



**Walchand Institute of Technology, Solapur
(An Autonomous Institution)
Department of Civil Engineering
Organizes**

‘Civil WITchar- 2026’

Name of Event: - EcoCrete

Problem statement-

The participants have to prepare a mix of M35 Grade Concrete by substituting basic ingredients of concrete with eco-friendly materials, including agricultural waste and by-products. Participants can substitute any ingredient of concrete. The 7th day compressive strength will be tested on the event day, which shall preferably be in the range of 23 to 26 N/mm². Participants shall bring 3 cubes of 150x150x150 mm, along with mix design report duly signed by the HOD. The report must contain details of ingredients, calculations, proportions and cost of concrete per cubic meter. The participants must bring an appropriate quantity of physical samples of substituted materials.

Rules and Regulations-

1. Date of casting must be clearly ENGRAVED on all 3 cubes.
2. Maximum 3 participants per team.
3. The participants must bring their ID Cards.
4. All teams and their respective members should reach the event venue in time.
5. All teams must maintain demureness at all times. Organisers may disqualify any team that behaves inappropriately.
6. In case of disputes, the decision taken by the event head and judges will be final and binding to all.
7. The organizers reserve all rights to change any or all of the above rules as they deem fit. Change in rules, if any, will be highlighted on the website or informed.

Testing of Cubes and Assessment of Report-

A. Strength Test

1. Three cubes will be tested, and the average strength will be determined.
2. To confirm the grade of concrete M35, the average strength shall preferably be in the range of 23 to 26 N/mm².
3. Maximum 50% weightage will be given to the strength criteria.
4. The weightage for strength beyond 26 N/mm² will be limited to a maximum 50%.
5. The weightage for strength below 23 N/mm² will be given accordingly.

B. Substitution for Ingredients

1. Total 30% weightage will be given for substituting Eco-friendly material (10% for cement + 10% for River Sand + 10% Coarse Aggregate).

2. Appropriate quantities of physical samples of substituted material and their properties will be observed.

C. Economy of mix design

1. The 20% weightage will be given to the economy of the cube. The cost of concrete per cubic meter will be checked.

Judging Criteria-

1. The team scoring a higher weightage in total (A+B+C) will be declared the winner.
2. In case of a tie among the teams, the Economy and weight of the cube will be considered.

Certification policy-

1. All students will be given participation certificates.
2. The winning team will be awarded the certificate of excellence, along with the trophy and cash prize.

Team Details-

1. Registration Fee- 300/- per Team

Contact Details-

Faculty Co-ordinator

Prof.Chetan G. Konapure

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Faculty Co-coordinator

Prof. Shailaja A. Doddi

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Student Coordinators: Miss. Anika Vallakati (TY Civil) – 7780361863 & Mr. Sad Shaikh (SY Civil) - 9579169955