

**Programme: Master of Science Chemistry (MSCCH20)**

**Year / Semester: IIIrd semester**

**Paper Code: MCH 604**

**Paper Name: Drugs and Pharmaceuticals- I**

**Syllabus**

**BLOCK 1 : DRUG DISCOVERY, DESIGN AND DEVELOPMENT**

Unit – 1 : Drug discovery, design and development

Unit – 2 : Concepts of receptors, agonists and antagonists

Unit – 3 : Drug development of Salbutamol, cimetidine and captopril

Unit – 4 : Structure activity relationship studies – I

Unit – 5 : SAR studies – II Development of oxaminiquine & SAR studies of Sulphonamides and benzepines.

**BLOCK 2 : DRUGS ACTING ON DIFFERENT TARGETS – I**

Unit – 6 : Combinatorial synthesis

Unit – 7 : Quantitative structure activity relationships – (QSAR)

Unit – 8 : Pharmacokinetics, prodrugs and clinical trials

Unit – 9 : Drugs acting on metabolic process

Unit – 10 : Drugs acting on cell walls and cell membranes