

## WEIGHTED VERSION OF GENERAL INTEGRAL FORMULA OF EULER TYPE

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*Abstract.* The weighted generalization of the integral formula with  $m$  nodes is introduced, and some sharp and the best possible inequalities for the functions whose higher order derivatives belong to  $L_p$  spaces are given. Specially, the general one-point integral formula is established. Special cases of the well known weights are considered and generalizations of the Gaussian quadrature formulae with one node are obtained.

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