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Study on Decision Making Problem Using Octadecagonal Fuzzy Number

M. Babu¹ and S. Senthil²

¹Assistant Professor, Department of Mathematics, School of Basic Sciences ²Assistant Professor, Department of Mathematics, School of basic sciences Vels Institute of Science, Technology and Advanced Studies (VISTAS), Chennai, India mbabu5689@gmail.com and senthilsports@yahoo.co.in

Abstract: The aim of this article is to address the fuzzy decision making problem (FDMP) utilizing the Octadecagonal fuzzy number. We initiate the evaluation of the Payoff matrix through the Octadecagonal fuzzy number. We transform the fuzzy decision making problem into a crisp valued decision making problem by employing a ranking method for the payoff. The crisp valued decision making problem can be effectively formulated using the savage mini max regret criterion.

Keywords: Fuzzy decision making problem (FDMP), Octadecagonal fuzzy number, membership function, Pay off matrix

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