

Department : Civil

Year : 2016-2017

Group No: 1

Guided By

**PROF. KRISHNENDU  
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## **SMT. S. R. PATEL ENGINEERING COLLEGE, UNJHA**

### **Project Title**

### **PREPARE SELF COMPACTED CONCRETE USING SUPER PLASTICIZER, VISCOSITY MODIFYING ADMIXTURE AND RICE HUSK ASH**

#### **Abstract:**

• Self-compacting concrete (SCC), which has been developed and exploited over the past one and a half decades, eliminates the need of mechanical vibration to compact the fresh concrete. • In our project work we are prepare self compacting concrete using different admixture like super plasticizer and viscosity modifying admixture. This two admixture are use for improve work ability of concrete passing ability of concrete and segregation resistance of concrete. In our project we conduct some test for determine the property of self compacting concrete material like specific gravity of cement, rice husk ash, coarse aggregate size 10 mm and 20 mm, fine aggregate, grading of fine aggregate and coarse aggregate, silt content of fine aggregate and PH value of water. • In our project we make instrument for testing various property of self compacting concrete like work ability, passing ability, filling ability, segregation resistance. • We conducted slump flow test, V-funnel test, L-Box test, and U box test for determine fresh property of concrete like passing ability, filling ability and segregation resistance. • We conduct test of compressive strength of concrete and split tensile strength of concrete for determine harden property of self compacting concrete. • In our project we are prepare mix design of self compacting concrete using EFNARC and INDIAN STANDARD method of mix design (IS : 10262-2009) • Self compacting concrete generally has higher powder content than normal concrete and thus it is necessary to replace the cement by addition to achieve an economical and durable concrete. In our project we are use rice husk ash to replace cement by 0% to 20% of RHA to make concrete economic.

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