Sarvasiddhanta Education Society's Swaminarayan Siddhanta Institute of Technology

Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University Nagpur-Katol Highway Road, Khapri (Kothe), Tal: Kalmeshwar, Nagpur, Maharastra-441501



Criterion No. 3

3.5.1: Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

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MEMORANDUM OF UNDERSTANDING

BETWEEN

Swaminarayan Siddhanta Institute of Technology

AND

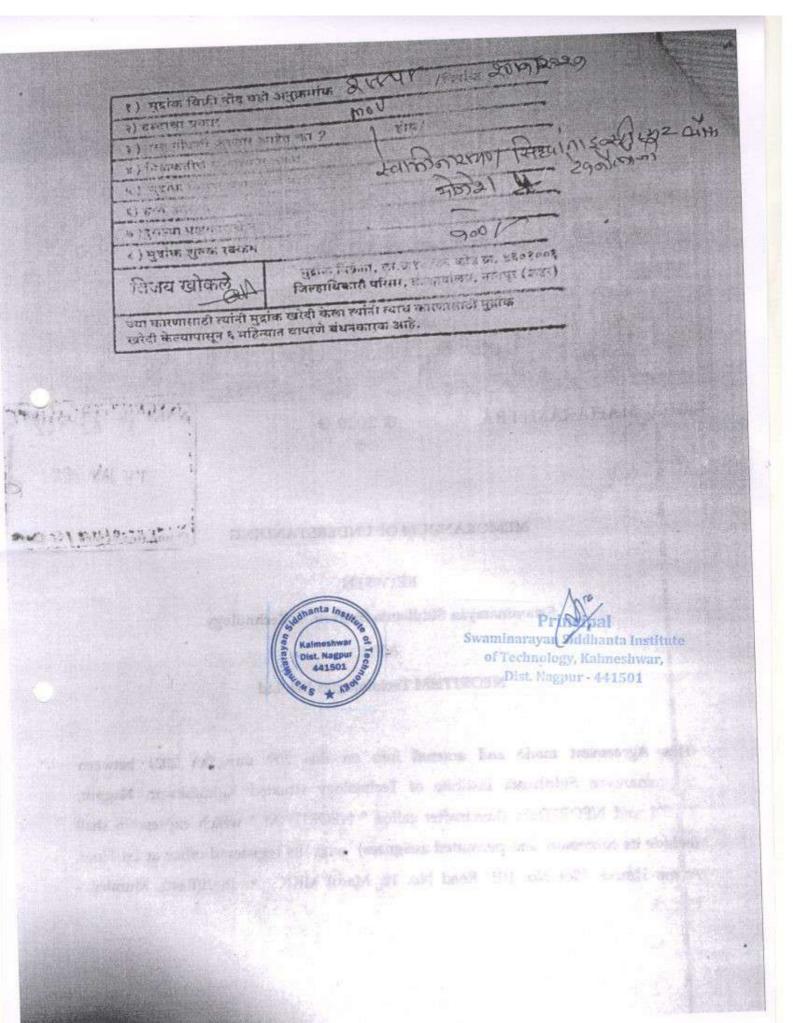
NEORITHM Technologies Pvt. Ltd

This Agreement made and entered into on this 20th day Jan 2021 between Swaminarayan Siddhanta Institute of Technology situated Kalmeshwar, Nagpur, 441501 and NEORITHM (hereinafter called "NEORITHM" which expression shall include its successors and permitted assignees) with its registered office at 1st Floor, Arena House, Plot No. 103, Road No. 12, Marol MIDC, Andheri(East), Mumbai – 400093.



Principal Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Naggur - 441501

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OBJECTIVES OF THE MOU

The objective of this Memorandum of Understanding is:

- a. To promote interaction between Swaminarayan Siddhanta Institute of Technology and NEORITHM in mutually beneficial areas.
- To provide a formal basis for initiating interaction between Swaminarayan Siddhanta Institute of Technology and NEORITHM.

1. PROPOSED MODES OF COLLABORATION

Swaminarayan Siddhanta Institute of Technology and NEORITHM propose to collaborate through

- Sponsoring student projects / fellowships in two year M.Tech. and five year dual degree programs at Swaminarayan Siddhanta Institute of Technology.
- b. Sponsoring eligible employees of NEORITHM for doing M.Tech./Ph.D. degrees in Swaminarayan Siddhanta Institute of Technology. The eligibility criteria for selection will be as per norms of Swaminarayan Siddhanta Institute of Technology.
- c. Sponsoring R&D projects, which may be carried out wholly at Swaminarayan Siddhanta Institute of Technology or at premises of NEORITHM or partly at Swaminarayan Siddhanta Institute of Technology and partly at NEORITHM.
- d. training of NEORITHM personnel through Continuing Education Programmes conducted by Swaminarayan Siddhanta Institute of Technology in areas of interest to NEORITHM.
- e. any other appropriate mode of interaction agreed upon between Swaminarayan Siddhanta Institute of Technology and NEORITHM.

Each of the above modes of interaction will be initiated by entering into a separate agreement between the two parties.



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of Technology, Kalmeshwar,
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2. FORMS OF RESEARCH AND DEVELOPMENT PROGRAMS

The form of any of the said Research and Development Program (hereinafter referred to as "Research Program") will be subject to a separate Research Agreement entered into by the Parties but may also include the following:

- a. In their own existing facilities The performance of research individually by each Party or concurrently by both Parties in mixed groups at their own facilities with regular exchanges of results.
- b. In a separate research and development facility The performance of research by the technical personnel of both Parties working together in the facilities of one Party or in mixed groups at the facilities supported/ sponsored by either Party.
- c. Third parties The performance of research by the Parties together with one or more third parties.

3. AGREEMENTS FOR RESEARCH COLLABORATION

Each research collaboration undertaken by the parties hereunder shall be initiated by the signing of a separate research agreement between the parties, which will describe in detail:

- a. The nature, scope and schedule of the research collaboration.
- b. The form of the research collaboration.
- c. The estimated cost of the research collaboration together with the amount of funding, if any, to be received from third parties.
- d. The treatment of intellectual property and data rights, including patents, industrial design registration, copyrights and all other proprietary information (including innovations not patented, designs not registered etc.) which result from the research collaboration or which belong to a party and are used in research collaboration.
- e. other provisions as may be mutually agreed upon, including provisions covering the consequences of default or termination by a participant, term, arbitration of disputes and applicable law.

4. CONFIDENTIALITY

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a. During and for a period of three years from the date of disclosure, each party agrees to consider as confidential all information disclosed by the other party

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in written or tangible form or, if orally disclosed confirmed in writing within thirty days of disclosure and identified as confidential by the disclosing party.

- b. The obligations above shall not extend to any confidential information for which the receiving party can prove that this information.
 - is in the public domain at the time of disclosure or comes within the public domain without fault of the receiving party
 - is already known or become known to the receiving party
 - is received from a third party having no obligations of confidentiality to the disclosing party,
 - is independently developed by the receiving party; or
 - is required to be disclosed by law or court order.

5. NON-EXCLUSIVITY

The relationship of the parties under this MOU shall be nonexclusive and both parties, including their affiliates, subsidiaries and divisions, are free to pursue other agreements or collaborations of any kind. However, when entering into a particular research agreement, the participants may agree to limit each party's right to collaborate with others on that subject.

6. TERMS AND TERMINATION

This MOU, unless extended by mutual written agreement of the parties, shall expire 3 years after the effective date specified in the opening paragraph. This MOU may be amended or terminated earlier by mutual written agreement of the parties at any time. Either party shall have the right to unilaterally terminate this MOU upon 60 days prior written notice to the other party. However, no such early termination of this MOU, whether mutual or unilateral, shall affect the obligations of the participants under any Research Agreement, Confidentiality clause as referenced in clause 6 above, or any other agreement entered into pursuant to this MOU, which obligations shall survive any such termination.

7. ASSIGNMENT

It is understood by the Parties herein this MOU is based on the professional competence and expertise of each party and hence neither Party shall transfer or assign this Agreement, or rights or obligations arising hereunder, either wholly or in part, to any third party.

Each Party shall bear the respective costs of carrying out the obligations under 8. COSTS OF THE MOU

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this MOU.

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9. SIGNED IN DUPLICATE

This MOU is executed in duplicate with each copy being an official version of the Agreement and having equal legal validity.

BY SIGNING BELOW, the parties, acting by their duly authorized officers, have caused this Memorandum of Understanding to be executed, effective as of the day and year first above written.

SIGNED by, for and on behalf of NEORITHM Technologies Pvt. Ltd.

Authorized Signatory

Name: Nandkishore Aradhya

Title: Neorithm

SIGNED by, for and on behalf of Swaminarayan Siddhanta Institute of Technology

Authorized Bighator

Authorized Stenatory
Swaminarayan Stochanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

Name: Dr. Arif Khan

Title: Principal





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Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501



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MEMORANDUM OF UNDERSTANDING

BETWEEN

Swaminarayan Siddhanta Institute of Technology

AND

Johnson System Pvt. Ltd.

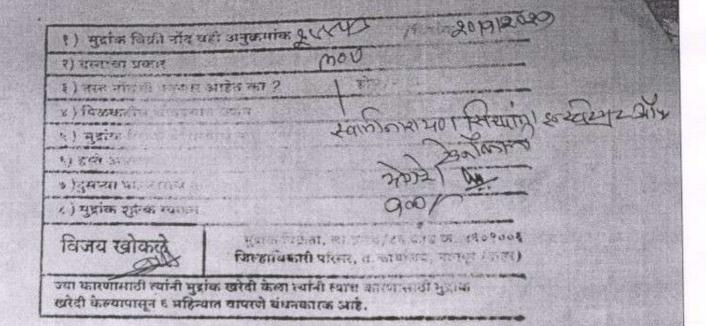
This Agreement made and entered into on this 17th day Jan 2021 between Swaminarayan Siddhanta Institute of Technology, situated Kalmeshwar, Nagpur, 441501 and Johnson System Pvt. Ltd. (hereinafter called " JOHNSON SYSTEM " which expression shall include its successors and permitted assignees) with its registered office at 3rd Floor, Ramdeo House, Plot No. 203, Bajaj Nagar Nagpur - 440010.

OBJECTIVES OF THE MOU

The objective of this Memorandum of Understanding is:



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of Technology, Kalmeshwar,
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Swaminarayan Siddhanta Institute of Technology, Kalmeshwar. Dist. Nagpur - 441501

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CHILD AND DESCRIPTION OF THE PARTY OF THE PA

- a. to promote interaction between Swaminarayan Siddhanta Institute of Technology and JOHNSON SYSTEM in mutually beneficial areas.
- To provide a formal basis for initiating interaction between Swaminarayan Siddhanta Institute of Technology and JOHNSON SYSTEM.

1. PROPOSED MODES OF COLLABORATION

Swaminarayan Siddhanta Institute of Technology and JOHNSON SYSTEM propose to collaborate through

- a. Sponsoring student projects / fellowships in two year M.Tech. and five year dual Polytechnic Courses at Swaminarayan Siddhanta Institute of Technology.
- b. Sponsoring eligible employees of JOHNSON SYSTEM for doing M.Tech./Ph.D. degrees in Swaminarayan Siddhanta Institute of Technology. The eligibility criteria for selection will be as per norms of Swaminarayan Siddhanta Institute of Technology.
- c. Sponsoring R&D projects, which may be carried out wholly at Swaminarayan Siddhanta Institute of Technology or at premises of JOHNSON SYSTEM or partly at Swaminarayan Siddhanta Institute of Technology and partly at JOHNSON SYSTEM.
- d. Training of JOHNSON SYSTEM personnel through Continuing Education Programmes conducted by Swaminarayan Siddhanta Institute of Technology in areas of interest to JOHNSON SYSTEM.
- e. any other appropriate mode of interaction agreed upon between Swaminarayan Siddhanta Institute of Technology and JOHNSON SYSTEM.

Each of the above modes of interaction will be initiated by entering into a separate agreement between the two parties.

2. FORMS OF RESEARCH AND DEVELOPMENT PROGRAMS

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The form of any of the said Research and Development Program (hereinafter referred to as "Research Program") will be subject to a separate Research Agreement entered into by the Parties but may also include the following:

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- a. In their own existing facilities The performance of research individually by each Party or concurrently by both Parties in mixed groups at their own facilities with regular exchanges of results.
- b. In a separate research and development facility The performance of research by the technical personnel of both Parties working together in the facilities of one Party or in mixed groups at the facilities supported/ sponsored by either Party.
- Third parties The performance of research by the Parties together with one
 or more third parties.

3. AGREEMENTS FOR RESEARCH COLLABORATION

Each research collaboration undertaken by the parties hereunder shall be initiated by the signing of a separate research agreement between the parties, which will describe in detail:

- The nature, scope and schedule of the research collaboration.
- b. The form of the research collaboration.
- c. The estimated cost of the research collaboration together with the amount of funding, if any, to be received from third parties.
- d. The treatment of intellectual property and data rights, including patents, industrial design registration, copyrights and all other proprietary information (including innovations not patented, designs not registered etc.) which result from the research collaboration or which belong to a party and are used in research collaboration.
- e. other provisions as may be mutually agreed upon, including provisions covering the consequences of default or termination by a participant, term, arbitration of disputes and applicable law.

4. CONFIDENTIALITY

- a. During and for a period of three years from the date of disclosure, each party agrees to consider as confidential all information disclosed by the other party in written or tangible form or, if orally disclosed confirmed in writing within thirty days of disclosure and identified as confidential by the disclosing party.
- b. The obligations above shall not extend to any confidential information for which the receiving party can prove that this information:



Swaminarayan Siddhanta Institute,
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- is in the public domain at the time of disclosure or comes within the public domain without fault of the receiving party.
- is already known or become known to the receiving party
- is received from a third party having no obligations of confidentiality to the disclosing party,
- is independently developed by the receiving party; or
- is required to be disclosed by law or court order.

5. NON-EXCLUSIVITY

The relationship of the parties under this MOU shall be nonexclusive and both parties, including their affiliates, subsidiaries and divisions, are free to pursue other functions.

6. TERMS AND TERMINATION

This MOU, unless extended by mutual written agreement of the parties, shall expire 3 years after the effective date specified in the opening paragraph. This MOU may be amended or terminated earlier by mutual written agreement of the parties at any time. Either party shall have the right to unilaterally terminate this MOU upon 60 days prior written notice to the other party. However, no such early termination of this MOU, whether mutual or unilateral, shall affect the obligations of the participants under any Research Agreement, Confidentiality clause as referenced in clause 6 above, or any other agreement entered into pursuant to this MOU, which obligations shall survive any such termination.

7. ASSIGNMENT

It is understood by the Parties herein this MOU is based on the professional competence and expertise of each party and hence neither Party shall transfer or assign this Agreement, or rights or obligations arising hereunder, either wholly or in part, to any third party.

8. COSTS OF THE MOU

Each Party shall bear the respective costs of carrying out the obligations under this MOU.



9. SIGNED IN DUPLICATE

This MOU is executed in duplicate with each copy being an official version of the Agreement and having equal legal validity.

BY SIGNING BELOW, the parties, acting by their duly authorized officers, have caused this Memorandum of Understanding to be executed, effective as of the day and year first above written.

SIGNED by, for and on behalf of JOHNSON SYSTEM Pvt. Ltd.

Authorgounson, SYSTEMS

Name: Anil Upadhayay Title: Head, Research Wing Johnson Systems SIGNED by, for and on behalf of Swaminarayan Siddhanta Institute of

Technology

Author Principal

Swaminarayan Sidonanta Institute of Technology, Kabneshwar, Nama: Napparu 4 (24)

Title: Principal,

Swaminarayan Siddhanta Institute of

Technology

Kalmeshwar Dist. Nagpur 441501

Principal
Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

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MEMORANDUM OF UNDERSTANDING BETWEEN

InspireBridge Technology Pvt. Ltd.

And

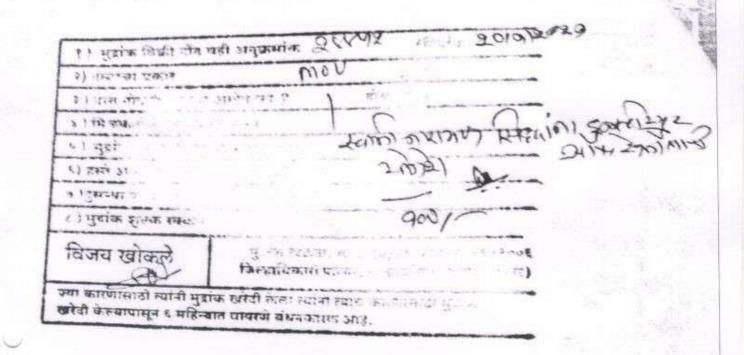
Swaminarayan Siddhanta Institute of Technology

This Memorandum of Understanding (MoU) is entered between InspireBridge Technology Pvt. Ltd., a company incorporated under the Indian Companies Act, 1956 having its registered office, and represented by its undersigned of the ONE Part; and Swaminarayan Siddhanta Institute of Technology, a Maharashtra based college/ university represented by undersigned of the OTHER PART; whereas IB and Swaminarayan Siddhanta Institute of Technology shall be hereinafter jointly referred to as the "Parties" and singularly as a "Party".

The Parties has decided to agree to establish industry-academic collaboration in areas of mutual interest and in accordance with terms and conditions set forth in this Memorandum of Understanding (MoU), IB and Swaminarayan Siddhanta Institute of Technology agree on following activities:



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- 1. IB will offer summer internship to interested students of Swaminarayan Siddhanta Institute of Technology at its offices / project- locations so that the students get hands on experience of live projects. The number of students, who can be considered for internship, would be as mutually decided between IB and Swaminarayan Siddhanta Institute of Technology every year.
- 2. IB will arrange to provide periodic field visit to faculty and students of Swaminarayan Siddhanta Institute of Technology at its project sites to enable them to get practical exposure and learning from interaction with members of IB project-teams.
- 3. Depending on requirement, IB may offer specific projects with identified deliverables to be executed by Swaminarayan Siddhanta Institute of Technology. Delhi modalities including financials would be mutually world out for each project/assignment.
- 4. After Swaminarayan Siddhanta Institute of Technology starts offering courses relevant to the industry in which IB operates and based its requirements, IB may participate in campus placements, when it does so, IB will be given priority status like invitation for zeroday placement etc.
- 5. Swaminarayan Siddhanta Institute of Technology will give preference to officials of IB in pursuing advance training and/ or post graduation studies at its various schools.

Each Party shall appoint one nodal officer to periodically review and identify ways cooperation between them.

This MoU will take effect from the date it is signed by representatives of the Parties. It will remain valid for five years, and may be continued thereafter after suitable review and agreement. Either Party may terminate the MoU by giving written notice to the other Party six months in advance. Once terminate, neither IB nor Swaminarayan Siddhanta Institute of

Technology will be responsible for any losses, financial or otherwise, which 0

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Dist. Nagpur 441501

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the other Party may suffer. However, IB and Swaminarayan Siddhanta Institute of Technology will ensure that all activities in progress are allowed to be completed successfully.

This MoU is Signed subject to approval of the respective academic/administrative bodies.

On behalf of IB

Signed by:

Name: Libin George

Title: IBSAP Practice Area Leader InspireBridge Technology Pvt. Ltd.

Libin GC

On behalf of Swaminarayan Siddhanta Institute of Technology

Signed by:

Name: Dr. Arif Khan Dr. Arif Khan Principal

Swaminarayan Siddhanta Institute of Menologic Coaheshwar,

Dist. Nagpur - 441501 Swaminarayan Siddhanta Institute

of Technology

Witness:

1.Elizabeth Mathew

Manager, University Relations, IB

Witness:

1. Dr. Debabrata Dey

Assistant Professor,

Basic Science and Humanities,



Publicipal
Swaminarayan Siddhauta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

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MEMORANDUM OF UNDERSTANDING BETWEEN

iLabs Research Pvt. Ltd.

And

Swaminarayan Siddhanta Institute of Technology

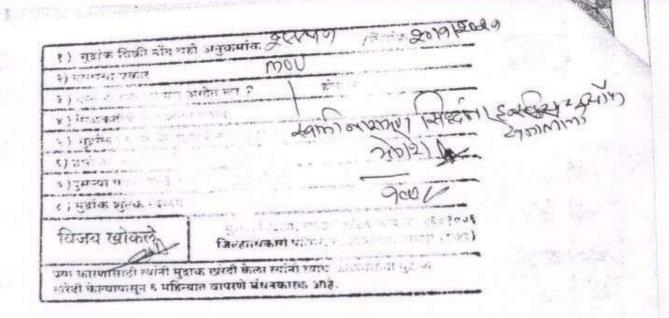
This Memorandum of Understanding (Mou) is entered between iLabs Research Pvt. Ltd., a company incorporated under the Indian Companies Act, 1956 having its registered office, and represented by its undersigned of the ONE Part; and Swaminarayan Siddhanta Institute of Technology, a Maharashtra based college/ university represented by undersigned of the OTHER PART; Whereas iLabs and Swaminarayan Siddhanta Institute of Technology shall be hereinafter jointly referred to as the "Parties" and singularly as a "Party".

The Parties has decided to agree to establish industry-academic collaboration in areas of mutual interest and in accordance with terms and conditions set forth in this Memorandum of Understanding (MoU), iLabs



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of Technology, Kalmeshwar,

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Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

and Swaminarayan Siddhanta Institute of Technology (NCET) agree on following activities:

- iLabs will offer summer Internship to Interested students of Swaminarayan Siddhanta Institute of Technology at its offices / project- locations so that the students get hands on experience of live projects. The number of students, who can be considered for internship, would be as mutually decided between iLabs and Swaminarayan Siddhanta Institute of Technology every year.
- iLabs will arrange to provide periodic field visit to faculty and students
 of Swaminarayan Siddhanta Institute of Technology at its project
 sites to enable them to get practical exposure and learning from
 interaction with members of iLabs project-teams.
- Depending on requirement, iLabs may offer specific projects with identified deliverables to be executed by Swaminarayan Siddhanta Institute of Technology. Delhi modalities including financials would be mutually world out for each project/assignment.
- 4. After Swaminarayan Siddhanta Institute of Technology starts offering courses relevant to the industry in which iLabs operates and based its requirements, iLabs may participate in campus placements, when it does so, iLabs will be given priority status like invitation for zero-day placement etc.
- Swaminarayan Siddhanta Institute of Technology will give preference to officials of iLabs in pursuing advance training and/ or post graduation studies at its various schools.

Each Party shall appoint one nodal officer to periodically review and identify ways cooperation between them.

This MoU will take effect from the date it is signed by representatives of the Parties. It will remain valid for five years, and may be continued thereafter after suitable review and agreement. Either Party may terminate the MoU by giving written notice to the other Party six months in advance. Once terminate, neither iLabs nor Swaminarayan Siddhanta Institute of Technology will be responsible for any losses, financial or otherwise, which the other Party may suffer. However, iLabs and Swaminarayan Siddhanta Institute of Technology will ensure that all activities in progress are allowed to be completed successfully.

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This Mou is Signed subject to approval of the respective academic/administrative bodies.

On behalf of ILabs

On behalf of Swaminarayan Siddhanta Institute of Technology

Signed by:

Name: Abhishe angole

itle: Chief Technical Officer iLabs Research Pvt. Ltd. Signed Bo Arif Kha

Na waminarayan sukikanta Institute Prechhology, Kalmeshwar,

Title: Principal



Witness:

1.Renuka Angolo Public, Relationship Office iLabs Research Pvt. Ltd. Witness:

 Dr. Debabrata Dey Assistant Professor, Basic Science and Humanities

Kalmeshwar Dist. Nagpur at 441501

Principal
Swaminarayan Giddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

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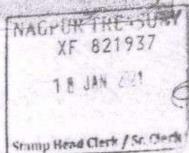
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MEMORANDUM OF UNDERSTANDING BETWEEN

ATHARVA Group

And

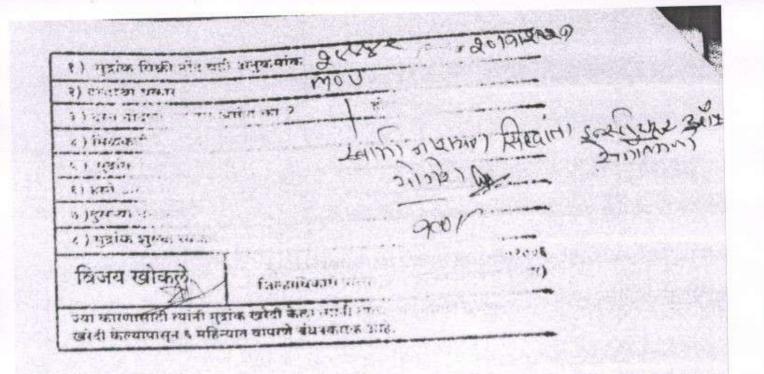
Swaminarayan Siddhanta Institute of Technology

This Memorandum of Understanding (MoU) is entered between ATHARVA Group, a company incorporated under the Indian Companies Act, 1956 having its registered office, and represented by its undersigned of the ONE Part and Swaminarayan Siddhanta Institute of Technology, a Maharashtra based college/ university represented by undersigned of the OTHER PART; whereas ATHARVA Group and Swaminarayan Siddhanta Institute of Technology shall be hereinafter jointly referred to as the "Parties" and singularly as a "Party".

The Parties has decided to agree to establish industry-academic dollaboration in areas of mutual interest and in accordance with terms and conditions set forth in this Memorandum of Understanding (MoU), ATHARVA Group and Swaminarayan Siddhanta Institute of Technology agree on following activities:



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Principal
Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

- ATHARVA Group will offer summer internship to interested students
 of Swaminarayan Siddhanta Institute of Technology at its offices
 / project- locations so that the students get hands on experience of
 live projects. The number of students, who can be considered for
 internship, would be as mutually decided between ATHARVA Group
 and Swaminarayan Siddhanta Institute of Technology every
 year.
- ATHARVA Group will arrange to provide periodic field visit to faculty and students of Swaminarayan Siddhanta Institute of Technology at its project sites to enable them to get practical exposure and learning from interaction with members of ATHARVA Group's project-teams.
- Depending on requirement, ATHARVA Group may offer specific projects with identified deliverables to be executed by Swaminarayan Siddhanta Institute of Technology. Delhi modalities including financials would be mutually world out for each project/assignment.
- 4. After Swaminarayan Siddhanta Institute of Technology starts offering courses relevant to the industry in which ATHARVA Group operates and based its requirements, ATHARVA Group may participate in campus placements, when it does so, ATHARVA Group will be given priority status like invitation for zero-day placement etc.
- Swaminarayan Siddhanta Institute of Technology will give preference to officials of ATHARVA Group in pursuing advance training and/ or post-graduation studies at its various schools.

Each Party shall appoint one nodal officer to periodically review and identify ways cooperation between them.

This MoU will take effect from the date it is signed by representatives of the Parties. It will remain valid for five years, and may be continued thereafter after suitable review and agreement. Either Party may terminate the MoU by giving written notice to the other Party six months in advance. Once terminate, neither ATHARVA Group nor Swaminarayan Siddhanta Institute of Technology will be responsible for any losses, financial or otherwise, which the other Party may suffer. However, ATHARVA Group and Swaminarayan Siddhanta Institute of Technology will ensure that all activities in progress are allowed to be completed successfully.



This Mou is signed subject to approval of the respective academic/administrative bodies.

On behalf of ATHARVA Group

On behalf of Swaminarayan
Siddhanta Institute of Technology

Signed by: ATHARY BUILDEF.S

Name: Ravinder Saini

Title: Chief Executing Officer

Signed by:

Name Britakhan

Sympleon Stadbanta Institute of Technology, Kalmeshwar, Dist. Nagpur - 441501



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Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501



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MEMORANDUM OF UNDERSTANDING BETWEEN

Armaan Dreamhomes Pvt. Ltd.

And

Swaminarayan Siddhanta Institute of Technology

This Memorandum of Understanding (MoU) is entered between Armaan Dreamhomes Pvt. Ltd., a company incorporated under the Indian Companies Act, 1956 having its registered office, and represented by its undersigned of the ONE Part; and Swaminarayan Siddhanta Institute of Technology, a Gujarat based college/university represented by undersigned of the OTHER PART; whereas Armaan Dreamhomes Pvt. Ltd. and Swaminarayan Siddhanta Institute of Technology shall be hereinafter jointly referred to as the "Parties" and singularly as a "Party".

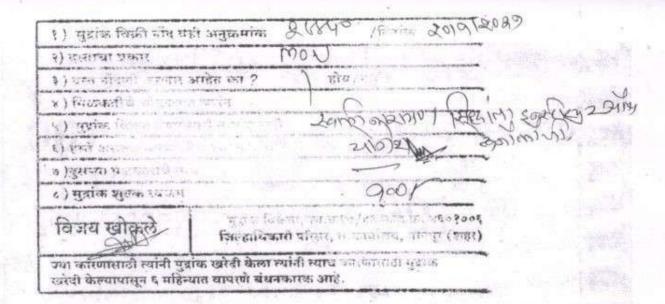
The Parties has decided to agree to establish industry-academic collaboration in areas of mutual interest and in accordance with terms and conditions set forth in this Memorandum of Understanding (MoU), Armaan Dreamhomes Pvt. Ltd. and Swaminarayan Siddhanta Institute of Technology agree on following activities:

Armaan Dreamhomes Pvt. Ltd. will provide support for designing the course curriculum at Swaminarayan Siddhanta Institute of Technology which would be relevant for industry. To achieve this, senior officials from Armaan Dreamhomes Pvt. Ltd. will work in close collaboration with faculty members of Swaminarayan Siddhanta Institute of Technology.

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of Technology, Kalmeshwar,
Dist. Nagpur - 441501

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services and a service and

- 2. Once a curriculum is designed and course relevant to industry are offered at Swaminarayan Siddhanta Institute of Technology, senior officials from Armaan Dreamhomes Pvt. Ltd. will share their knowledge and experience by way of taking sessions, participating in seminars and other academic activities of Swaminarayan Siddhanta Institute of Technology.
- 3. Armaan Dreamhomes Pvt. Ltd. will offer summer internship to interested students of Swaminarayan Siddhanta Institute of Technology at its offices / project-locations so that the students get hands on experience of live projects. The number of students, who can be considered for internship, would be as mutually decided between Armaan Dreamhomes Pvt. Ltd. and Swaminarayan Siddhanta Institute of Technology every year.
- 4. Armaan Dreamhomes Pvt. Ltd. will arrange to provide periodic field visit to faculty and students of Swaminarayan Siddhanta Institute of Technology at its project sites to enable them to get practical exposure and learning from interaction with members of Armaan Dreamhomes Pvt. Ltd. project-teams.
- Depending on requirement, Armaan Dreamhomes Pvt. Ltd. may offer specific projects with identified deliverables to be executed by Swaminarayan Siddhanta Institute of Technology. Delhi modalities including financials would be mutually world out for each project/assignment.
- 6. After Swaminarayan Siddhanta Institute of Technology starts offering courses relevant to the industry in which Armaan Dreamhomes Pvt. Ltd. operates and based its requirements, Armaan Dreamhomes Pvt. Ltd. may participate in campus placements, when it does so, Armaan Dreamhomes Pvt. Ltd. will be given priority status like invitation for zero-day placement etc.
- Swaminarayan Siddhanta Institute of Technology will give preference to
 officials of Armaan Dreamhomes Pvt. Ltd. in pursuing advance training and/ or
 post-graduation studies at its various schools.

Each Party shall appoint one nodal officer to periodically review and identify ways cooperation between them.

This MoU will take effect from the date it is signed by representatives of the Parties. It will remain valid for five years, and may be continued thereafter after suitable review and agreement. Either Party may terminate the MoU by giving written notice to the other Party six months in advance. Once terminate, neither Armaan Dreamhomes Pvt. Ltd. nor Swaminarayan Siddhanta Institute of Technology will be responsible for any losses, financial or otherwise, which the other Party may suffer. However, Armaan Dreamhomes Pvt. Ltd. and Swaminarayan Siddhanta Institute of Technology will ensure that all activities in progress are allowed to be completed successfully.



Swaminarayan Siddhanta Institute of Technology, Kaimeshwar, Dist. Nagpur - 441501 This Mou signed is subject to approval of the respective academic/administrative bodies.

On behalf of Armaan Dreamhomes Pvt. Ltd.

Quelarmanino ARREAN BUYLDERS AND DEVELOPERS

Name: Aqueel Siddiqui

- Title: CEO

Witness:

1. Yasser Ali Schull

On behalf of Swaminarayan Siddhanta Institute of Technology

Signed by: Dr. Arif Khan

Principal
Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

Adhanta insing Kalmeshwat, Dist. Hagpur 441501

Witness:

1. Md. Irfan <

dananta Instituto Kalmeshwar Dist. Nagpur 441501 45

Swaminarayan Siddhanta Institute of Technology, Main caliwar, Dist Nameur - 43 1501



महासुष्ट्र MAHARASHTRA

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KALMESHWAR

11 DCT 2021
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KALMESHWAR

MEMORANDUM OF UNDERSTANDING BETWEEN

Aaryan Trade and Commerce LLP

And

Swaminarayan Siddhanta Institute of Technology

This Memorandum of Understanding (Mou) is entered between Aaryan Trade and Commerce a company incorporated under the Indian Companies Act, 1956 having its registered office, and represented by its undersigned of the ONE Part; and Swaminarayan Siddhanta Institute of Technology, a Maharashtra based college represented by undersigned of the OTHER PART; whereas Aaryan Trade and Commerce LLP and Swaminarayan Siddhanta Institute of Technology shall be hereinafter jointly referred to as the "Parties" and singularly as a "Party".

The Parties has decided to agree to establish industry-academic collaboration in areas of mutual interest and in accordance with terms and conditions set forth in this Memorandum of Understanding (MoU), Aaryan Trade and Commerce LLP and Swaminarayan Siddhanta Institute of Technology agree on following activities:

Kalmeshwar of 441501

Principal
Swaminarayan Siddhania Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

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- Aaryan Trade and Commerce LLP will provide support for designing the course curriculum at Swaminarayan Siddhanta Institute of Technology which would be relevant for industry. To achieve this, senior officials from Aaryan Trade and Commerce LLP will work in close collaboration with faculty members of Swaminarayan Siddhanta Institute of Technology.
- 2. Once a curriculum is designed and course relevant to industry are offered at Swaminarayan Siddhanta Institute of Technology, senior officials from Aaryan Trade and Commerce LLP will share their knowledge and experience by way of taking sessions, participating in seminars and other academic activities of Swaminarayan Siddhanta Institute of Technology.
- 3. Aaryan Trade and Commerce LLP will offer internship to interested students of Swaminarayan Siddhanta Institute of Technology at its offices / project-locations so that the students get hands on experience of live projects. The number of students, who can be considered for internship, would be as mutually decided between Aaryan Trade and Commerce LLP and Swaminarayan Siddhanta Institute of Technology every year.
- 4. Aaryan Trade and Commerce LLP will arrange to provide periodic field visit to faculty and students of Swaminarayan Siddhanta Institute of Technology at its project sites to enable them to get practical exposure and learning from interaction with members of Aaryan Trade and Commerce LLP projectteams.
- 5. Depending on requirement, Aaryan Trade and Commerce LLP may offer specific projects with identified deliverables to be executed by Swaminarayan Siddhanta Institute of Technology. Modalities including financials would be mutually world out for each project / assignment.

After Swaminarayan Siddhanta Institute of Technology starts offering courses relevant to the industry in which Aaryan Trade and Commerce LLP operates and based its requirements, Aaryan Trade and Commerce LLP may participate in campus placements, when it does so, Aaryan Trade and Commerce LLP will be given priority status like invitation for zero-day placement etc.

 Swaminarayan Siddhanta Institute of Technology will give preference to officials of Aaryan Trade and Commerce LLP in pursuing advance training and / or post-graduation studies at its institute.

Each Party shall appoint one nodal officer to periodically review and identify ways cooperation between them.



Principal
Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

This MoU will take effect from the date it is signed by representatives of the Parties. It will remain valid for five years, and may be continued thereafter after suitable review and agreement. Either Party may terminate the MoU by giving written notice to the other Party six months in advance. Once terminate, neither Aaryan Trade and Commerce LLP nor Swaminarayan Siddhanta Institute of Technology will be responsible for any losses, financial or otherwise, which the other Party may suffer. However, Aaryan Trade and Commerce LLP and Swaminarayan Siddhanta Institute of Technology will ensure that all activities in progress are allowed to be completed successfully.

This Mou is signed subject to approval of the respective academic / administrative bodies.

PARTNED

On behalf of Aaryan Trade and Commerce LLP

AARYAN TRADE AND COMMERCE LLP

Mornioo Signed by:

Name: Mr. Aaryan Siddiqui

Title: CEO

On behalf of Swaminarayan Siddhanta Institute of Technology

Signed by:

Name: Dr. Debabrata Dev

Title: Principal

Witness:

1. Mr. Sheilch Gaffar Md. Sharif

Date: 18.10.20

Witness:

1. Mr. Chandrashekhar Lodhi

Date: 18.10- 2021

ATTESTED

Sheetal Surendra Shukla

Advocate & Notary

401-B, Shyandri Apartment Opp. Osmania Hospital, Asani Nagar,

Nagpur-440013 (M.S.).



Kaimeshwar Dist. Nagour

441501

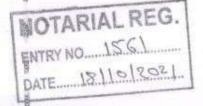
Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist Nagpur - 441501



महाराष्ट्र MAHARASHTRA

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MEMORANDUM OF UNDERSTANDING BETWEEN

Armaan Builders & Developers

And

Swaminarayan Siddhanta Institute of Technology

This Memorandum of Understanding (Mou) is entered between Armaan Builders & Developers a company incorporated under the Indian Companies Act, 1956 having its registered office, and represented by its undersigned of the ONE Part; and Swaminarayan Siddhanta Institute of Technology, a Maharashtra based college represented by undersigned of the OTHER PART; whereas Armaan Builders & Developers and Swaminarayan Siddhanta Institute of Technology shall be bereinafter jointly referred to as the "Parties" and singularly as a "Party".

The Parties has decided to agree to establish industry-academic collaboration in areas who of mutual interest and in accordance with terms and conditions set forth in this memorandum of Understanding (MoU), Armaan Builders & Developers and Swaminarayan Siddhanta Institute of Technology agree on following activities:



Principal
Swaminarayan Aiddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

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Principal
Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist, Nagpur : 441501



- Armaan Builders & Developers will provide support for designing the course curriculum at Swaminarayan Siddhanta Institute of Technology which would be relevant for industry. To achieve this, senior officials from Armaan Builders & Developers will work in close collaboration with faculty members of Swaminarayan Siddhanta Institute of Technology.
- 2. Once a curriculum is designed and course relevant to industry are offered at Swaminarayan Siddhanta Institute of Technology, senior officials from Armaan Builders & Developers will share their knowledge and experience by way of taking sessions, participating in seminars and other academic activities of Swaminarayan Siddhanta Institute of Technology.
- 3. Armaan Builders & Developers will offer internship to interested students of Swaminarayan Siddhanta Institute of Technology at its offices / projectlocations so that the students get hands on experience of live projects. The number of students, who can be considered for internship, would be as mutually decided between Armaan Builders & Developers and Swaminarayan Siddhanta Institute of Technology every year.
- 4. Armaan Builders & Developers will arrange to provide periodic field visit to faculty and students of Swaminarayan Siddhanta Institute of Technology at its project sites to enable them to get practical exposure and learning from interaction with members of Armaan Builders & Developers project-teams.
- Depending on requirement, Armaan Builders & Developers may offer specific projects with identified deliverables to be executed by Swaminarayan Siddhanta Institute of Technology. Modalities including financials would be mutually world out for each project / assignment.
- 6. After Swaminarayan Siddhanta Institute of Technology starts offering courses relevant to the industry in which Armaan Builders & Developers operates and based its requirements, Armaan Builders & Developers may participate in campus placements, when it does so, Armaan Builders & Developers will be given priority status like invitation for zero-day placement etc.
- Swaminarayan Siddhanta Institute of Technology will give preference to
 officials of Armaan Builders & Developers in pursuing advance training and /
 or post-graduation studies at its institute.

Each Party shall appoint one nodal officer to periodically review and identify ways cooperation between them.



Principal
Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

This MoU will take effect from the date it is signed by representatives of the Parties. It will remain valid for five years, and may be continued thereafter after suitable review and agreement. Either Party may terminate the MoU by giving written notice to the other Party six months in advance. Once terminate, neither Armaan Builders & Developers nor Swaminarayan Siddhanta Institute of Technology will be responsible for any losses, financial or otherwise, which the other Party may suffer. However, Armaan Builders & Developers and Swaminarayan Siddhanta Institute of Technology will ensure that all activities in progress are allowed to be completed successfully.

This Mou is signed subject to approval of the respective academic / administrative

On behalf of Armaan Builders & Developers

Signed by: Differential alopers

Name: Mr. Aqueel Siddiqui Proprietor

Title: CEO

Witness:

1. Mr. Shoeb Asad Khan

Date: 18-10-202

On behalf of Swaminarayan Siddhanta Institute of Technology.

Signed by: , Sulfavor

Name: Dr. Debabrata Dey

Title: Principal

Witness:

1. Mr. Kamlesh Raut

Date: 18-10.2021

ATTESTED

18/10/2021 Sheetal Surendra Shukla

Advocate & Notary 401-B, Shyandri Apartment Opp. Osmania Hospital Anant Nagar,

Nagpur-440013 (M.S.)

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Swaminarayan Siddhanta institute of Technology, Kalmeshwar, Dist. Nagpur - 441501

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MEMORANDUM OF UNDERSTANDING BETWEEN

KBM INDUSTRIES

And

Swaminarayan Siddhanta Institute of Technology

This Memorandum of Understanding (Mou) is entered between KBM INDUSTRIES a company incorporated under the Indian Companies Act, 1956 having its registered office, and represented by its undersigned of the ONE Part; and Swaminarayan Siddhanta Institute of Technology, a Maharashtra based college represented by undersigned of the OTHER PART; whereas KBM INDUSTRIES and Swaminarayan Siddhanta Institute of Technology shall be hereinafter jointly referred to as the "Parties" and singularly as a "Party".

The Parties has decided to agree to establish industry-academic collaboration in areas of mutual interest and in accordance with terms and conditions set forth in this Memorandum of Understanding (MoU), KBM INDUSTRIES and Swaminarayan Siddhanta Institute of Technology agree on following activities:

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Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

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Provipal
Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

- KBM INDUSTRIES will provide support for designing the course curriculum at Swaminarayan Siddhanta Institute of Technology which would be relevant for industry. To achieve this, senior officials from KBM INDUSTRIES will work in close collaboration with faculty members of Swaminarayan Siddhanta Institute of Technology.
- 2. Once a curriculum is designed and course relevant to industry are offered at Swaminarayan Siddhanta Institute of Technology, senior officials from KBM INDUSTRIES will share their knowledge and experience by way of taking sessions, participating in seminars and other academic activities of Swaminarayan Siddhanta Institute of Technology.
- 3. KBM INDUSTRIES Boxing of Perfection will offer internship to interested students of Swaminarayan Siddhanta Institute of Technology at its offices / project- locations so that the students get hands on experience of live projects. The number of students, who can be considered for internship, would be as mutually decided between KBM INDUSTRIES and Swaminarayan Siddhanta Institute of Technology every year.
- 4. KBM INDUSTRIES will arrange to provide periodic field visit to faculty and students of Swaminarayan Siddhanta Institute of Technology at its project sites to enable them to get practical exposure and learning from interaction with members of KBM INDUSTRIES project-teams.
- Depending on requirement, KBM INDUSTRIES may offer specific projects with identified deliverables to be executed by Swaminarayan Siddhanta Institute of Technology. Modalities including financials would be mutually world out for each project / assignment.

Teners warminarayan Siddhanta Institute of Technology starts offering controls relevant to the industry in which KBM INDUSTRIES operates and cases its requirements, KBM INDUSTRIES may participate in campus Blacknews, when it does so, KBM INDUSTRIES will be given priority status in itation for zero-day placement etc.

 Swaminarayan Siddhanta Institute of Technology will give preference to officials of KBM INDUSTRIES in pursuing advance training and / or postgraduation studies at its institute.

Each Party shall appoint one nodal officer to periodically review and identify ways cooperation between them.

Kalmeshwar e Dist. Nagpur 441501

Swaminarayay Siddhanta Institute of Technology, Kalmeshwar, Dist, Nagpur - 441501 This MoU will take effect from the date it is signed by representatives of the Parties. It will remain valid for five years, and may be continued thereafter after suitable review and agreement. Either Party may terminate the MoU by giving written notice to the other Party six months in advance. Once terminate, neither KBM INDUSTRIES nor Swaminarayan Siddhanta Institute of Technology will be responsible for any losses, financial or otherwise, which the other Party may suffer. However, KBM INDUSTRIES and Swaminarayan Siddhanta Institute of Technology will ensure that all activities in progress are allowed to be completed successfully.

This Mou is signed subject to approval of the respective academic / administrative bodies.

On behalf of KBM INDUSTRIES

Signed by

Signed by:

Name: Ms. Shruti Paliwal

Title: Director

Witness:

Technology

Signed by:

Title: Principal

1. Vikas Wankhede

1. Rohan Singh

Witness:

Date: 27.10.2021

On behalf of Swaminarayan Siddhanta Institute of

Name: Dr. Debabrata Dey









Principal Swaminarayan Mddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur - 441501



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MEMORANDUM OF UNDERSTANDING BETWEEN

Nuva Infrastructure Pvt. Ltd.

And

Swaminarayan Siddhanta Institute of Technology

This Memorandum of Understanding (Mou) is entered between Nuva Infrastructure Pvt. Ltd. a company incorporated under the Indian Companies Act, 1956 having its registered office, and represented by its undersigned of the ONE Part; and Swaminarayan Siddhanta Institute of Technology, a Maharashtra based college represented by undersigned of the OTHER PART; whereas Nuva Infrastructure Pvt. Ltd. and Swaminarayan Siddhanta Institute of Technology shall be hereinafter jointly referred to as the "Parties" and singularly as a "Party".

The Parties has decided to agree to establish industry-academic collaboration in areas of mutual interest and in accordance with terms and conditions set forth in this Memorandum of Understanding (MoU), Nuva Infrastructure Pvt. Ltd. and Swaminarayan Siddhanta Institute of Technology agree on following activities:



Principal
Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

प्रोतकापत्र कोणाकडे सादर करावसारी			
प्रतिज्ञापत्रासाठी कारण		******	
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Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501



- Nuva Infrastructure Pvt. Ltd. will provide support for designing the course curriculum at Swaminarayan Siddhanta Institute of Technology which would be relevant for industry. To achieve this, senior officials from Nuva Infrastructure Pvt. Ltd. will work in close collaboration with faculty members of Swaminarayan Siddhanta Institute of Technology.
- 2. Once a curriculum is designed and course relevant to industry are offered at Swaminarayan Siddhanta Institute of Technology, senior officials from Nuva Infrastructure Pvt. Ltd. will share their knowledge and experience by way of taking sessions, participating in seminars and other academic activities of Swaminarayan Siddhanta Institute of Technology.
- 3. Nuva Infrastructure Pvt. Ltd. will offer internship to interested students of Swaminarayan Siddhanta Institute of Technology at its offices / projectlocations so that the students get hands on experience of live projects. The number of students, who can be considered for internship, would be as mutually decided between Nuva Infrastructure Pvt. Ltd. and Swaminarayan Siddhanta Institute of Technology every year.
- 4. Nuva Infrastructure Pvt. Ltd. will arrange to provide periodic field visit to faculty and students of Swaminarayan Siddhanta Institute of Technology at its, project sites to enable them to get practical exposure and learning from interaction with members of Nuva Infrastructure Pvt. Ltd. project-teams.
- Depending on requirement, Nuva Infrastructure Pvt. Ltd. may offer specific projects with identified deliverables to be executed by Swaminarayan Siddhanta Institute of Technology. Modalities including financials would be mutually world out for each project / assignment.
- 6. After Swaminarayan Siddhanta Institute of Technology starts offering courses relevant to the industry in which Nuva Infrastructure Pvt. Ltd. operates and based its requirements, Nuva Infrastructure Pvt. Ltd. may participate in campus placements, when it does so, Nuva Infrastructure Pvt. Ltd. will be given priority status like invitation for zero-day placement etc.
 - Swaminarayan Siddhanta Institute of Technology will give preference to
 officials of Nuva Infrastructure Pvt. Ltd. in pursuing advance training and /
 or post-graduation studies at its institute.

Each Party shall appoint one nodal officer to periodically review and identify ways cooperation between them.



Principal
Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501

This MoU will take effect from the date it is signed by representatives of the Parties. It will remain valid for five years, and may be continued thereafter after suitable review and agreement. Either Party may terminate the MoU by giving written notice to the other Party six months in advance. Once terminate, neither Nuva Infrastructure Pvt. Ltd. nor Swaminarayan Siddhanta Institute of Technology will be responsible for any losses, financial or otherwise, which the other Party may suffer. However, Nuva Infrastructure Pvt. Ltd. and Swaminarayan Siddhanta Institute of Technology will ensure that all activities in progress are allowed to be completed successfully.

This Mou is signed subject to approval of the respective academic / administrative

On behalf of Nuva Infrastructure Pvt. Ltd.

Signed by:

Name: Mr. Sarang Raut

Title: Director

Π.

Signed by: , Sulp.ort

Siddhanta Institute of

On behalf of Swaminarayan

Name: Dr. Debabrata Dey

Title: Principal

Technology

Witness: Juni

1. Mr. Yogesh Janbandhu

Witness:

ı. Vikas Wankhede

Date: 18-10-2021

Nagpur Regn. No. 16148

Wy Term Expires on 02-01-2025

Date: 18.10.2021

ATTESTED

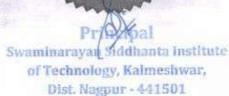
Sheetal Surendra Shukla

Advocate & Notary 401-B, Shyandri Apartment Opp Osmania Hospital, Anam Nagar, Nagpur-440013 (M.S.)



Kalmeshwar

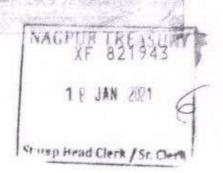
Dist, Nagpur





महाराष्ट्र MAHARASHTRA

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MEMORANDUM OF UNDERSTANDING BETWEEN

SUNCITY Group

And

Swaminarayan Siddhanta Institute of Technology

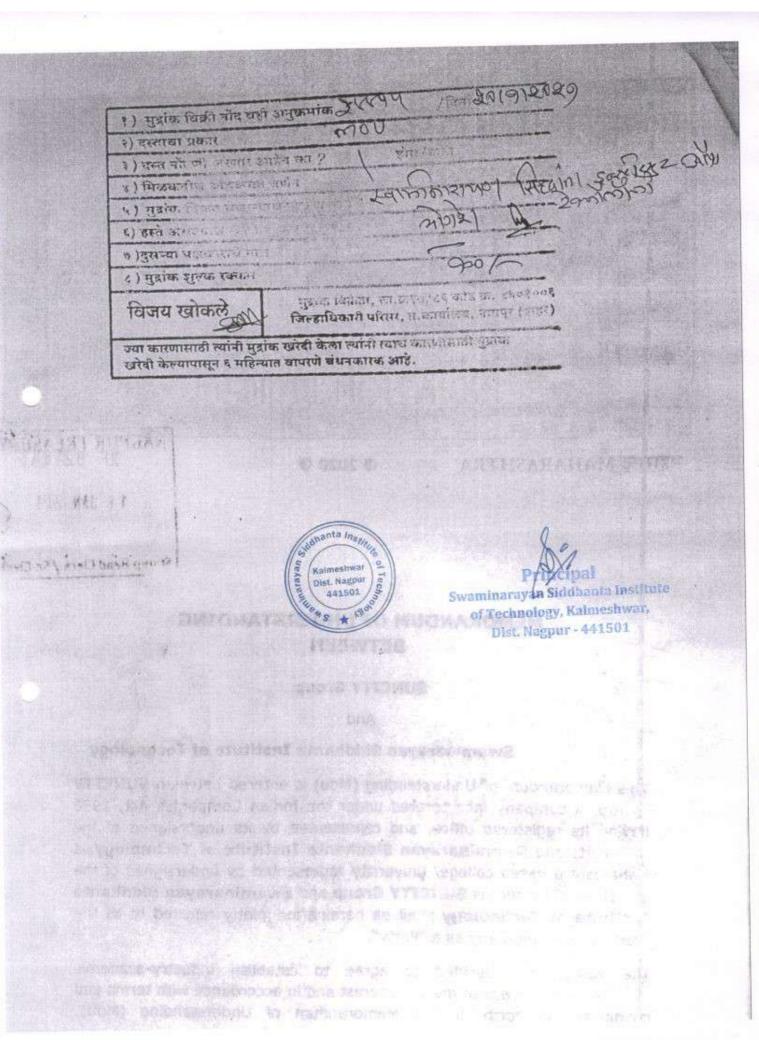
This Memorandum of Understanding (Mou) is entered between SUNCITY Group, a company incorporated under the Indian Companies Act, 1956 having its registered office, and represented by its undersigned of the ONE Part; and Swaminarayan Siddhanta Institute of Technology, a Maharashtra based college/ university represented by undersigned of the OTHER PART; whereas SUNCITY Group and Swaminarayan Siddhanta Institute of Technology shall be hereinafter jointly referred to as the "Parties" and singularly as a "Party".

The Parties has decided to agree to establish industry-academic collaboration in areas of mutual interest and in accordance with terms and conditions set forth in this Memorandum of Understanding (MoU),



Swaminarayan Siddhanta Institute

of Technology Rantesinson,
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SUNCITY Group and Swaminarayan Siddhanta Institute of Technology agree on following activities:

- SUNCITY Group will offer summer internship to interested students
 of Swaminarayan Siddhanta Institute of Technology at its offices
 / project- locations so that the students get hands on experience of
 live projects. The number of students, who can be considered for
 internship, would be as mutually decided between SUNCITY Group
 and Swaminarayan Siddhanta Institute of Technology every
 year.
- SUNCITY Group will arrange to provide periodic field visit to faculty and students of Swaminarayan Siddhanta Institute of Technology at its project sites to enable them to get practical exposure and learning from interaction with members of SUNCITY Group project-teams.
- Depending on requirement, SUNCITY Group may offer specific projects with identified deliverables to be executed by Swaminarayan Siddhanta Institute of Technology. Delhi modalities including financials would be mutually world out for each project/assignment.
- 4. After Swaminarayan Siddhanta Institute of Technology starts offering courses relevant to the industry in which SUNCITY Group operates and based its requirements, SUNCITY Group may participate in campus placements, when it does so, SUNCITY Group will be given priority status like invitation for zero-day placement etc.
- Swaminarayan Siddhanta Institute of Technology will give preference to officials of SUNCITY Group in pursuing advance training and/ or post graduation studies at its various schools.

Each Party shall appoint one nodal officer to periodically review and identify ways cooperation between them.

This MoU will take effect from the date it is signed by representatives of the Parties. It will remain valid for five years, and may be continued thereafter after suitable review and agreement. Either Party may terminate the MoU by giving written notice to the other Party six months in advance. Once terminate, neither SUNCITY Group nor Swaminarayan Siddhanta Institute of Technology will be responsible for any losses, financial or otherwise, which the other Party may suffer. However, SUNCITY Group and Swaminarayan Siddhanta Institute of Technology will ensure that all activities in progress are allowed to be completed successfully.



This Mou is Signed subject to approval of the respective academic/administrative bodies.

On behalf of SUNCITY Group

On behalf of Swaminarayan Siddhanta Institute of Technology

Signed SUNCITY GROUP Candhi Nagar, Mumbal- 400076

Name: Satish Thakur

Title: Managing Director

SUNCITY Group

Signed by:

Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Name: Dr. Arif Khan

Title: Principal,

Swaminarayan Siddhanta Institute of

Technology



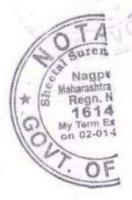
Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur - 441501

anta Institu

Kalmeshwar



Principal
Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur - 441501



- Web Dreamworks Pvt. Ltd. will provide support for designing the course curriculum at Swaminarayan Siddhanta Institute of Technology which would be relevant for industry. To achieve this, senior officials from Web Dreamworks Pvt. Ltd. will work in close collaboration with faculty members of Swaminarayan Siddhanta Institute of Technology.
- 2. Once a curriculum is designed and course relevant to industry are offered at Swaminarayan Siddhanta Institute of Technology, senior officials from Web Dreamworks Pvt. Ltd. will share their knowledge and experience by way of taking sessions, participating in seminars and other academic activities of Swaminarayan Siddhanta Institute of Technology.
- 3. Web Dreamworks Pvt. Ltd. will offer internship to interested students of Swaminarayan Siddhanta Institute of Technology at its offices / projectlocations so that the students get hands on experience of live projects. The number of students, who can be considered for internship, would be as mutually decided between Web Dreamworks Pvt. Ltd. and Swaminarayan Siddhanta Institute of Technology every year.
- 4. Web Dreamworks Pvt. Ltd. will arrange to provide periodic field visit to faculty and students of Swaminarayan Siddhanta Institute of Technology at its project sites to enable them to get practical exposure and learning from interaction with members of Web Dreamworks Pvt. Ltd. project-teams.
- Depending on requirement, Web Dreamworks Pvt. Ltd. may offer specific projects with identified deliverables to be executed by Swaminarayan Siddhanta Institute of Technology. Modalities including financials would be mutually world out for each project / assignment.
- 6. After Swaminarayan Siddhanta Institute of Technology starts offering courses relevant to the industry in which Web Dreamworks Pvt. Ltd. operates and based its requirements, Web Dreamworks Pvt. Ltd. may participate in campus placements, when it does so, Web Dreamworks Pvt. Ltd. will be given priority status like invitation for zero-day placement etc.
- Swaminarayan Siddhanta Institute of Technology will give preference to officials of Web Dreamworks Pvt. Ltd. in pursuing advance training and / or post-graduation studies at its institute.

Each Party shall appoint one nodal officer to periodically review and identify ways cooperation between them.



Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur - 441501



This MoU will take effect from the date it is signed by representatives of the Parties. It will remain valid for five years, and may be continued thereafter after suitable review and agreement. Either Party may terminate the MoU by giving written notice to the other Party six months in advance. Once terminate, neither Web Dreamworks Pvt. Ltd. nor Swaminarayan Siddhanta Institute of Technology will be responsible for any losses, financial or otherwise, which the other Party may suffer. However, Web Dreamworks Pvt. Ltd. and Swaminarayan Siddhanta Institute of Technology will ensure that all activities in progress are allowed to be completed successfully.

This Mou is signed subject to approval of the respective academic / administrative bodies.

Kalmeshwar

Dist. Nagpur 441501

On behalf of Web Dreamworks Pvt. Ltd.

Signed by: ()

Name; Mr. Sachin Patil

Title: CEO

Witness: (

1. Mr. Yogesh Janbandhu

Date: 18.10.20

On behalf of Swaminarayan Siddhanta Institute of Technology

Signed by: , S

Name: Dr. Debabrata Dey

Title: Principal

Witness:

ı. Mr. Kamlesh Raut

Sheetal Surendra Shut

401-B, Shyandri Apartme Opp. Osmania Hospital. Anant hours

Nagpur-440013 (M.S.).

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Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur - 441501

Swaminarayan Siddhanta Institute of Technology

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List of students undertaken project work/field work/internship during academic year 2021-22

S.No.	Name of students	Branch	Year/ Semester	Project Work/ Field Work/ Internship
1.	Md. Amin Parvez	Civil Engineering	4th Yr/8th Sem	Project Work
2.	Nidhi Sharma	Civil Engineering	4th Yr/8th Sem	Project Work
3.	Prashant Joshi	Civil Engineering	4th Yr/8th Sem	Project Work
4.	Rahul Borkar	Civil Engineering	4th Yr/8th Sem	Project Work
5.	Atif Zaheer	Civil Engineering	4th Yr/8th Sem	Project Work
6.	Meraj Ali	Civil Engineering	4th Yr/8th Sem	Project Work
7.	Kanta Sahu	Civil Engineering	4th Yr/8th Sem	Project Work
8.	Harish Lilhare	Civil Engineering	4th Yr/8th Sem	Project Work
9.	Kartik Gaurkar	Civil Engineering	4th Yr/8th Sem	Project Work
10.	Sharafraj Khan Hakue	Civil Engineering	4th Yr/8th Sem	Project Work
11.	- Mrunal Kelkar	Civil Engineering	4th Yr/8th Sem	Project Work
12.	Ankit Khadse	Civil Engineering	4th Yr/8th Sem	Project Work
13.	Sweety Meshram	Civil Engineering	4th Yr/8th Sem	Project Work
14.	Nikhil Ramteke	Civil Engineering	4th Yr/8th Sem	Project Work
15.	Shubhangi Sakhare	Civil Engineering	4th Yr/8th Sem	Project Work
16.	Shivajee Singh	Civil Engineering	4th Yr/8th Sem	Project Work
17.	 Harshali Umredkar 	Civil Engineering	4th Yr/8th Sem	Project Work
18.	Akash Charde	Civil Engineering	4th Yr/8th Sem	Project Work
19.	Rohit Pimpalkar	Civil Engineering	4th Yr/8th Sem	Project Work
20.	Saurav Ponikar	Civil Engineering	4th Yr/8th Sem	Project Work
21.	Shubham Kelzarkar	Civil Engineering	4th Yr/8th Sem	Project Work
22.	 Vishal Gharat 	Civil Engineering	4th Yr/8th Sem	Project Work
23.	Ajay Nageshwar	Civil Engineering	4th Yr/8th Sem	Project Work
24.	Ajay Vitalkar	Civil Engineering	4th Yr/8th Sem	Project Work
25.	Suresh Meshram	Civil Engineering	4th Yr/8th Sem	Project Work
26.	Tanveer Hussain	Civil Engineering	4th Yr/8th Sem	Project Work
27.	Swadeep Shambharkar	Civil Engineering	4th Yr/8th Sem	Project Work
28.	Shaharukalli Saiyyad	Civil Engineering	4th Yr/8th Sem	Project Work
29.	Ashish Khadilkar	Civil Engineering	4th Yr/8th Sem	Project Work
30.	Priti Tayade	Civil Engineering	4th Yr/8th Sem	Project Work
31.	Shivkumar Netrogoankar	Civil Engineering	4th Yr/8th Sem	Project Work
32.	Akshay Khokle	Civil Engineering	4th Yr/8th Sem	Project Work
33.	Ranjeet Yesankar	Civil Engineering	4th Yr/8th Sem	Project Work
34.	Navin Gaikawad	Civil Engineering	4th Yr/8th Sem	Project Work
35.	Anjali Dilip Ukey	Civil Engineering	3rd Yr/6th Sem	Internship
36.	Darshana Bhashkar Dautpure	Civil Engineering	3rd Yr/6th Sem	Internship



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38. Karishma 39. Koma 40. May 41. Nisha 42. Prat 43. Smruti 44. Sona 45. Supriya 46. Vaishnay 47. Yogita 48. Akshay 49. Amar 50. Amin 51. Ankit Sha 52. Ankusl 53. Bablu N 54. Badalkum 55. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Mohan 68. Mukesh G 69. Navjeevan 70. Nikhil Ch </th <th>to Dhoowest Dueto de</th> <th>Civil Produced</th> <th>and ar / oth o</th> <th></th>	to Dhoowest Dueto de	Civil Produced	and ar / oth o	
39. Koma 40. May 41. Nisha 42. Prat 43. Smruti 44. Sona 45. Supriya 46. Vaishnay 47. Yogita 48. Akshay 49. Amar 50. Amin 51. Ankit Sha 52. Ankusl 53. Bablu N 54. Badalkum 55. Devansh 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Mohan 68. Mukesh G 69. Navjeevan 70. Nikhil Ch <td>ta Bhagwat Pustode</td> <td>Civil Engineering</td> <td>3rd Yr/6th Sem</td> <td>Internship</td>	ta Bhagwat Pustode	Civil Engineering	3rd Yr/6th Sem	Internship
40. May 41. Nisha 42. Prat 43. Smruti 44. Sona 45. Supriya 46. Vaishnay 47. Yogita 48. Akshay 49. Amar 50. Amin 51. Ankit Sha 52. Ankusl 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	a Ashokrao Kohale	Civil Engineering	3rd Yr/6th Sem	Internship
41. Nisha 42. Prat 43. Smruti 44. Sona 45. Supriya 46. Vaishnav 47. Yogita 48. Akshay 49. Amar 50. Amin 51. Ankit Sha 52. Ankus 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	al Santosh Ingle	Civil Engineering	3rd Yr/6th Sem	Internship
42. Prat 43. Smruti 44. Sona 45. Supriya 46. Vaishnay 47. Yogita 48. Akshay 49. Amar 50. Amin 51. Ankit Sha 52. Ankusl 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Mohan 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. <td< td=""><td>yuri Bawankar</td><td>Civil Engineering</td><td>3rd Yr/6th Sem</td><td>Internship</td></td<>	yuri Bawankar	Civil Engineering	3rd Yr/6th Sem	Internship
43. Smruti 44. Sona 45. Supriya 46. Vaishnav 47. Yogita 48. Akshay 49. Amar 1 50. Amin 51. Ankit Sha 52. Ankus 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 66. Mohan K 67. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	Vijay Pakmode	Civil Engineering	3rd Yr/6th Sem	Internship
44. Sona 45. Supriya 46. Vaishnav 47. Yogita 48. Akshay 49. Amar 50. Amin 51. Ankit Sha 52. Ankus 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 66. Mohan K 67. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	tiksha Wanjari	Civil Engineering	3rd Yr/6th Sem	Internship
45. Supriya 46. Vaishnav 47. Yogita 48. Akshay 49. Amar 1 50. Amin 51. Ankit Sha 52. Ankusl 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	i Kisan Turankar	Civil Engineering	3rd Yr/6th Sem	Internship
46.	l Bhojraj Lanje	Civil Engineering	3rd Yr/6th Sem	Internship
47. Yogita 48. Akshay 49. Amar 1 50. Amin 51. Ankit Sha 52. Ankusl 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	Damodar Nikule	Civil Engineering	3rd Yr/6th Sem	Internship
48. Akshay 49. Amar 1 50. Amin 51. Ankit Sha 52. Ankusl 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	vi Diliprao Dahake	Civil Engineering	3rd Yr/6th Sem	Internship
49. Amar 1 50. Amin 51. Ankit Sha 52. Ankusl 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil Ch 72. Omkar Gaj 73. Panka 74. Pramod Wa	Vijay Bhandarkar	Civil Engineering	3rd Yr/6th Sem	Internship
50. Amin 51. Ankit Sha 52. Ankusl 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil Ch 72. Omkar Gaj 73. Panka 74. Pramod Wa	Pramod Bhagwat	Civil Engineering	3rd Yr/6th Sem	Internship
51. Ankit Sha 52. Ankusl 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moh 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil Ch 72. Omkar Gaj 73. Panka 74. Pramod Wa	Nareshrao Mude	Civil Engineering	3rd Yr/6th Sem	Internship
52. Ankusl 53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil Ch 72. Omkar Gaj 73. Panka 74. Pramod Wa	Taimur Sheikh	Civil Engineering	3rd Yr/6th Sem	Internship
53. Bablu N 54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moh 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil Ch 72. Omkar Gaj 73. Panka 74. Pramod Wa	aradrao Tembhekar	Civil Engineering	3rd Yr/6th Sem	Internship
54. Badalkum 55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moh 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil Ch 72. Omkar Gaj 73. Panka 74. Pramod Wa	h Rajesh Jaiswal	Civil Engineering	3rd Yr/6th Sem	Internship
55. Devanand 56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Mohan K 69. Navjeevan 70. Nikhil Ch 71. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	lilkanth Goradwar	Civil Engineering	3rd Yr/6th Sem	Internship
56. Devansh 57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil Ch 72. Omkar Gaj 73. Panka 74. Pramod Wa	nar Ruprao Dongare	Civil Engineering	3rd Yr/6th Sem	Internship
57. Gagan 58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moha 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil Ch 72. Omkar Gaj 73. Panka 74. Pramod Wa	l Digambar Hingole	Civil Engineering	3rd Yr/6th Sem	Internship
58. Himanshu 59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moh 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil Ch 72. Omkar Gaj 73. Panka 74. Pramod Wa	hu Vikas Ghodam	Civil Engineering	3rd Yr/6th Sem	Internship
59. Hrutik T 60. Imra 61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Mohan K 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	Ramesh Dahikar	Civil Engineering	3rd Yr/6th Sem	Internship
60. Imra 61. Kanai 62. Kapil Bl 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moh 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka	Rajendra Nawkhare	Civil Engineering	3rd Yr/6th Sem	Internship
61. Kanai 62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moh 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka	irupati Nalguntha	Civil Engineering	3rd Yr/6th Sem	Internship
62. Kapil Bh 63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moh 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka	n Irshad Khan	Civil Engineering	3rd Yr/6th Sem	Internship
63. Kartik Mu 64. M Abrar 65. Moha 66. Mohan K 67. Moh 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	Narayan Sarkar	Civil Engineering	3rd Yr/6th Sem	Internship
64. M Abrar 65. Moha 66. Mohan K 67. Moh 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	hagwan Shamkule	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
65. Moha 66. Mohan K 67. Moh 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka	ırlidhar Sakharwade	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
66. Mohan K 67. Mohan K 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	r M Yusuf Dosani	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
67. Moho 68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	ımmad Sufiyan	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
68. Mukesh G 69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka	Crushnarao Bijawe	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
69. Navjeevan 70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka	d Owais Raza	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
70. Nikhil Ch 71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	Govardhan Katewar	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
71. Nikhil 72. Omkar Gaj 73. Panka 74. Pramod Wa	Kasandas Chavhan	Civil Engineering	3rd Yr/6th Sem	Internship
72. Omkar Gaj 73. Panka 74. Pramod Wa	andrakant Bhosale	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
73. Panka 74. Pramod Wa	Namdeo Kuthe	Civil Engineering	3rd Yr/6th Sem	Internship
74. Pramod Wa	jananrao Kshirsagar	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
	j Shivaji Bedre	Civil Engineering	3rd Yr/6th Sem	Internship
75. Prathan	asudeo Wadibhasme	Civil Engineering	3rd Yr/6th Sem	Internship
	n Ajay Dhomne	Civil Engineering	3rd Yr/6th Sem	Internship
	Subhas Rathod	Civil Engineering	3rd Yr/6th Sem	Internship
	atrugan Khajuriya	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
	Bhersing Machhirke	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
	Talha Ali Khan	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
80. Rohit U	Umesh Thakare	Civil Engineering	3 rd Yr/ 6 th Sem	Internship



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81.	Rushikesh Babanrao Gahukar	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
82.	Sachin Changdeo Zade	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
83.	Sachin Lokchand Katre	Civil Engineering	3rd Yr/6th Sem	Internship
84.	Sagar Shankar Puppalwar	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
85.	Sahil Narendra Ladse	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
86.	Santosh Omprakash Pal	Civil Engineering	3 rd Yr/ 6 th Sem	Internship
87.	Saurabh Shivajirao Padmane	Civil Engineering	3rd Yr/6th Sem	Internship
88.	Shaikh Mudassir Shikh Rahim	Civil Engineering	3rd Yr/6th Sem	Internship
89.	Sharven Sunil Ghurde	Civil Engineering	3rd Yr/6th Sem	Internship
90.	Shashank Ravindra Mahasaheb	Civil Engineering	3rd Yr/6th Sem	Internship
91.	Shekh Saqib Ahamad Abdul	Civil Engineering	3rd Yr/6th Sem	Internship
92.	Shivkumar Matkawala	Civil Engineering	3rd Yr/6th Sem	Internship
93.	Shubham Anil Chaudhari	Civil Engineering	3rd Yr/6th Sem	Internship
94.	Shubham Bhushan Belkode	Civil Engineering	-3rd Yr/6th Sem	Internship
95.	Sourabh Laxmikant Katlawar	Civil Engineering	3rd Yr/6th Sem	Internship
96.	Suhas Naraynrao Sasankar	Civil Engineering	3rd Yr/6th Sem	Internship
97.	Sumedh Vilas Dhawale	Civil Engineering	3rd Yr/6th Sem	Internship
98.	Swapnil Arun Gaikwad	Civil Engineering	3rd Yr/6th Sem	Internship
99.	Vivek Chintaman Waghade	Civil Engineering	3rd Yr/6th Sem	Internship
100.	Yogesh Ramkrushna Jugnaike	Civil Engineering	3rd Yr/6th Sem	Internship
101.		Mechanical	4th Yr/8th Sem	Project Work
	Ashish Nagmote	Engineering		
102.	Chaileant Tatada	Mechanical	4th Yr/8th Sem	Project Work
	Shrikant Tatode	Engineering		
103.	Mahd Dana	Mechanical	4th Yr/8th Sem	Project Work
	Mohd. Raza	Engineering		
104.	Chukham Bhalavi	Mechanical	4th Yr/8th Sem	Project Work
	Shubham Bhalavi	Engineering		
105.	C!! W!!	Mechanical	4th Yr/8th Sem	Project Work
	Swapnil Wanjari	Engineering		
106.	Varial litardes I annual	Mechanical	3rd Yr/6th Sem	Internship
	Komal Jitendra Lonpande	Engineering		
107.	Character I Day 1-17 D	Mechanical	3rd Yr/6th Sem	Internship
	Shyamal Pundalikrao Dugane	Engineering		
108.	DI 1 C': D'	Mechanical	3rd Yr/6th Sem	Internship
	Bhushan Sitaram Bisen	Engineering	0 00111	memonip
109.	T 1 1 27 2	Mechanical	3rd Yr/6th Sem	Internship
	Lokesh Narayan Raut	Engineering		p
110.	Mi D-6	Mechanical	3rd Yr/6th Sem	Internship
Mirza Refa	Mirza Refaquat Muneeb Mirza	Engineering	The Contract of the Contract o	v
111.		Mechanical	3rd Yr/6th Sem	Internship
	Neeraj Vinod Guhe	Engineering	The Selli	memomp
112.	Prashant Shamrao Zode	Mechanical	3rd Yr/6th Sem	Internship
114.			AII V DOIII	HILLEHISHID



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113.	Saurabh Gajanan Shirbhate	Mechanical Engineering	3rd Yr/6th Sem	Internship
114.	Sayed Mobin Sayed Azim	Mechanical Engineering	3 rd Yr/ 6 th Sem	Internship
115.	Mosami Tonge	Electronics & Telecommunication Engineering	4 th Yr/ 8 th Sem	Project Work
116.	Shewta Rokde	Electronics & Telecommunication Engineering	4 th Yr/8 th Sem	Project Worl
117.	Sneha Langde	Electronics & Telecommunication Engineering	4 th Yr/8 th Sem	Project Worl
118.	Prasad Dongre	Electronics & Telecommunication Engineering	4th Yr/8th Sem	Project Worl
119.	Komal Meshram	Electronics & Telecommunication Engineering	4 th Yr/8 th Sem	Project Worl
120.	Shubham Pandhram	Electronics & Telecommunication Engineering	4 th Yr/ 8 th Sem	Project Worl
121.	Shubham Tandulkar	Electronics & Telecommunication Engineering	4 th Yr/ 8 th Sem	Project Worl
122.	Siddhi Alkesh Pandey	Electronics & Telecommunication Engineering	3 rd Yr/ 6 th Sem	Internship
123.	Shital Anandrao Maraskolhe	Electronics & Telecommunication Engineering	3 rd Yr/ 6 th Sem	Internship
124.	Himanshu Bachle	Computer Engineering	4th Yr/8th Sem	Project Work
125.	Mona Prakash Vishwakarma	Computer Engineering	3rd Yr/6th Sem	Internship
126.	Nikeeta Kailash Ambule	Computer Engineering	3rd Yr/6th Sem	Internship
127.	Abhit Arvind Mishra	Computer Engineering	3rd Yr/6th Sem	Internship
128.	Harshal Arvind Singatwar	Computer Engineering	3rd Yr/6th Sem	Internship
129.	Shaikh Faizan Mohd Ajaz	Computer Engineering	3rd Yr/6th Sem	Internship

Reshwar of Technology, Kalmeshwar, Dist. Nagpur 441501

Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur 441501

STUDY OF FLUORIDE CONTENT IN GROUNDWATER OF CHANDRAPUR REGION AND FLUORIDE REMOVAL BY ADSORPTION TECHNIQUES

Dissertation submitted
In
Partial fulfillment of the requirement for the award of the degree
Of

Bachelor of Technology

In

Civil Engineering

By

Md Amin Parvez

Nidhi Ramnaresh Sharma

Prashant Govidrao Joshi

Rahul Borkar

Atif Abdul Zaheer

Under the guidance of

Prof. Hiradas G. Lilhare

Department of Civil Engineering, SSIT, Kalmeshwar, Nagpur



Sarvasiddhant Education Society's Swaminarayan Siddhanta Institute of Technology Department of Civil Engineering

RASTRASANT TUKDOJI MAHARAJ NAGPUR UNIVERSITY NAGPUR, MAHARASTRA SESSION: 2021-2022



Principal Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur 441501

Certificate

The thesis titled "Study of Fluoride Content of Groundwater of Chandrapur Region and Fluoride Removal by Adsorption Technique" submitted by Atif Abdul Zaheer, Nidhi Ramnaresh Sharma, Prashant Govidrao Joshi, Rohit Shard Pimpalkar, and Md Amin Md Parvez Umar Sheikh for the award of degree of Bachelor of Technology in Civil Engineering has been carried out under my supervision at the Department of Civil Engineering of Swaminarayan Siddhanta Institute of Technology, Nagpur . The work is comprehensive, complete and fit for evaluation.

Prof. Hizaddas G. Lilhare.

Dept. of Civil Engg.

Head of the Department Swaminarayan Siddhanta Instituta

Swaminarayan Siddhanta Institute of Technology, Nagpur

Forwarded by -

Dr. Debabrata Dey

Principal

Swaminarayan Siddhanta Institute Principal, of Technology, Kalmeshwar, Dist. Nagpur 441501

Swaminarayan Siddhanta Institute of Technology, Nagpur

External Examiner

has been held on 24/06/22 and accepted. The B.E"Viva -Voce Examination of

Signature of External Examiner

Dist. Nagpur

Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur 441501

ABSTRACT

Groundwater is the most important source of water to meet the requirement of consumption for drinking water, irrigation. India is the largest user of groundwater in the world. It uses an estimated 230 cubic kilometers of groundwater per year - over a quarter of the global total. More than 60% of irrigated agriculture and 85% of drinking water supplies are dependent on groundwater. Fluorine is widely dispersed in nature. It is about 0.06 to 0.09 % of component on Earth's crust and is estimated to be the 13th most abundant element on our planet. It is the most electronegative of all chemical elements, and as a result, it never exists in elemental form, but rather combines with other elements. Fluoride is distributed universally throughout soils, plants, and animals, and is assumed to be an essential element in animals, including humans. Fluoride has an important role in bone mineralization and formation of dental enamels. Fluoride, when consumed in inadequate quantities (less than 0.5 ppm), causes health problems such as dental caries, lack of formation of dental enamel, and reduced bone mineralization, especially among children. In contrast, when Fluoride is consumed in excess (more than 1 ppm), health problems may result, which equally affect the young and old (WHO 1996). At higher fluoride concentrations, metabolic processes are affected in humans, and overexposed individuals may suffer from skeletal or dental fluorosis, non-skeletal manifestations, or combinations of these maladies

Among the three forms of environmental media (air, soil, and water), groundwater is the major source of fluoride exposure in humans. To sustain life, freshwater must be continuously available to humans. Throughout history, humans have relied on groundwater as a source of drinking water, and even today, more than half of the world's population depends on sources of groundwater for survival. The levels of natural fluoride that occur in groundwater range from 0.5 to 48 ppm, or more. Common symptoms of fluoride toxicity in humans are stained teeth, paralyzing bone disease, stooped backs, crooked hands and legs, blindness, and other deformities. W.H.O has stated that fluoride should be in the range of 0.1 to 0.5ppm. The Indian Standard for fluoride contents is 1 ppm. This shows that the requirement of fluoride content changes and it depends on the geographical condition and the age of human



Principal
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Domestic Wastewater Treatment by Root Zone Technology using macrophytes

Dissertation submitted
In
Partial fulfillment of the requirement for the award of the degree
Of

Bachelor of Technology

In

Civil Engineering

By

- MERAJ ALI

KANTA BISUN SAHU

HARISH KUMAR LILHAR

KARTIK SADANAND GAURKAR

SHARAFRAJ KHAN

MRUNAL ARJUN KRLKAR

Under the guidance of

Prof. Hiradas G. Lilhare

Department of Civil Engineering, SSIT, Kalmeshwar, Nagpur



Sarvasiddhant Education Society's Swaminarayan Siddhanta Institute of Technology Department of Civil Engineering

RASTRASANT TUKDOJI MAHARAJ NAGPUR UNIVERSITY NAGPUR, MAHARASTRA SESSION: 2021-2022



Principal Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur 44150)

Certificate

The thesis titled "Domestic Wastewater Treatment by Root Zone Technology using macrophytes" submitted by Student1, Student2, Student3, Student4, Student5 for the award of degree of Bachelor of Technology in Civil Engineering has been carried out under my supervision at the Department of Civil Engineering of Swaminarayan Siddhanta Institute of Technology; Nagpur .The work is comprehensive, complete and fit for evaluation.

Prof. Pratik Patil

Head of the Department

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has been held on 24 06 22 and

Signature of External Examiner

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Principal Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur 441501

Abstract

Every day, we face various environmental issues. The growing population and human activities deplete and degrade the quality and quantity of available water resources. Water is used for a variety of domestic and industrial purposes. Because of the rapid growth of industrialization and urbanization, water has become impure, containing so many insoluble materials and ingredients that it has become wastewater. Nowadays, the world is grappling with major water-related issues. Adopting well-defined methodologies at an affordable cost by utilizing natural resources is critical for effective water use. This project examines Root Zone Technology by using macrophytes, which is a low-cost and environmentally friendly method of wastewater treatment. To effectively treat domestic and industrial effluents, the root zone treatment and macrophytes treatment system uses a natural method. The wetlands bed will be divided into number of zones: soil layer, sand layer, coal layer and aggregate layer. Root zone plants (Colocasia esculenta) planted on the top layer and then treated with floating macrophytes (Pistia stratiotes/Spirodela and Lemna). When wastewater passes through the top and intermediate layers, all suspended solids become trapped in the pores of soil and sand, and the remaining solids are removed by bacteria. After passing through filter bed water is allow to store in another chamber where water is treated with floating macrophytes which utilizes dissolve and suspended nutrients and helps to reduce concentration of pollution of waste water. The effluent characteristics such as pH, color, odor, BOD, COD, TDS, TSS, Nitrogen, and Phosphate determined. The result shows a reduction in parameters Because of the longer detention periods, the removal rate is increasing.

The goal of this project is to determine which wastewater treatment method is the most cost-effective in comparison to traditional wastewater treatment methods. The conventional method is unsuitable for rural areas due to its high cost. One of the alternative wastewater treatment technologies is the Root Zone technology combine with macrophytes. This Treatment process is simple to use, requires little installation, and requires little maintenance. It is also less expensive than traditional treatment systems. To reap the benefits of this technology and ensure long-term development, it must be fully utilized in developing countries such as India.

Keywords: Root Zone technology, Root Zone, macrophytes, Phragmitesaustralis, canna Indica, Spirodela polyrrhiza. rhizosphere

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Principal Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur 44150)

A PRELIMINARY REPORT ON

HYDRAULIC TRAFFIC REDUCE SYSTEMS (HTRS)

SUBMITTED TO THE RASHTRASANT TUKADOJI MAHARAJ UNIVERSITY, NAGPUR IN

THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE

AWARD OF THE DEGREE OF

BACHELOR OF ENGINEERING (CIVIL ENGINEERING)

SUBMITTED BY

ANKIT C. KHADSE

SWEETY MESHRAM

NIKHIL K. RAMTEKE

SHUBHANGI SHAKHARE

SHIVAJI SINGH

HARSHALI UMREDKAR

PROJECT GUIDE

PROF. ANKUSH BANSOD

Department of Civil Engineering



SWAMINARAYAN SIDDHANTH INSTITUTE OF TECHNOLOGY ,NAGPUR.

(Sarvasiddhanta Education Society's)

(2021-2022)

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Principal
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SWAMINARAYAN SIDDHANTH INSTITUTE OF TECHNOLOGY ,NAGPUR

(Sarvasiddhanta Education Society's)

(2021-2022)

CERTIFICATE

This is to certify that the project report entitles,

HYDRAULIC TRFFIC REDUCE SYSTEMS (HTRS)

Submitted By,

ANKIT C. KHADSE

SWEETY MESHRAM

NIKHIL K. RAMTEKE

SHUBHANGI SAKHARE

SHIVAJI SINGH

HARSHALI UMREDKAR

Are bonafide students of this institute and the work has been carried out by him/her under the

Supervision of Prof. ANKUSH BANSOD and it is approved for the partial fulfilment of the requirement of RTMNU, NAGPUR for the award of the degree of Bachelor of Engineering

(Civil Engineering).

USH BANSOD

Project Guide

DR. D.DEY

Principal Swaminarayan Siddh: Arincipaltute

of Technology, Kalmeshwar,-Swaminarayan Siddhanth 4 lhistitute of Technology, Nagpur

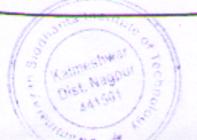
Head of Department

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Swaminarayan Siddhanta Institute of Technology, Kalmeshwar,

Dist. Nagpur 441501

63



ABSTRACT

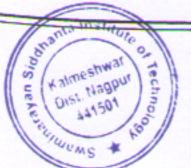
Vehicular traffic is the major problem in metropolitan cities because traffic congestion is increasing rapidly at signalized intersections; it results in chronic situation in dense downtown areas. Traffic congestion is also major problem for smooth transportation. So, here we adopted a mechanism which minimizes traffic problems and that mechanism is called hydraulic machine. Hydraulic machine is the mechanisms which lift the things up and down at a particular height. Our purpose is to create a mechanism which lifts the footpath at signalized intersection up and down when there is more traffic at signalized intersection. We studied about the various congested signalized intersection areas and then selected Cotton Market & Baidyanath Square for our study. We collected the peak hour traffic data using survey method and categorized the vehicles into different classes.

Calculate the queue length at cotton market square using normal footpath and again calculate the queue length for same traffic data by using hydraulic footpath. On comparing the reduction of queue length percentage we observed that hydraulic footpath is more preferable than the normal footpath for congested traffic at signalized intersection, because it reduce approximate 60% queue length. Also, hydraulic footpath gives extra space at signalized intersection and it helps to increase service volume.

Keywords :-

Vehicular traffic Cotton Market Square, ITDP, IRC.

-



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Department of Civil Engineering

SESSION 2021-22

CERTIFICATE

Forwarded here with the thesis entitled "Experimental Study of Pervious Concrete" by Mr. Akash Charde, Mr. Rohit Pimpalkar, Mr. Saurav Poinkar, Mr. Shubham Kelzarkar, Mr. Vishal Gharat, student of this college in fulfilment of the requirement for the award of Bachelor Degree of B.E. (Civil engineering) in the faculty of Engineering and Technology, Rashtrasant Tukadoji Maharaj, Nagpur University, Nagpur, Maharashtra, India.

Prof. Md Shahjada Alam

Guide, Civil, Assistant Professor, SSIT

Prof. Hiradas Lilhare

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Prof. Pratik Patil

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Department of Civil Engineering

SESSION 2021-22

APPROVAL CERTIFICATE

This is to certify that the dissertation entitled "Experimental Study of Pervious Concrete" submitted to Rashtrasant Tukadoji Maharaj, Nagpur University, Nagpur, Maharashtra, India in the department of Civil Engineering by Mr. Akash Charde, Mr. Rohit Pimpalkar, Mr. Saurav Poinkar, Mr. Shubham Kelzarkar, Mr. Vishal Gharat, in a partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Civil engineering.

Internal Examiner

External Examiner



Principal Swaminarayan siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur 44150!

Abstract

Pervious concrete is a special type of concrete with a high porosity used for concrete flatwork applications that allows water from precipitation and other sources to pass directly through, thereby reducing the runoff from a site and allowing groundwater recharge. It is also called as porous concrete, permeable concrete, and no fines concrete and porous pavement. Pervious concrete is made using large aggregates with little to no fine aggregates. The concrete paste then coats the aggregates and allows water to pass through the concrete slab. This type of concrete having a high void content of about 30%, is becoming popular nowadays due to its potential to reduce the runoff to the drainage systems which can provide a water flow rate around 0.34 cm/second. It is an important application for sustainable construction and is one of many low impact development techniques used by builders to protect water quality. Pervious concrete also find its effective application in low loading intensity parking pavements, footpaths, walkways and highways. The pervious concrete is considered as an Environmental Protection Agency (EPA) for providing pollution control, storm management and suitable development. It is a composite material produced by mixing cement, Admixture (conplast SP430) and gravel or crushed stone. This concrete has a light colour and open-cell structure because of which they do not absorb heat from the sun; they also do not radiate the heat back into the atmosphere, which reduces heating in the environment. Pervious concrete has low installation costs. In addition, it filters the storm water thus reducing the number of pollutants entering the rivers and ponds. Pervious concrete also improves the growth of trees. In the present study the behaviour of pervious concrete has been studied experimentally. The water-cement ratio was kept at different ratios 0.35, 0.40, 0.45. Different properties of pervious concrete e.g. workability, compressive strength, split tensile strength, flexural strength test at 7, 14 & 28 days have been studied experimentally. The mix proportions with aggregates size (4.75 mm to 10 mm) gives higher strength when compared to mixes with aggregates size (10 mm to 20 mm) and (4.75 mm to 20 mm) respectively.

Keywords- Pervious Concrete, Admixture, Mix Proportion, Permeability, Porosity.



Principal Swaminarayan Siddhanta Institute of Technology Kalmeshwar, Dist. Nagpur 441501

SNOW FREE CONCRETE SURFACE USING HYDRONIC RADIENT HEAT

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF BACHELORS

IN CIVIL ENGINEERING

SUBMITTED BY

AJAY NAGESHWAR

AJAY VITALKAR

SURESH MESHRAM

TANVEER IQBAL HUSSAIN

PROJECT GUIDE

Mr. Pratik Patil
Department of Civil Engineering



SWAMINARAYAN SIDDHANTA INSTITUTE OF TECHNOLOGY, NAGPUR

(Sarvasiddhanta Education Society's) (2021-22)



Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur 441501

SWAMINARAYAN SIDDHANT INSTITUTE OF TECHNOLOGY, NAGPUR

(Sarvasiddhanta Education Society's) (2021-22)



CERTIFICATE

THIS IS TO CERTIFY THAT THE PROJECT WORK ENTITLED "SNOW-FREE CONCRETE SURFACES USING HYDRONIC RADIANT HEAT" IS A BONAFIED WORK DONE BY FOLLOWING STUDENTS FOR PARTIAL FULFILMENT OF THE AWARD OF BACHELORS IN CIVIL ENGINEERING, DURING THEACDEMIC YEAR 2021-2022.

AJAY NAGESHWAR

AJAY VITALKAR

SURESH MESHRAM

TANVEER IQBAL HUSSAIN

THIS IS AN ORIGINAL PROJECT CARRIED OUT UNDER THE GUIDANCE OF Mr. PRATIK PATIL AND FULFILLS ALL THE REQUIREMENTS TO NATURE AND STANDARD OF WORK REQUIRED FOR THE BACHELORS IN CIVIL ENGINERRING.

Mr. PRATIK PATIL

(GUIDE) SSIT, Nagpur Mr. PRATIK PATIL

(H.O.D.) SSIT, Nagpur Dr. DEBBRAGAS. DEY

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of Technology, Kalmeshw Dist. Nagpur 441501



CERTIFICATE OF PROJECT GUIDE

THE WORK ENTITLED "SNOW-FREE CONCRETE SURFACES USING HYDRONIC RADIANT HEAT" IS A PIECE OF PROJECT WORK DONE UNDER MY GUIDANCE AND SUPERVISION FOR THE PARTIAL FULFILMENT OF AWARD OF BACHELORS IN CIVIL ENGINEERING AT SWAMINARAYAN SIDDHANT INSTITUTE OF TECHNOLOGY, NAGPUR.

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE PROJECT WORK,

- > EMBODIES THE WORK OF CANDIDATES THEMSELVES.
- > HAS BEEN DULY COMPLETED.
- ➢ IS UPTO THE STANDARD, BOTH IN RESPECT OF CONTENT AND LANGUAGE FOR BEING REFERRED TO THE EXAMINER.

Mr. PRATIK PATIL
PROJRECT GUIDE

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OF TECHNOLOGY, NAGPUR

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Principal Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur 441501

ABSTRACT

Snow accumulation during the winter results in many issues affecting national strategic goals. More specifically, it hinders the overall transportation system which significantly affects economic competitiveness. Moreover, it causes many traffic accidents in the winter affecting people's lives and assets.

Traditional methods for snow accumulation are the use of deicing agents such as salt-based chemical (NaCl, MgCl2) and sand. However, the application of these chemicals leads to the adverse effects on environment, drainage system and especially infrastructure (corrosion, premature failure). This remarkably raises the maintenance costs on structures.

Therefore, it is necessary to conduct an alternative technology for snow removal which is environmentally safe and highly effective to avoid the negative effects of those deicing agents. Heated snow melting systems are potential solutions to prevent snow accumulation that has increasingly drawn attention during the last few decades in many countries.

This research presents the method of snow melting with hydronic radiant heat to avoid the negative effects of traditional agents on environment as well as infrastructure systems. Two- dimensional (2D) and three dimensional (3D) finite element models are developed to investigate the influence of input parameters on the performance of snow melting in various environmental conditions. Intensive parametric studies are conducted to analyze and determine the key factors in the snow melting process. Consequently, appropriate values of those parameters are proposed for future experiments, design and construction in the Indian.

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Principal Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist Nagnur 441501

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Dissertation

On

"AN INVESTIGATION ON BACTERIAL CONCRETE"

Submitted to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur
In Partial Fulfillment of the Requirement for the Degree of
Bachelor of Engineering in Civil Engineering
In the faculty of Engineering & Technology Civil Engineering

Submitted by

Swadeep M. Shambharkar Shaharukalli U. Saiyyad Ashish W. Khadilkar Pirti Tayade Shivkumar S. Netragaonkar Akshay G. Khokle Ranjeet U. Yesankar Navin R. Gaikwad

Under the Guidance of
Asst. Prof. Girish Kawale
Assistant Professor, Civil Engineering Department,
SSIT, Katol Road, Nagpur.



Department of Civil Engineering
Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology, Katol Road, Nagpur
2021-22



CERTIFICATE

This is to certify that the project work entitled

"AN INVESTIGATION ON BACTERIAL CONCRETE" has been duly submitted by the following students in satisfactory manner as a partial fulfillment the Degree in Civil Engineering from Rashtrasant Tukadoji Maharaj Nagpur University during academic session 2019-2020.

Swadeep M. Shambharkar Shaharukalli U. Saiyyad Ashish W. Khadilkar Pirti Tayade Shivkumar S. Netragaonkar
Akshay G. Khokle
Ranjeet U. Yesankar
Navin R. Gaikwad

Asst. Prof. Girish Kawale
Assistant Professor,
Department of Civil Engg.

Mr. Pratik Patil
Associate Professor &
Head of Department
of Civil Engg.

HEAD

Dept. of Civil Engg.

Nuva College of Engg. & Tech.

Dr. D. Dey
Principal
S.S.I.T, Katol Road,
Nagpur.

Principal Swambaa ayaa Siddhanta Institut of Technology, Katmeshwar Dist. Nagpur 441501



Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Dist. Nagpur 441501

DISSERTATION APPROVAL SHEET

Swadeep M. Shambharkar, Shaharukalli U. Saiyyad, Ashish W. Khadilkar, Akshay G. Khokle, Pirti Tayade, Ranjeet U. Yesankar, Shivkumar S. Netragaonkar, Navin R. Gaikwad has done the appropriate work related to "An Investigation on concrete" in partial fulfillment for the award of Degree in Civil Engineering is being submitted to Swaminarayan Siddhanta Institute of Technology, Katol Road, Nagpur.

Internal Examiner:

Sign:

Name:

External Examiner:

Sign:

Name:

Prof. AZaz

Place: Swaminarayan Siddhanta Institute of Technology, Katol Road, Nagpur.

Date: 24/06/22

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ABSTRACT

Cracking in concrete is the main concern throughout the structures because it causes loss of strength with time. Hence a special type of environmental free solution is to be made for maintenance purpose. Therefore, a bacterial concrete is prepared. However, the drawback of this material is that it easily cracks due to its low tensile strength, & due to temperature expansion, contraction, whereas the creep & shrinkage also produce cracks. While bigger cracks deteriorate structural integrity, also hair-line cracks may result in durability problem. In this study we will discuss about the self-healing process of concrete is process by which the cracks obtained in the body of concrete get repaired by itself or it required some external help to complete self-healing activity. The bacterial species called Bacillus subtilis for increasing the strength of concrete and decreasing the porosity at 28 Days.

Though these species are eco-friendly and does not cause any harm to human and use for improving the resistance of concrete when exposed to alkaline, sulfate and freeze-thaw environments. This paper mainly comprises of activation of bacteria and focuses on strength of bacteria concrete with normal concrete and also filling of cracks.

Keywords: Self-healing concrete, Creep & shrinkage, hydrolyze urea, Bacillus subtilis

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S.S.I.T. NAGPUR



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GOVERNMENT CONTRACTOR

BUILDERS

INFRA LAND DEVELOPERS

ENGINEERING EQUIPMENTS

Ref. No .: MREI/52

Date: 22|08/2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Anjali Dilip Ukey, studying B.E in Civil Engineering (3rd year) at Swaminarayan Siddhanta Institue of Technology, Nagpur, has done summer internship program on RCC Component work for the commercial building at Trimurtinagar, Nagpur. He/She is working under my concern from 18th July to 18th August 2022.

We have observed that the candidate is having hard working nature and sincere during the training period and wish his/her for better prospects in studies as well as in career.



Authorized Signature





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GOVERNMENT CONTRACTOR

BUILDERS

INFRA LAND DEVELOPERS

ENGINEERING EQUIPMENTS

Ref. No .: MREI/45

Date: 22/08/2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Pratiksha Wanjari, studying B.E in Civil Engineering (3rd year) at Swaminarayan Siddhanta Institue of Technology, Nagpur, has done summer internship program on RCC Component work for the commercial building at Trimurtinagar, Nagpur. He/She is working under my concern from 18th July to 18th August 2022.

We have observed that the candidate is having hard working nature and sincere during the training period and wish his/her for better prospects in studies as well as in career.

Brund

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GOVERNMENT CONTRACTOR

BUILDERS

INFRA LAND DEVELOPERS

ENGINEERING EQUIPMENTS

Ref. No .: MREI/46

Date: 22/08/2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Nisha Vijay Pakmode, studying B.E in Civil Engineering (3rd year) at Swaminarayan Siddhanta Institue of Technology, Nagpur, has done summer internship program on RCC Component work for the commercial building at Trimurtinagar, Nagpur. He/She is working under my concern from 18th July to 18th August 2022.

We have observed that the candidate is having hard working nature and sincere during the training period and wish his/her for better prospects in studies as well as in career.

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Authorized Signature





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GOVERNMENT CONTRACTOR

BUILDERS

INFRA LAND DEVELOPERS

ENGINEERING EQUIPMENTS

Ref. No .: MREI/47

Date: 22108/2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Mayuri Bawankar, studying B.E in Civil Engineering (3rd year) at Swaminarayan Siddhanta Institue of Technology, Nagpur, has done summer internship program on RCC Component work for the commercial building at Trimurtinagar, Nagpur. He/She is working under my concern from 18th July to 18th August 2022.

We have observed that the candidate is having hard working nature and sincere during the training period and wish his/her for better prospects in studies as well as in career.

Authorized Signature





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GOVERNMENT CONTRACTOR

BUILDERS

INFRA LAND DEVELOPERS

ENGINEERING EQUIPMENTS

Ref. No .: MREI/48

Date: 22/08/2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Komal Santosh Ingle, studying B.E in Civil Engineering (3rd year) at Swaminarayan Siddhanta Institue of Technology, Nagpur, has done summer internship program on RCC Component work for the commercial building at Trimurtinagar, Nagpur. He/She is working under my concern from 18th July to 18th August 2022.

We have observed that the candidate is having hard working nature and sincere during the training period and wish his/her for better prospects in studies as well as in career.

Authorized Signature





S-6, Radha Krishna Sahniwas, IT Park Main Road, Gayatri Nagar, Parsodi, Nagpur-440022

Website: www.mrinfra.com Email: info.mrinfra@gmail.com

Contact: 0712-6695115/ 0712-6695116

GOVERNMENT CONTRACTOR BUILDERS

INFRA LAND DEVELOPERS

ENGINEERING EQUIPMENTS

Ref. No .: MREI/49

Date: 22/08/2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Karishma Ashokrao Kohale, studying B.E in Civil Engineering (3rd year) at Swaminarayan Siddhanta Institue of Technology, Nagpur, has done summer internship program on RCC Component work for the commercial building at Trimurtinagar, Nagpur. He/She is working under my concern from 18th July to 18th August 2022.

We have observed that the candidate is having hard working nature and sincere during the training period and wish his/her for better prospects in studies as well as in career.

Authorized Signature





S-6, Radha Krishna Sahniwas, IT Park Main Road, Gayatri Nagar, Parsodi, Nagpur-440022

Website: www.mrinfra.com Email: info.mrinfra@gmail.com

Contact: 0712-6695115/ 0712-6695116

GOVERNMENT CONTRACTOR

BUILDERS

INFRA LAND DEVELOPERS

ENGINEERING EQUIPMENTS

Ref. No.: MREI 50

Date: 22/08/2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Harshalata Bhagwat Pustode, studying B.E in Civil Engineering (3rd year) at Swaminarayan Siddhanta Institue of Technology, Nagpur, has done summer internship program on RCC Component work for the commercial building at Trimurtinagar, Nagpur. He/She is working under my concern from 18th July to 18th August 2022.

We have observed that the candidate is having hard working nature and sincere during the training period and wish his/her for better prospects in studies as well as in career.

Authorized Signature



Swaminaray a cadnanta Institute of Technology, Kalmeshwar, Dist. Nagpur 441501



S-6, Radha Krishna Sahniwas, IT Park Main Road, Gayatri Nagar, Parsodi, Nagpur-440022

Website: www.mrinfra.com Email: info.mrinfra@gmail.com

Contact: 0712-6695115/ 0712-6695116

GOVERNMENT CONTRACTOR

BUILDERS

INFRA LAND DEVELOPERS

ENGINEERING EQUIPMENTS

Ref. No .: MREI / ST

Date: 22/08/2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Darshana Bhashkar Dautpure, studying B.E in Civil Engineering (3rd year) at Swaminarayan Siddhanta Institue of Technology, Nagpur, has done summer internship program on RCC Component work for the commercial building at Trimurtinagar, Nagpur. He/She is working under my concern from 18th July to 18th August 2022.

We have observed that the candidate is having hard working nature and sincere during the training period and wish his/her for better prospects in studies as well as in career.



Authorized Signature



Project Report

On

"Experimental Study of Pervious Concrete"

Submitted in partial fulfilment of the requirements for Degree of

Bachelor of Engineering

In

Civil Engineering

Submitted to

Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU), Nagpur



Submitted by

Mr. Akash Charde

Mr. Rohit Pimpalkar

Mr. Saurav Poinkar

Mr. Shubham Kelzarkar

Mr. Vishal Gharat

Under the guidance of

Prof. Md Shahjada Alam



DEPARTMENT OF CIVILENGINEERING
SWAMINARAYAN SIDDHANTA INSTITUTE OF TECHNOLOGY,
NAGPUR (MAHARASHTRA)



Session: 2021-22



Ref. No .: AB/NGP/2022/40

Date: 22/8/2022

TO WHOM IT MAY CONCERN

This is to certify that Mr. Devanshu Vikas Ghodam, a student of 6th semester (3rd year), B.E (Civil Engineering), Swaminarayan Siddhanta Institute of Technology, Nagpur, has done internship program on foundation work for the residential building, Dabha, Nagpur. He is working under my concern from 19th July 2022 to 19th August 2022.

During the period of his internship programme with us he was found punctual, hardworking and inquisitive.

We wish him every success in life.

For Atharva Builders.

For ATHARY BULLD

Authorized Signatur



A

PROJECT REPORT

ON

"THE IMPACT OF CAM STRATEGIES ON INCREMENTAL SHEET
FORMING FOR DC 04"

Submitted To

RASHTRASANT TUKDOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF BACHELOR OF ENGINEERING IN MECHANICAL ENGINEERING



Under The Guidance Of
PROF. Junaid Khan
Submitted By
Ashish Bramhadas Nagdeote
Mohammad Junaid Raza
Shrikant Shankarrao Tatode
Shubham Shravan Bhalavi
Swapnil Suresh Wanjari

DEPARTMENT OF MECHANICAL ENGINEERING
Sarvasiddhanta Education Society's
Swaminarayan Siddhanta Institute of Technology

Kalmeshwar, Nagpur, Maharashtra

2021-2022



Sarvasiddhanta Education Society's Swaminarayan Siddhanta Institute of Technology

Kalmeshwar, Nagpur, Maharashtra 441501(India)

DEPARTMENT OF MECHANICAL ENGINEERING

Certificate

Forwarded here with the thesis entitled "The Impact of CAM Strategies on

Incremental Sheet Forming for DC04". Ashish Bramhadas Nagdeote,
Mohammad Junaid Raza, Shrikant Shankarrao Tatode, Shubham Shravan
Bhalavi, Swapnil Suresh Wanjari are students of this college in partial fulfilment
of the requirement for the award of Degree of Engineering (Mechanical Engineering)
in the faculty of Engineering & Technology, Rashtrasant Tukadoji Maharaj, Nagpur
University, Nagpur, Maharashtra, India.

Prof. Junaid Khan

Dept of Backering Eggs.

O COL

Prof. Junaid Khan

Guide

Or D. Dev Principal Swaminapayan Siddhanta Institut of Technology, Kalmeshwar Dist, Nagpur 441501

Date

: 15/04/2022

Place

: Nagpur



Abstract

Incremental sheet forming (ISF) is a sheet metal forming technique. A sheet is formed into the final workpiece by a series of small incremental deformations. However, studies have shown that it can be applied to polymer and composite sheets too. Generally, the sheet is formed by a round-tipped tool, typically 5 to 20mm in diameter. The tool can be attached to a CNC machine, a robot arm, or similar indents into the sheet by about 1 mm and follows a contour for the desired part. It then indents further and draws the next contour for the part into the sheet and continues to do this until the full part is formed. A pilot study shows that not much study has been done on the effect of CAM strategies for Incremental sheet forming. This research project involves CAM strategies made up of method of deformation, cut pattern, percentage step over, tool shape and part shape. Seventy-two different CAM strategies are possible by combining these parameters. All these strategies will be tested and analysed with the help of simulation software, but before that, a part will be generated in modelling software followed by a tool path. Programming will be required to convert the tool path into a simple (x, y, z, t) file for simulations. After the simulation, dominant strategies will be selected for physical experimentations based on simulation results and data interpretation. A decision will be taken based on sheet thickness uniformity, spring back, fatigue strength, and run time. After successful experiments, simulation results will be validated, followed by documentation. This project aims to determine optimal strategies for the foremost quality of parts produced by incremental sheet forming. This project also requires the knowledge of modelling, tool path generation (N.C. files), simulations and programming.





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Ref. No. KBM/58

Date: 1919122

INTERNSHIP CERTIFICATE

This is to certify that Mr. Mirza Refaquat Muneeb Mirza, B.E., student in 6th semester Mechanical Engineering from Swaminarayan Siddhanta Institute of Technology, Nagpur has successfully completed the Summer Internship Programme at KBM Industries, Hingna MIDC, Nagpur during the period from 16.08.2022 to 16.09.2022.

We wish him, all the best in future endeavors.



KBM Industries

FOR KBM INDUSTIRES





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Ref. No. KBM | 59

Date: 1919122

INTERNSHIP CERTIFICATE

This is to certify that Mr. Lokesh Narayan Raut, B.E., student in 6th semester Mechanical Engineering from Swaminarayan Siddhanta Institute of Technology, Nagpur has successfully completed the Summer Internship Programme at KBM Industries, Hingna MIDC, Nagpur during the period from 16.08.2022 to 16.09.2022.

We wish him, all the best in future endeavors.



FOR KBM INDUSTRES





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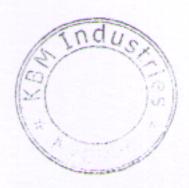
Ref. No. KBM 60

Date: 1919122

INTERNSHIP CERTIFICATE

This is to certify that Mr. Neeraj Vinod Guhe, B.E., student in 6th semester Mechanical Engineering from Swaminarayan Siddhanta Institute of Technology, Nagpur has successfully completed the Summer Internship Programme at KBM Industries, Hingna MIDC, Nagpur during the period from 16.08.2022 to 16.09.2022.

We wish him, all the best in future endeavors.



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Ref. No. KRM [6]

Date: 19|9|22

INTERNSHIP CERTIFICATE

This is to certify that Mr. Saurabh Gajanan Shirbhate, B.E., student in 6th semester Mechanical Engineering from Swaminarayan Siddhanta Institute of Technology, Nagpur has successfully completed the Summer Internship Programme at KBM Industries, Hingna MIDC, Nagpur during the period from 16.08.2022 to 16.09.2022.

We wish him, all the best in future endeavors.



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Ref. No. KBM/62

Date: 19 9 22

INTERNSHIP CERTIFICATE

This is to certify that Mr. Sayed Mobin Sayed Azim, B.E., student in 6th semester Mechanical Engineering from Swaminarayan Siddhanta Institute of Technology, Nagpur has successfully completed the Summer Internship Programme at KBM Industries, Hingna MIDC, Nagpur during the period from 16.08.2022 to 16.09.2022.

We wish him, all the best in future endeavors.



KBM Industries

FOR KBM INDUSTINES





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Ref. No. KBM /63

Date: 1919122

INTERNSHIP CERTIFICATE

This is to certify that Mr. Bhushan Sitaram Bisen, B.E., student in 6th semester Mechanical Engineering from Swaminarayan Siddhanta Institute of Technology, Nagpur has successfully completed the Summer Internship Programme at KBM Industries, Hingna MIDC, Nagpur during the period from 16.08.2022 to 16.09.2022.

We wish him, all the best in future endeavors.

KBM Industries

FOR KBM INDUSTIRES



Kalmeshwar Dist. Nagpur 441501



PAPER CUPS / PLATES | WRAPPER PRINTING

Ref. No. KBM/64

Date: 1919122

INTERNSHIP CERTIFICATE

This is to certify that Mr. Shyamal Pundalikrao Dugane, B.E., student in 6th semester Mechanical Engineering from Swaminarayan Siddhanta Institute of Technology, Nagpur has successfully completed the Summer Internship Programme at KBM Industries, Hingna MIDC, Nagpur during the period from 16.08.2022 to 16.09.2022.

We wish him, all the best in future endeavors.

KBM Industries

FOR KBM INDUSTIRES





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Ref. No. KBM/65

Date: 1919122

INTERNSHIP CERTIFICATE

This is to certify that Ms. Komal Jitendra Lonpande, B.E., student in 6th semester Mechanical Engineering from Swaminarayan Siddhanta Institute of Technology, Nagpur has successfully completed the Summer Internship Programme at KBM Industries, Hingna MIDC, Nagpur during the period from 16.08.2022 to 16.09.2022.

We wish her, all the best in future endeavors.

WAGOO *

KBM Industries

FOR KBM INDUSTIRES

Kalmeshwar O To O St. Nagpur A41501

Privide al Swaminarayan Siddhanta Institute of Technology, Kalmeshwar,

A

Project Report

On

"ENERVATION DETECTION & ALERT SYSTEM FOR FOUR WHEELER DRIVERS"

In Partial Fulfillment of the Requirement for the Degree of Bachelor of

Engineering

In

"ELECTRONICS & TELECOMMUNICATION ENGINEERING"

Submitted By

SWETA MURLIDHAR ROKDE

MOSAMI RAMESH TONGE

SNEHA SURESH LANGDE

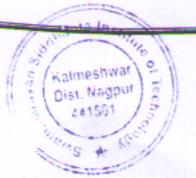
Under Guidance of

Prof. Pooja Thakre



DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

1



SWAMINARAYAN SIDDHANTA INSTITUTE OF TECHNOLOGY NAGPUR, MAHARASHTRA, INDIA

[2021-2022]

DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

Certificate

This is to certify that, Ms. Sweta Murlidhar Rokde, Ms. Mosami Ramesh Tonge & Ms. Sneha Suresh Langde is the student of Eight Semester of Bachelor of Engineering (Electronics & Telecommunication Engineering) has satisfactorily completed their project work- on the topic "ENERVATION DETECTION & ALERT SYSTEM FOR FOUR WHEELER DRIVERS" under my Guidance.

This is the partial fulfillment of the requirement for the award of degree of Bachelor of Engineering (Electronics & Telecommunication Engineering) of Rashtrasant Tukdoji Maharaj, Nagpur University, Maharashtra, INDIA. The Project work Submitted above is a bonafide work of Ms. Sweta Murlidhar Rokde, Ms. Mosami Ramesh Tonge & Ms. Sneha Suresh Langde at the institute during the Academic session of 2021-2022.

This work in the same form or in any other form is not submitted to any other university for the award of any degree or diploma. I find this work comprehensive, completed and fit for evaluation.

Date:

Place: Nagpur

Prof. Profa Thakre

2

Kalmeshwar Dist. Nagpur 441501

SWAMINARAYAN SIDDHANTA INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

Certificate

ALERT SYSTEM FOR FOUR WHEELER DRIVERS" by Ms. Sweta Murlidhar Rokde, Ms. Mosami Ramesh Tonge & Ms. Sneha Suresh Langde student of this College in fulfillment of the requirement for the award of degree of Bachelor of Engineering (Electronics & Telecommunication Engineering) in the faculty of Engineering & Technology, Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur Maharashtra, INDIA 2020-2021.

Prof. Pooja Thakre HOD (ETQT AD

Dept. of Electronics & comunication Engg.
Swaminareyan to a marka institute
of Technology, Kalmeshwar, Nagpur.

Dr. D. Dey
PRINCIPAL
Principal
Swaminarayan Siddhanta Institute
of Technology, Kalmeshwar,
Dist. Nagpur 441501

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Swaminarayan Siddhanta institution of Technology, Kalmeshwar, Dist. Nagpur 441501

SWAMINARAYAN SIDDHANTA INSTITUTE OF TECHNOLOGY NAGPUR, MAHARASHTRA, INDIA

DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

PROJECT APPROVAL SHEET

Following team has done the appropriate work related to the "ENERVATION DETECTION & ALERT SYSTEM FOR FOUR WHEELER DRIVERS" in partial fulfillment for the award of Bachelor of Engineering in Electronics of "Rashtrasant Swaminarayan Tukdoji Maharaj, Nagpur University, and Nagpur" and is being submitted to Engineering & Technology, Kalmeshwar, Nagpur (Maharashtra).

Students Name: -

Ms. Sweta Murlidha Rokde Ms. Mosami Ramesh Tonge Ms. Sneha Suresh Langde

Asst. Proppoja Thakre Guide .

Date: - 23.6.2022

Place: Nagpur

Swaminarayan Siddhanta Institute of Technology, Kalmeshwar,

Kalmeshwal

Abstract

prowsiness has been a major cause of horrific accidents all over the world causing deaths and fatal injuries. The number of fatal injuries is increasing day by day globally. Over the years, researchers have concluded that drivers lack sleep and more fatigue which causes the driver to fall asleep. This project shows that a new experimental model has been developed to detect driver drowsiness in order to reduce accidents caused by this problem which increases transport safety. In this work two methods are used to effectively detect the person's drowsiness.

First the driver's face is captured and retina of the eye is detected and facial feature extraction is performed and blinking values are calculated, then threshold values are set. Second, an Arduino module is used that integrates with elastomeric sensors for real-time calculation of driver's eye blinking is measured and if the threshold limit is exceeded then the buzzer will be on and vibrator is on until the driver doesn't turn the project off. The result of both methods is taken as input to make the final decision and alert the driver.

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Principal
Swaminarayan Siddhanta Institute
8 of Technology, Kalmeshwar,
Dist. Nagpur 441501

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A

Project report

On

"ANDROID CONTROLLED FIRE FIGHTER ROBOT"

In Partial Fulfilment of the Requirement for the Degree of Bachelor of

Engineering

In

"ELECTRONICS & TELECOMMUNICATION ENGINEERING"

Submitted By

KOMAL BABA MESHRAM

PRASAD ANIL DONGRE

SHUBHAM DEEPAK PANDHRAM

SHUBHAM VIJAYRAO TANDULKAR

Under Guidance of

Prof. Pooja Thakre



DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

1

Kalmeshwar Dist. Nagpur 441501

SWAMINARAYAN SIDDHANTA INSTITUTE OF TECHNOLOGY NAGPUR, MAHARASHTRA, INDIA

[2021-2022]

*DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION

ENGINEERING

Certificate

This is to certify that, Mr. Komal Baba Meshram, Mr. Prasad Anil Dongre, Mr. Shubham Deepak Pandhram & Mr. Shubham Vijayrao Tandulkar is the student of Eight Semester of Bachelor of Engineering (Electronics & Telecommunication Engineering) has satisfactorily completed their project work on the topic "ANDROID CONTROLLED FIRE FIGHTER ROBOT" under my Guidance.

This is the partial fulfilment of the requirement for the award of degree of Bachelor of Engineering (Electronics & Telecommunication Engineering) of Rashtrasant Tukdoji Maharaj, Nagpur University, Maharashtra, INDIA. The Project work Submitted above is a bonafide work of Mr. Komal Baba Meshram, Mr. Prasad Anil Dongre, Mr. Shubham Deepak Pandhram & Mr. Shubham Vijayrao Tandulkar at the institute during the Academic session of 2021-2022.

This work in the same form or in any other form is not submitted to any other university for the award of any degree or diploma. I find this work comprehensive, completed and fit for evaluation.

Date: 23.6.2022

Place: Nagpur

Prof. Pooja Thakre

Guide

2

Kalmeshwar Dist. Nagpur Dist. Nagpur 441501

SWAMINARAYAN SIDDHANTA INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION

ENGINEERING

Certificate

Forwarded herewith the project entitled "ANDROID CONTROLLED FIRE FIGHTER ROBOT" by Mr. Komal Baba Meshram, Mr. Prasad Anil Dongre, Mr. Shubham Deepak Pandhram & Mr. Shubham Vijayrao Tandulkar student of this College in fulfilment of the requirement for the award of degree of Bachelor of Engineering (Electronics & Telecommunication Engineering) in the faculty of Engineering & Technology, Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur Maharashtra, INDIA 2021-2022.

HTER ROROT" by Mr. Komal Raha Meshram, Mr. Prasad Anil Dongre, Mr. Shubham

Prof. Pooja Thakre

Dept. of Electronics & Telecommunication Engg. Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Nagpur.

Dr. D. Dey

PRINCIPAL

Principal

Swaminarayan Siddhanta Institute of Technology, Kalmeshwar,

Dist. Nagpur 441501

Kalmeshwar Dist. Nagpur 441501

3

SWAMINARAYAN SIDDHANTA INSTITUTE OF TECHNOLOGY

NAGPUR, MAHARASHTRA, INDIA

DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

PROJECT APPROVAL SHEET

Following team has done the appropriate work related to the "ANDROID CONTROLLED FIRE FIGHTER ROBOT" in partial fulfilment for the award of Bachelor of Engineering in Electronics of "Rashtrasant Tukdoji Maharaj, Nagpur University, and Nagpur" and is being submitted to Swaminarayan Siddhanta Institute Of Technology, Kalmeshwar, Nagpur (Maharashtra).

Students Name: -

Mr. Komal Baba Meshram

Mr. Prasad Anil Dongre

Mr. Shubham Deepak Pandhram

Mr. Shubham Vijayrao Tandulkar

Prof. Pogja Thakre

Guide

Date: - 23 . 6 . 2022

Kalmeshwar

Dist. Nagput

Place: Nagpur

. - 1:

of Technology Kalmeshwar,

ABSTRACT

Our proposed project aims to develop an android controlled fire fighter robot that can be used to extinguish fifes through remote handling. The vehicle consists of a water tank along with a pump which can throw water when needed. The system uses an 8051 microcontroller for this purpose. The android device is used as a transmitter to send over controlling commands to the vehicle. The android device provides a good touch based gui for controlling the robotic vehicle. The Bluetooth receiver on the vehicle is used to receive those commands sent by the android device. These are then fed to the motors responsible for controlling the vehicle movements in front, back, left and right direction.

The Bluetooth receiver is interfaced with an 8051 microcontroller for this purpose. The microcontroller after receiving input commands, operates the motors through a driver IC for vehicle movements.

The use of android has one more advantage in addition to improved GUI. It allows use of Bluetooth technology for communication allowing the vehicle to operate in a good range from the device. The system can also be later enhanced through the use of a wireless camera to be used for monitoring purposes

Dist. Nagpur Charles A41501

8

Frincipal Swaminarayan Siddhanta Institute of Technology, Kalmeshwag,

DESIGN OF A SECURE WIRELESS HOME AUTOMATION SYSTEM USING Wi-Fi TECHNOLOGY

Dissertation submitted inpartial fulfilment of requirement for the award ofdegree of

Bachelor of Engineering

in

Computer Engineering

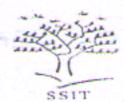
Submitted

by

HimanshuBachale

Guide

Prachi Bhure



Department of Computer Engineering

Swaminarayan Siddhanta Institute of Technology, Nagpur

Session -2021-2022



Principal

of Technology Kalmeshwar,

CERTIFICATEE

The thesis titled "DESIGN OF A SECURE WIRELESS HOME AUTOMATION SYSTEM USING Wi-Fi TECHNOLOGY" submitted by Himanshu Bachale for the award of degree of Master of Technology in CE, has been carried out under my supervision at the Department of CE of Swaminarayan Siddhanta Institute of technology, Nagpur. The work is comprehensive, complete and fit for evaluation.

Guide

HEAD

Swaminarayan Siddhanta Institute Assistant Professor

of Technology, Kalmeshwar, Nagpur Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Nagpur

Forwarded by

Principal

Dr. Debabrata Dey

Swammajayan Siddhanta Institute

of Technology, Kalmeshwar

Swaminarayan Siddhanta Institute of Technology, Kalmeshwar, Nagpur

External Examiner

The B.E. Viva- Voice Examination of Himanshu Bachale has been held on 21/6/2022 and accepted.

Signature of External Examiner

Swaminarayan Siddhanta Institute of Technology, Kalmeshwar,

Kalmeshwar, Dist. Ragpur

441501

ABSTRACT

Technology is always evolves. To be able to design a product using the current technology that will be beneficial to the lives of others is a huge contribution to the human community. This paper presents the design and implementation of a low cost but yet flexible mechanism using a smartphone based home automation system. With the rapid expansion of the Internet, the owners have been requesting remote control and monitoring of these in home appliances. This leads to networking these appliances to form a kind of home automation system. An Android based home automation system allows users to control the appliances by an Android application or through a website is presented.

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Principal Swaminarayan Siddhanta Institut of Technology; Kalmeshwar, Dist.Nagpur 441501

Page I

Department of CE, Swaminarayan Siddhanta Institute of Technology, Nagpur