*Dedicated to Professor Ioan A. RUS on the occasion of his $70^{th}$ anniversary*

# A Schurer-Stancu type quadrature formula

DAN BĂRBOSU

ABSTRACT. Starting from the Schurer-Stancu approximation formula (1.4) we construct the quadrature formula (2.5). The coefficients of (2.5) are expressed at (2.6). We establish the case when (2.5) has the degree of exactness 1 and in this case we give the form of the remainder term. Also an optimal quadrature of Schurer-Stancu type is established. As particular cases, the Stancu, Schurer and respectively Bernstein quadrature formulas are obtained.

NORTH UNIVERSITY OF BAIA MARE
DEPARTMENT OF MATHEMATICS AND
COMPUTER SCIENCE
VICTORIEI 76, 430122 BAIA MARE, ROMANIA
*E-mail address*: barbosudan@yahoo.com