

# Pharmacology 1 and Prescription Knowledge

## Mechanism of Action and Effects of Drugs

Refer lecturer for course updated notes.

Students are obliged to follow the courses for evaluation process and presented notes are preliminary drafts for the whole evaluation process.

Non-structural property remedies

Physico-chemical property related effects

Structural feature

Custom domain-domain shape (receptor, transport protein, ion migration, G-protein, chemical messenger)

# Isomerism

- Structural Isomerism (Constitutional)
  - Chain isomerism
  - Positional isomerism
  - Functional group isomerism
- Stereoisomerism
  - Configurational
    - Geometric
    - Optical
      - Enantiomer
      - Diastereomers
  - Conformational

- Target points
- Enzymes, antimetabolites
- Ion channels
- Receptors
- Transport systems

# Receptors

- Definition
- Effects
- Types
- Drug-receptor interactions
- Changing the number of receptors
- Drug-receptor bonds
- Drug receptor interaction theories/hypotheses

- Agonist
- Antagonist
- Partial agonist-antagonist

- Mechanisms fo drugs
- Physical and chemical effects

- Nuclear receptors
- Substance P
- VIP



- Receptors and postreceptor events
- G protein signaling
- Secondary messengers

## Drug interactions

- Mechanisms of drug interactions
- Pharmaceutical interactions
- Pharmacokinetic interactions
- Absorption/Distribution/Metabolism/Excretion interactions