**B. Pharm 6th Semester Examination**

**Subject- Medicinal Chemistry-III (BP60IT)**

**Full Marks- 75 Time – 3 hours**

**Answer all the questions.**

**1. Answer all (10x2=20)**

(a) Define antibiotics? Classify them with examples.

(b) Classify sulphonamides with examples.

(c) What are beta sactam antibiotics? Classify them with examples.

(d) What are antimalarial drugs? Explain the hide cycle of malaria.

(e) Define and classify anthelmintics with examples.

(f) Write the SAR of aminoglycoside antibiotics.

(g) Write a note on macrolide antibiotic.

(h) Write a note on combinational chemistry and its applications.

(i) Write the synthesis and MOA of chloramphenicol.

(j) Write a note on urinary tract anti-infectives and give synthesis of ciprofloxacin.

**2. Answer any two questions. (2x10=20)**

(a) Classify antimalarials write in detail about 4-Amino Quinolines. Out line synthesis of chloroquine.

(b) Discuss the nomenclature and SAR of cephalosporins. Write the synthesis of any one drug.

(c) Discuss the basic concept and application of prodrug design.

**3. Answer any seven questions. (7x5=35)**

(a) Write an account of antiprotozoal agents.

(b) Classify antifungal agents. Discuss in detail mechanism of action of azole type antifungal agents.

(c) Give a complete account of co-trimoxazole.

(d) Discuss various approaches of drug design.

(e) Explain role of Hammet’s electronic parameter and partition coefficient in QSAR approach.

(f) Write an account of class -I B-lactamase inhibitors.

(g) Discuss SAR of Tetracyclines.

(h) Discuss various antitubercular agents. Write the synthesis of Isoniazid.

(i) Classify and discuss SAR of fluoroquinolone with its mechanism of action.