

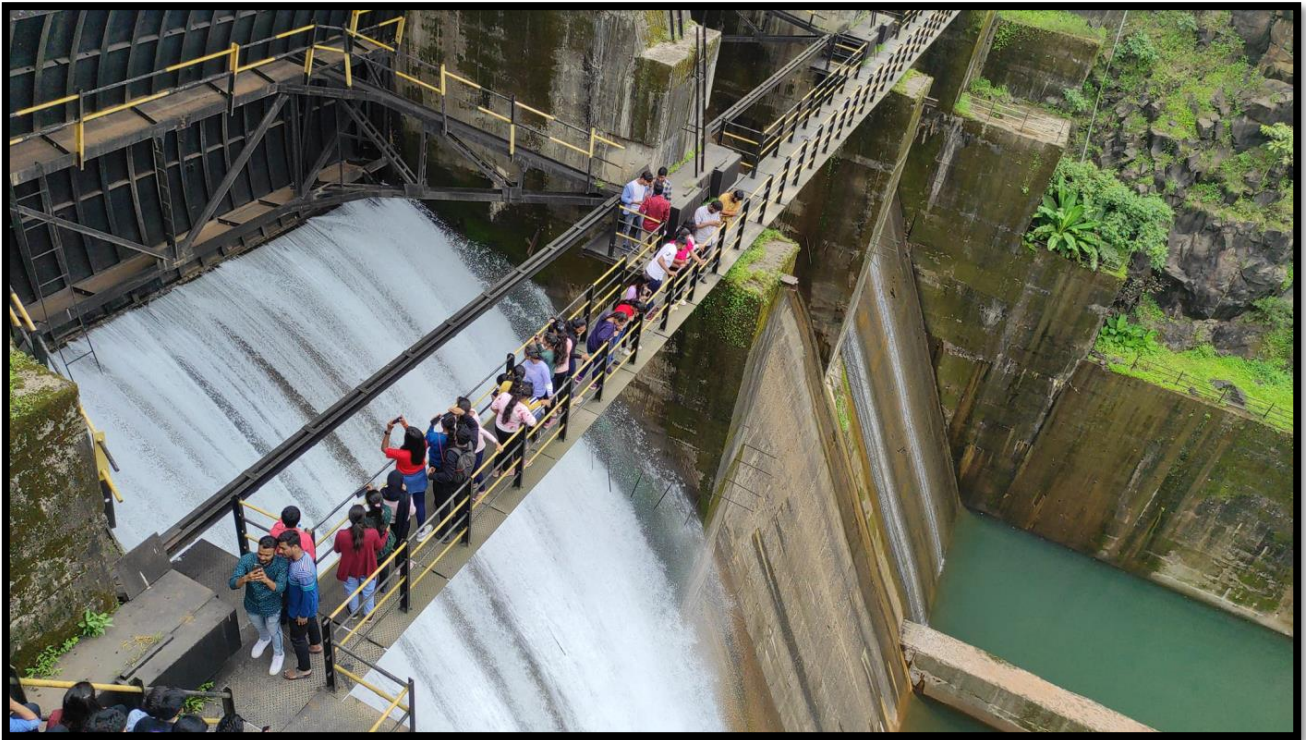


Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering and Technology, Baramati

Department of Civil Engineering

Short report on 'Visit to Dhom Balkawadi dam near Wai and Constrotrait Material Testing & Services Lab in Wai, District – Satara alongwith 39 Civil Engg students on 30 Aug 2022 .

Industrial visit report



Content of report:

1. Objective of visit
2. Details of visit
3. Photographs taken during visit
4. Feedback
5. List of participants
6. Outcomes of visit
7. Details of permissions taken from industry

Coordinator for visit: Prof. D. G. Patil, Dr. S. G. Morkhade , Er. Sachin Jarande

1. Visit to Dhom Balkawadi dam and its hydroelectric power plant

Introduction:

Visit was organised on 30.8.22 by dept of Civil Engineering of VPKBIET BARAMATI (vpkbiet.org) for better industrial exposure of Civil Engineering students to Dhom Balkwadi dam near Wai, district Satara n it's hydroelectric power plant. Students studied different concept related to hydrology, planning of reservoirs, construction of dam, reservoir operations, discharge from dam, hydropower generation, irrigation, steel structures, construction of culvert n bridges, Geology, drainage system of area, topography, landslides, erosion, sedimentation etc.

Objective of the visit: better industrial exposure to students and staff

Details:

Prof. D. G. Patil, Dr. Samadhan Morkhade, Er. Sachin Jarande from Civil engineering dept coordinated visit on behalf of Civil Engineering Department and in association of Industry institute interaction cell (IIIC) of VPKBIET Baramati (dept coordinator Prof. Miss. J. C. Bhong and Dean IIIC Dr D. B. Hanchate).

It gave students opportunity to learn n correlate different concepts from practical application point of view n as per needs of industry. Students learned from experience, guidance from industry experts. They motivated students n guided for career opportunities.

Thank you to irrigation dept officials n team, team from hydroelectric power plant for their kind support, guidance n sharing valuable time for our students. Er. Borse sir accompanied us demonstrated all operations with help of their team.

Some photographs taken during visit:



Fig. 1, 2 : View of dam spillway at entry of dam site



Fig. 3, 4 : storage of the dam and visitors on embankment of dam with officers at site



Fig. 5, 6 : Top View of dam and water stored in summer (photo taken from elephant point of Mahabaleshwar)



Fig. 7, 8 : Geology rock specimens collected at site and visit to Mahaganapati temple at Wai during breakfast stop.



Fig. 9, 10 : students observing operation of spillway gates during release of water and Dr. S. G. Morkhade sir explaining design of stell structures of Bridge constructed for acess to ICPO



Fig. 11, 12 : Dr. S. G. Morkhade , Prof. D. G. Patil, Er. Sachin Jarande sir with Er. Borse sir from Irrigation dept and staff at site



Fig. 13, 14 : Dr. S. G. Morkhade , Prof. D. G. Patil, Er. Sachin Jarande sir at site and location of landslide, reconstructed temporary pipe culvert



Fig. 15, 16 : view of backwater stored and spillway channel with stilling basin for dissipation of excess energy of released water



Fig. 17 : students at hydroelectric power plant while team is explain its working



Fig. 18 : Er. Borse sir explaining dam features to students



Fig. 19 : Prof. D. G. Patil guiding the students about planning, execution of project



Fig. 20 : Dr. S. G. Morkhade sir during demonstration of design and working of Gantry girder used in hydroelectric power plant



Fig. 21 : demonstration of operation of butterfly valve



Fig. 22, 23 : students at agrotourism centre while taking lunch near to dam site where lunch was pre-planned to save time.

2. Visit to Constrotrait Material Testing & Services LLP) in Wai, District - Satara

Introduction:

Further we prof. D, G. Patil, Dr. S. G. Morkhade (PG Coordinator, ME in structural Engineering of Vpkbiet.org), Er. Sachin Jarande & Civil engineering students visited to Civil engineering material testing lab n consultancy services office (Constrotrait Material Testing & Services LLP) in Wai, District - Satara started by our VPKBIET Baramati Alumni Er. Mukund Gaikwad sir...(ME Structural Engineering) <https://g.co/kgs/cvsXix>

Objective of the visit: understanding of different tests carried out for field applications and career opportunities in this sector.

Details:

Er. Mukund Gaikwad sir and his team members highlighted importance of testing of materials in present scenario in construction sector, advanced techniques n explained tests n services offered by them in Wai and in surrounding area in Satara district. Nice to visit his place with high end lab equipments , his expert qualified team n discussion with them.

Some photographs taken during visit:



Fig. 24,25: students at Constrotrait Material Testing & Services lab in Wai, District – Satara with Er. Mukund Gaikwad sir and his team members.



Fig. 26,27: Experts from Constrotrait Material Testing & Services lab explained procedure and importance different tests carried out on Civil Engg material like Steel, cement, aggregate, Concrete cubes, Bitumen and many more.



Fig. 28,29: Experts from Constrotrait Material Testing & Services lab demonstrated equipments used for testing and demonstrated some tests



Fig. 30,31: Experts from Constrotrait Material Testing & Services lab guided for career opportunities in near future in testing of material and consultancy and also stressed the importance of such quality control tests in construction sector

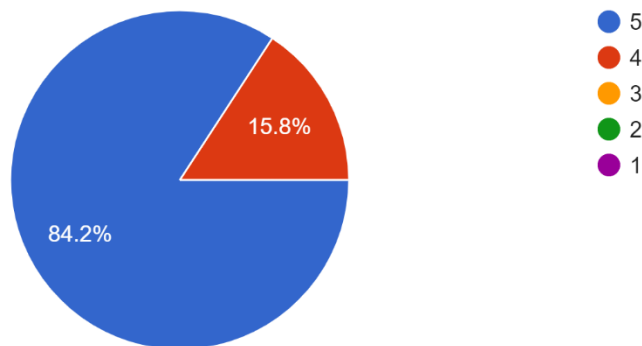
Feedback of Industrial visit

It was a great experience n exposure to students. They could see dam, working of spillway gates and generation of hydroelectricity and other topics from Hydrology, Irrigation, water resources engg, Bridge engg, landslide etc.

Feedback of visit from students:

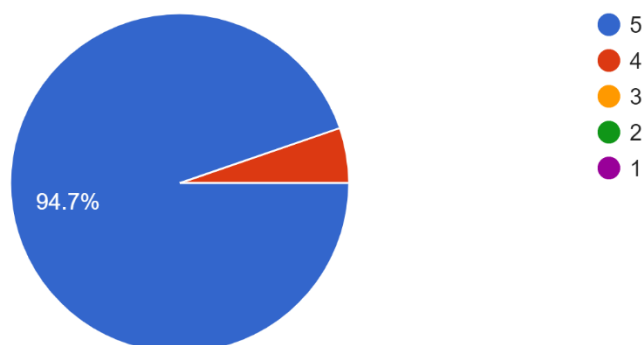
1. The field visit was timely and full day time available was used appropriately.

38 responses



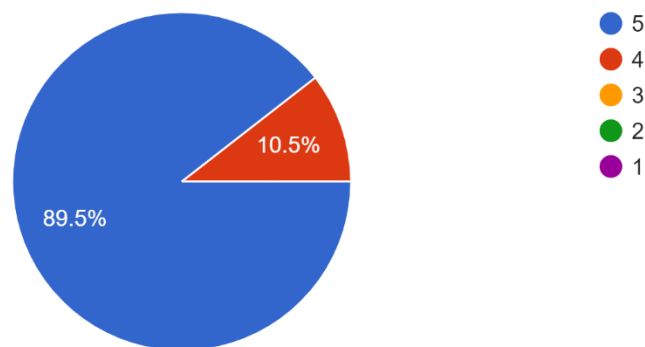
2. The visit was well organized and planned with all requirements and permissions.

38 responses



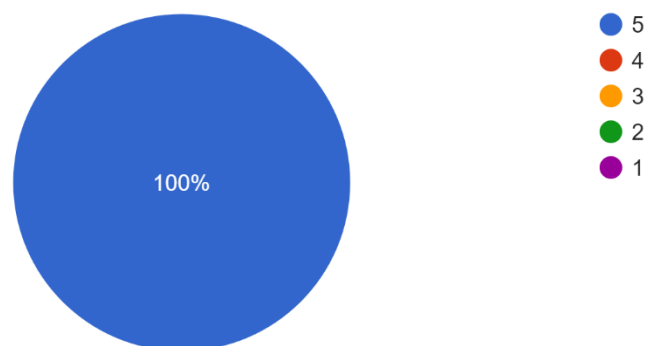
3. The location selected was appropriate to meet the stated objectives and students could see all technical points as per discussions.

38 responses



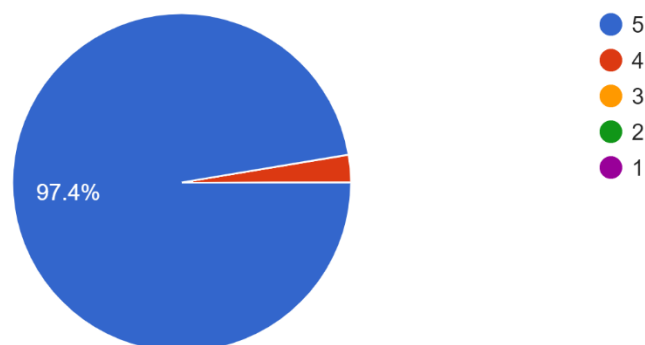
4. The visit was useful to strengthen knowledge gathered in lectures and considering practical applications, understanding career opportunities.

38 responses



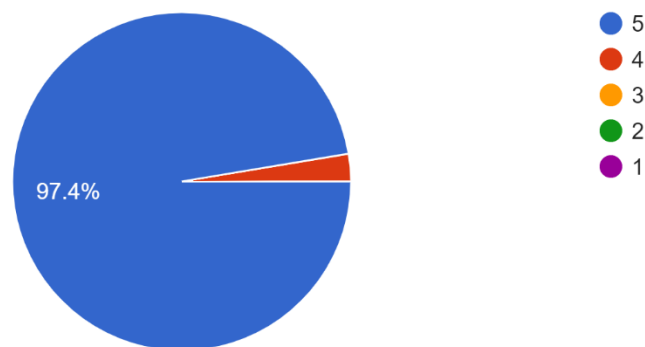
5. Aims and objectives, instructions for the visit were explained at the beginning and proper care was taken during visit considering safety of students at site

38 responses



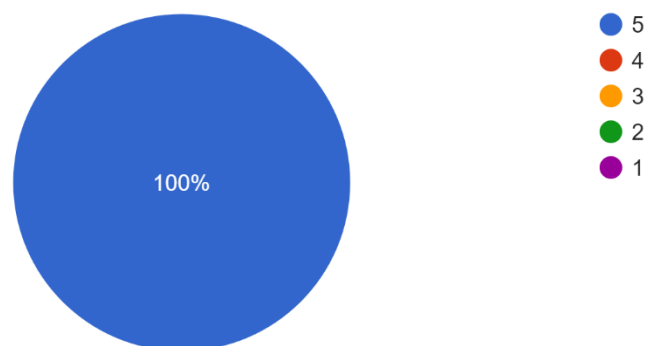
6. A teacher accompanied the students during the visit and guided students at all locations with care.

38 responses



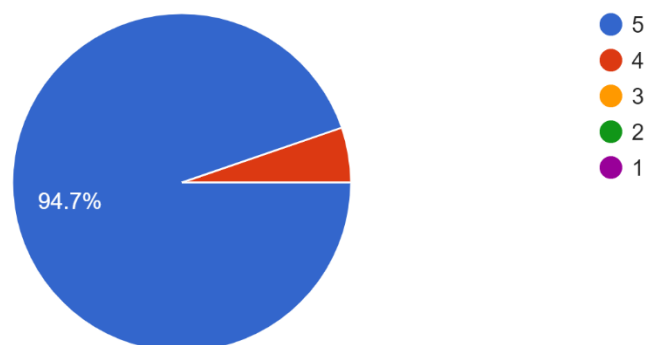
7. The Teacher and officers on site explained working , operations of plant by giving sufficient time.

38 responses



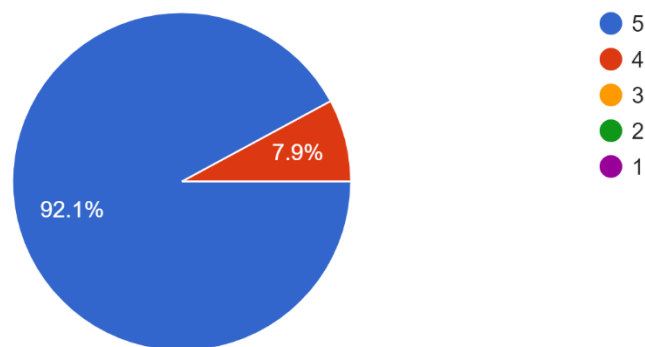
8. The Teacher/Resource Person at site were responsive to student's questions during the visit and they clearly doubts related to subject.

38 responses



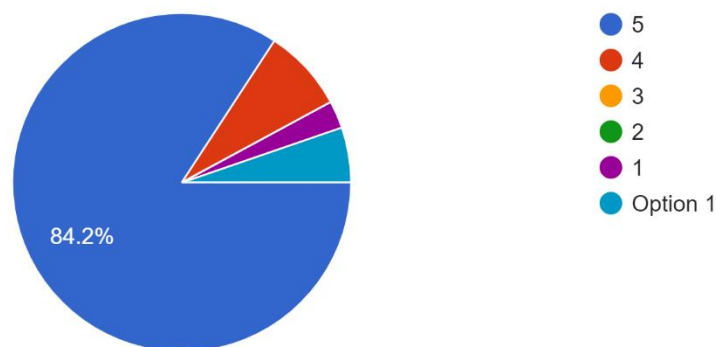
9. The Teacher/officers at site encouraged student participation and understanding of operations at site.

38 responses



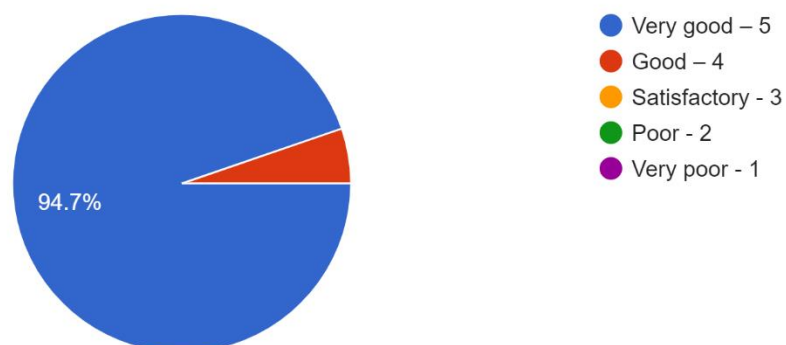
10. I recommend such field visits to be continued further for better industrial exposure.

38 responses



11. The overall grading of the Visit: Very good – 5 Good – 4 Satisfactory - 3 Poor - 2 Very poor - 1

38 responses



Thank you Dr. C. B. Nayak sir (HOD, Civil engineering) and Hon. Principal Dr. R S Bichkar sir for their kind support, guidance and motivation to have industrial exposure.

List of Visitors:

SN	RN	Class/ Staff	Name	Gender	Age
1	36	BE Civil	Barabade Sachin	M	22
2	79	BE Civil	Bhoge Rushikesh	M	21
3	72	BE Civil	Bhosale Indrajit Mahendra	M	21
4	80	BE Civil	Birajdar Ritesh	M	22
5	16	BE Civil	Chavare Tejas Bharat	M	21
6	4	BE Civil	Daund Saurav	M	21
7	71	BE Civil	Gunge Saurabh	M	22
8	30	BE Civil	Hole Divyesh	M	22
9	12	BE Civil	Ingole Akash	M	22
10	75	BE Civil	Jadav Swapnil	M	21
11	77	BE Civil	Jadhav Kshitija	F	22
12	43	BE Civil	Jadhav Nikhil	M	22
13	73	BE Civil	Kolhe Harhwardhan	M	21
14	60	BE Civil	Nikam Ajay	M	20
15	87	BE Civil	Pawar Tejal huanumant	F	21
16	28	BE Civil	Randhave Tejasvi Laxman	F	21
17	46	BE Civil	Sapkal Dhanashri Tanaji	F	20
18	42	BE Civil	Shinde Yashodan	M	21
19	78	BE Civil	Surve Sayali	F	22
20	37	BE Civil	Tarte Sanika Sunil	F	21
21	55	BE Civil	Thombare Omkar	M	21
22	40	BE Civil	Yadav Pooja Kanhaiyalal	F	20
23	50	TE Civil	Bagwan Nida Firoj	F	20
24	33	TE Civil	Bhosale Prachi Pramod	F	20
25	26	TE Civil	Deshmukh Prathamesh Mahesh	M	19
26	28	TE Civil	Gajakas Bharti Navnath	F	19

SN	RN	Class/ Staff	Name	Gender	Age
27	19	TE Civil	Jadhav Dhanashri Dasharath	F	21
28	1	TE Civil	Jadhav Sakshi Ravindra	F	20
29	9	TE Civil	Jagtap Sanjivani Dattatray	F	20
30	32	TE Civil	Kale Ishwari Ginyandev	F	19
31	20	TE Civil	Kapse Shivani Balaji	F	19
32	55	TE Civil	Kare Gauri Pandurang	F	19
33	36	TE Civil	Khanvilkar Avanti Shankar	F	20
34	25	TE Civil	Kshirsagar Neha Anil	F	20
35	22	TE Civil	Mokashe Arati Baban	F	20
36	24	TE Civil	Nangare Anjali Sunil	F	21
37	34	TE Civil	Patel Aiman Riyazoddin	F	19
38	30	TE Civil	Pawar Mrudula Sambhaji	F	19
39	2	TE Civil	Shinde Priti Balu	F	20
40	Coordinator	Faculty	Mr. Patil Dilip Gulabrao	M	42
41	Co-coordinator	Faculty	Dr. Morkhade Samadhan G.	M	37
42	support	Tech assistant	Mr.Jarande Sachin	M	32

Programme outcomes mapped through this visit:

Industrial visits represent important activities in Civil Engineering programme that contribute to the achievement of various essential learning objectives and programme outcomes.

1. **Engineering knowledge:** students learned many things from theory and its applications on site
2. **Problem analysis:** students analysed different problems like selection of site and landslides, design of culvert with scientific approach.
3. **Design/development of solutions:** students understood design of earthen dam and location of spillway
4. **Design/development of solutions:** practical exposure motivated students to gain more knowledge in this area
5. **Modern tool usage:** students could see latest technology (SCADA) related to control and operation of power plants and different latest advanced equipments used in the Constrotrait Material Testing & Services lab
6. **The engineer and society:** students could learn about various social issues related to availability of roads in remote areas, land acquisition process and agriculture according to climate.
7. **Environment and sustainability:** students learned how construction of dam is useful in many ways for economic development with less harm to environment or to conserve environment with use of water and how hydroelectricity is sustainable source of energy
8. **Ethics:** students get exposure of professional working at site through discussions and experience.

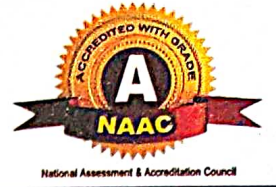
9. **Individual and team work:** students coordinated well for successful achieving the objectives of visit and learned to work in team for throughout the visit by following instructions from staff.
10. **Communication:** students are motivated for proper documentation of visit details
11. **Project management and finance:** students learned financial aspects in planning and execution of such large projects and benefits received as compared to costs
12. **Life-long learning:** everyone recognized the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Annexure: Visit permissions

We had applied to irrigation dept for permission to visit dam site and Vishwaj Energy Pvt Ltd for visit to Hydroelectric power plant of Dhom Balkawadi dam. So they had permitted us so and guided well during visit through their team.



Vidya Pratishthan's
**KAMALNAYAN BAJAJ INSTITUTE OF
ENGINEERING & TECHNOLOGY, BARAMATI**
विद्या प्रतिष्ठानचे कमलनयन बाजाज इंस्टिट्यूट ऑफ इंजिनिअरिंग अँड टेक्नॉलॉजी, बारामती.
(Formerly Vidya Pratishthan's College of Engineering, Baramati)



Approved by AICTE & Govt. of Maharashtra, Affiliated to Savitribai Phule Pune University, Pune.
University Id. No. PU/PN/Engg./152/2000 | DTE Code : 6284 | Accredited by NAAC with 'A' Grade

Ref.No.: VPKBIET/2022/ 650

Date : 18/08/2022

To,
The Executive Engineer,
Dhom Balkawadi Project Division.
Satara Irrigation Division.
Wai, Dist:- Satara

Subject:- Request to grant a permission to visit our Civil Engineering Students (UG) at Hydro-Electric Power plant and Dam

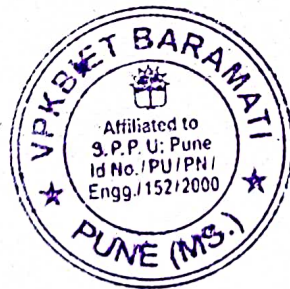
Dear Sir,

About 60 students of Civil Engineering along with 3 staff members would like to visit Dhom Balkawadi dam and its hydroelectric power plant during any convenient date between 25th August to 15th September 2022 (preferably on 26 Aug or working weekend day) . I assure you to follow the rules and regulations of your campus during the visit. This will be great industrial exposure to students.

Prof. D. G. Patil (9960686384) will be the overall incharge of this visit.

Awaiting for your kind reply in this regard,

Thanking You,



Yours Sincerely

R.S. Bichkar

Dr. R.S. Bichkar

Principal

Vidya Pratishthan's

Kamalnayan Bajaj Institute of
Engineering & Technology, Baramati
Vidyanagari, Baramati-413133

Vidyanagari, Bhigwan Road, Baramati, Dist. Pune (Maharashtra) - 413 133, India.

Phone: 91-2112-239503, 239504 | Fax: 91-2112-239514 | E-mail: principal.vpkbiet@vidyapratishthan.com | Web: www.vpkbiet.org



Vidya Pratishthan's
KAMALNAYAN BAJAJ INSTITUTE OF
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विद्या प्रतिष्ठानचे कमलनयन बाजाज इंस्टिट्यूट ऑफ इंजिनिअरिंग अँड टेक्नॉलॉजी, बारामती.
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University Id. No. PU/PN/Engg./152/2000 | DTE Code : 6284 | Accredited by NAAC with 'A' Grade

Ref.No.: VPKBIET/2022/ 664

Date : 24/08/2022

To,
The Director,
M/S Vishwaj Energy Pvt. Ltd.
Sinhgad, Opposite to BMCC College,
Sivajinagar, Pune
Dist:- Pune.

Subject:- Request to grant a permission to visit our Civil Engineering Students (UG) at Hydro-Electric Power plant of Dhom Balkawadi dam on 30 August 2022

Dear Sir,

About 40 students of Civil Engineering along with 3 staff members will visit Dhom Balkawadi dam and its hydroelectric power plant on 30th August 2022. We have taken permission to visit the dam from the Irrigation department.

We kindly request you grant permission to visit the hydroelectric power plant operated by your organisation on the same day. This will be a great industrial exposure to students. Kindly motivate, guide and illustrate operations at the plant to students through your team at site.

I assure you to follow the rules and regulations of your site during the visit and we will take care of our students during the visit so that there will not be any unfortunate accidents. We have visited your plant about six times till date in previous years with utmost care and discipline. Prof. D. G. Patil (9960686384) will be the overall incharge of this visit.

Awaiting for your kind reply in this regard,

Thanking You,






Yours Sincerely

Dr. R.S. Bichkar

Principal

Vidya Pratishthan's
Kamalnayan Bajaj Institute of
Engineering & Technology, Baramati
Vidyanagari, Baramati-413133

 <p>दूरध्वनी :- (०२१६२) २४४४५५ ईमेल eesidsatara@gmail.com</p>	<p>महाराष्ट्र शासन विभाग</p>  <p>जलसंपदा</p> <p>कार्यकारी अभियंता, सातारा सिंचन विभाग, सातारा सिंचन भवन, कृष्णानगर, सातारा ४१५००३</p>	 <p>स्वातंत्र्याचा अमृत महोत्सव</p>
<p>जा.क्र. सासिंवि/ प्रशा-३/ 2१७७९ /२०२२</p>		<p>दिनांक :- 2३/०८/२०२२</p>

प्रति,

Dr.R.S.Bichkar,
Principal,
Vidya Pratishthan's
Kamalnayan Bajaj Institute of
Engineering & Technology, Baramati,
Vidyanagari, Baramati – 413133.

Subject :- Permission to Visit Dhom Balkawadi Dam & Hydro Electric Power Plant.

Ref :- Principal, Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering & Technology, Baramati's letter No VPKBIET/2022/650 Date 18/08/2022.


As requested vide above referred letter permission to visit Dhom Balkawadi Dam (only) on 30/08/2022 is being accorded with following conditions. Students as per list provided by you and Lecturers / officers of your institute will only be allowed to visit Dhom Balkawadi Dam.

1. Everybody should carry along with him/her his/her original Identity Card.
2. Video shooting or photography is strictly prohibited .
3. For Dam visit 30/40 persons only will allowed at a time.
5. Whole responsibility of visiting student / lecturers / officers will lie with Principal, Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering & Technology, Baramati.
6. You are requested to contact Sub Division Engineer, Dhom Balkawadi Irrigation, Sub Div No 1, Wai for any further clarification / information.

However Hydraulic Power plant is operated by M/S Vishwaj Energy, Pvt.Ltd, Sinhgad Road behind college of BMC, Agarkar Road, Shivaji Nagar, Pune-5. Hence you are requested to take permission from this agency to visit hydroelectric project separately.

This is for your information & necessary action please.

O.C.Approved by E.E.


Dy. Executive Engineer
Satara Irrigation Division, Satara

Copy to – Sub Division Engineer Dhom Balkawadi Irrigation Sub Div No 1 Wai for necessary action.

