

MELLIN-WEIERSTRASS INTEGRAL TRANSFORM OF n^{th} ORDER PARTIAL DERIVATIVE OF $f(x, y)$

SHAHNAAZ ASSAD¹, PREETI TAMRAKAR² & AMARNATH KUMAR THAKUR³

Dr. C. V. Raman University, Bilaspur, Chhattisgarh, India

ABSTRACT

An expression is obtained for Mellin-Weierstrass transform MW of the function in terms of their existence. It is shown, how the main result can be extended to hold for the MW transform of several functions and how the n^{th} order partial derivative of the transform exists.

KEYWORDS: Integral Transform, Mellin Transform, Weierstrass Transform, Mellin- Weierstrass Transform, Generalized Function, Existence Theorem, Multiplication Theorem