

# Automatic Question Paper Generation with Marks Allocation Using Bloom's Taxonomy

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**Abstract:** *In any educational course curriculum, courses are defined by specific learning objectives. To assess whether students have achieved these objectives, teachers conduct various assessments. However, creating diverse question papers that align with these objectives and meet university assessment standards is a challenging task for educators. Currently, there are no standardized methods to ensure the quality of these question papers, highlighting the need for a system that can automatically generate question papers based on teacher specifications within seconds. Researchers suggest using various tags to define questions, such as cognitive level, difficulty level, question type, and content/topic. We propose an autonomous question paper generation system that addresses this need. This system allows educators to input a set of questions and specify the complexity of each one. Using machine learning techniques, the system assigns marks to each question based on Bloom's taxonomy. These questions, along with their assigned marks, are then stored in a database, ensuring a consistent and efficient approach to question paper creation.*

**Keywords:** Question paper generation, Machine learning, Bloom's taxonomy, Natural Language Processing (NLP)