

Date:

## **Participant's information:**

Name of the participant 1:

Name of the participant 2:

Name of the participant 3:

Name of the institution:

Address of the institution:

Phone number:

Email address:

## **Design report:**

Q.) Design three concrete cubes of 100mm size having strength of 40-48Mpa. Take note that least weight for the concrete cubes is desirable and their average will be taken for grading in the judging format.

## **Cement properties:**

Type of cement used:

Fineness % of cement:

Specific gravity of cement:

Consistency of cement (% of water required):

Initial setting time:

Final setting time:

## **Fine aggregate:**

Size of aggregate:

Specific gravity:

Grading zone of FA:

Fineness modulus:

**Coarse aggregate:**

Specific gravity:

Fineness modulus:

**Admixture used (if any):**

Type:

Specific gravity:

**Concrete Properties:**

Water cement ratio:

Cement content:

Workability:

Method of Mixing:

Degree of supervision: (Rate on a scale of 1 to 10, 10 being excellent and 1 being negligent)

Additional materials added (if any):

**Design procedure:****1. Target mean strength:**

**2. Water cement ratio:**

**3. Selection of water content:**

**4. Calculation of cement content:**

**5. Calculation of coarse aggregate and fine aggregate:**

**6. Absorption of CA/FA and free moisture in FA (if any):**

## **7. Calculation of mix proportions including site correction:**

**8. Comments:**

**Signature of the Head of department:**

**Seal of the institution:**