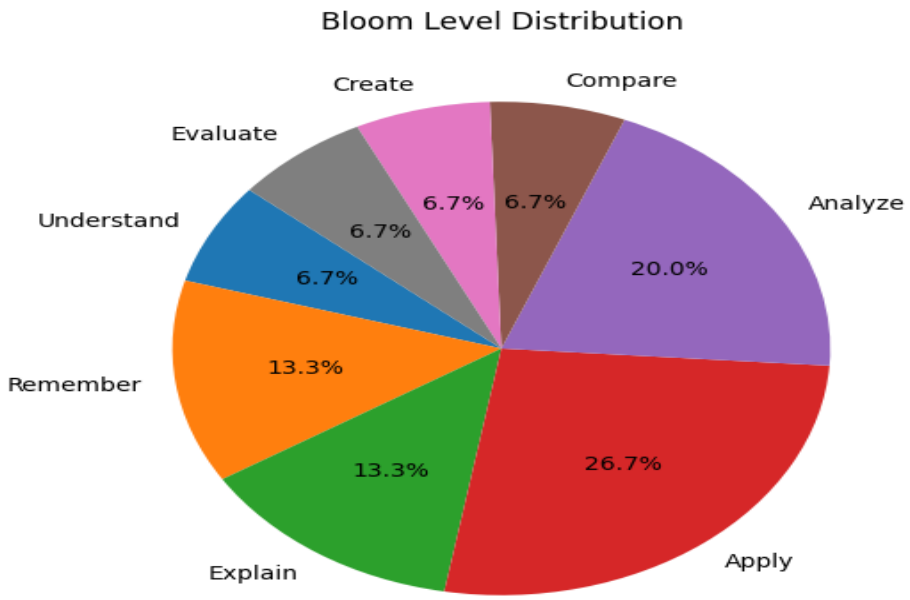
Bloom Taxonomy Analysis Report



Correlation with Student Scores

Understand: 1 questions → Avg Score: 72 → Weighted Score: 4.8
Remember: 2 questions → Avg Score: 65 → Weighted Score: 8.67
Explain: 2 questions → Avg Score: 0 → Weighted Score: 0.0
Apply: 4 questions → Avg Score: 80 → Weighted Score: 21.33
Analyze: 3 questions → Avg Score: 85 → Weighted Score: 17.0
Compare: 1 questions → Avg Score: 0 → Weighted Score: 0.0
Create: 1 questions → Avg Score: 90 → Weighted Score: 6.0
Evaluate: 1 questions → Avg Score: 78 → Weighted Score: 5.2
Estimated Overall Performance Score: 63.0

Question Analysis

1. 1. Define stress and strain.
→ Level: Understand
→ Reason: The question is asking for a definition of a term, which requires the ability to recall and desc
→ Suggestion: To move this question up one level, consider rephrasing it as 'What are the key differen

2. 2. List the types of beams used in structural design.
→ Level: Remember
→ Reason: The question asks for a list of specific types of beams, which requires recalling or remembe
→ Suggestion: To categorize this question into a higher level of Bloom's Taxonomy, you could rephrase

3. 3. Explain the concept of shear force in beams.
→ Level: Explain
→ Reason: The question requires the test-taker to define and describe the concept of shear force in be
→ Suggestion:

4. 4. What is the difference between static and dynamic loads?
→ Level: Apply
→ Reason: The question requires recalling specific information about load types, which is a factual reca
→ Suggestion: To classify this question at the Analyze level, it would need to ask about the characteris

5. 5. State Hooke’s Law.
→ Level: Remember
→ Reason: The question asks the test-taker to recall or state a definition, which is a fundamental level
→ Suggestion: To assess higher cognitive skills, consider rephrasing the question to require more adva

6. 6. Derive the bending equation for a simply supported beam.
→ Level: Analyze
→ Reason: The question requires deriving a specific formula (bending equation) for a particular type of
→ Suggestion:

7. 7. Explain the working principle of a cantilever beam with a diagram.
→ Level: Explain
→ Reason: This question requires the test-taker to provide a detailed explanation of the working princip
→ Suggestion: While the task is descriptive, providing a diagram is not solely an application or analysis

8. 8. Calculate the reactions at supports for a beam with given loading.
→ Level: Apply
→ Reason: The question requires the application of a specific formula or principle to calculate reactions
→ Suggestion:

9. 9. Analyze a truss using the method of joints.
→ Level: Analyze
→ Reason: The question requires breaking down the process of analyzing a truss using the method of
→ Suggestion: To further develop this skill, consider asking questions like 'What are the constraints on

10. 10. Compare the advantages of RCC over steel structures.
→ Level: Compare
→ Reason: The question requires the test-taker to identify and discuss the benefits of RCC (Reinforced
→ Suggestion: This question aligns well with the Compare level as it asks the test-taker to evaluate the

11. 11. Design a slab for a residential building using IS code provisions.
→ Level: Apply
→ Reason: The question requires the test-taker to apply their knowledge of IS code provisions to desig
→ Suggestion: To categorize this question at a higher level, such as Analyze or Evaluate, the test-take

12. 12. Propose a structural system for a cyclone -resistant shelter.
→ Level: Create
→ Reason: This question requires the student to propose an original solution, designing a structural sys
→ Suggestion: To further categorize this question, it could be even more accurately classified as 'Creat

13. 13. Critically evaluate the failure of a bridge due to poor load distribution.
→ Level: Evaluate
→ Reason: The question requires the test-taker to assess the failure of a bridge due to poor load distrib
→ Suggestion: To make this question more suitable for Bloom's Taxonomy levels, you could modify it t

14. 14. Develop a maintenance plan for aging concrete structures.
→ Level: Apply
→ Reason: The question requires the application of knowledge to develop a maintenance plan, which i
→ Suggestion: To further classify this question at a higher level, consider adding more complexity by as

15. 15. Analyze the impact of material selection on structural sustainability.
→ Level: Analyze
→ Reason: The question requires breaking down the concept of material selection and its impact on str
→ Suggestion: Consider further refining the question to require an even deeper level of analysis, such a