Work plan and methodology:

1. Literature survey:
   Review of literature will be done by procuring data from various cites on the internet such as science direct, advanced google net search and the library at
   1. IISC library, Bangalore.
   2. Govt College of pharmacy library, karad
   3. Shivaji University library, kolhapur
   4. E-library.

2. Collection of pure drug sample and tablet dosage form:
   The pure bulk sample of sitagliptin will be collected from std company as merck pharmaceutical ltd. The tablets will be collected from the local pharmacy. The reagents of analytical grade required will be procured from Bombay unichem lab.

3. Pre-analytical study of the drug:
   Various analytical reagents available in the market will be collected to check the solubility of the drug and dosage form. To check the interaction of the excipients with the solvent system. Formulation of buffer system if it is to required. Washing of the quites for UV and column for the HPLC is also will be done. The pure drug sample will be checked for the purity by IR spectra and physical properties like M.P etc

4. Method development using a suitable analytical technique:
   To establish sensitive and accurate method/s for the quantitative estimation of DPP-4 inhibitors in bulk and dosage form. Design and development of analytical process by using various methodologies. Optimization of analytical technique.

5. Evaluation of the analytical method:
   To check out the linearity and accuracy. To evaluate physical and chemical properties. For this the reading in the 6 sets will be carried and with time analysis to see the degradation of the drug if any. This is the most important step for the method development.

6. Validation of the developed analytical technique:
   The developed method will be validated for the parameters tested throughout the method as defined by the ICH, (ICH-Q2B, 1996):

7. Result and discussion.