## **ABSTRACT**

The objective of this work was the (1) estimation of Casein protein in milk sample of cow and sheep (2) effects of protein diet on growth which are collected from different market of Punjab (Pakistan). For this work, pure casein selected as parameter quality of milk. All samples analyzed in UV-Spectrophotometer for casein by using Biuret method.

The absorbance of the standard solution (nm) was taken in the absorbance range of 0.147 nm to 0.531nm and these values also confirmed by drawing absorbance curve. And the maximum absorbance showed by pure casein taken as standard with the concentration 10g/100ml was 0.531nm. Result showed that the concentration of casein varies from 0.30g/100ml to 1.45g/100ml for cow milk sample. Maximum casein value for cow milk sample is 1.45g/100ml While the concentration of casein varies from 1.31g/100ml to 2.43g/100ml for sheep milk samples. Maximum casein value for sheep milk is 2.43g/100ml. Casein value (max. 2.43g/100ml) for sheep milk samples is high then casein value (max. 1.45g/100ml) for cow milk samples.Collectively, results indicates that the Sheep milk has higher casein content and larger casein micelle size, which affect their renneting properties and coagulation time.