



### Activity Report

| S.No. | Title of the information   | Information in brief  |                             |                    |                     |  |
|-------|--|---|-----------------------------|--------------------|---------------------|--|
| 1     | Identified Gap No/s.:  | 14  |                             |                    |                     |  |
| 2     | Activity Type:   | Industry Visit  |                             |                    |                     |  |
| 3     | Activity/Event Organizer/s or Coordinator/s:                             | Dr. S. N. Topannavar, Professor and HOD, Mechanical Engineering Department, HIT Nidasoshi   |                             |                    |                     |  |
| 4     | Title of the Activity/Event:   | Industry Visit At Hidkal Dam Power Plant, Hidkal  |                             |                    |                     |  |
| 5     | Date:  | 14-02- 2022   |                             |                    |                     |  |
| 6     | Venue:   | Hidkal, Taluk : Hukkeri, District: Belagavi   |                             |                    |                     |  |
| 7     | Objectives:  | 1. To understand the working principles of hydraulic turbines.<br>2. To understand & Types of hydropower generation plants.<br>3. To understand layouts of hydropower plants.<br>4. To Understand & new and advanced technologies of power generation.<br>5. To understand the hydropower potential in India.   |                             |                    |                     |  |
| 8     | Activity Outcomes:   | 1. Hydropower plants are a vital energy source to the world. Water is an efficient and reliable fuel. The use, creation, and expansion of power plants should continue being pursued.<br>2. Understand the working principles of hydraulic turbine<br>3. Understand energy conversion principle from hydraulic energy to mechanical output shaft energy |                             |                    |                     |  |
| 9     | Details of Resource Person/s with contact details:                       | Mr. S.M. Madiwale, AEE, Civil Engineer, Hldakl Dam, Hidkal  |                             |                    |                     |  |
| 10    | Finance Management:  | Expenses incurred by the Department Association (AIMSS)   |                             |                    |                     |  |
| 11    | No. of participants  | Students: Boys: 10 & Girls : 00, Staff: 02  |                             |                    |                     |  |
| 12    | Mapped POs ,Weight-age assigned & %age of attainment : PO (Weight-age)   | PO mapped   | Weight-age assigned (1/2/3) | %age of Attainment | Level of attainment |  |
|       |  | PO1   | 3                           | 99.6               | 2.988               |  |
|       |  | PO2   | 3                           | 99.6               | 2.988               |  |
|       |  | PO3   | 3                           | 99.6               | 2.988               |  |
|       |  | PO4   | 3                           | 99.6               | 2.988               |  |
|       |  | PO5   | 3                           | 99.6               | 2.988               |  |
|       |  | PO6   | 3                           | 99.6               | 2.988               |  |
|       |  | PO7   | 3                           | 99.6               | 2.988               |  |
|       |  | PO8   | 3                           | 99.6               | 2.988               |  |
|       |  | PO9   | 3                           | 99.6               | 2.988               |  |
|       |  | PO10  | 3                           | 99.6               | 2.988               |  |
|       |  | PO11  | 3                           | 99.6               | 2.988               |  |
| PO12  | 3  | 99.6  | 2.988                       |                    |                     |  |
| 13    | Mapped PSOs ,Weight-age assigned & %age of attainment : PSO (Weight-age) | PSO mapped  | Weight-age assigned (1/2/3) | %age of Attainment | Level of attainment |  |
|       |  | PSO1  | 3                           | 99.6               | 2.988               |  |
|       |  | PSO2  | 3                           | 99.6               | 2.988               |  |
|       |  | PSO3  | 3                           | 99.6               | 2.988               |  |
| 14    | Outcomes achieved/Impact   | 1. The activity mapped with PO1, PO2, PO3, PO4, PO5   |                             |                    |                     |  |





S J P N Trust's  
**Hirasugar Institute of Technology, Nidasoshi**  
Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.  
**Accredited at 'A' Grade by NAAC**  
**Programmes Accredited by NBA: CSE, ECE, EEE & ME.**

Mech. Engg. Dept.

AIMSS

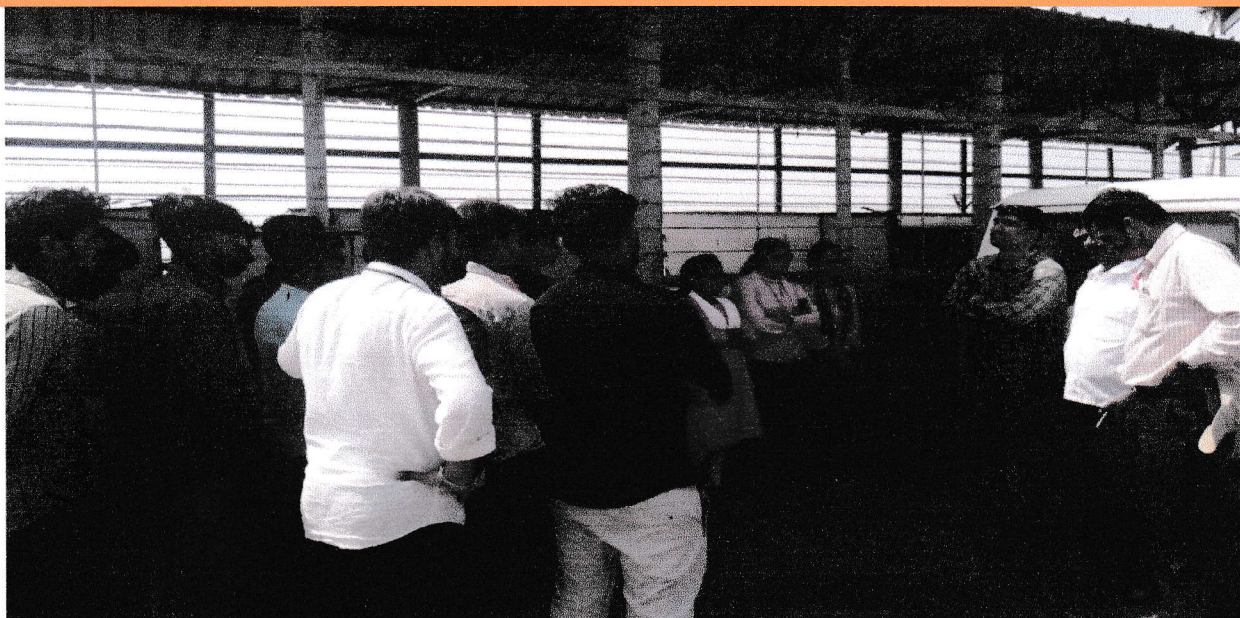
Activity Report

AY:2021-22

analysis:

- PO6, PO7, PO8, PO9, PO10, and PO11 & PO12 was found satisfactory with attainment level of 2.988 each against the Mapped values during the impact analysis.
2. The activity mapped with PSO1, PSO2 & PSO3 was found satisfactory with attainment level of 2.988 each against the Mapped value during the impact analysis.

### Photo Gallery



Mr. S. M. Madiwale, AEE, Civil Engineer, Hidakal Dam, Hidkal is delivering about power plant house during industry visit held on 14<sup>th</sup> February 2022.



Staff and students are attended industry visit at Hidkal dam power plant, Hidkal held on 14<sup>th</sup> February 2022.

Mr. Vivekanand Kambi  
AIMSS Secretary

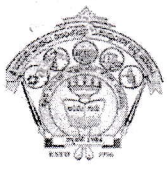
Prof. M. M. Shivashimpi & Prof. D. N. Inamdar  
AIMSS-Coordinator/s

Dr. S. N. Topannavar

**Mechanical Engg.  
HIT, Nidasoshi**

Nidasoshi, Taq: Hukkeri, Dist: Belgaum, Karnataka - 591 236  
Phone: +91-8333-278887, Fax: 278886, Web: [www.hsit.ac.in](http://www.hsit.ac.in) Mail: [hod@hsit.ac.in](mailto:hod@hsit.ac.in)





S J P N Trust's

Hirasugar Institute of Technology, Nidasoshi.

*Inculcating Values, Promoting Prosperity*

Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.

Accredited at 'A' Grade by NAAC

Programmes Accredited by NBA: CSE, ECE, EEE, ME

**DEPARTMENT OF CIVIL ENGINEERING**

Dept. Civil. Engg.

Request Letter

2021-22

Ref. No: HIT/CIVIL/03/2021-22

Date: 31/01/2022

To,  
The Executive Engineer  
K.N.N.L, G.R.B.C.C, Div. No-02  
Hidakal Dam,  
Tq; Hukkeri, Dist. Belagavi

**Sub:** Regarding Technical visit to **Hidakal Dam** for Second year Engineering Students,

Dear Sir,

With reference to above cited subject as a part of academic curriculum, the students and faculties of Department of Civil Engineering, S.J.P.N.T's Hirasugar Institute of Technology, Nidasoshi are going to visit your premises.

The students wish to visit the Dam site to understand Civil Engineering Concepts which is the part of their academic curriculum. We will undertake the responsibility of our students, for their behavior, any loss and damage during their visit.

Hence, we kindly request to permit the site visit and also provide valuable technical inputs so that our students can understand and appreciate.

The students (20No's) and faculties (06 No's) will be visiting the site on 14<sup>th</sup> Feb, 2022. (i.e., on Monday). The visit will be purely for academic purpose.

Kindly grant the permission for the same and do the needful.

Thanking You,

Yours Sincerely,

*M. D. Patil*

Coordinator

*31/01/2022*

H.O.D

HOD

Civil Engineering

S.J.P.N.T's HIT, Nidasoshi



S J P N Trust's  
Hirasugar Institute of Technology, Nidasoshi.  
*Inculcating Values, Promoting Prosperity*  
Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.  
Accredited at 'A' Grade by NAAC  
Programmes Accredited by NBA: CSE, ECE, EEE, ME  
**DEPARTMENT OF CIVIL ENGINEERING**

Dept. Civil. Engg.

Activity

Co-curricular

2021-22

Date: 09-02-2022

To,  
The Principal,  
Hirasugar Institute of Technology,  
Nidasoshi.

**Sub:** Regarding Technical Visit for Civil Engineering students to **Hidakal Dam & Sangam Sugar Factory Hidkal.**

Respected sir,

With reference to above cited subject, we have planned a technical visit to **Hidakal Dam** for 3<sup>rd</sup> sem students and it is tentatively scheduled on **14<sup>th</sup>, Feb 2022** as a part of curriculum. & Sugar factory

The students can understand concept of Dams, its parts and working.

Hence, kindly grant the permission and transportation facility for the same.

Thanking You,

Yours sincerely,

W.D. Patil  
Co-ordinator

Mr. Kothinwale  
Vehicle  
incharge

10/2

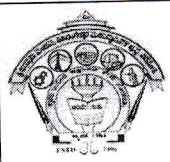
Informing to  
SB shinde &  
Alloted Bus

14/2/22  
18/2/22  
SB shinde

9/02/2022  
H.O.D  
Civil Engineering  
S.J.P.N.T's HIT, Nidasoshi

SB shinde  
9449018302





S J P N Trust's  
**Hirasugar Institute of Technology, Nidasoshi.**  
*Inculcating Values, Promoting Prosperity*  
 Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.  
**Accredited at 'A' Grade by NAAC**  
**Programmes Accredited by NBA: CSE, ECE, EEE & ME**

**Mech.Engg.Dept**

**Industry Visit**

**Registration**

**2021-22 (OddSem)**

## Registration Sheet

*& Sangam Sugar Factory, Hidkal*

**Event: Industry Visit at Hidkal Dam Power House, Hidkal on 14<sup>th</sup> February 2022**

### **Semester: III**


| R.No | STUDENT NAME             | USN        | Contact No.   | Signature          | Remarks |
|------|--------------------------|------------|---------------|--------------------|---------|
| 1    | AKASH RAJU PATIL         | 2HN20ME001 | 8970358852/62 |                    |         |
| 2    | BASAVARAJ G KAMBAR       | 2HN20ME002 | 9945063960    |                    |         |
| 3    | GONDHALI ATHARV SHANKAR  | 2HN20ME003 | 7498194119    |                    |         |
| 4    | KAUSHIK SHIVAKALE        | 2HN20ME004 | 8762936555    |                    |         |
| 5    | PRAMOD B AMMANAGI        | 2HN20ME005 | 8904703863    | <i>[Signature]</i> |         |
| 6    | SANGAMESH K SURAPPAGOL ✓ | 2HN20ME006 | 9902826925    | <i>[Signature]</i> |         |
| 7    | YOGESH R DHANWADE        | 2HN20ME007 | 9663276591    | <i>[Signature]</i> |         |
| 8    | ABDULRAHIM B KAZI        | Diploma    | 9964405656    |                    |         |
| 9    | AKASH ASHOK BADIGER      | Diploma    | 9591304521    | <i>[Signature]</i> |         |
| 10   | AKASH P MADIHALLI ✓      | Diploma    | 6360192823    | <i>[Signature]</i> |         |
| 11   | AKSHAY MAHADEV CHABBI ✓  | Diploma    | 6363959820    | <i>[Signature]</i> |         |
| 12   | MALIKJAN MUJAWAR         | Diploma    | 7676164379    | <i>[Signature]</i> |         |
| 13   | NITISH RAVINDRA BANI     | Diploma    | 9901851203    | <i>[Signature]</i> |         |
| 14   | RAHUL D MANGASULE        | Diploma    | 9606379556    |                    |         |
| 15   | RAHUL M NADESHWAR        | Diploma    | 96206398438   |                    |         |
| 16   | SACHIN S PUJERI          | Diploma    | 7337825438    | <i>[Signature]</i> |         |
| 17   | SHIVAPRABHU PATROT ✓     | Diploma    | 7760183609    | <i>[Signature]</i> |         |
| 18   | SHIVARAJ B NEELAKANTH    | Diploma    | 6361702459    |                    |         |
| 19   | SHRINATH G SOOJI         | Diploma    | 8310456559    |                    |         |
| 20   | YASH RAMESH MANE         | Diploma    | 8938251751    |                    |         |

### **Industrial visit Coordinators**

1. Dr. K.M.Akkoli *[Signature]*
2. Dr. M.M.Shivashimpi *[Signature]*
3. Shri. V.G. Badiger *[Signature]*

*[Signature]*  
**HOD**  
**Mechanical Engg.**  
**HIT, Nidasoshi**



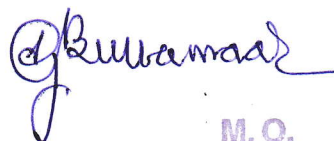
|  |   |                              |
|--|---|------------------------------|
|  | <p style="text-align: center;">S J P N Trust's<br/>Hirasugar Institute of Technology, Nidasoshi.<br/><i>Inculcating Values, Promoting Prosperity</i><br/>Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.<br/>Accredited at 'A' Grade by NAAC<br/>Programmes Accredited by NBA: CSE, ECE, EEE &amp; ME</p> | Mech.Engg.Dept               |
|  |   | Industrial Visit             |
|  |   | Physical Fitness Certificate |
|  |   | 2021-22 (OddSem)             |

## Physical Fitness Certificate

**This is certified that, the following students are physical fit to attend the industry visit at Hidakal Dam Power House, Hidakal on 14<sup>th</sup> February 2022.**

### Semester: III

| R.No | STUDENT NAME            | USN        |
|------|-------------------------|------------|
| 1    | AKASH RAJU PATIL        | 2HN20ME001 |
| 2    | BASAVARAJ G KAMBAR      | 2HN20ME002 |
| 3    | GONDHALI ATHARV SHANKAR | 2HN20ME003 |
| 4    | KAUSHIK SHIVAKALE       | 2HN20ME004 |
| 5    | PRAMOD B AMMANAGI       | 2HN20ME005 |
| 6    | SANGAMESH K SURAPPAGOL  | 2HN20ME006 |
| 7    | YOGESH R DHANWADE       | 2HN20ME007 |
| 8    | ABDULRAHIM B KAZI       | Diploma    |
| 9    | AKASH ASHOK BADIGER     | Diploma    |
| 10   | AKASH P MADIHALLI       | Diploma    |
| 11   | AKSHAY MAHADEV CHABBI   | Diploma    |
| 12   | MALIKJAN MUJAWAR        | Diploma    |
| 13   | NITISH RAVINDRA BANI    | Diploma    |
| 14   | RAHUL D MANGASULE       | Diploma    |
| 15   | RAHUL M NADESHWAR       | Diploma    |
| 16   | SACHIN S PUJERI         | Diploma    |
| 17   | SHIVAPRABHU PATROT      | Diploma    |
| 18   | SHIVARAJ B NEELAKANTH   | Diploma    |
| 19   | SHRINATH G SOOJI        | Diploma    |
| 20   | YASH RAMESH MANE        | Diploma    |

  
**M. O.**

S. J. P. N. Trust's Dispensary  
Nidasoshi



## UNDERTAKING

I the undersigned Mr/Ms.....studying in.....Semester, Mechanical Engineering Branch of Hirasugar Institute of Technology, Nidasoshi, interested to participate in industry Visit of Hidkal Dam Power House, Hidkal on 14/02/2022. I will obey the respective rules, regulations of the Institute and company and spot instructions given by the concerned authority during the visit without fail. I have undergone Medical checkup and fit to participate in Industry Visit. If anything happens wrong with me during the journey, I only responsible. The institute or the faculty of the institute is not responsible for any kind of damage or accidents or uneven things happen with me. I will not claim any kind of damages from institute. I have taken prior permission from my parents to participate in the above said event.

|                    |   |                 |            |
|--------------------|---|-----------------|------------|
| Name:              | Akash . P . Madihalvi                     | USN:            |            |
| Mob. No:           | 6360192823                                | Parent Mob. No: | 9481558279 |
| Permanent Address: | A/P: Nidasoshi Tq: Hukkeri Dist: Belagavi |                 |            |

Akash  
14/02/2022  
Students Signature with Date

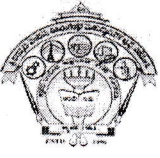
## UNDERTAKING

I the undersigned Mr/Ms. Shivaprabhu. M. Patrot.....studying in.....3rd Semester, Mechanical Engineering Branch of Hirasugar Institute of Technology, Nidasoshi, interested to participate in industry Visit of Hidkal Dam Power House, Hidkal on 14/02/2022. I will obey the respective rules, regulations of the Institute and company and spot instructions given by the concerned authority during the visit without fail. I have undergone Medical checkup and fit to participate in Industry Visit. If anything happens wrong with me during the journey, I only responsible. The institute or the faculty of the institute is not responsible for any kind of damage or accidents or uneven things happen with me. I will not claim any kind of damages from institute. I have taken prior permission from my parents to participate in the above said event.

|                    |  |                 |            |
|--------------------|--|-----------------|------------|
| Name:              | Shivaprabhu. M. Patrot                     | USN:            |            |
| Mob. No:           | 7760183609                                 | Parent Mob. No: | 7760183609 |
| Permanent Address: | A/P: - Hukkeri Tq: Belagavi Dist: Belagavi |                 |            |

Shivaprabhu 14/02/2022  
Students Signature with Date













|  |   |  |                  |
|--|---|--|------------------|
|  | S J P N Trust's<br>Hirasugar Institute of Technology, Nidasoshi.<br><i>Inculcating Values, Promoting Prosperity</i><br>Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.<br>Accredited at 'A' Grade by NAAC<br>Programmes Accredited by NBA: CSE, ECE, EEE & ME |  | Mech.Engg.Dept   |
|  |   |  | Industrial Visit |
|  |   |  | Attendane        |
|  |   |  | 2021-22 (OddSem) |

## Attendance Sheet

**Event: Industry Visit at Hidkal Dam Power House , Hidkal on 14<sup>th</sup> February 2022**


**Semester: III**

| R.No | STUDENT NAME            | USN        | Contact No.   | Sinature  | Remarks |
|------|-------------------------|------------|---------------|---|---------|
| 1    | AKASH RAJU PATIL        | 2HN20ME001 | 8970358852/62 |   |         |
| 2    | BASAVARAJ G KAMBAR      | 2HN20ME002 | 9945063960    |   |         |
| 3    | GONDHALI ATHARV SHANKAR | 2HN20ME003 | 7498194119    |   |         |
| 4    | KAUSHIK SHIVAKALE       | 2HN20ME004 | 8762936555    |   |         |
| 5    | PRAMOD B AMMANAGI       | 2HN20ME005 | 8904703863    |    |         |
| 6    | SANGAMESH K SURAPPAGOL  | 2HN20ME006 | 9902826925    |    |         |
| 7    | YOGESH R DHANWADE       | 2HN20ME007 | 9663276591    |   |         |
| 8    | ABDULRAHIM B KAZI       | Diploma    | 9964405656    |   |         |
| 9    | AKASH ASHOK BADIGER     | Diploma    | 9591304521    |  |         |
| 10   | AKASH P MADIHALLI       | Diploma    | 6360192823    |  |         |
| 11   | AKSHAY MAHADEV CHABBI   | Diploma    | 6363959820    |  |         |
| 12   | MALIKJAN MUJAWAR        | Diploma    | 7676164379    |  |         |
| 13   | NITISH RAVINDRA BANI    | Diploma    | 9901851203    |  |         |
| 14   | RAHUL D MANGASULE       | Diploma    | 9606379556    |   |         |
| 15   | RAHUL M NADESHWAR       | Diploma    | 96206398438   |   |         |
| 16   | SACHIN S PUJERI         | Diploma    | 7337825438    |  |         |
| 17   | SHIVAPRABHU PATROT      | Diploma    | 7760183609    |  |         |
| 18   | SHIVARAJ B NEELAKANTH   | Diploma    | 6361702459    |   |         |
| 19   | SHRINATH G SOOJI        | Diploma    | 8310456559    |   |         |
| 20   | YASH RAMESH MANE        | Diploma    | 8938251751    |   |         |

**Industrial visit Coordinators**

1. Dr. M.M.Shivashimpi

2. Shri. V.G. Badiger

  
**Assistant Executive Engineer**  
**KNNL CBC Sub Dn.No.2**  
**Hidkal Dam.**

14/02/2022





S J P N Trust's  
**Hirasugar Institute of Technology, Nidasoshi**  
*Inculcating Values, Promoting Prosperity*  
Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.  
**Accredited at 'A' Grade by NAAC**  
**Programmes Accredited by NBA: CSE, ECE, EEE & ME.**

Mech. Engg. Dept.

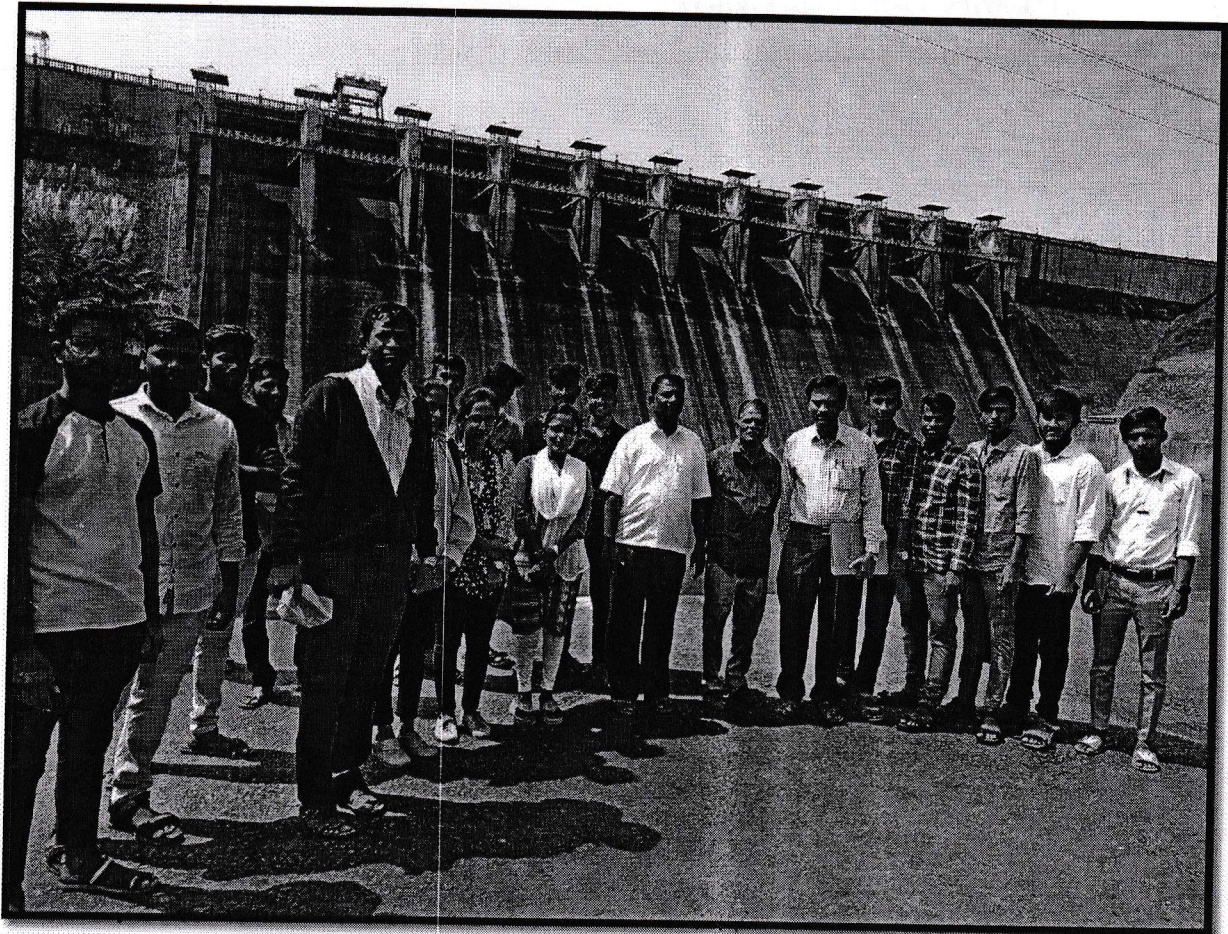
Academic


Industry Visit  
Report

AY:2021-22

# Report on Industry Visit to Hidkal Dam Power Plant, Hidkal

Date: 14<sup>th</sup> February 2022



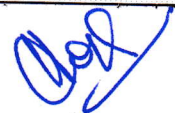
  
Student Co-ordinators:

1. Mr. Yogesh Donawade

  
Staff Co-ordinators:


1. Dr. M.M. Shivashimpi

2. Shri. V.G. Badiger

  
Dr. S. N. Topannavar

  
Mechanical Engg.  
HIT, Nidasoshi



|  |   |                              |
|--|---|------------------------------|
|  | <p align="center"><b>S J P N Trust's</b><br/> <b>Hirasugar Institute of Technology, Nidasoshi</b><br/> <i>Inculcating Values, Promoting Prosperity</i><br/>         Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.<br/> <b>Accredited at 'A' Grade by NAAC</b><br/> <b>Programmes Accredited by NBA: CSE, ECE, EEE &amp; ME.</b></p> | <b>Mech.Engg.Dept.</b>       |
|  |   | <b>Academic</b>              |
|  |   | <b>Industry Visit Report</b> |
|  |   | <b>AY:2021-22</b>            |

## **CONTENTS**

| <b>Sl. No</b> | <b>TOPIC</b>                        | <b>Page. No.</b> |
|---------------|-------------------------------------|------------------|
| <b>1</b>      | <b>Introduction</b>                 | <b>1</b>         |
| <b>2</b>      | <b>Conclusions</b>                  | <b>2</b>         |
| <b>3</b>      | <b>Industry Visit Photo Gallery</b> | <b>3</b>         |





## 1. Introduction

Raja Lakhamagouda dam, also known as Hidkal dam, is a dam constructed across the Ghataprabha River in the Krishna River basin. It is situated at Hidkal village in Hukkeri Taluk of Belagavi district in North Karnataka, India. It is located at a distance of 55 kms from Belagavi.

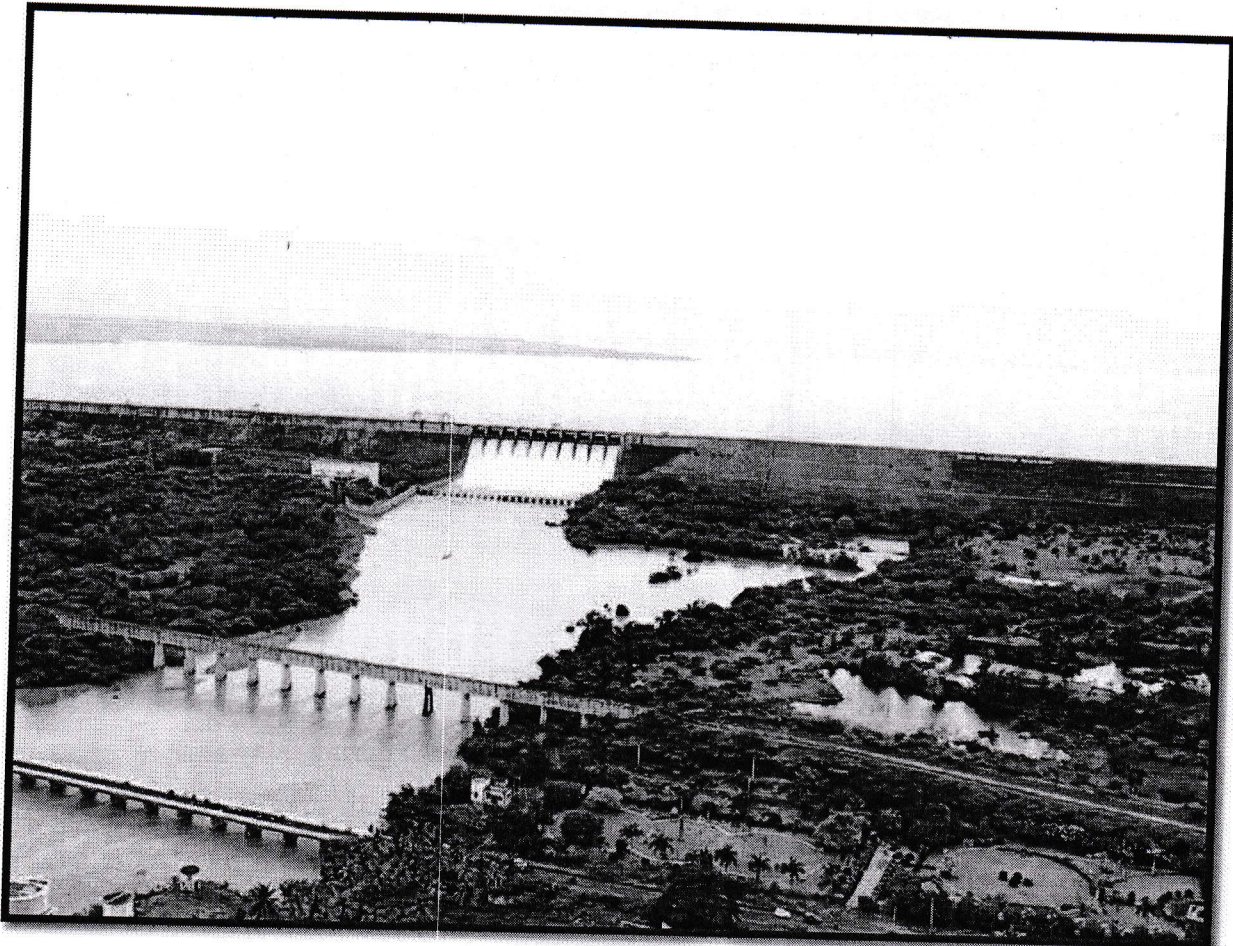


Figure 1.1 The view of Hidkal Dam during rainy season

The dam with the height of 62.48 metres and 10 Vertical Crest Gates, impounds a large reservoir with a gross surface area of 63.38 Square kilometres, and storage capacity of 51.16 Tmcft. It is an earthen and masonry dam which caters to the Irrigation needs for over 8,20,000 acres, and Hydel power generation. It is constructed as a part of the Ghataprabha Irrigation project which was completed in three phases and finished in 2009. The dam is named after Raja Lakhamagouda Sardesai, philanthropist and Zamindar of Vantamuri. The approximate expenditure of the Hidkal dam project was Rs. 9.47 crores. This dam caters for the irrigation of approximately 13400 hectores of agriculture lands in the Hukkeri taluk of Belgaum. This dam is popularly known as Raja Lakhamgowda Dam. Numerous fossils were





excavated from nearby areas of the dam site which makes it a place of interest for the archeologists. It is also a popular tourists place for the tourists visiting Belgaum. Nearby attractions includes Belgaum Fort ,Kamala Basti, Kapileshwara Temple ,Rakaskop, Varapoha Falls, Ramakrishna Ashram, Kittur Fort and Palace. The dam is not only an enthralling picnic spot but also attracts many archaeologists who frequents the place to research about fossils which were revealed recently nearby the Hidkal Dam.

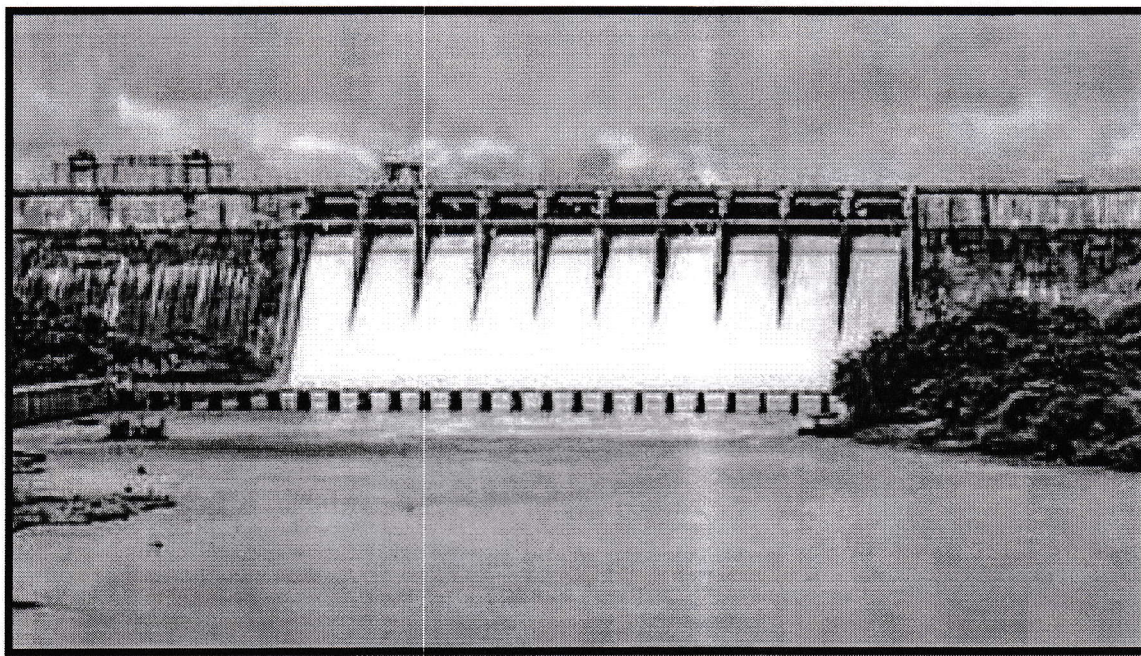


Figure 1.2 The Water flow from dam through radial gate during rainy season

This dam is home to a number of migratory birds like the Demoiselle cranes and Bar-headed geese that fly here every year, making it a roosting site. The area around the dam is now being used to cultivate sugarcane instead of the traditional paddy and wheat crops, disturbing the feeding habits of these birds. The dam is a place of profound natural beauty, archaeological interest and a nature spot for bird watching and is well worth a visit.

Best time to visit the Hidkal Dam is in the month of October-March as weather remains pleasant here. Visitors can visit the day during the day, usually with timings 8:00 AM - 7:00 PM. Entry fee is INR 5 per person.

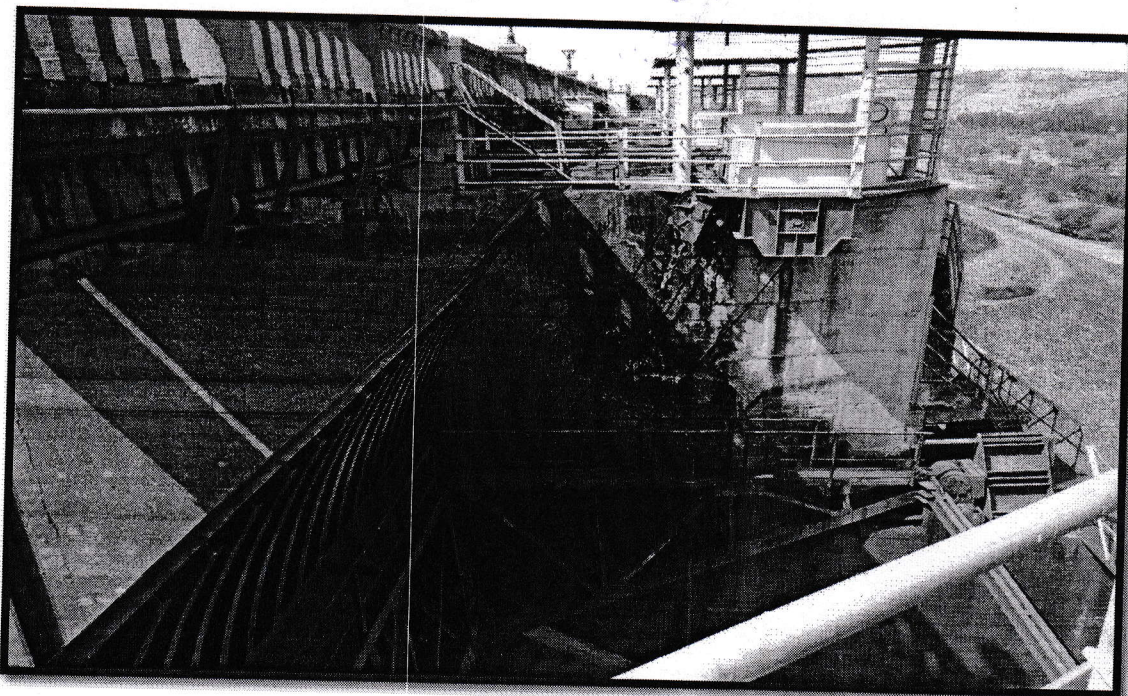
## 2. Conclusions

Hydropower plants are a vital energy source to the world. Water is an efficient and reliable fuel. The use, creation, and expansion of power plants should continue being pursued. Understand the working principles of hydraulic turbine Understand energy conversion principle from hydraulic energy to mechanical output shaft energy.

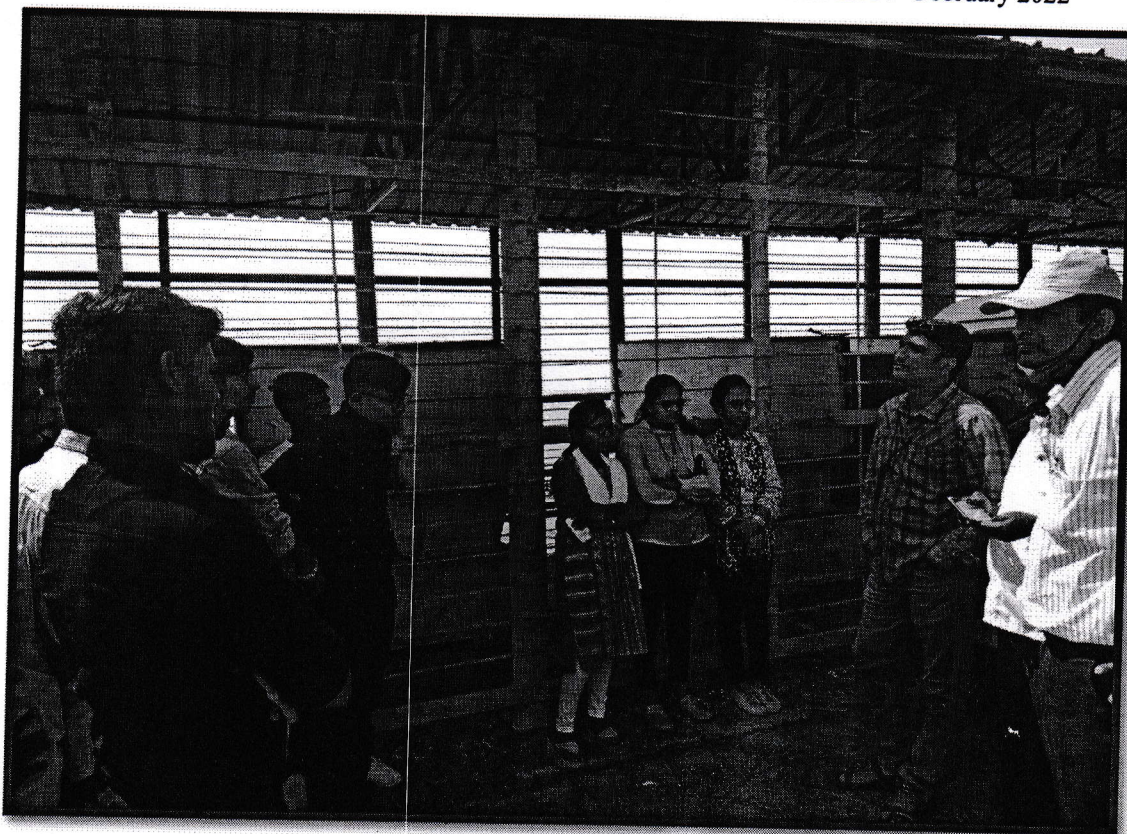




### 3. Industry Visit Photo Gallery



The view of Radial Gate Valve used in Hidakal Dam, Hidkal visited on 14<sup>th</sup> February 2022



Mr. S. M. Madiwale, AEE, Civil Engineer, Hidakal Dam, Hidkal is delivering about power plant house during industry visit held on 14<sup>th</sup> February 2022.



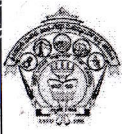


Staff and students are attended industry visit at Hidkal dam power plant, Hidkal held on 14<sup>th</sup> February 2022.



Staff and students are attended industry visit at Hidkal dam power plant, Hidkal held on 14<sup>th</sup> February 2022.



|   |   |                  |
|---|---|------------------|
|  | <b>S J P N Trust's</b><br><b>Hirasugar Institute of Technology, Nidasoshi</b><br><i>Inculcating Values, Promoting Prosperity</i><br>Approved by AICTE, Recognized by Govt. of Karnataka and<br>Affiliated to VTU Belagavi.<br>Accredited at 'A' Grade by NAAC<br>Programmes Accredited by NBA: CSE, ECE, EEE & ME | Mech. Engg. Dept |
|   |   | Activities       |
|   |   | Feedback         |
|   |   | 2021-22 (odd)    |

### FEEDBACK

Title of the Activity: **Industrial Visit to "Hidkal Dam Power House, Hidkal"**

| Gap No.: 14 | Mapped POs                | POs Weightage            | Mapped PSOs | PSOs Weightage |
|-------------|---------------------------|--------------------------|-------------|----------------|
|             | 1,2,3,4,6,7,8,10, 11 & 12 | 3,3,3,3,3,3,3,3,3, 3 & 3 | 1,2 & 3     | 3,3 & 3        |


Date/Duration: 14-02-2022

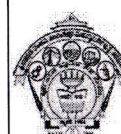
Place: Hidkal

Note: Solicit your response in numeric (10 points:Excellent-0 point: Not Good)

| S.No.        | Parameter  | Numeric Response (0-10) |
|--------------|--|-------------------------|
| 1            | Concept realization and skills observed during industry visit.         | 10                      |
| 2            | Inspired to build and lead the better career after the graduation.     | 10                      |
| 3            | Rate the industry in the professional learning prospective.            | 10                      |
| 4            | Your development/+ve change during the industry visit.                 | 10                      |
| 5            | Overall motivation and inspiration received during the industry visit. | 10                      |
| Total points |  | 50                      |

Write your comments on activity/event organization (All Arrangements such as Hospitality, Logistics, and Hall etc.):

  
Signature of the Participant

|  |   |                  |
|--|---|------------------|
|  | <b>S J P N Trust's</b><br><b>Hirasugar Institute of Technology, Nidasoshi</b><br><i>Inculcating Values, Promoting Prosperity</i><br>Approved by AICTE, Recognized by Govt. of Karnataka and<br>Affiliated to VTU Belagavi.<br>Accredited at 'A' Grade by NAAC<br>Programmes Accredited by NBA: CSE, ECE, EEE & ME | Mech. Engg. Dept |
|  |   | Activities       |
|  |   | Feedback         |
|  |   | 2021-22 (odd)    |

### FEEDBACK

Title of the Activity: : **Industrial Visit to "Hidkal Dam Power House, Hidkal"**

| Gap No.:14 | Mapped POs                | POs Weightage            | Mapped PSOs | PSOs Weightage |
|------------|---------------------------|--------------------------|-------------|----------------|
|            | 1,2,3,4,6,7,8,10,1 1 & 12 | 3,3,3,3,3,3,3,3,3, 3 & 3 | 1,2 & 3     | 3,3 & 3        |

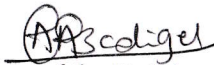
Date/Duration: 14-02-2022

Venue: Hidkal

Note: Solicit your response in numeric (10 points:Excellent-0 point: Not Good)

| S.No.        | Parameter  | Numeric Response (0-10) |
|--------------|--|-------------------------|
| 1            | Concept realization and skills observed during industry visit.         | 10                      |
| 2            | Inspired to build and lead the better career after the graduation.     | 9                       |
| 3            | Rate the industry in the professional learning prospective.            | 10                      |
| 4            | Your development/+ve change during the industry visit.                 | 10                      |
| 5            | Overall motivation and inspiration received during the industry visit. | 10                      |
| Total points |  | 49                      |

Write your comments on activity/event organization (All Arrangements such as Hospitality, Logistics, and Hall etc.):

  
Signature of the Participant





**S J P N Trust's**  
**Hirasugar Institute of Technology, Nidasoshi**  
 Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.  
 Accredited at 'A' Grade by NAAC  
 Programmes Accredited by NBA: CSE, ECE, EEE & ME.

**Mech. Engg. Dept.**

**Activities**

**Impact Analysis on Feedback**

**AY:2021-22**

### Impact Analysis and PO & PSO Attainment

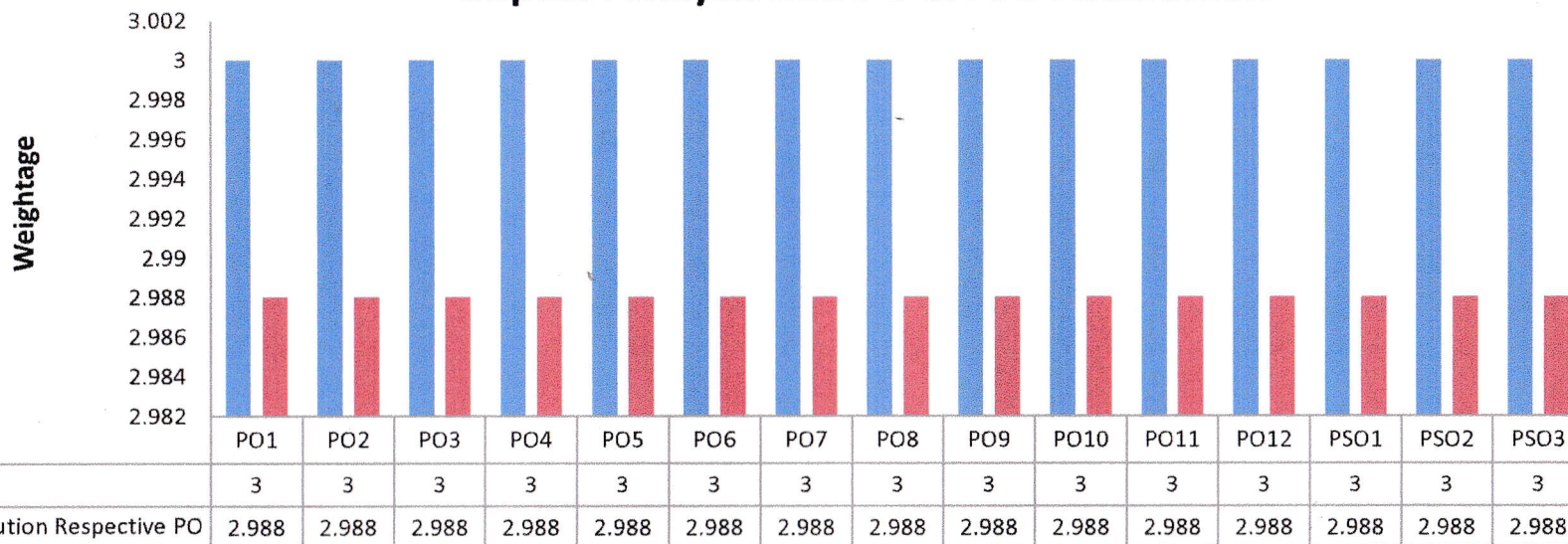
|   |  |                                     |   |
|---|--|-------------------------------------|---|
| <b>Activity Name:</b>                                       | Industrial visit to Hidkal Dam Power House, Hidkal | <b>No. of Respondents (N):</b>      | 10  |
| <b>Grand Total Points are given by all respondents (T):</b> | 498  | <b>Impact Coefficient (IC=0-1):</b> | Here, $IC = T / (N * 50) = 498 / (10 * 50) = 0.996$ |

| Mapped PO/s | Weightage Assigned (1/2/3) | PO Attained/Activity Contribution to the respective PO (IC*Weightage Assigned) | Mapped PSO/s | Weightage Assigned (1/2/3) | PO Attained/Activity Contribution to the respective PSO (IC*Weightage Assigned) |
|-------------|----------------------------|--|--------------|----------------------------|---|
| PO1         | 3                          | 2.988  | PSO1         | 3                          | 2.988   |
| PO2         | 3                          | 2.988  | PSO2         | 3                          | 2.988   |
| PO3         | 3                          | 2.988  | PSO3         | 3                          | 2.988   |
| PO4         | 3                          | 2.988  |              |                            |   |
| PO5         | 3                          | 2.988  |              |                            |   |
| PO6         | 3                          | 2.988  |              |                            |   |
| PO7         | 3                          | 2.988  |              |                            |   |
| PO8         | 3                          | 2.988  |              |                            |   |
| PO9         | 3                          | 2.988  |              |                            |   |
| PO10        | 3                          | 2.988  |              |                            |   |
| PO11        | 3                          | 2.988  |              |                            |   |
| PO12        | 3                          | 2.988  |              |                            |   |





### Impact Analysis and PO & PSO Attainment



#### Justification:

##### 1. Justification for Mapping of POs & PSOs

| Mapped POs/ PSOs | Weightage | Justification   |
|------------------|-----------|---|
| PO1              | 3         | This activity substantially addresses hydropower engineering a field of engineering that has to do with harnessing the energy of flowing water and turning that energy into electricity.                              |
| PO2              | 3         | This activity substantially enlightens revolutionary concepts for hydroelectric energy storage and the analysis focusing on underwater hydro storage and hydropower's hybridization with fast energy storage systems. |
| PO3              | 3         | This activity substantially enlightens advances in the electro-mechanical components and generator design with their potential role to adapt hydropower to the current operating conditions.                          |
| PO4              | 3         | This activity is substantially about emerging and advanced technologies to mitigate flow instabilities as well as emerging magneto-rheological control techniques. Recent research findings on flow instabilities,    |





|      |   |  |
|------|---|--|
|      |   | especially concerning fluid-structure interaction and transient operating conditions.  |
| PO5  | 3 | This activity substantially addresses modern hydraulic turbines to meet new challenges associated with the variable demand on the energy market as well as limited energy storage capabilities, resulting in great flexibility required in operation over an extended range of regimes far from the turbines' best efficiency point. |
| PO6  | 3 | This activity addresses briefly dams and reservoirs that can reduce river flows, raise the water temperature, degrade water quality and cause sediment to build up. This has negative impacts on fish, birds, and other wildlife.  |
| PO7  | 3 | This activity addresses briefly climate-friendly energy sources, generating power without producing air pollution or toxic by-products.  |
| PO8  | 3 | This activity addresses the significant potential for novel approaches in the planning, design, and operation of a hydropower station.   |
| PO9  | 3 | This activity addresses Project the potential size of the hydropower workforce under different growth scenarios and where skill set gaps exist relative to today's workforce.  |
| PO10 | 3 | This activity enlightens additional training programs are needed to meet anticipated hydropower workforce needs in 2030 and develop recommendations to fill the gaps   |
| PO11 | 3 | This activity provides the hydropower program is the abundant low-cost energy the projects contribute to electric power grids. Because hydroelectric power plants burn no fuel, operating costs are low and are immune to rising fossil fuel prices.   |
| PO12 | 3 | This activity enlightens innovation and aims at increasing hydropower's efficiency, flexibility of operation, and lifetime and reducing the costs of installation, operation, and maintenance.   |
| PSO1 | 3 | This activity provides exposure to many of the key skills that mechanical engineers learn and develop a wide range of applications for hydroelectric generation.   |
| PSO2 | 3 | This activity addresses knowledge of design procedure and analyzes hydro mechanical components design such as intake gate, Penstock size, and thickness, manhole, expansion joints, draft tube, turbine blade design, etc.   |
| PSO3 | 3 | This activity enlightens us about hydropower facilities can have large environmental impacts by changing the environment and affecting land use, homes, and natural habitats in the dam area.  |

2. The activity mapped with PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, and PO11 & PO12 was found satisfactory with an attainment level of 2.988 each against the Mapped values during the impact analysis.





**S J P N Trust's**  
**Hirasugar Institute of Technology, Nidasoshi**  
Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.  
Accredited at 'A' Grade by NAAC  
Programmes Accredited by NBA: CSE, ECE, EEE & ME.

**Mech. Engg. Dept.**

**Activities**

**Impact Analysis on Feedback**

**AY:2021-22**

3. The activity mapped with PSO1, PSO2 & PSO3 was found satisfactory with an attainment level of 2.988 each against the Mapped value during the impact analysis.

**Conclusion:** The activity is organized to fulfill the program outcomes engineering knowledge, problem analysis, design/development solution, conduct investigations of complex problems, modern tool usage, engineering and society, environment and sustainability, ethics, individual & teamwork, communication, project management & finance and lifelong learning and PSO1, PSO2 & PSO3 has mitigated the gap identified satisfactorily to some extent.

**Future Suggestions:** Hydropower plants are a vital energy source for the world. Water is an efficient and reliable fuel. The use, creation, and expansion of power plants should continue to be pursued.

Mr. Vivekanand Kambi  
AIMSS Secretary

Prof. M.M. Shivashimpi & Prof. D.N. Inamdar  
AIMSS-Coordinator/s

Dr. S.N. Topannavar

**HOD**  
**Mechanical Engg.,**  
**HIT, Nidasoshi**