

Chapter 4
Study Design

4.0. STUDY DESIGN

The present thesis deals with the *in-vivo* and *in-vitro* studies on Wistar rats. The present study focused on the effect of arjunolic acid and vitamin B₁₂ on sodium arsenite induced ovarian and uterine dysfunction. To fulfill this objective the study design was projected towards three major dimensions of experimental design where the preventive, protective, and curative mode of the experiment was executed *in vivo* by pre-treatment, co-administration, and post-treatment mode respectively. An *In-vitro* assay system was also developed to figure out the direct action of arjunolic acid and B₁₂ against arsenic. The experimental design and group distribution are as followed:

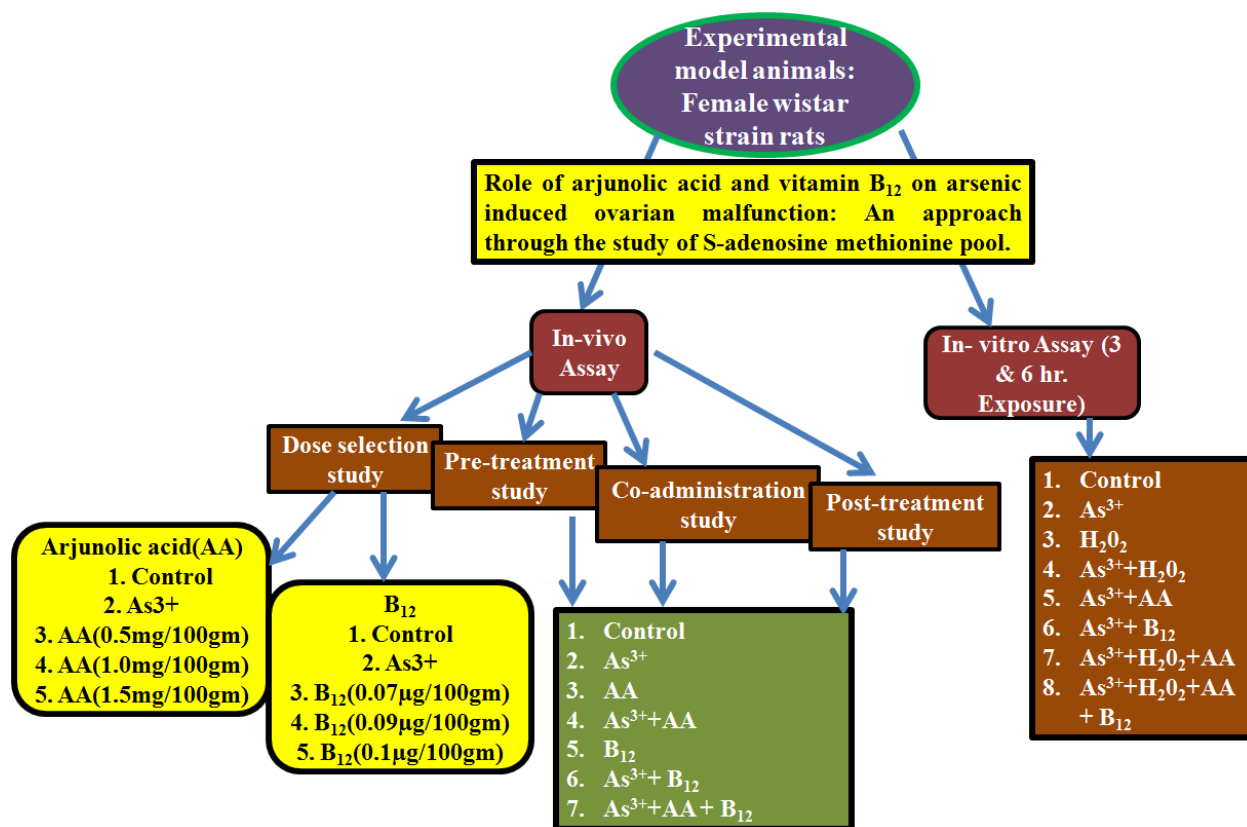


Fig.: Schematic diagram of the study design of present research work.