

PHARMACEUTICAL CHEMISTRY – VI

(Medicinal Chemistry – II)

PH. 6.3

THEORY.

3 hours/week

UNIT -I

1. Classification, mode of action, uses and structure activity relationship of the following classes of drugs. Synthesis of those compounds only exemplified against each class.

Steroids and Related Drugs: General study on Steroidal nomenclature and stereochemistry, Androgens and anabolic agents, Estrogens and progestational agents, : synthesis of Progesterone from diosgenin, Diethyl satilboestrol, Synthesis of Testosterone from Cholesterol, General study of structural formula and therapeutic uses of steroidal antiinflammatory agents.

UNIT -II

2. Drugs acting on the Central Nervous System:

General Anaesthetics : Anesthetic ether, Halothane, Thiopental sodium.

Local Anaesthetics : Benzocaine, Procaine, Lignocaine, Dibucaine.

Hypnotics and Sedatives: Phenobarbitone, Cyclobarbitone, Glutethimide, Diazepam

Opioid analgesics : Pethidine, Methadone.

UNIT -III

Anticonvulsants : Phenytoin, Ethosuximide, Primidone,

Carbamazepine

Antiparkinsonism drugs: Levodopa, Amantidine

CNS stimulants : Nikethemide, Ethamivan, Amphetamine

3. Psychopharmacological agents (neuroleptics, antidepressants, anxiolytics):

Chlorpromazine, Haloperidol, Imipramine, Phenelzine, Chlordiazepoxide, Alprazolam.

UNIT -IV

4. Diuretics: Acetazolamide, Chlorthiazide, Furosemide, Mersalyl.

Cardiovascular drugs: Clonidine, Methyldopa, Procainamide, Nifedipine,