BEST PROJECT LIST

BATCH 2013-14

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1	5687	S.Prabhakaran	Development of green/sustainable concrete infill walls
2	5701	K.Indhumathi	Effect on properties of concrete containing bottom as Partial sand replacement
3	5679	A.Jayalakshmi	Corrosion of Fatigue crack growth and life evaluation of SA 516 grade 70steel
4	5693	S.Pavithra	Experimental analysis of concrete using M sand along with partial replacement of cement by GGPS
5	5705	M.Monica	Approximate method in structural analysis of Frame and shear wall under lateral loads
	5719	G.Ashwini	

BEST PROJECT 1

DEVELOPMENT OF GREEN/SUSTAINABLE CONCRETE INFILL WALLS

S.PRABHAKARAN (11810103033)

Guided by:

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The design and construction of sustainable buildings involve a sensible balance

Social –Safe, healthy and comfortable interior Environment

Environmental –Constructed such that low environmental impact

Economic – Durable, Low maintenance, Reusable and energy efficient, during construction and operation phases

By considering the above factors, we have chosen Prefabricated Infill Wall Panel mainly Bamboo reinforced filler wall panel as a versatile building element which can provide sustainable benefits.

An essential cost effective technology to enhance the quality of life on the provision of adequate, affordable and quality housing can be developed.

Thereby we can avoid the scarcity and high cost of labours and materials which affects low-cost housing programs.

EFFECT ON PROPERTIES OF CONCRETE CONTAINING BOTTOM AS PARTIAL SAND REPLACEMENT

K.INDUMATHI (11810103011)

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Concrete is a composite construction material primarily composed of aggregate, cement and water. Nowadays concrete has its own importance in the construction industry. This project involves the use of high performance material and by-products manufactured at reasonable cost with lowest possible environmental impact.Bottom ash is one of the coal combustion by-products and it is generated as residue after burning pulverized coal at boiler.

Bottom ash is a coarse material and does not possess any pozzolanic property. Hence, it is proposed to replace the fine aggregate up to 40% in concrete. Different concrete mixes with various water-cement ratios and control mix were prepared with washed bottom ash for mix design M40 grade of concrete.

The experimental investigations were carried out to study the effects of use of bottom ash as a replacement of fine aggregate. The various strength properties such as compressive strength, flexural strength, split tensile strength were studied through the experiments and results were discussed.

BEST PROJECT 3

CORROSION OF FATIGUE CRACK GROWTH AND LIFE EVALUATION OF SA 516 GRADE 70STEEL

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Corrosion fatigue study is important to increase the service life of components in aggressive environments. Crack propagation data relevant to realistic conditions are used for safe service life predictions and to determine remedial actions for maintenance. In this background, the present study has been carried out to understand the corrosion fatigue behavior of SA 516 grade 70 steel.

BEST PROJECT 4

EXPERIMENTAL ANALYSIS OF CONCRETE USING M-SAND ALONG WITH PARTIAL REPLACEMENT OF CEMENT BY GGBS

S.PAVITHRA (11810103031)

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Concrete is a synthetic construction material made by mixing of cement, fine aggregates, coarse aggregates and water in the proper proportions.

The fine aggregate which is obtained from river bed has alarmed the environmental concerns. Therefore a search for an alternate fine aggregate has resulted in choosing m-sand.

Also various studies revealed that the performance of the concrete has increased due to the use of GGBS.

Thus this paper focuses on replacing 50% percentage of cement with GGBS in two different water cement ratio 0.45 and 0.5 along with the use of m-sand to develop high performance concrete.

BEST PROJECT 5

APPROXIMATE METHOD IN STRUCTURAL ANALYSIS OF FRAME AND SHEAR WALL UNDER LATERAL LOADS

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Multi storied structures have become the primary habitat structures in cities and densely crowded urban localities due to lack of available free land space. Design of these structures can be performed after structural analysis using known computer software. However analysis results are only as good as the input given to that software. A suitable methodology is required to check and validate the output of this software which has to be based on sound mechanics principles. An attempt has been made in this thesis to bring out the approximate methods of structural analysis of multi storied frames with and without shear walls such that conceptual design of these structures can be readily carried out. Two or three typical frames will be taken for analysis and the results of such analysis will be validated with computer analysis using available software. The exercise will be carried both for shear wall and non-shear wall structures.