**B.Pharm 4th Semester Examination**

**Subject- Pharmaceutical Organic Chemistry-III (BP40IT)**

 **Full mark- 75 Time – 3 hours**

 **Answer all the questions.**

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

 **(a) Differentiate between Diastereomers and enantiomers**

 **(b) What are chiral molecules. Give examples**

**(c) Write the structure of stereoisomers formed when cis-2- butene is heated with bromine**

 **(d) Describe the isomerism exhibited by Maleic acid and fumaric acid**

**(e) State the necessary condition for a compound to show optical isomerism**

**(f) Explain the term meso compounds.**

**(g) What are conformational isomers, Give example**

**(h) What is mutarotation.**

**(i) Define isoelectric point with examples**

**(j) What is sequence rule**

**Q. 2. Answer any two. (2 x 10=20)**

**(i) Discuss the synthesis, chemical reactions and machinal uses of phridine.**

**(II) Explain the tolling reactions: (a) Birch Reduction reaction**

 **(b) Wolff’s kishner ReDUCTION**

 **(C) Clemens Reduction**

**(iii) Write the synthesis, Chemical reaction and methional uses of imidazole .**

**Q. 3. Answer any Seven Questions. (7x5=35)**

 **(a) Explain EZ system of nomenclature with examples.**

**(b) Write short note on resolution of Racemic mixture.**

**(c) Discuss chemical properties of Fhizole and mention its machinal uses .**

**(d) Write a brief note on Fisher’s Projection.**

**(e) Define stereoisomerism, classify them with examples.**

**(f) Discuss the General method of preparation of furan**

**(g) Explain the conformational isomerism of n-Butane**

**(h) Write a brief note on openture -Oxidation and Dakin reaction.**

**(i) Write the synthesis and mechanical uses of Thiophene**