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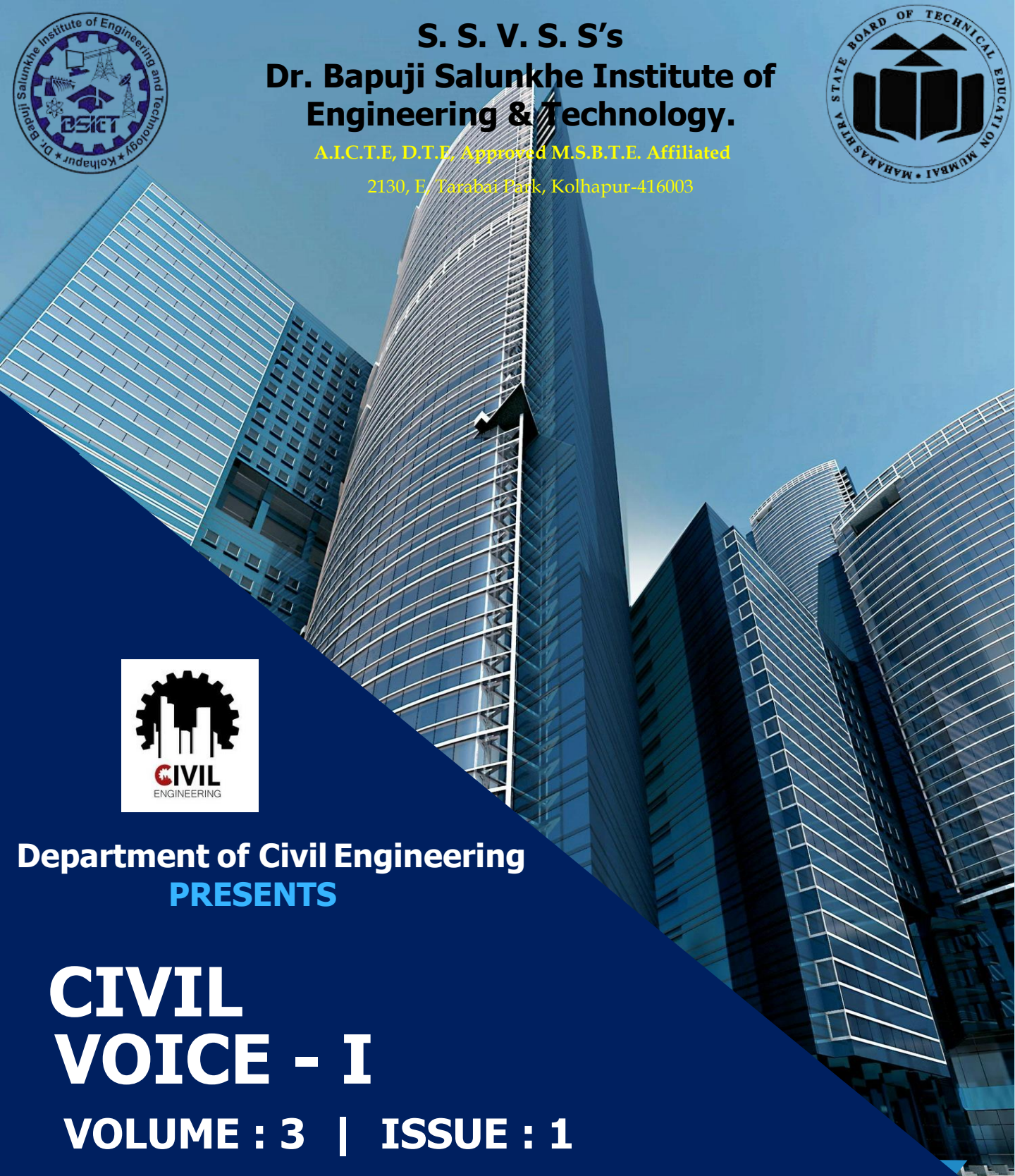
Dr. Bapuji Salunkhe Institute of Engineering & Technology.
A.I.C.T.E, D.T.E. Approved M.S.B.T.E. Affiliated
2130, E, Tarabai Park, Kolhapur-416003



Department of Civil Engineering
PRESENTS

CIVIL VOICE - I

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ACADEMIC YEAR 23-24
DECEMBER 2023

About The Department

The Department was established in 2009 with an approved intake of 60 students and has steadily grown with a strong focus on quality technical education. Since its inception, the department has been committed to developing competent engineering professionals through a well-structured academic framework.

To support effective teaching and learning, the department has developed seven advanced laboratories with a total investment of ₹20 lakh. These laboratories are utilized for academic instruction, practical training, research activities, and consultancy work, enabling students to gain hands-on experience and industry-relevant skills.

The department is supported by a team of highly experienced faculty members, each having more than 8 years of experience in teaching, fieldwork, and consultancy. Their expertise ensures strong academic mentoring, practical exposure, and continuous guidance, helping students achieve both professional competence and career readiness.

Principal's Message

It gives me immense pleasure to extend a warm welcome to all students, parents, faculty members, and stakeholders to Dr. Bapuji Salunkhe Institute of Engineering & Technology (BSIET).

At BSIET, we are committed to nurturing young minds by providing a stimulating academic environment that blends strong theoretical knowledge with hands-on practical exposure. Guided by the vision of Shri Swami Vivekanand Shikshan Sanstha, Kolhapur, and inspired by the ideals of Shikshan Maharshi Dr. Bapuji Salunkhe, our institution continuously strives for excellence in technical education rooted in ethics, discipline, and social responsibility.

Our focus on Outcome-Based Education (OBE), experiential learning, and industry-oriented practices ensures that students are well prepared to meet the evolving challenges of the professional world. Along with academic rigor, equal importance is given to research, innovation, entrepreneurship, and the development of soft skills such as communication, teamwork, and leadership.

The dedicated efforts of our faculty, the enthusiasm of our students, and the strong support from industry partners have helped BSIET maintain consistent academic performance and commendable placement records. Beyond academics, we actively encourage students to participate in co-curricular and extracurricular activities, enabling their holistic development and shaping them into confident professionals and responsible citizens.

Let us work together to uphold the legacy of excellence and take BSIET to greater heights.

I firmly believe that education is a transformative journey, and at BSIET, we aim to make this journey meaningful, empowering, and future-ready. I wish all our students a successful, enriching, and memorable academic year ahead.

Hod's Message

It gives me great pleasure to present the Civil Engineering Department newsletter for the month of **December 2023**, which highlights the academic, technical, and developmental activities conducted during this period. The department remains committed to nurturing academic excellence while continuously enhancing students' technical knowledge and professional competence.

During this month, various expert lectures, seminars, workshops, and skill development programs were organized to expose students to recent trends, practical applications, and industry expectations.

These activities were designed to complement classroom learning and encourage experiential and outcome-based education.

I sincerely appreciate the dedicated efforts of our faculty members and the enthusiastic participation of students in all departmental initiatives. Their commitment and teamwork have played a key role in the successful execution of these activities.

I encourage our students to remain focused on continuous learning, innovation, and ethical practices, which are essential qualities of a successful civil engineer. I wish all students and faculty members continued success in their academic endeavors and future professional careers.

Our Vision

"To provide quality technical education for fulfilling social needs as a civil engineer"

Our Mission

- To impart quality teaching, hands on training and value education to students.
- To inculcate professional ethics through quality and modern construction practices.
- To facilitate students for self – employability and pursue career enhancing courses.

Program Outcome's

PO 1. Basic knowledge: Apply knowledge of basic mathematics, sciences and basic engineering to solve the broad-based Civil engineering problems.
PO 2. Discipline knowledge: Apply Civil engineering knowledge to solve broad-based Civil engineering related problems.
PO 3. Experiments and practice: Plan to perform experiments and practices to use the results to solve broad-based Civil engineering problems.
PO 4. Engineering tools: Apply relevant Civil technologies and tools with an understanding of the limitations.
PO 5. The engineer and society: Assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to practice in field of Civil engineering.
PO 6. Environment and sustainability: Apply Civil engineering solutions also for sustainable development practices in societal and environmental contexts.
PO 7. Ethics: Apply ethical principles for commitment to professional ethics, responsibilities and norms of the practice also in the field of Civil engineering.
PO 8. Individual and team work: Function effectively as a leader and team member in diverse/ multidisciplinary teams.
PO 9. Communication: Communicate effectively in oral and written form.
PO 10. Life-long learning: Engage in independent and life-long learning activities in the context of technological changes also in the Civil engineering and allied industry.

Program Specific Outcome's

PSO1: Civil Engineering Fundamentals Apply fundamental concepts of civil engineering such as building construction, surveying, structural engineering, transportation engineering, geotechnical engineering, and water resources engineering to solve practical engineering problems.

PSO2: Planning, Design, and Execution Assist in planning, designing, estimation, and execution of civil engineering projects using standard codes, drawings, and specifications with the help of modern tools and software.

PSO3: Site Practices and Quality Control Perform site supervision, material testing, quality control, and safety practices in construction projects by following standard procedures and professional ethics.

PSO4: Sustainability and Professional Practice Apply sustainable construction practices, environmental considerations, and ethical responsibilities while working in civil engineering projects and professional environments

Program Educational Objectives (PEOS)

PEO 1 - Provide socially responsible, environment friendly solutions to Civil engineering related broad-based problems adapting professional ethics.

PEO 2 - Adapt state-of-the-art Civil engineering broad-based technologies to work in multidisciplinary work environments.

PEO 3 - Solve broad-based problems individually and as a team member communicating effectively in the world of work.

Department Activities– Expert Lecture

Introduction Program

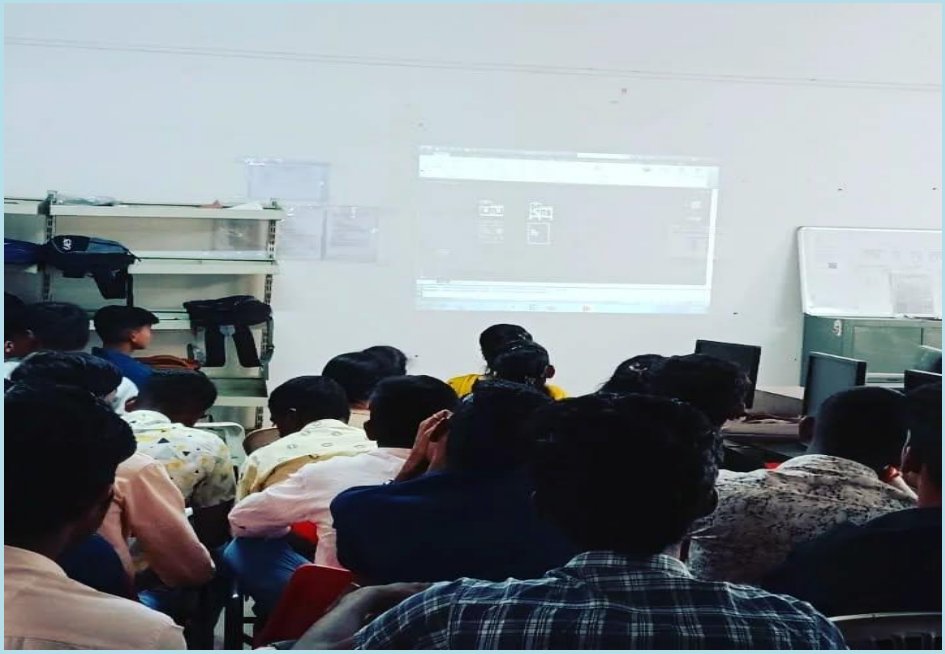
The Induction Programme for first-year students (2023–24) was conducted at BSIET, Kolhapur on 22 August 2023.
The programme was inaugurated by lighting the lamp and began with an opening address by the principal.
The key speaker, Mr. Madhukar Mukund Patil, spoke on Future Career Opportunities in Engineering and the Importance of Positive Thinking.
He guided students on building confidence, dedication, self-belief, and maintaining a positive mindset for success.
The toppers of first-year Diploma were felicitated during the programme.
The session was highly motivating and informative, encouraging students to focus on their goals and personal development.

Career opportunities for Diploma Students

The expert lecture was conducted to guide diploma students about various career opportunities after completing their studies.
The speaker explained different paths such as higher education, government jobs, private sector jobs, and skill-based careers.
He highlighted the importance of technical knowledge, practical skills, and continuous learning in engineering fields.
The lecture also focused on improving communication skills and professional attitude for career growth.
Students were motivated to set clear goals and prepare early for their future careers.
Overall, the session was informative, inspiring, and helpful for career planning.

Awareness of CAD

The lecture focused on creating awareness about design concepts and allied engineering tools. The expert explained the importance of AutoCAD in Civil and Mechanical engineering applications. Students were introduced to basic and commonly used AutoCAD commands through interactive discussion. The session highlighted how design software helps in accurate planning, drafting, and execution of projects. Practical uses of AutoCAD in industry and real-time projects were also discussed.
The lecture helped students understand the role of modern design tools in improving technical skills and employability.



Hands on Training of Total Station

The lecture focused on introducing Total Station and its importance in modern surveying work. The expert explained the basic components, working principle, and applications of Total Station. Students learned how Total Station is used for accurate measurement of distance, angles, and elevations. Hands-on training helped students understand field procedures and real-time data collection.

The session highlighted the advantages of Total Station over traditional surveying methods. Overall, the lecture enhanced students' practical knowledge and understanding of advanced surveying technology.

Industrial Visit

Sewage Treatment Plant

The Department of Civil Engineering organized an industrial visit to a Sewage Treatment Plant (STP) to provide practical exposure to wastewater treatment processes. Students learned about various stages of sewage treatment such as screening, sedimentation, aeration, and disinfection. The working of different treatment units and safety measures followed at the plant were explained by technical experts. The visit helped students understand the importance of wastewater management and environmental protection. Students also gained insights into treated water reuse and sludge disposal methods. Overall, the visit was informative and enhanced practical understanding of environmental engineering concepts.

Water Treatment Plant

The Department of Civil Engineering organized an industrial visit to a Water Treatment Plant (WTP) to understand the process of treating raw water for potable use. Students observed various treatment stages such as aeration, coagulation, sedimentation, filtration, and disinfection. The functioning of different units and equipment was explained by plant officials. Students learned about water quality standards and testing methods. The visit highlighted the importance of safe drinking water supply and public health. Overall, the visit was informative and strengthened students' practical knowledge.

Percolation Tank

The Department of Civil Engineering organized an educational visit to a Percolation Tank to understand groundwater recharge techniques. Students learned about the purpose and construction of percolation tanks used for conserving rainwater. The importance of percolation tanks in increasing groundwater levels and controlling runoff was explained. Officials discussed site selection, storage capacity, and maintenance aspects. The visit helped students understand sustainable water management practices. Overall, the visit was informative and enhanced awareness about water conservation.

Visit to Canal

The Department of Civil Engineering organized an educational visit to a **Canal** to study irrigation and water conveyance systems. Students learned about the design, alignment, and components of canal systems. The functioning of canal structures such as regulators, outlets, and distributaries was explained by experts. Emphasis was given on water distribution methods and maintenance practices. The visit helped students understand the role of canals in irrigation and agricultural development. Overall, the visit was informative and enhanced practical knowledge of water resources engineering.

Visit to Biogas Plant

The Department of Civil Engineering organized an educational visit to a Biogas **Plant** to understand renewable energy generation from organic waste. Students learned about the process of anaerobic digestion and biogas production. The functioning of components such as the digester, gas holder, and slurry outlet was explained. The importance of biogas in waste management and energy conservation was highlighted. Students also gained knowledge about the use of biogas and by-products as manure. Overall, the visit was informative and promoted awareness of sustainable energy practices.

Visit to Lift Irrigation

The Department of Civil Engineering organized an educational visit to a Lift Irrigation Scheme to understand modern irrigation techniques. Students learned about the concept and necessity of lifting water from lower to higher elevations. The working of pumping stations, pipelines, and control systems was explained by technical staff. Emphasis was given on power requirements and operational challenges. The visit highlighted the importance of lift irrigation in water-scarce regions. Overall, the visit was informative and enhanced students' understanding of irrigation engineering.

Visit to KT Weir

The Department of Civil Engineering organized an educational visit to a KT Weir (Kolhapur Type Weir) to study river water control structures. Students learned about the purpose, design, and components of KT weirs used for irrigation and water storage. The functioning of gates, piers, and crest levels was explained by experts. Emphasis was given on flood regulation and seasonal water management. The visit helped students understand the importance of KT weirs in regional irrigation systems. Overall, the visit was informative and strengthened practical knowledge of hydraulic structures.

Visit to Kalambwadi Dam

The Department of Civil Engineering organized an educational visit to Kalambwadi Dam to study a major water storage and irrigation structure. Students learned about the purpose, type, and components of the dam. The working of spillway, gates, and canal outlets was explained by technical staff. Emphasis was given on water storage, flood control, and irrigation benefits. Students also understood maintenance and safety aspects of dams. Overall, the visit was informative and enhanced practical knowledge of water resources engineering.

Visit to Construction Site Gokul Shirgaon MIDC

The Department of Civil Engineering organized an educational visit to a Construction Site at Gokul Shirgaon MIDC to provide practical exposure to real-time construction activities. Students observed various stages of construction including excavation, foundation work, and structural elements. The use of construction materials, machinery, and safety practices was explained by site engineers. Emphasis was given on site planning, quality control, and supervision. Students gained insights into industrial construction standards followed in MIDC areas. Overall, the visit was informative and enhanced practical understanding of construction management.

Visit to Construction Site Pratibha Nagar

The Department of Civil Engineering organized an educational visit to a Construction Site at Pratibha Nagar to provide students with practical exposure to building construction activities. Students observed various stages such as excavation, foundation work, and superstructure construction. The site engineer explained construction methods, materials used, and safety measures. Emphasis was given on quality control and site management practices. The visit helped students relate theoretical knowledge to actual field conditions. Overall, the visit was informative and enhanced practical understanding of building construction.

Visit to Construction Site Pratibha Nagar of Ram Sinha Group

The Department of Civil Engineering organized an educational visit to a Construction Site at Pratibha Nagar of Ram Sinha Group to provide practical exposure to building construction activities. Students observed various stages such as excavation, foundation work, and superstructure construction. The site engineer explained construction techniques, materials used, and safety practices followed at the site. Emphasis was given on quality control and project management. Students gained insights into real-time site execution and industry standards. Overall, the visit was informative and enhanced practical understanding of construction practices.

Visit to Construction Parmale House Nagala Park

The Department of Civil Engineering organized an educational visit to the Construction Site of Parmale House at Nagala Park to provide practical exposure to residential building construction. Students observed various stages of construction including foundation work, RCC activities, and masonry work. The site engineer explained construction methods, materials used, and safety measures followed on site. Emphasis was given on quality control and proper execution practices. Students gained insights into real-time site management and supervision. Overall, the visit was informative and enhanced practical understanding of building construction.

Civil Highlights

- **Mizoram Railway Bridge Collapse (Aug 23, 2023)** A major under-construction railway bridge on the Bhairabi–Sairang line in Mizoram collapsed, killing dozens of workers and highlighting the critical need for enhanced safety protocols on large infrastructure projects.
- **Uttarakhand Tunnel Collapse & Rescue (Nov 12, 2023)** A section of the Silkyara Bend–Barkot tunnel under construction collapsed, trapping dozens of workers. A large, coordinated rescue operation was launched, emphasizing the challenges of tunnelling in geologically complex Himalayan terrain.
- **Infrastructure Quality & Safety Concerns in India** Throughout 2023, multiple infrastructure quality concerns were raised, including premature road damages on major expressways soon after construction and public scrutiny of highway and bridge construction standards (e.g., Delhi-Dehradun Expressway issues reported later). These discussions reflect the engineering community's emphasis on construction quality and safety.
- **Innovative Engineering & Sustainability Trends** Industry publications in 2023 highlighted the shift towards climate-resilient and sustainable infrastructure, urging new engineering solutions that reduce environmental footprint and improve robustness in transportation and urban expansion projects.
- **Awards and Recognition in Construction Sector (Jul 2023)** The CE&CR Awards 2023 recognized outstanding achievements and innovations across various civil engineering and infrastructure domains, celebrating excellence in bridges, materials technology, and sustainable construction practices.
- **New Karimnagar Cable Bridge Inaugurated (June 21, 2023)** The Karimnagar Cable Bridge**,** a cable-stayed bridge over the Manair River in Telangana, was inaugurated to improve regional connectivity and ease traffic. This modern bridge enhances transport efficiency and shorter travel distances between key areas.
- **Progress on Mumbai–Ahmedabad High-Speed Rail Corridor (2023)** The Mumbai–Ahmedabad Bullet Train project achieved key construction milestones in 2023, including viaduct and steel bridge work, reflecting India's push toward high-speed rail infrastructure and modern transportation systems.

Academic Toppers

Class	Rank	Name	Percentage
SY	1st	BANGI ALAJARIN ADAM	93.67
	2nd	NAIR SRIDEVI JAYANT	92.33
	3rd	MALI NEHA ABHUIT	86.67
TY	1st	NAIR SRILAKSHMI JAYANT	91.10
	2nd	GAVADE PRATIKSHA BHAGVAN	82.60
	3rd	PATIL VIKAS BHIVAJI	80.80

DEPARTMENT OF CIVIL ENGINEERING

2130, E, Tarabai Park, Kolhapur 416003, Maharashtra.
Telephone: 0231-2658613 | Email: civil@bsiet.org