MGM's
POLYTECHNIC

CIVIL ENGINEERING
DEPARTMENT

स्थापत्य

A NEWS LETTER OF CIVIL DEPARTMENT

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SPECIAL POINTS OF INTEREST:

- Students Results
- Faculties Achievements
- Social Activity
- Industrial Visits
- Lecture Talks by Professionals

MSBTE Academic Result Winter 2019

Maharashtra State Board of Technical Education (MSBTE) has conducted the Winter 2019 Examination in month of November-December 2019. For this Examination from our department two Fifty Eight students was appeared. The overall result of department was 85.00 % for the Winter 2019 examination.

Topper Students of Department

FIRST YEAR		
1)	Prathmesh Sulane	87.69 %
2)	Shaikh Arselan	84.71%
3)	Rathod Kamlesh	83.14 %

SECOND YEAR		
1)	Shashimahal Sakshi	88.67 %
2)	Wadhwani Sahil	88.33%
3)	Chavan Darshana	87.44 %

THIRD YEAR		
1)	Zinjurde Neha	94.00 %
2)	Ghugare Shantanu	93..60%
3)	Shelar Vishal	91.20 %

Prof. Bhutekar S. B.
M. E. (Structures)
Lecturer

Utilization of Industrial Sludge and Quarry Dust in Manufacturing of Bricks

This paper presents the results of the utilization of dried sludge and quarry dust as brick making materials. The different slabs of percentages of dried sludge that can be mixed with quarry dust and fly ash for brick making are 20%,30% and 40% for sample 1,2 and 3 respectively. The standard compressive strength of the bricks is 10.5N/mm2 and 7 N/mm2 for first and second class brick respectively. The study evaluated the suitability of the use of sludge as partial substitute for clay in brick manufacturing. In this study, three different proportions of dry sludge, quarry dust and fly ash are experimented and evaluated its feasibility as building material with minimum required strength. This study also emphasized on casting of light weight brick by adopting the best possible proportions without compromising with the minimum required compressive strength.

Prof. Toshniwal S. S.
B.E. (Civil)
Lecturer

Nonlinear time history Analysis of Regular shaped, C-shaped and L-shaped building by using E Tabs

In this paper three models of rectangular shape and L-shape and C shape each of G+5 are taken for analysis. Each of the buildings are assumed to be in Zone V and having medium soil type. For time history analysis previous Elcentro earthquake 1940 data has been taken. In this study listed parameters are considered namely Maximum displacement and drift, Base shear, Maximum storey acceleration and Time period. From the study we come to know that Irregular shaped building leads to increase in displacement, story drift, storey acceleration, time period and member forces, but it reduces the base shear.

An Overview on: Bubble Deck Slab

Prof. Shaikh S. J.
M. E. (Structures)
Lecturer

This project introduces the bubble deck slab its uses and advantages to constructs economical and light weight structure. To use this technique, we have reduced the total construction material and concrete by 35%. This project deals with reduction of dead load of slab by introduction of high -density polythene bubble in the middle of slab. By introducing the gap, it leads to 30 to 50% lighter slab which reduces the loads on columns, walls and foundation, thus having various advantages over the traditional slab. The aim of this project is to introduce about the various properties of bubble deck slab based on various studies done in the comparison with the conventional slab. Using bubble deck means floor cycle up to 20% faster than traditional construction method. By the Use of recycled material, lower energy consumption and reduced CO2 emissions, less transportation and crane lifts that make bubble deck more environmentally friendly than other concrete construction technique. Advantages of these project are material and weigh reduction, construction and time saving, cost saving, green design i.e. we used HDPE (High Density Polyethene) recycled balls because to reduce wastage of plastics instead of burning the plastics. The Bubble Deck slabs being entirely recyclable. Recycled balls can be recovered during the demolition of the building to meet the goal of sustainable construction)

Social Activity

Departmental Staff and students done the Tree Plantation at Nirgudi on 13.07.2019

Tobacco Awareness Program as conducted for Departmental Students on 11.07.2019

Industrial Visits

Visit to Building Under Construction with Second year Students on 24.08.2019

Visit to Ready Mix Concrete Plant with Second year Students on 09.09.2019

Visit to Jayakwadi Dam with Third year Students on 19.09.2019

Visit to Water Treatment Plant, Pharola with Third year Students on 06.09.2019

Visit to Stone Crusher Plant with Second year Students on 27.08.2019

Visit to Huz House Construction with Third year Students on 05.10.2019

Lecture Talk by Professionals

Lecture Talk arranged for Third year students on Estimating and Costing on 20.08.2019

Lecture Talk arranged for Second year students from IRSC on 19.09.2019

Lecture Talk arranged for Second and Third year students on Precast Concrete on 31.08.2019