The objectives of the study were:

1. To study the effect of Bisphenol A (BPA) on the movement of intestine *in vitro* of rat in order to examine the effect of BPA on the motor function of intestinal smooth muscle.

2. To study the effect of BPA in association with adrenergic, cholinergic and non-adrenergic, non-cholinergic (NANC) agonists and antagonists on the movement of intestine *in vitro* of rat in order to understand the mechanism of action of BPA induced motor function of intestinal smooth muscle.

3. To study the effect of BPA on the activity of acetylcholinesterase (AChE) in BPA treated rats to ascertain the involvement of AChE in BPA induced motor function of intestinal smooth muscle.

4. To study the effect of BPA on intracellular Ca$^{2+}$ deposition and nitric oxide synthase (NOS) expression in intestinal smooth muscle of BPA treated rats in order to examine the roles of Ca$^{2+}$ and NOS in BPA induced motor function of intestinal smooth muscle.

5. To study the cytoarchitectural changes in intestinal wall structure of BPA treated rats in order to examine the structural alterations in BPA induced motor function of intestinal smooth muscle.

6. To study the effect of BPA on oxidative stress indices in intestinal smooth muscle tissue in BPA treated rats in order to examine the genesis of oxidative stress caused by BPA in the intestinal smooth muscle.

7. To study the role of vitamin C in BPA induced motor function of intestinal smooth muscle with special reference to oxidative stress variables in intestinal smooth muscle cells.