



## CHEMTREK - Rulebook

### 1. QUIZTILLATION

National Level Chemical Engineering Quiz Competition

Under Pragyaa 2026

#### 1. Eligibility

1. The competition is open to undergraduate students pursuing Chemical Engineering or allied disciplines.
2. Students from all years and all departments of engineering colleges/Diploma colleges/universities are eligible.
3. Participation is open to students from other colleges and universities across the country.

#### 2. Registration & Participation

4. Participants must carry a valid college ID card for verification.
5. Registration will be on a first-come, first-served basis.

#### 3. Quiz Structure

7. The quiz will consist of 30 objective-type questions.
8. Each question carries 2 marks.
9. The quiz will be conducted in 3 different sets of question papers to ensure fairness.
10. No negative marking will be applied for incorrect answers.

#### 4. Syllabus / Topics Covered

11. Questions will be strictly related to Chemical Engineering fundamentals, including:
  - Fluid Mechanics

- Mass Transfer
- Heat Transfer
- Chemical Engineering Thermodynamics
- Chemical Reaction Engineering
- Environmental Engineering
- Membrane Technology

## **5. Examination Rules**

12. The total duration of the quiz will be 60 minutes.
13. Participants must report to the venue at least 10 minutes before the commencement of the quiz.
14. No electronic gadgets (mobile phones, smart watches, calculators, tablets, etc.) are allowed inside the examination hall.
15. Any form of malpractice or misconduct will lead to immediate disqualification.

## **6. Evaluation & Results**

16. Evaluation will be carried out by the Quiz Committee, and their decision will be final and binding.
17. In case of a tie, a tie-breaker round may be conducted at the discretion of the organizers.
18. Results will be announced on the NEXT day or as notified by the organizing committee.

## **7. General Rules**

19. Participants must follow the instructions given by the quiz coordinators and volunteers.
20. The organizing committee reserves the right to modify rules or format if required.
21. All participants are expected to maintain discipline and decorum throughout the event.

## **2. INDUSTRY DEFINED PROBLEM (IDP) CHALLENGE**

**Theme: Green & Sustainable Chemical Engineering**

### **1. About the Event**

The Industry Defined Problem (IDP) Challenge is designed to expose participants to real-world industrial challenges and enhance their problem-solving, analytical, and innovative thinking skills. This event aims to bridge the gap between academia and industry by enabling students to work on actual engineering problems faced by industries, with a focus on sustainable and environmentally responsible solutions.

### **2. Eligibility**

1. The competition is open to Diploma, undergraduate and postgraduate students of Chemical Engineering and allied branches.
2. Students from all years and all colleges/universities are eligible to participate.
3. Inter-college teams are allowed.

### **3. Team Formation & Registration**

4. Participants may register individually or in teams.
5. A team may consist of a maximum of 4 members.
6. Each participant can be a member of only one team.
7. Registration must be completed within the specified deadline.

### **4. Problem Statement Allocation**

8. After successful registration, each team will be provided with 2–3 industry-defined problem statements.
9. The problem statements will be based on real industrial scenarios related to:
  - Green Chemical Engineering
  - Sustainable Process
  - Energy Efficiency

- Waste Minimization
- Environmental Compliance

10. Each team must select one problem statement to work on.

## **5. Problem Analysis & Solution Development**

11. Teams are required to:

- Understand and analyze the given problem thoroughly.
- Identify key challenges and constraints.
- Propose a technically feasible, innovative, and sustainable solution.

12. Solutions should emphasize:

- Environmental sustainability
- Economic feasibility
- Practical applicability in industry

## **6. Presentation & Evaluation**

13. Each team will present their solution before a panel of experts from academia and industry.

14. The presentation must clearly include:

- Problem understanding
- Proposed methodology
- Technical justification
- Sustainability impact
- Expected outcomes

15. The presentation duration and Q&A time will be communicated on the event day.

## **7. Evaluation Criteria**

16. Teams will be evaluated based on:

- Understanding of the problem
- Innovation and creativity
- Technical accuracy
- Sustainability and environmental impact
- Feasibility and scalability
- Presentation and communication skills

17. The decision of the judging panel will be final and binding.

## **8. General Rules**

18. Participants must adhere to the instructions provided by the event coordinators and judges.
19. Any form of plagiarism or unethical practices will lead to immediate disqualification.
20. Teams must maintain professionalism and discipline throughout the event.
21. The organizing committee reserves the right to modify rules, format, or schedule if required.

## **9. Awards & Certification**

22. Winners and runners-up will be awarded certificates and prizes.
23. All participants will receive participation certificates.

Think Sustainable. Solve Industrial. Innovate for the Future.