

# Automatic Question Paper Generation and Weightage Assigning using Bloom's Taxonomy

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**Abstract:** Bloom's Taxonomy is a classification of learning objectives within education that educators set for students. The cognitive domain within this taxonomy is designed to verify a student's cognitive level during a written examination. Educators may sometimes face the challenge in analysing whether their examination questions comply within the requirements of the Bloom's taxonomy at different cognitive levels. This paper proposes an automated analysis of the exam questions to determine the appropriate category based on this taxonomy. This rule-based approach applies Natural Language Processing (NLP) techniques to identify important keywords and verbs, which may assist in the identification of the category of a question. This work focuses on the computer programming subject domain. At present, a set of 100 questions (70 training set and 30 test set) is used in the research. Preliminary results indicate that the rules may successfully assist in the identification of the Bloom's taxonomy category correctly in the exam questions.

**Keywords:** NLP, Bloom's Taxonomy.

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