**TITLE OF THE THESIS**

****

A Review of Literature Submitted to Mandsaur University, Mandsaur As a requirement for the Award of Course work of

**Doctor of Philosphy**

**Session……………..**

Submitted by

By

**Student Name**

Ph.D

(En. No )

Under Supervision of

**Guide Name**

Designation of Guide

Dept. of ………….

Faculty……………

**MANDSAUR UNIVERSITY**

Approved by UGC, Rewas Dewda Road, SH - 31, Mandsaur, Madhya Pradesh- 458001

**Ph. No. +919752122999, +919425924111**

**Website:** [www.mandsauruniversity.edu.in/](http://www.mandsauruniversity.edu.in/)

**Email :** info@mandsauruniversity.edu.in, phd@mandsauruniversity.edu.in

**Pattern of Review of literature**

Oxadiazoles belong to an important group of heterocyclic compounds having –N=C–O– linkage. It is well documented that oxadiazole system contains the following members which are numbered by designating the hetero atoms at particular position. There are Four known isomers: 1,2,3-oxadiazole (17), 1,2,4-oxadiazole (18), 1,2,5-oxadiazole (19) and 1,3,4-Oxadiazole (20) (Figure 4). However,1,3,4-oxadiazole and 1,2,4-oxadiazole are better known, and more widely studied by researchers because of their many important chemical and biological properties [Gupta et. al, **2005**].



**Figure 4. Four Isomer of oxadiazole.**

 1, 3, 4-Oxadiazole (**20**) is a thermally stable aromatic molecule [Aniswarth, **1965**]. They have been known for about 80 years, it is only in the last decade that investigations in this field have been intensified. This is because of large number of applications of 1,3,4-oxadiazoles in the most diverse areas through drug synthesis, dye stuff industry, heat resistant materials, heat resistant polymers and scintillators. Reviews of the relevant literature prior to 1965 are available [Hetzheim & Mockel, **1966**].



 Literature survey reveals that particularly 1, 3, 4-oxadiazole derivatives exhibit wide range of biological activities including antibacterial [Sun et. al, **1998**], anti-inflammatory [Amir & Shahani, **1998**], fungicidal [Nizamudalin et. al, **1999**], herbicidal, pesticide [Nandihalli & Duke, **1993**], anti-leshminasis [Varma et. al, **1999**], anticonvulsant [Nandihalli & Duke, **1993**], anti-HIV [Hazarika & Kataky, **1998**], antibacterial and plant growth regulator activities [Chaudhari et. al, **1995**].

**GUIDELINE’s**

**Font size = Main heading Times new roman-14 and bold,**

* + - **sub heading -Times new roman 12and bold**
		- **Text font - Times new roman 12**
		- **Page margin – 1 inch, Gutter position left 0.5 inch**
		- **Reference pattern**

**For article -APA style**

Daniel, V., Daniel, K. V., Kuwar, P. S., & Singh, N. (2009). Advances In The Pharmacotherapy of Alzheimer's Disease: A Review. *Journal of Pharmacy Research*, *2*(12), Page no

**For Books- APA style**

Foye, W. O. (2008). *Foye's Principles Of Medicinal Chemistry*. T. L. Lemke, & D. A. Williams (Eds.). Lippincott Williams & Wilkins, Page no.