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Presentation on

# Collaborative Technique to solve the problems

Subject: Design of Machine Elements (MC303)

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#### Content



- Motivation
- Suitability of Technique
- Procedure
- Outcomes
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#### **Motivation**



- Design of Machine Elements-Basic Element design.
- Students are expected to solve varieties of numerical to understand the subject
- Conventional methods are useful to make the students to understand concepts
- But application of proper theory to solve the problems is needed, it needs practice
- To become expert in this domain, students should practice more number of problems
- Collaborative technique plays vital role to create interest in solving the problems

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#### **Suitability of Technique**



- This technique involves
  - Solve the problems in group
  - Discuss the same problem in front of other students
- Varieties of problems are covered through this technique
- As DME involves more numerical, this technique is suitable to create interest and develop the thinking ability on problems with different methods of solutions.

#### **Procedure**



- Selected 18 critical problems, which covers most of the concepts from syllabus
- Formed 18 groups, involving 4 students in each group
- Allotted one problem to each group
- In each group students were expected to discuss, brainstorm and come up with the solutions
- Each group presented solutions in front of other students
- During presentations all students actively participated and asked doubts to presenters

#### **Outcomes**



- Understanding of Varieties of problems
- Created Interest in solving the problems in groups
- Students prepared for presentations. Each one was eager to explain the solutions
- Habit to work in groups

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### **Photographs**









