Subhash Chandra* (sahusubhash77@gmail.com), B9 Hostel North Campus, IIT Mandi, Mandi, 175005, India, and Syed Abbas. The calculus of bivariate fractal interpolation surfaces.

In this work, we investigate partial integrals of bivariate fractal interpolation functions. We also prove that the mixed Riemann-Liouville fractional integral of order $\gamma = (p,q); \ p > 0, q > 0$, of bivariate fractal interpolation functions are again bivariate interpolation functions corresponding to some iterated function system. Furthermore, we discuss the integral transforms of the bivariate fractal interpolation functions. (Received August 23, 2021)