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(57) Abstract :
The present invention provides a method for using Ultraviolet–Visible spectroscopy to estimate canagliflozin in pharmaceutical dosage form. The method for determination of Canagliflozin, comprising of preparing different concentration of Canagliflozin solutions using methanol as solvent; preparing UV spectra of Canagliflozin solution using spectrophotometer to obtain wavelength of maximum absorption and absorbance of Canagliflozin; plotting calibration curve of Canagliflozin at wavelength of 286 nm by taking absorbance on y-axis and concentration of solution on x-axis; computing concentration of unknown Canagliflozin from equation of calibration curve using formula. The method for the estimation of Canagliflozin in bulk powder, wherein the Beer's law limit for estimation is in the range of 0.5-2.5 µg/ml. The method for the estimation of Canagliflozin in tablet, comprising of weighing accurately 10mg of Canagliflozin and transferring into clean, dry 100ml volumetric flask and dissolving with sufficient amount of methanol; making up volume of solution upto 100ml with methanol to obtain concentration of 100µg/ml; pipetting out aliquots of solution in 5 distinct 10ml volumetric flasks in quantities of 0.5, 1,1.5, 2,2.5 ml; filling the volumes of flasks with methanol to achieve concentrations of 0.5-2.5 g/ml; measuring absorbance of working standard solutions for Canagliflozin at 286nm; plotting graph of concentration (on X-axis) Vs mean response (on Y- axis); plotting calibration curves using concentration range v/s absorbance. The developed method is simple, sensitive, precise, rapid and cost effective for determination of Canagliflozin in bulk and pharmaceutical formulations and can be adopted in regular quality control test in Industries.

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