**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**

**Jnana Sangama, Belagavi-590018, Karnataka**



A PROJECT REPORT ON

**“UNFIRED SOIL BRICKS ADMIXED WITH COCONUT COIR, GLASS POWDER AND EGG SHELL POWDER”**

*Submitted in partial fulfilment of the requirements for the eighth semester Project Work*

*Phase-II (18CVP83)*

BACHELOR OF ENGINEERING

IN

CIVIL ENGINEERING

*Submitted by:*

**MADHU 1VK18CV007**

**RAKSHITHA V 1VK18CV015**

**YOGESHWARI S 1VK18CV024**

**SHOBITHA H J 1VK19CV406**

*Under the guidance of*

**Mr. HARISH T S**

**Assistant Professor**

**Dept. of Civil Engineering**



Janatha Education Society(R)

**DEPARTMENT OF CIVIL ENGINEERING**

**VIVEKANANDA INSTITUTE OF TECHNOLOGY**

**Gudimavu, Kumbalagodu Post, Kengeri Hobli, Bengaluru-560074**

**2021-2022**

**Janatha Education Society (R)**

**VIVEKANANDA INSTITUTE OF TECHNOLOGY**

Gudimavu, Kumbalagodu Post, Kengeri Hobli, Bengaluru – 560 074



**DEPARTMENT OF CIVIL ENGINEERING**

**CERTIFICATE**

Certified that the Project Phase-II work entitled **“*UNFIRED SOIL BRICKS ADMIXED WITH COCONUT COIR, GLASS POWDER AND EGG SHELL POWDER*”** carried out by **MADHU** (1VK18CV007), **RAKSHITHA V** (1VK18CV015), **YOGESHWARI S** (1VK18CV024) and **SHOBITHA H J** (1VK19CV406), 8th semester students of **Vivekananda Institute of Technology**, Bengaluru in partial fulfilment for the award of Bachelor of Engineering in **Civil Engineering** of the **Visvesvaraya Technological University, Belagavi** during the academic year **2021-2022**. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the department library.

The Project Phase-II has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

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| --- | --- | --- | --- | --- | --- |
| Signature of the Guide  **Mr. Harish T S**  Assistant Professor  Dept. of Civil Engineering  VKIT, Bengaluru | | Signature of HOD  **Dr. Shashikumar C S**  Associate Professor & Head  Dept. of Civil Engineering  VKIT, Bengaluru | | Signature of the Principal  **Dr. Padmanabha S**  Principal  VKIT, Bengaluru | |
| Internal Examiner:  External Examiner: | NAME  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | SIGNATURE  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

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**CERTIFICATE**

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| Signature of the Guide  **Mr. Harish T S**  Assistant Professor  Dept. of Civil Engineering  VKIT, Bengaluru | | Signature of HOD  **Dr. Shashikumar C S**  Associate Professor & Head  Dept. of Civil Engineering  VKIT, Bengaluru | | Signature of the Principal  **Dr. Padmanabha S**  Principal  VKIT, Bengaluru | |
| Internal Examiner:  External Examiner: | NAME  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | SIGNATURE  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

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**CERTIFICATE**

This is to certify that Project Phase-II report entitled ***“UNFIRED SOIL BRICKS ADMIXED WITH COCONUT COIR, GLASS POWDER AND EGG SHELL POWDER”*** carried out by **RAKSHITHA V** bearing **USN-1VK18CV015** a confide student of **Vivekananda Institute of Technology**, Bengaluru in partial fulfilment for the academic year 2021-22. It is certified that all corrections/suggestions indicated have been incorporated in the report deposited in the department library. The Project Phase-II has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

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| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Signature of the Guide  **Mr. Harish T S**  Assistant Professor  Dept. of Civil Engineering  VKIT, Bengaluru | | Signature of HOD  **Dr. Shashikumar C S**  Associate Professor & Head  Dept. of Civil Engineering  VKIT, Bengaluru | | Signature of the Principal  **Dr. Padmanabha S**  Principal  VKIT, Bengaluru | | | Internal Examiner:  External Examiner: | NAME  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | SIGNATURE  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |  |  |

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This is to certify that Project Phase-II report entitled ***“UNFIRED SOIL BRICKS ADMIXED WITH COCONUT COIR, GLASS POWDER AND EGG SHELL POWDER”*** carried out by **YOGESHWARI S** bearing **USN-1VK18CV024** a confide student of **Vivekananda Institute of Technology**, Bengaluru in partial fulfilment for the academic year 2021-22. It is certified that all corrections/suggestions indicated have been incorporated in the report deposited in the department library. The Project Phase-II has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

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| Signature of the Guide  **Mr. Harish T S**  Assistant Professor  Dept. of Civil Engineering  VKIT, Bengaluru | | Signature of HOD  **Dr. Shashikumar C S**  Associate Professor & Head  Dept. of Civil Engineering  VKIT, Bengaluru | | Signature of the Principal  **Dr. Padmanabha S**  Principal  VKIT, Bengaluru | |
| Internal Examiner:  External Examiner: | NAME  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | SIGNATURE  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

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This is to certify that Project Phase-II report entitled ***“UNFIRED SOIL BRICKS ADMIXED WITH COCONUT COIR, GLASS POWDER, AND EGG SHELL POWDER”*** carried out by **SHOBITHA H J** bearing **USN-1VK19CV406** a confide student of **Vivekananda Institute of Technology**, Bengaluru in partial fulfilment for the academic year 2021-22. It is certified that all corrections/suggestions indicated have been incorporated in the report deposited in the department library. The Project Phase-II has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

**ACKNOWLEDGEMENT**

It is time for expressing our sincere gratitude towards all who are responsible for the successful completion of Project Phase-II work. Firstly, we would like to express our sincere regards and heartful thanks to our guide **Mr. Harish T S** Assistant Professor, Dept. of civil engineering, VKIT, Bengaluru, whose constant encouragement, guidance and support throughout the Project Phase -II work made us complete the work successfully on time. Also, we would like to thank our project coordinator **Mr. Siddaraju N** Assistant Professor, Dept. of Civil Engineering, VKIT, Bengaluru, for his support.

We take this opportunity to express our sincere words of gratitude to our HOD **Dr. Shashikumar C S**, Associate Professor and Head of Civil Engineering Department, VKIT, Bengaluru, for his support.

We take this opportunity to express our sincere words of gratitude to our beloved principal **Dr. Padmanabha S** for being kind enough to provide us an opportunity to work on a project in this institution.

We would like to convey our heartfelt gratitude to our beloved Vice Principle**, Dr. D V Chandrashekar**, VKIT, Bengaluru, for his support and encouragement during our studies

Our sincere gratitude is due towards Management of our institution **Vivekananda Institute of Technology,** Bengaluru.

We are grateful for all the teaching and non-teaching staff of **Department of Civil Engineering**, VKIT, Bengaluru, for providing us support and required facilities for successful completion of this Project Phase-II.

Last but not the least, we would like to thank our **Parents and Friends** who have helped us directly and indirectly in all possible ways for the success of this Project Phase-II.

**ACKNOWLEDGEMENT**

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Last but not the least, I would like to thank my **Parents and Friends** who have helped me directly and indirectly in all possible ways for the success of this Project Phase-II.

**DECLARATION**

We, **MADHU** (1VK18CV007), **RAKSHITHA V** (1VK18CV015), **YOGESHWARI S** (1VK18CV024) and **SHOBITHA H J** (1VK19CV406) 8th semester students of **Vivekananda Institute of Technology**, Bengaluru. Hereby declare that the work being presented on the Project Phase-II entitled ***“UNFIRED SOIL BRICKS ADMIXED WITH COCONUT COIR, GLASS POWDER AND EGG SHELL POWDER”*** which is being submitted as partial fulfilment for 8th semester B.E. in Civil Engineering from Visvesvaraya Technological University, Belagavi, is an authentic record of our own Project Phase-II work that has been carried out by us during academic year 2021-22 at **Vivekananda** **Institute of Technology,** Bengaluru, under the guidance of **Mr. Harish T S** Assistant Professor of Dept. Civil Engineering, Vivekananda Institute of Technology, Bengaluru.

**Name of the students Signature**

1. MADHU
2. RAKSHITHA V
3. YOGESHWARI S
4. SHOBITHA H J

**DECLARATION**

I, **MADHU** 8th semester B.E, bearing USN (1VK18CV007), Vivekananda Institute of Technology, Bengaluru. Hereby declare that the work being presented on the Project Phase-II work entitled ***“UNFIRED SOIL BRICKS ADMIXED WITH COCONUT COIR, GLASS POWDER AND EGG SHELL POWDER”*** which is being submitted as partial fulfilment for 8th semester B.E. in Civil Engineering from Visvesvaraya Technological University, Belagavi, is an authentic record of my own Project Phase-II work that has been carried out by me during academic year 2021-22 at **Vivekananda Institute of Technology,** Bengaluru under the guidance of **Mr. Harish T S,** Assistant Professor, Dept. of Civil Engineering, Vivekananda Institute of Technology, Bengaluru.

**DECLARATION**

I, **RAKSHITHA V** 8th semester B.E, bearing USN (1VK18CV015), Vivekananda Institute of Technology, Bengaluru. Hereby declare that the work being presented on the Project Phase-II work entitled ***“UNFIRED SOIL BRICKS ADMIXED WITH COCONUT COIR, GLASS POWDER AND EGG SHELL POWDER”*** which is being submitted as partial fulfilment for 8th semester B.E. in Civil Engineering from Visvesvaraya Technological University, Belagavi, is an authentic record of my own Project Phase-II work that has been carried out by me during academic year 2021-22 at **Vivekananda Institute of Technology,** Bengaluru under the guidance of **Mr. Harish T S,** Assistant Professor, Dept. of Civil Engineering, Vivekananda Institute of Technology, Bengaluru.

**DECLARATION**

I, **YOGESHWARI S** 8th semester B.E, bearing USN (1VK18CV024), Vivekananda Institute of Technology, Bengaluru. Hereby declare that the work being presented on the Project Phase-II work entitled ***“UNFIRED SOIL BRICKS ADMIXED WITH COCONUT COIR, GLASS POWDER AND EGG SHELL POWDER”*** which is being submitted as partial fulfilment for 8th semester B.E. in Civil Engineering from Visvesvaraya Technological University, Belagavi, is an authentic record of my own Project Phase-II work that has been carried out by me during academic year 2021-22 at **Vivekananda Institute of Technology,** Bengaluru under the guidance of **Mr. Harish T S,** Assistant Professor, Dept. of Civil Engineering, Vivekananda Institute of Technology, Bengaluru.

**DECLARATION**

I, **SHOBITHA H J** 8th semester B.E, bearing USN (1VK19CV406), Vivekananda Institute of Technology, Bengaluru. Hereby declare that the work being presented on the Project Phase-II work entitled ***“UNFIRED SOIL BRICKS ADMIXED WITH COCONUT COIR, GLASS POWDER AND EGG SHELL POWDER”*** which is being submitted as partial fulfilment for 8th semester B.E. in Civil Engineering from Visvesvaraya Technological University, Belagavi, is an authentic record of my own Project Phase-II work that has been carried out by me during academic year 2021-22 at **Vivekananda Institute of Technology,** Bengaluru under the guidance of **Mr. Harish T S,** Assistant Professor, Dept. of Civil Engineering, Vivekananda Institute of Technology, Bengaluru.

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**Jnana Sangama, Belagavi-590018, Karnataka**



A PROJECT REPORT ON

**“UNFIRED SOIL BRICKS ADMIXED WITH COCONUT COIR, GLASS POWDER AND EGG SHELL POWDER”**

*Submitted in partial fulfilment of the requirements for the seventh semester Project Work*

*Phase-II (18CVP83)*

BACHELOR OF ENGINEERING

IN

CIVIL ENGINEERING

*Submitted by:*

**MADHU 1VK18CV007**

*Under the guidance of*

**Mr. HARISH T S**

**Assistant Professor**

**Dept. of Civil Engineering**



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**2021-2022**

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*Phase-II (18CVP83)*

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*Phase-II (18CVP83)*

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**2021-2022**