**ABSTRACT**

In this paper, the work of Guria and Jana [1]is extended to include the slip condition at the lower porous plate. The upper plate is subjected to a constant injection –Vo and the lower plate to a transverse sinusoidal suction velocity distribution, so that the flow becomes three dimensional.Approximate solutions were found for velocity and temperature using regular perturbation techniques. The effect of various parameters like Reynolds Number, Prandtl Number, Nusselt Number on the flow fields were studied numerically.Influence of thermal diffusionis also taken into consideration. The validation of the theoretical results obtained is also carried out