## MULTIVALENT HARMONIC FUNCTIONS WITH A FIXED COEFFICIENT

## POONAM SHARMA AND NOOHI KHAN

## **Abstract**

In this paper, we consider a family of harmonic multivalent functions that have fixed second coefficient. It is shown that functions therein are sense preserving harmonic maps and they form a convex family. Some results such as radius of convexity, extreme points, growth inequalities, a convolution property, neighborhood and integral operator are also discussed for functions belonging to this family.

.....

**Key Words and Phrases**: Multivalent harmonic starlike and convex functions, Neighbourhood, Extreme points.

**2000 Mathematics Subject Classification**: Primary 30C45; Secondary 30C50.