

2018-19

**NEWSLETTER**  
**Department**  
**of**  
**Civil Engineering**



**S.V.S.M.D's**

**Kai. Kalyanrao (Balasaheb) Ingale**  
**Polytechnic, Akkalkot**



# Civil Engineering Department

## Welcome



It gives me great pleasure to give my best wishes to Newsletter of department for the academic year 2018-19. The students and faculties of department are always proactive in taking initiatives in technical, cultural and social events, industrial visits and expert lectures etc. I hope this newsletter will serve the purpose of reflecting all activities of department and it will inspire others to do their best.

I wish good luck to the entire team and look forward for your kind patronage to newsletter.

Mr. D.A. Janngonda  
Head of Department

## Vision

- To strive for making Vibrant Civil Engineers for rural community development.

## Mission

M1 - To mould Responsible Engineers with Good Discipline Knowledge.

M2- To transform the Rural Potential into Technical Excellence with The help of Knowledge & Technology.

M3- To motivate the Students for Becoming Entrepreneur.

## Program Educational Objectives (PEOs)

1. To equip the students with sufficient knowledge to become leaders in industry.
2. Ability to tackle the problems individually and as a team by communicating effectively in the professional world.
3. To pursue higher education.

## Program Outcomes (POs)

<b>PO1</b>	<b>Basic and discipline specific knowledge:</b> Apply the knowledge of basic mathematics, science and engineering fundamental and engineering specialization to solve the engineering problems
<b>PO2</b>	<b>Problem analysis:</b> Identify and analyze well-defined engineering problems using codified standard methods.
<b>PO3</b>	<b>Design / Development of Solution:</b> Design solutions for well-defined technical problems and assist with the design of system components or process to meet specified needs.
<b>PO4</b>	<b>Engineering Tools, Experimentation and Testing:</b> Apply the modern engineering tools and appropriate technique to conduct standard tests and measurements.
<b>PO5</b>	<b>Engineering Practices for Society, Sustainability and Environment:</b> Apply appropriate technology in context of society, sustainability, environment and ethical practices.
<b>PO6</b>	<b>Project Management:</b> Use engineering management principals individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
<b>PO7</b>	<b>Life-long learning:</b> Ability to analyze individual needs and engage in updating in context of technological changes.

## Expert Talks

1. **“Emerging Trends in civil Engg”**by Mr.Bugade sir and Chavan sir from VVP Engineering & Technology college for third year students..
2. **Mr.Khambad C.G.gives a expert lecture on“Personality Development”** for third year students.
3. Mr.Ligade sir from A.G. PATIL Engineering & Technology college gives an expert lecture on construction management.
4. **“Concrete Structure Guest Lecture”**byMr. R.G.Maske, Orchid College of Engineering Solapur.
5. **“Design of R.C.C. Structure”** by Mr. Peerzade S.K. (Builder &Contractor, Akkalkot)
6. **“Significance of Auto Cad”** by Mr. Prashant Karande (CADInstitute, Baramati)
7. **“Personality Development”** by Mrs. Pratibha Chincholkar ( Solapur)





## Site Visits

Third year students visited the following Site Visits.

1. National Highway Visit Maindargi, Akkalkot.
2. RMC Plant Maindargi Akkalkot.
3. Highway Equipment and Machineries , Akkalkot.
4. Visit under DRS and SWM Subject
5. Sewage treatment plant, Degaon, Solapur.
6. Water Treatment plant, Pakni, Solapur.
7. Construction of substructure , Shower N Tower Park, Solapur.
8. Construction Site C.B.Khedagi College (Site Visit) .
9. Solid Waste Disposal, Solid Waste Disposal Plant, NagarParishad,
10. Treatment of solid waste, Composting Plant, Solapur Road,
11. Treatment of solid waste , Vermi-Composting Plant, Solapur Road.
12. Steel detail ,Rathi Cement (Steel Supplier), Solapur MIDC.
13. Highway construction , GRILL Infraprojects Pvt Ltd (Highway).
14. Bridge & Culvert , GRILL Infraprojects Pvt Ltd ,(Bridge & Culvert).



Construction Site C.B.Khedagi College (Site Visit)

STP Visit at Degaon, Solapur.





Highway Visit at Maindargi, Akkalkot.



## Co-Curricular activity:

Sr · No	Type of activity & Details ( Paper presentation/Pr oject /Quiz/Etc.)	Date	Name of participating student	Organizing Body &OrganizingInst itute.	Awards (Winner/Part icipation )	Level (State /National /etc.)
1	Super surveyor	7/3/20 19	Akash P. Kamble	A.G. PATIL INSTITUTE OF TECHNOLOGY ,SOLAPUR	2 <sup>nd</sup> Prize	National
2	Project competition & Exhibition	MAR- 2019	Mr. ThambKedar	ZEAL INSTITUTES NARHE ,PUNE	1 <sup>ST</sup> RANK	STATE
3	Project competition & Exhibition	MAR- 2019	Mr. Gavandi Prasad	ZEAL INSTITUTES NARHE ,PUNE	1ST RANK	STATE
4	POSTER PRESENTATION	MAR- 2019	Mr. BhaikattiSwapnilAp pasha	SANGAMESHWA R COLLEGE SOLAPUR	PARTICIPATI ON	STATE
5	POSTER PRESENTATION	MAR- 2019	Mr. Pawar V.D	SANGAMESHWA R COLLEGE SOLAPUR	III PRIZE	STATE
6	POSTER PRESENTATION	MAR- 2019	Miss. Kumbhar P.S.	SANGAMESHWA R COLLEGE SOLAPUR	PARTICIPATI ON	STATE
7	POSTER PRESENTATION	MAR- 2019	Miss. Rathod P.P.	SANGAMESHWA R COLLEGE SOLAPUR	PARTICIPATI ON	STATE

## Extra-Curricular activity:

Sr. No	Type of activity & Details ( SPORTS/DRA MA /SOCIAL/NSS Etc.)	Date	Name of participating student	Organizing Body & Organizing Institute.	Awards (Winner/Participation )	Level (State /National /etc.)
1	Foundation Day	06/08/2018	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
2	Teacher Day	05/09/2018	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
3	Engineering Day	15/09/2018	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
4	Well-Come Function	05/09/2018	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
5	Tree Plantation	15/08/2018	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
6	WORKSHOP	27/01/2019 TO 29/01/2019	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
7	VOLLEY BALL	29/12/2018	INGALE V.R	<b>Institute.</b>	FIRST PRIZE	<b>Institute</b>
8	CRICKET	29/12/2018	INGALE V.R	<b>Institute.</b>	FIRST PRIZE	<b>Institute</b>
9	CARROM	29/12/2018	INGALE V.R	<b>Institute.</b>	FIRST PRIZE	<b>Institute</b>
10	CRICKET		MANE M .B(TYCE)	C ZONE CRICKET TOURLAMEN T	PARTICIPATION	ZONAL
11	<b>SWACHH BHARAT(NSS)</b>	25 /01/ 2019	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
12	<b>TREE PLANTATION</b>	29/01/2019	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE
13	<b>BLOOD DONATION AND HEALTH CAMP</b>	18/3/2019	51	INSTITUTE	PARTICIPATION	INSTITUTE
14	<b>YOGA</b>	21/06/2019	CIVIL DEPT.	INSTITUTE	PARTICIPATION	INSTITUTE

## **FDP/ STTP ORGANIZED / CONDUCTED**

<b>Sr. No.</b>	<b>FDP/ STTP ORGANIZED / CONDUCTED</b>	<b>FROM</b>	<b>TO</b>	<b>No. of Days</b>
<b>1</b>	<b>FDP on Out Come Based Education System</b>	18/08/2018	19/08/2018	02
<b>2</b>	<b>FDP on Advanced Industries Application based on Auto-CAD</b>	03/03/2019	04/03/2019	02

## DEPARTMENTAL EVENT :

Sr.No.	NAME OF EVENT	DATE ORGANISED
1	QUIZ COMPETITION	15/09/2017






**QUIZ COMPETITION**

## Faculty Achievements:




### Workshops/Training attended

1. Mr.Gram N.A. attended five days training program on “**Overview of NBA NORMS & Its Preparation For Accreditation.**”
2. Mrs.Birajdar M.R.attended two days workshop “ **Standard Practices of Water Waste Water Analysis**” organized by Orchid College of Engineering Solapur.
3. Mr.Ghatge S.A. attended five days training program on “**NBA Norms & Preparation for Accreditation**” 'sponsored by MSBTE conducted at A.G.Patil Polytechnic Institute, Solapur.
4. Mr.Samane K.R attended five days training program on “**NBA Norms & Preparation for Accreditation**” 'sponsored by MSBTE conducted at A.G.Patil Polytechnic Institute, Solapur.
5. Mr.Jangonda D.A attended one day workshop “**Orientation I-Scheme Programme**” organized by SSWP, Solapur.
6. Mr.Jangonda D.A as a Jury Member attended one day “**MSBTE Quiz Competition**” organized by G.P Solapur.




## Academic Performance:

THIRD YEAR			
SR.NO.	NAME OF THE STUDENT	RESULT IN %	PHOTO
1	<b>KHAJURGIKAR SUSHMA SHANKARLING</b>	<b>89.37</b>	
2	<b>THAMB KEDAR MALLINATH</b>	<b>85.70</b>	
3	<b>BHOSALE SAMARTH SHIVAJI</b>	<b>82.06</b>	

**SECOND YEAR**

<b>SR.NO.</b>	<b>NAME OF THE STUDENT</b>	<b>RESULT IN %</b>	<b>PHOTO</b>
	<b>BANGI ARIFA KHALIL AHMED</b>	<b>87.29</b>	
	<b>MANJULKAR BHIMASHA HULLEPPA</b>	<b>83.71</b>	
	<b>HIPPARGIKAR MUDASSAR MAHIBUB</b>	<b>76.78</b>	

**FIRST YEAR**

<b>SR.NO.</b>	<b>NAME OF THE STUDENT</b>	<b>RESULT IN %</b>	<b>PHOTO</b>
<b>1</b>	<b>BANGI SAIDA KHALIL AHMAD</b>	<b>84.36</b>	
<b>2</b>	<b>KEKAN DASHARATH BUDHAPPA</b>	<b>80.51</b>	
<b>3</b>	<b>GUTTEDAR MANJUNATH LAXMIPUTRA</b>	<b>78.83</b>	



## **PAPERS PUBLISHED:**

**Low cost Housing**

**Submitted by;**

- 1. Shaikh Riya Mehboob (Enrollment no.1212050015)**
- 2. Hanchate Santosh Shrinivas (Enrollment no.1312050005)**
- 3. Wachhe Abhishek Anil (Enrollment no.)**
- 4. Dhokale Harshavardhan Ambarishi (Enrollment no.1012050029)**
- 5. Rathod Chandrakant Ramu (Enrollment no.1312050008)**
- 6. Badure Nagesh Siddharam (Enrollment no.1312050032)**

**Under the guidance of;**

**Lect. Ms. Birajdar M.R.**

**[Lecturer in Civil Engg. Department**

**S.V.S.M.D's K.K.I. Polytechnic, Akkalkot]**

**Department of CIVIL Engineering**

### **ABSTRACT**

**Low Cost Housing is a new concept which deals with effective budgeting and following of techniques which help in reducing the cost construction through the use of locally available materials along with improved skills and technology without sacrificing the strength, performance and life of the structure. There is huge misconception that low cost housing is suitable for only sub standard works and they are constructed by utilizing cheap building materials of low quality. The fact is that Low cost housing is done by proper management of resources. Economy is also achieved by postponing finishing works or implementing them in phases. Now in low cost housing, building material cost is less because we make use of the locally available materials and also the labour cost can be reduced by properly making the time schedule of our work. Cost of reduction is achieved by selection of more efficient material or by an improved design. The sustainability can be defined as meeting**

the needs of today without compromising the needs of future generations. Low Cost housing has the potential to produce good quality housing at a price that is affordable both in the short and long term. Thus, Low Cost housing must aim at economic, social and environmental sustainability from planning to implementation phase and at the same time result in housing that is affordable, accessible and environmentally less damaging . The National Urban Housing and Habitat Policy-2007 intends to promote sustainable development of habitat in India with a view to ensuring equitable supply of land, shelter and services at affordable prices to all sections of society . However, the Ministry of Housing defines affordable housing based on revenue, size and several cost-effective measures. For economically weaker sections, affordable housing would mean a unit gauging between 300 and 500 sq.ft with pricing below Rs 5 Lakh for which one can pay Rs. 4,000- Rs. 5,000 as EMI. For mid-income groups, an entity between 500 and 600 sqft with pricing upto Rs 7 Lakh – Rs 12 Lakh for which an EMI of Rs. 5,000- Rs. 10,000 is required to be paid as EMI would be regarded as low cost housing. It covers the use of local materials in the different components of building to make the building low cost and it makes affordable houses for low income people. Owing a house for low income and middle income is becoming a difficult. Hence, it has become a necessity to adopt cost effective, innovative and environment-friendly housing technologies for the construction of houses and buildings for enabling the common people to construct houses at affordable cost. This paper compares construction cost for the traditional and low cost housing technologies.

Low cost housing refers to those housing units which are affordable by that section of society whose income is below than median household income. This depends on three key parameters—income level, size of dwelling unit and affordability. This paper aims to point out the various aspects of predestined building methodologies by highlighting the different available techniques, and the economical advantages achieved by its adoption. In a building the walls, floors and roofs are the most important sections, which can be analyzed distinctively based on the needs, thus, improving the speed of construction and reducing the construction cost. This paper also aims to cover the use of local materials in the different components of building to make them as low cost available solutions for low income groups.

**Comparison of strength between normal concrete & admixture concrete.**

**Submitted by:**

- 1. Akoba A.S. (Enrollment no. 1512050138)**
- 2. Phulari R.C. (Enrollment no. 1612050140)**
- 3. Kembhavi S.B. (Enrollment no.1512050139)**
- 4. Kamble A.P. (Enrollment no. 1712050124)**
- 5. Dodamani N.A. (Enrollment no. 1712050131)**
- 6. Hanamgonda C.B. (Enrollment no. 1512050028)**

**Under the Guidance of:**

**Lect. N.A. Gram**

**[Lecturer in Civil Engg. Department**

**S.V.S.M.D's K.K.I. Polytechnic, Akkalkot]**

**Department of Civil Engineering**

**Abstract- Materials scientists, chemists, engineers, and manufacturers' technical representatives have helped the concrete industry to improve our ability to control work times, workability, strength, and durability of Portland cement concrete by adding some supplementary substances named admixtures.**

**The function of each admixture focuses on a specific need, and each has been developed independently of the others. Some admixtures already have chemistry that affects more than one property of concrete, and some have simply been combined for ease of addition during the batching process. To better understand recommended usage for various application of these chemicals admixture in concrete, the present study is planned to be obtained more specific information in this direction.**

**In this investigation on performance of concrete with GGBS and different PCE based water reducing admixture the tests on compressive strength and Workability of the concrete with Ordinary Portland cement and Portland pozzolana cement with GGBS and admixture are carried out at different curing periods for M45 grade of concrete to conclude its behavior.**

**Best From Waste**

**Submitted by;**

- 1. Bhaikatti S.A. (Enrollment no. 1612050001)**
- 2. Dongaritot P.S. (Enrollment no. 1512050006)**
- 3. Rodagi C.M. (Enrollment no.1612050056)**
- 4. Thamb K.M. (Enrollment no. 1612050003)**
- 5. Hilli S.S. (Enrollment no. 1412050216)**
- 6. Patil A.A. (Enrollment no. 1512050025)**

**Under the Guidance of;**

**Lect. S.A. Ghatge**

**[Lecturer in Civil Engg. Department**

**S.V.S.M.D's K.K.I. Polytechnic, Akkalkot]**

**Department of Civil Engineering**

**ABSTRACT**

**In our country, India, worshipping is the way of living and people offer various offerings to the deities which mainly consist of flowers, leaves, fruits, coconuts, clothes. out of which floral offerings are found in huge quantity. Thus, temple waste has a unique share of flower waste in the total waste. After fulfilling their purpose, flowers along with other waste, find their way into the garbage or are discarded either into some water bodies or left up on the open places as a waste causing various environmental problems. The majorly offered flowers in temples are rose, jasmine, marigold, chrysanthemum, hyacinth, hibiscus, etc. This floral waste can be utilized in different ways to produce valuable products and can thus help to save environment from pollution caused due to improper disposal of flower waste. Techniques like vermicomposting, composting, dyes extraction, extraction of**

**essential oils, making of holy colors and bio-gas generation can be used. Moreover, this flower waste can also be used for making incense sticks besides using them for some art and craft techniques. Petals of different flowers can also be utilized for handmade papermaking by extracting the pulp or by mottling them into the readymade pulp. In this paper, we have reviewed the ways by which temple waste can be utilized and managed to get valuable products which will lead to a healthier and waste free environment.**



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**Approved by: All India Council for Technical Education (AICTE), New Delhi**

**Recognized by: Government of Maharashtra**

**Approved by: Directorate of Technical Education (DTE), Mumbai**

**Affiliated to: Maharashtra State Board of Technical Education (MSBTE),  
Mumbai**

**COURSES OFFERED IN DIPLOMA ENGINEERING**

<b>Discipline</b>	<b>Intake Capacity</b>	<b>Duration of Course</b>
<b>Civil Engineering</b>	<b>60</b>	<b>3 Years</b>
<b>Electronics and Telecom. Engineering</b>	<b>30</b>	<b>3 Years</b>
<b>Mechanical Engineering</b>	<b>60</b>	<b>3 Years</b>
<b>Computer Engineering</b>	<b>30</b>	<b>3 Years</b>
<b>Total Intake</b>	<b>180</b>	