The modification of polymers has received much attention recently. Among the methods of modification of polymers, grafting is one of the promising methods. In principle, graft co-polymerization is an attractive method to impart a variety of functional groups to a polymer. Graft co-polymerization initiated by chemical treatment, photo-irradiation, high-energy radiation technique, etc. In the past several years, there has been increased emphasis on applications of grafted polymers. The modified polymers through grafting have a bright future and their development is practically boundless. The excellent physiochemical attributes such as providing stability to the formulations, improves solubility of hydrophobic drugs, excellent swelling capacity and its biodegradability, impart bioavailability, drug targeting in a specific tissue and very weak antigenecity, made grafted polymer the primary resource in both pharmaceutical and medical applications.