

Universiti Teknologi MARA

**Ranking Islamic Religious Schools'
Academic Performance Using Fuzzy
VIKOR**

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STUDENT'S DECLARATION

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



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ABSTRACT

Ranking is a position in the hierarchy or in the scale. School rankings in Malaysia have become a popular benchmark for academic achievement, especially as there are many types of schools in Malaysia. This study focuses only on Islamic religious schools. The objective of this study is to rank Islamic religious schools in Perlis based on their academic achievement in *Sijil Pelajaran Malaysia* (SPM) in 2018. This study used Fuzzy VIKOR to evaluate the ranking of Islamic religious schools in Perlis. Fuzzy VIKOR is a multi-criteria decision-making (MCDM) method. The alternative to be chosen is Islamic religious schools and the results for several subjects are the criterion. In this study, the data are transformed into a linguistic variable and categorized into five criteria which are excellent, honourable, average, passing and non-performing. The linguistic variable is a trapezoidal fuzzy number. The results of this study have shown that fuzzy VIKOR can be used to resolve the ranks of Islamic religious schools. As a result, School 1 is the best Islamic religious school in Perlis by using this technique. This has shown that fuzzy VIKOR can be used in the study of rank.

Keywords: Multi Criteria Decision Making (MCDM), VIKOR, fuzzy number, Islamic religious schools, *Sijil Pelajaran Malaysia* (SPM)

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