. With relevant examples, discuss the clinical applications of drugs that:
   1) Have agonist activity on eicosanoid receptors
   2) Reduce activity of eicosanoids
   (15-30 sentences; 15 marks)

B. Discuss the molecular mechanisms by which drugs inhibit thrombosis or produce thrombolysis. With relevant examples, discuss clinical applications of anti-thrombotic drugs.
   (10-20 sentences; 10 marks)

QUESTION 4: CARDIOVASCULAR SYSTEM

Discuss the endogenous chemical mediators that are involved in regulation of the cardiovascular system. With relevant examples, discuss the clinical applications of drugs that affect the chemical mediators.
(25-50 sentences; 25 marks)

QUESTION 5: ENDOCRINE-REPRODUCTION SYSTEM

A. With relevant examples, discuss the pharmacological basis for the clinical applications of drugs that:
   1) Have agonist activity on hypothalamic and pituitary hormone receptors
   2) Have antagonist activity on hypothalamic and pituitary hormone receptors
   (15-30 sentences; 15 marks)

B. With relevant examples, discuss the molecular mechanisms by which non-insulin anti-hyperglycaemic drugs produce their anti-hyperglycaemic effects
   (10-20 sentences; 10 marks)

QUESTION 6: CHEMOTHERAPY

With relevant examples, discuss the following:

A. Mechanisms of action of chemotherapeutic drugs
   (15-30 sentences; 15 marks)

B. Mechanisms by which microbes and malignant cells develop resistance to chemotherapeutic drugs
   (10-20 sentences; 10 marks)

PGY 3310/PGY 4210 ASSIGNMENTS

November 2023

INSTRUCTIONS

- Indicate the Course Code, your full names (surname first) and computer number on your answer scripts
- Answer ALL THE questions
- Each question carries 25 marks
- Answers to each question should consist of a minimum of 25 and maximum of 50 sentences
- All your answers should be hand-written
- Any amount of plagiarism will result in a score of ZERO for the question where the plagiarism is detected
- Submit the written assignments by THURSDAY 16TH NOVEMBER 10:00. Assignments submitted after the deadline will not be marked.

QUESTION 1: PHARMACOKINETICS-PHARMACODYNAMICS

A. With relevant examples, discuss the various molecular mechanisms by which drugs produce pharmacological effects
(13-25 sentences; 12.5 marks)

B. With relevant examples, discuss the processes involved in distribution and elimination of drugs
(13-25 sentences; 12.5 marks)

QUESTION 2: AUTONOMIC-RESPIRATORY-GIT PHARMACOLOGY

Discuss the endogenous chemical mediators that are involved in the regulation of the autonomic nervous system, respiratory system and gastrointestinal system. With relevant examples, discuss clinical applications of drugs that affect the mediators.
(25-50 sentences; 25 marks)

Receptor binding
enzyme inhibition
Ion channel modulators
Second messanger systems
Transporter interactions
Alteration to gene Expression
Immunomodulation

9. Drug used in the treatment of hepatic entamoeba histolytica infections

10. Anti-bacterial drugs that are used to treat methicillin-resistant staphylococcus aureas infections

11. Ciprofloxacin: mechanism of action, anti-microbial spectrum and major adverse effects other than nausea & vomiting

12. Antibiotic associated diarrhoea

13. Artesunate: mechanism of action, clinical uses and major adverse effects other than nausea and vomiting

14. Adverse effects of first-line anti-tuberculosis drugs

15. With relevant examples, outline the mechanisms of action of chemotherapeutic agents used in treatment of cancer

- Answers to each question should consist of a minimum of 5 and maximum of 10 sentences

1. Adverse effects of long-term use of glucocorticoids
2. Drug management of hyperthyroidism
3. Pharmacological basis for the use of drugs used in the treatment and prevention of osteoporosis
4. Use incretin mimetics and incretin enhancers in management of diabetes mellitus
5. Compare and contrast glimepiride and metformin
6. Pharmacological basis for the clinical uses of gonadotrophin releasing hormone agonists
7. Oxytocic agents
8. Selective estrogen receptor modulators

--

Reading books with ReadEra
https://readera.org