

# Automatic Question Paper Generation Using Bloom's Taxonomy

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**Abstract:** *This paper presents a framework for automating question paper generation based on Bloom's Taxonomy, which categorizes cognitive learning objectives. By leveraging Natural Language Processing (NLP) and Machine Learning (ML), this system classifies learning objectives into six domains: Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating. Through automated processes, this solution ensures question papers align with diverse cognitive skills, promoting deeper understanding and reducing educator workload. The methodology employs keyword extraction and rule-based NLP algorithms to map questions to appropriate cognitive categories. Experimental results demonstrate the system's ability to produce balanced and reliable assessments, outperforming traditional manual methods*

**Keywords:** Bloom's Taxonomy, Natural Language Processing, Machine Learning, Educational Assessment, Question Paper Generation