VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"JNANA SANGAMA", MACHHE, BELAGAVI - 590018, KARNATAKA 2020-2021



Project Report on

"AN EXPERIMENTAL STUDY ON PROPERTIES OF CONCRETE USING OVER BURNT BRICKS AS PARTIAL REPLACEMENT TO COARSE AGGREGATES"

Submitted in partial fulfillment of the requirement for the award of degree

BACHELOR OF ENGINEERING
IN
CIVIL ENGINEERING

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CERTIFICATE

Certified that a project report on entitled "AN EXPERIMENTAL STUDY ON PROPERTIES OF CONCRETE USING OVER BURNT BRICKS AS PARTIAL REPLACEMENT TO COARSE AGGREGATES" has been successfully carried out by APOORVA A (1SV18CV003), MEGHASHREE (1SV18CV004), CHANDRAHASA PATEL K A (1SV18CV008), HABIB ULLA KHAN (1SV18CV014), students of Shridevi Institute of Engineering and Technology, Tumakuru -572-106, in partial fulfillment of project for the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Jnana Sangama, Belagavi -590018 during the academic year 2021-2022. It is certified that all corrections and suggestions indicated for internal assessment have been incorporated in the report deposited in the Department library. The report has been approved as it satisfies the academic requirement in respect of project on current topic prescribed for B.E Degree.

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ABSTRACT

Concrete is used as a composite material in construction of most of the structure. In an effort to find an alternative material in concrete much work has been focused to use brick aggregates in producing normal strength or even higher strength by far the most common coarse aggregates used in concrete is obtained from natural rock, but type of rock suitable for concrete making is not available locally and everywhere. However, there is hardly any literature producing previous concrete using bricks chips as coarse aggregates. Their search was conducted to study the suitability crushed over burnt bricks as alternative coarse aggregates for concrete production. The concrete cube beams and cylinders of M-20, M-25, M-30, and M-35 grade were thrown in this trail explore work and try to analyze different properties of concrete with crushed over burnt bricks as an alternative material. The physical properties like compressive strength, tensile strength, flexural strength and workability with alternative material was used with a dosage of 10%, 20% and 30% in concrete with the age of 7, 14& 28 days of curing. The general properties of fresh and hardened concrete were tried and the outcomes were dissected. Over Burnt bricks were casted and tested for compressive strength, tensile strength, flexural strength, and workability. The result shows that the aggregate that concrete derived from Over Burnt bricks aggregate attained lower strength than the regular concrete. More detailed and elaborated work is recommended with different mix ratio and a different proportion of Over Burnt aggregates for a better conclusion

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