

Tech Green Concrete Cube Competition

Tech Green Concrete Cube Competition is a National Level Mix Design Competition for all Diploma & Degree students. This contest provides a National platform for the students to explore their innovations through the Competition.

Green Concrete Cube Competition Dates: - 15th September 2022

Green Concrete Cube Compressive Competition Strength Test: - Any Strength of Concrete of Three cubes

GREEN CONCRETE

Green concrete is produced with the use of waste material as an alternate for cement or aggregate. The practices involved in production of green concrete do not cause damage to environment. As extraction, production, construction, operation, demolition and recycling are the lifetime cycle of green concrete. In addition, green concrete with life cycle sustainability has high performance than conventional concrete. It uses less energy in its production and produces less CO₂ emission. Recycled demolition waste aggregate, recycled concrete aggregate, blast furnace slag, manufactured sand, glass aggregate and fly ash are some of the waste materials used in manufacturing green concrete. Better workability, reduction in shrinkage and creep, less heat of hydration, use of local and recycled materials, good thermal and fire resistant are the advantages of green concrete. Bridges, buildings, dams and roads are built by using green concrete. However, green concrete has some disadvantages such as high cost of reinforcement, less life of buildings constructed with green concrete and less split tension.

Blast Furnace Slag, Fly Ash, Silica Fume, Recycled Glass, Foundry Sand, Waste Plastic, Demolition Waste, Farming Waste, Electronic Waste.

Competition Rules:

1.0 General Rules and Eligibility Requirements

- The minimum cementitious
- Coarse aggregates must be 20mm of maximum size and Fine aggregates must be 0.075mm– 4mm
- Cubes will be tested after 24 hours of casting.
- Participants are required to prepare three cubes which will be subject to normal curing method (water or air).
- All groups will be monitored by the appointed person from the organisers.
- Each group is only allowed to mix the concrete once. No trial mixes will be allowed.
- Only manual compaction using tamping rod is allowed.
- Time of 24 hours will be counted from the start of concrete mixing.
- All participants to attend compulsory induction before mixing commences.
- Entries not complying with the rules and regulations of the competition will be disqualified.