**Synthesis of Six Member Heterocyclic Compounds And Biological Activity** Aarushi Thakur¹˒ª

¹Department of Chemistry, University Institute of Sciences, Chandigarh University, Gharuan, Punjab.

a)thakuranika227@gmail.com

ABSTRACT

Chemistry as a whole has always concentrated on the development of new compounds and new ways to recreate the already existing compounds. Among a large number of compounds, heterocyclic compounds have always been at the forefront of attention since they constitute a range of compounds with rich biological activity. These Including one or more hetero atoms, 6-member heterocyclic compounds (N, S, O) has been harnessing huge attention due to their wide range of applications and biological activity. Six-membered heterocyclic compounds constitute pyridines, triazines, pyran, pyrimidine, etc. Pyridine is one of the regular mixtures that it expands upon in the arrangement of other synthetic mixtures in various applied modern fields like rural science and the drug business. The biological activity of the six-membered heterocyclic compounds ranges from Analgesics, antidepressants, anticonvulsants, anti-asthmatic, anti-HIV1, antimicrobial, insecticides, etc. are some examples of medications with these properties. The present paper aims to provide an overview of the recent advances in the synthesis of 6-membered heterocyclic compounds and their biological properties.

**Keywords:** Heterocycles, Pyridine, Pyridazines, Drugs