**ABSTRACT**

The heat and mass transfer of an unsteady three dimensional mixed convection flow of a viscousincompressible fluid past an infinite vertical porous plate is investigated. The temperature of the plate isassumed to be fluctuating cosinusoidally. The stationary plate is subjected to a constant suction. Approximatesolutions are derived for Velocity, Temperature and Concentration field. The effect of various nondimensional parameters on Velocity field, Temperature field, Concentration field, skin friction and Nusseltnumber, Sherwood numbers are studied numerically.