



## **CHAPTER-2**

# **AIMS & OBJECTIVES**

## 2.0. Aims and objectives

This present investigation is planned to focus on the remedial effectiveness of NAC in the rectification of sodium arsenite ( $\text{As}^{3+}$ ) allied initiation of oxidative ailments, inflammatory and apoptotic response and female reproductive toxicity in Wistar strain rats. The aim of this study is to reveal the harmless oral significance of NAC in counteracting arsenite challenged reproductive ailments as well as to establish a strategy of oral therapy with higher fruitful index to combat sodium arsenite prompted reproductive-anarchy.

This study fulfilled the following objectives:

1. Testing of direct efficiency of NAC against sodium arsenite propagated reproductive toxicity and associated antioxidant status.
2. Protective efficacy of different doses of NAC in connection through sodium arsenite linked repro-toxicity in female rats via *in vivo*.
3. Preventive merits of NAC to combat sodium arsenite induced female reproductive ailments *in vivo*.
4. Testing of indirect effect of NAC with reference to positive control alone or combined (DMSA) in the supervision of sodium arsenite driven female reproductive deformities in a curative mode.
5. Test of curative effect of NAC via diet in the opposition of female reproductive ailments developed by sodium arsenite.