Abstract

Due to uniqueness and self-similarity fractals became most interesting and fascinating field of research. In recent-days researcher used various terminologies to create fractals for a complex function $z^n + q$. This paper elaborate some fixed point results for a complex trigonometric function $f(z) = \cos(z^n) + q$. We established escape criteria for $f(z) = \cos(z^n) + q$ via Picard, Mann, Ishkawa, S, SP, CR and Noor iterative schemes. Moreover, we generate Julia and Mandelbrot set using our developed escape criteria. Our generated images are enriched fractals system and obtained Julia and Mandelbrot set are much interesting than existing one.