Geopolymer concrete (GPC) has been described as one of the most revolutionary development in concrete construction. Geopolymer was developed to replace conventional cement and utilization of industrial waste like flyash, rice husk, ground granulated blast furnace slag (GGBS) and metakaolin. Production of one tonne of cement generates an equal amount of carbon di oxide polluting the atmosphere which becomes a major threat to the environment. This leads to the development of an alternative binder and usage of industrial wastes. GPC doesn’t require any cement, thereby reducing its production and consequent pollution of the environment. Geopolymer used as a binding material in GPC. Utilization of GPC in structural elements requires justification with respect to mix design and strength properties, durability, flexure and shear behavior of beams and slabs and the laboratory investigation with respect to the above behavior were conducted and it gives better results than TVC.