VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"JNANA SANGAMA", MACHHE, BELAGAVI - 590018, KARNATAKA 2021-2022



Project Report on

"A LABORTORY INVESTIGATION ON THE PROPERTIES OF CEMENT CONCRETE WITH PARTIAL REPLACEMENT OF RICE HUSK ASH"

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

BACHELOR OF ENGINEERING IN CIVIL ENGINEERING

Submitted by:

JAYAMANJUSH CHOUDRI

1SV17CV008

LOKESHD

1SV17CV010

PUNITH KUMAR K B

1SV17CV013

SHUAIB AHMED

1SV17CV021

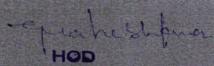
Under the guidance of:

Mr. PRAKASH J M. Tech.

Assistant Professor

Dept. of Civil Engineering

SIET, TUMKUR



Dent. of Civil Engineering SIET, TUMKUR - 6.



SHRIDEVI EDUCATION

DEPARTMENT OF CIVIL ENGINEERING

SHRIDEVI INSTITUTE OF ENGINEERING ANDTECHNOLOGY

(Affiliated to Visvesvaraya Technological University, Belagavi)

Sira Road, Tumakuru - 572106 KARNATAKA

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SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An ISO 9001:2000 Certified Institution) Sira Road, Tumakuru – 572106.



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CERTIFICATE

Certified that a project report on entitled "A LABORTORY INVESTIGATION ON PROPERTIES OF CEMENT CONCRETE WITH REPLACEMENT OF RICE HUSK ASH" has been successfully carried out by JAYAMANJUSH CHOUDRI (1SV17CV008), LOKESH D (1SV17CV010), PUNITHKUMAR K B (1SV17CV013), SHUAIB AHMED (1SV17CV021), students of Shridevi Institute of Engineering and Technology, Tumakuru -572106, in partial fulfilment 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.

Signature of the Project Guide Mr. 1 Prakash J M. Tech.,
Assistant Professor
Dept. of Civil Engineering

SIET, Tumakuru

Signature of the H Old Dr. G Mahesh Kumar Professor and Head Dept. of Civil Engineering SIET, Tumakuru Signature of the Principal

Dr. Narendra Viswanath

Principal

SIET, Tumakuru,

External Viva

Name of the Examiners

1. Marrogna. H.N 2. Dr. C. Dagarala epiaherlitana Signature with date

C. Dogonalista

Dept of Civil Engineering SIET TUMKUR - 6

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 Rice hush ash 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 RHA as coarse aggregates. Their search was conducted to study the suitability crushed over RHA 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 RHA 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 RHA were casted and tested for compressive strength, tensile strength, flexural strength, and workability. The result shows that the aggregate that concrete derived from Over RHA aggregate attained lower strength than the regular concrete. More detailed and elaborated work is recommended with different mix ratio and a different proportion of RHA aggregates for a better conclusion.

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