



MGM's  
POLYTECHNIC

CIVIL ENGINEERING  
DEPARTMENT

SPECIAL POINTS  
OF INTEREST:

- Students Results
- Faculties Achievements
- Social Activity
- Industrial Visits
- Lecture Talks by Professionals
- Departmental Activities
- Cultural Events



# अथापत्थ

A NEWS LETTER OF CIVIL DEPARTMENT

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## MSBTE Academic Result Summer 2018

Maharashtra State Board of Technical Education (MSBTE) has conducted the Summer 2018 Examination in month of May June 2018. For this Examination from our department three fifty students was appeared. The overall result of department was 75.00 % for the Summer 2018 examination.



## Topper Students of Department

### FIRST YEAR

- 1) Zinjurde Neha 81.16%
- 2) Katruwar Chinmay 74.95%
- 3) Samay kasliwal 72.74%

### SECOND YEAR

- 1) Shaikh Abrar 85.67 %
- 2) Wagh Aditya 84.10 %
- 3) Pathan Mujahid 81.09 %

### THIRD YEAR

- 1) Bhojwani Kunal 82.36 %
- 2) Borkhede Tanuja 80.48 %
- 3) Solanke Ajay 80.42 %



**Prof. Salve U. L.  
M. E. (Structures)  
Head of Department**



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



**Prof. Danish Ali  
M. E. (Structures)  
Lecturer**



**Prof. Domale A. P.  
M. E. (Structures)  
Lecturer**

## Interlinking Of Indian Rivers And Its Challenges

*Indian government proposed large scale civil engineering project to link the Indian rivers by network of canals and reservoirs named as National River Linking Project (NRLP). The concept of river interlinking is the process of connecting two rivers by constructing artificial canal which transfer water from water surplus area to water deficit area. This project comprises of 30 links out of which 14 links are under Himalayan component and 16 links are under peninsular component. If India succeeded to execute this project then it will be India's revolutionary achievement in the global market. This project appears to be very simple but it has several complications. This paper focuses on the Concept of river interlinking in a brief and challenges as well as consequences of project in social, economic, political and environmental aspect.*

*India has only 4% of total water available in the world whereas India has 18% share in the world's population which shows India doesn't have enough water to fulfill all its requirement. India receives around 4000 billion cubic meter average rainfall annually but distribution of rainfall is completely uneven and unseasonal across the nation, east and northern states gets into flood and on other side west and southern states faces to drought situation year after year.*

*Indian government proposed project named as National River Linking Project (NRLP) of worth 120 billion US\$ to transfer surplus water from north-eastern rivers to the water scarce rivers of south-west part of country. It will connect around 37 rivers and they will have 3000 dams and 14900 km long canal. Due to this water transfer, flood can be controlled easily and drought prone areas shall get relief. Initially this project was scheduled to be completed in 2016 but now deadline for completion of project is extended to*

*2050. This is one of the concrete step taken to boost irrigation rate, domestic water supply, Industrial production and socio-economic conditions in the water scarce region. On one side Every agency and every individuals believes*

*that massive solution requires to get additional water in future due to increasing population and decreasing water table while on other side many critics claims that NRLP is socio-economic and environmental disaster.*



**Prof. Domale A. P.  
M. E. (Structures)  
Lecturer**

### Analytical Study on Performance of Steel and RCC Frame Structure by Non-linear Static Analysis

Earthquake vulnerability is a measure of building damage is likely to experience when subject to ground shaking of specified intensity. Vulnerability and fragility functions relate seismic hazard of any structure. The building structures which are not designed by taking seismic consideration into account are definite to suffer severe damage even under low intensity earthquake. Hence main purpose of the paper is to compare seismic performance of G+12 RCC and Steel frame structure in Zone V. Pushover analysis is one of the methods available to understand the seismic behavior of the structure. In the present study all the frames either of RCC and Steel are design for same gravity loading and all are seismically analyzed under non-linear static method. Nonlinear static analysis (Pushover Analysis) considers the deformed geometry and nonlinear behavior of the material. Results are compared by using ETABS2015. Conclusion drawn from the comparative study is that Steel Frames performs better under seismic loading as compare to RCC as it has the highest strength to weight ratio.

### Seismic Performance of Steel Frame Structure over RCC Frame Structure



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

Concrete (RCC) has been playing very key role in the Indian construction industry due to its inherent heaviness, mass and strength but one must prefer steel as core construction material as it is on higher side than concrete in every general as well as technical aspect. In the present study an attempt has been made to demonstrate that how steel frame structure perform better under seismic loading in comparison with RCC frame structure. With proper design, engineering and construction the seemingly rigid structure built with steel can exhibit increased ductility and give better performance in earthquake prone areas. Objective of the study to compare the seismic performance of G+9 frame for both steel and RCC. For the current study both the frames are analyzed under equivalent static method in software ETABS2015. In this comparative study it is concluded that steel frames perform far better than the RCC in earthquake prone areas as it has the highest strength to weight ratio.

## Social Activity



**Departmental Staff and students has been given training on Fire Extinguisher on 09.03.2018**



# Industrial Visits



**Visit to Retaining Wall with Second year Students on 25.01.2018**



**Visit to RCC Detailing Site with Third year Students on 05.02.2018**



**Visit to Railway Over Bridge with First year Students on 08.03.2018**



**Visit to Railway Station with Second year Students on 10.03.2018**

# Lecture Talks by Professionals



**Lecture Talk arranged for third year students from PWD Officials on 02.02.2018**



**Lecture Talk arranged for Second year students on Software for Drafting on 22.02.2018**





Personality Development Workshop arranged for Second and Third year students on 12.02.2018



Visit To Radhai Organic Plant arranged for Third year students on 31.03.2018

## Annual Cultural Event & Farewell



State Level Technical Event VisioPolytech 2K18 arranged on 17.02.2018



*“ Change  
your  
thoughts  
And  
You  
change  
your  
world ”*



*“ A person who never made a mistake never tried anything new.... ”*