

### M.I.E.T. ENGINEERING COLLEGE

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### 1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Dept: CIVIL Academic Year: 2019-2020

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### AN EXPERIMENT ON MANUFACTURING OF BRICKS BY BLACK COTTON SOIL AND RED SOIL USING FLY ASH AND DEMOLITION WASTE

THE RESIDENCE OF THE

#### A PROJECT REPORT

#### Submitted by

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Of

**Bachelor of Engineering** 

In

CIVIL ENGINEERING

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**SEPTEMBER 2020** 

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INTERNAL EXAMINER

EXTERNAL EXAMINER

Manufacturing of bricks is the process involved in Mixing, Moulding and Burning using different materials such as lime, clay, fly ash. Different bricks are available in market are Sand Lime Bricks (Calcium Silicate Brick), Clay Bricks, Fly Ash Bricks and Red Soil Bricks. This project is to an experiment is to an experiment on manufacturing of brick by Black Cotton Soil and Red Soil using Fly Ash and Demolition Waste with addition of Nacl solution to the proper proportion will lead to good quality of bricks which can be used for construction purpose.

#### CONCLUSION

This experimental project are finished as per Indian standard code provisions and the physical & geotechnical properties of black cotton soil, red soil are within the permissible limits as per relevant IS Codes. As per cost-wise, Manufacturing of black cotton soil & red soil brick using fly ash and demolition are found to be cheaper than normal red soil brick and all tests are conducted and its gives high strength, hardness, good appearance, shape and any other physical properties.

### AN PARTIAL REPLACEMENT OF COCONUT SHELL AS COARSE AGGREGATE IN PAVER BLOCKS

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The use of waste coconut shell in concrete pavement block is a partial solution to the environmental and ecological challenges associated with the use of coconut shell. The aim of this project is to replacement natural aggregate by using waste coconut shells to produce pavement blocks. The coconut shell material is first crushed and then River sand were added in their respective ratios and the pavement blocks were casted. The paver block were tested for Compressive strength and Abrasion resistance, coarse aggregate is been replaced by 10%, 20%, 30%, 50% and 100% crushed coconut shells. The obtained results were compared with the results of conventional cement concrete paver block. From the findings, it can be seen that coconut shell pavement blocks have a good strength and can therefore be used for specific requirements namely footpaths, parking areas etc. Hence the project is helpful in reducing cocnut shell waste in a useful way and an effective way of disposal of coconut shell wastes with having adverse on the environment.

#### **CHAPTER 8**

#### CONCLUSION

The following conclusions were drawn from the experimental investigation such as follows;

- The utilization of waste coconut shells in production of paver block has productive way of disposal of organic waste.
- ii) The cost of paver block is reduced when compared to that of concrete paver block.
- iii) It also shows good strength.
- iv) It can be used in Non-traffic roads and parking.
- v) It is computed to use the 10%,20%30%,40% and 50% coconut shell aggregate in concrete which does not affect the properties of concrete.
- vi) Using coconut shells in concrete mix reduces the weight of block by 12-25% according to the % of replaced aggregates.
- vii) The cost of Coconut shell paver block is reduced when compare to that of concrete paver blocks.
- viii) Both physical and mechanical properties of coconut shell concrete pavement blocks were affected when coconut shell was used as a replacement for aggregate.
- ix) Usage of various Waste materials in the Manufacture of Paver blocks enables Utilization of Different type of waste and helps in achieving Eco Friendly Condition.
- x) Compressive Strength of Paver Block is attained at 10%, 20% of replacement of coconut shell aggregate to the nominal Paver Block.

### UTILISATION OF WASTE PLASTICS IN BITUMINOUS ROAD

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EXTERNAL EXAMINER

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The waste plastics and its disposal is a major threat to the environment, which results in pollution and global warming. Plastics are generally non-degradable hence, they take centuries to decay. The utilization of plastic waste in bituminous mixes enhances its properties and also its strength. In addition it will also be a solution to plastic disposal & various defects in road. In present scenario, plastic wastes consisting of carry bags, cups and other utilized plastic are used as a coating over aggregate and this coated stone can be used for road construction. In our project, we used PVC plastic wastes to act as a modified binder. The main aim of the project is to utilize the waste PVC plastics in an effective manner. PVC is very dense compared to most plastics. The aggregate mix is heated and also the plastic is effectively coated over the combination. As a result the prepared specimen shows a better binding property, stability and density. This is more eco-friendly and economical. This innovative technology will be bone for Indian hot-humid climate.

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#### **CHAPTER 8**

#### CONCLUSION

This study investigates the use of PVC with bitumen as additives to study the change in physical properties of VG30 graded bitumen. From the experimental work, the following can be concluded:

- Adoption of innovative processes are challenging at the early stage. This
  resistance due to initial inertia can be overcome through proper guidance,
  capacity building and change management.
- The scope of the initiative is to recycle waste plastic and mix it with bitumen to save cost, though durable and stronger roads in urban, sub-urban and rural areas.
- Generally bitumen became harder with the increase of PVC dosage.
- A gas evolution and thermal degradation of PVC plastics has been indicated beyond 190° C by the Thermo Gravimetric Analysis (TGA).
- Hence, misuse or wrong implementation of this technology may cause release of harmful gases, premature degradation making it essential to maintain the temperatures during construction.
- 6. In recent times and due to poor municipal handling of waste, plastic has been the cause of land and water pollution. In order to mitigate the environmental risk of plastics and enhance the quality of roads, use of waste

plastics in the development of roads is being promoted by the Tamil Nadu state government. The state government through city corporations and rural road development agencies has undertaken the construction of plastic roads.

- 7. As per a general estimation, to lay one km of plastic road 3.75 m wide, 9 tonnes of bitumen and 1 tonne of waste plastic are required for coating whereas a normal road requires, 10 tonnes bitumen for each kilometre so a plastic road saves 1 tonne bitumen for every kilometre laid. There will be an approximate saving of ₹50,000 to ₹60,000 per kilometre. In addition the environment will remain free from toxic side effect of plastic waste. One tonne of plastic waste is equivalent to 10 lakhs carry bags.
- 8. Settlement of plastics in the roads does not mean we got rid of plastics for forever, it is going to be there for forever in the means of micro-plastics and convert into planktons after several decades and enter into our environment, which can cause a serious threat to the environment.
- Awareness about elimination of myths about the plastic waste by providing a scientific technology for permanent disposal of plastic waste can be promoted

# Experimental Investigation On Autoclave Aerated Concrete Block

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AAC blocks are light Weight Aerated Autoclave concrete Block. It is manufactured through a reaction of aluminium powder and a proportionate blend of lime, cement, and fly ash or sand. Autoclaved aerated concrete(AAC) is a lightweight cellular concrete that has been used for more than 80 years. Currently, however, no good recycling options for AAC from construction and waste exist. During this process, the hydrogen gas escapes create lots(billions) of tiny air cells, applying AAC with a strong cellular structure, The hydrogen gas or bubbles cause the concrete to expand to roughly thrice times its original volume. further strengthened by high pressure steam curing. The product thus formed is not only light weight concrete but also has higher compressive strength. AAC is a masonry material that is lightweight, easy to construct, and economical to transport. AAC is one of the materials which can cope up with the shortage of building raw materials and can produce a light weight, energy efficient and environmentally friendly concrete. This study deals with the manufacturing process of the autoclaved aerated concrete blocks. Size of the mould 600\*200\*200. Material Ratio: (M-SAND:LIME:CEMENT:GYPSUM) (23:6.66:2.66:1), aluminium Powder: 0.08%, Water Cement Ratio: 0.6-0.65. cement 4kg, m-sand 30kg, lime 9kg, gypsum 2kg, aluminium powder 15g has to be used in this AAC blocks.

#### **CHAPTER-10**

#### 10 CONCLUSION

Compressive strength of AAC blocks is comparatively more than traditional clay brick. These are suitable for walls in RCC framed building. Utilization of m-sand leads to the reduction in the cement consumption in the product which results in reduction of green house gases. Density of AAC block is 1/3 that of traditional clay brick and there is no more change in wet condition. It helps in reducing dead load of structure. Cost of construction reduces by maximum up to 20% as reduction of dead load of wall on beam makes comparatively lighter members. As both side face of AAC block wall are plane, thickness of plaster is very less, and so there is substantial reduction up to 50% in requirement of cement and sand for plaster work. AAC is manufacturing from common and abundant natural raw materials, there fore it is extremely resource-efficient and eco-friendly. The energy consumed in the production process emits no pollutants and creates no byproducts or toxic waste products. The work ability of AAC helps to eliminate waste on the job site.

# COMPARATIVE STUDY ON CONCRETE BY PARTIAL REPLACEMENT OF GGBS, SILICA FUME AND METAKAOLIN FOR CEMENT WITH ADDITION OF POLYPROPYLENE FIBER.

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This type of concrete is also called as Green Concrete, because cement was replacing to maximum level with improving the properties better than binary and ternary blended concrete. This concrete is obtained by replacing the cement by three supplementary cementicious materials. It is attractive in many applications because it offers considerable strength at a relatively low cost. For this purpose pozzolanic materials are incorporating in to concrete like fly ash, silica, ggbs..etc those are called as mineral admixtures. Incorporation of these admixture not only enhance the properties of concrete they also reduces the cement content in concrete. The reduction of cement content means it minimise the environment impacts caused in cement production process and most of these materials are industrial by-products, problems with disposal also can be solved. In this study, the supplementary cementicious materials such as GGBS, metakaolin (MK), silica fume are used. Metakaolin has a very good fineness property, which fill the pores present in the cement and other ingredients present in the concrete. It increases the workability of concrete. GGBS and silica fume implies the strength to the concrete.

#### **CHAPTER 7**

#### **CONCLUSIONS**

From this project carried out to study the effect of partial replacement of cement (OPC 53 grade) with metakaolin, silica fume and GGBS 50% (by the weight of cement) the following conclusion can be done.

- Strength of the matakaolin based concrete comes out to be higher then the concrete made with OPC.
- ➤ The use of metakaolin is 50% weight of cement and 1% of PP fiber gives higher value of compressive strength with compared to normal M<sub>20</sub> grade concrete.
- The use of silica fume with 50% of replacement in cement will archived 80% of comparative strength with compared to normal M20 grade mix.
- The use of GGBS with 50% of replacement in cement will archived 98% of comparative strength with compared to normal M20 grade concrete.
- ➤ Inclusion of metakolin can not only reduce environmental load by reducing co₂ emission but also serve as a serviceability enhancement material for the building.

## EXPRIEMENTAL INVESTIGATION OF PERMEABLE CONCRETE

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INTERNAL EXAMINER

EXTERNAL EXAMINER

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Permeable Concrete is a special type of concrete with high porosity used for concrete flat work application that allow water from precipation and other sources to pass directly through, there by reducing the run off from a site and allow ground water recharge. This porosity is attained by a highly interconnectivity voids content. Typically permeable concrete has little(or) fine aggregate and has just enough cementing paste to be coat in the coarse aggregate particle while preserving interconnectivity voids

Permeable concrete is traditionally used in parking area, area with high traffic, walk ways in parks and gardens, Residential streets, Pedestrian walkways and Green house, Basketball and volley ball courts etc.

Permeable concrete is an important application for sustainable construction and its one of many low impact devolvement techniques used by Builder to protect water quality

threshold of rainfall intensity versus duration for shallow sloped landslides to occur is lower than previous estimates (Guzzetti, E. et al. 2007).

It was found that the rainfall intensity plays a more important role in increasing the chances for landslides to occur due to the sheer quantity of water draining over a short amount of time (Guzzetti, E. et al. 2007). These conditions

can be exasperated by human development, which alters the drainage path of the rainwater, increasing the likelihood of a landslide (Ozdemir, A et al. 2008). This is where the permeable pavement design could come in to play. Virtually all the studies conducted on permeable pavement have noted its incredible hydrological properties; because the permeable pavement allows water to pass through it in to the soil it does not significantly alter the drainage path of the rainwater. This means that structures could potentially be built with a permeable foundation. So, they would have little impact on the surrounding environment. The research focuses also on improving the growth of microorganisms during artificial temperature fluctuations induced by the heat pump. Further research on the short and long-term effects of contaminants that remain in the PPS should be undertaken.

The self-sustainability of these relatively new systems in comparison to traditional pavements requires further assessment. Moreover, the long-term impact of PPS on the environment is still unclear. Before all of this can be accomplished though more research has to be put into improving the lifespan as well as decreasing the costs of permeable pavement. Hopefully if these two negative aspects of permeable pavement can be eliminated these systems can be installed in more places around the world.

#### 13. CONCLUSIONS

This paper looked at various studies conducted on permeable pavement systems and their current application. Also discussed about the detailed design of

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permeable interlocking concrete pavement in brief. Maintenance and water quality control aspects relevant to the practitioner were outlined for permeable pavement systems. The water quality aspects is highlighted. Recent innovations were highlighted and explained, and their potential for further research work was outlined. The recent innovations like development of a combined geothermal heating and cooling, water treatment and recycling pavement system is promising and it is detailed in cut short, future research works are outlined in brief.

These permeable pavement systems are changing the way human development interacts with the natural environment. Its application towards parking lots, highways and even airport runways are all improvements in terms of water quality, water quantity and safety.

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### AN ASSESSMENT OF CLOSING POTHOLES BY USING MODIFIED BITUMEN

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INTERNAL EXAMINER

EXTERNAL EXAMINER

ii

In India Roads and streets affected by potholes. Most of the Pavements are Flexible Pavements as they are economical compared to Rigid Pavements. But maintenance causes trouble and increases cost of construction. Bitumen and aggregate being an important aspect of the Flexible Pavement from cracking and deterioration of the pavement. Hence in this different test to be done regarding more stable and effective proportions to be used between bitumen and plastic waste. Properties of Bituminous mixes can be improved by adding/replacing waste materials. At present nearly 56 lakhs tones of plastic waste is produced in India per year. The degradation rate of plastic waste is also a very slow process. Hence the project is helpful in reducing plastic waste in a useful way. We can use this waste plastic to work towards improving the safety of our roads whilst creating harder and tough roads. In this project we have used in different proportions with quarry dust, coarse aggregate and plastic waste.

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#### **CHAPTER 9**

#### CONCLUSION

In this study investigates the use of Plastic Bottles with bitumen as additives to change in physical properties of VG-30 graded bitumen. This review intended to find the effective ways to utilize the hard plastic waste particles as bitumen modifier for Flexible Pavements. Plastic roads would be a boon for India's hot extremely humid climate, where temperature frequently cross 50°C and torrential rains create havoc, leaving most of the roads with big Potholes. Due to heavy vehicles running on roads and other environmental condition potholes are generated which will cause hazardous problem. The durability of the roads laid out with the shredded plastic waste is much more compared with asphalt roads in the ordinary mix. Roads laid with plastic waste mix are found to be better than the conventional ones. The binding property of plastic makes the road last longer besides giving added strength to withstand more loads. The cost of plastic road construction may be slightly higher compared to the conventional method. This is eco-friendly and socially highly relevant and hence one of the best methods for easy disposal of Waste Plastics.

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# PARTIAL REPLACEMENT OF REINFORCEMENT IN CONCRETE STRUCTURE USING BAMBOO

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Concrete is used as the basic material for construction all over the world. It is strong in compression and weak in tension. To counteract this, steel is used as reinforcement materials to gain tension. The steel is expensive and corrodes easily which leads to deterioration of structure. This can be overcome by using Bamboo as reinforcement material due to its properties like light weight, strength, durability. This project is intended to evaluate the strength, reinforcement ability of bamboo as an effective partial replacement in reinforcement in concrete structure. Bamboo is a natural and economic material. Bamboo is the world's fastest growing woody plant. It grows approximately 7.5 to 40cm a day, with world record being 1.2m in 24 hours in Japan. Bamboo grows three times faster than most other species. Hence it is also an abundant resource. In this project, bamboos of various sizes are collected and the other binding and filling materials such as cement and aggregates are collected. To examine the strength characteristics, the beam specimen of partially bamboo reinforced is prepared using standard mould. After the curing of age in 7,14 and 28 days, the beams are evaluated for tensile strength. Thus, the results are obtained. This test will prove bamboo as an effective replacement in reinforcement of concrete structures.

#### **CHAPTER-9**

#### CONCLUSION

On the basis of the above work done, the following conclusions are made;

- > Utilization of naturally obtained and cost effective material in reinforcement.
- > The unit weight of concrete decreases considerably due to use of bamboo.
- ➤ Test results on 7, 14 and 28 days of beam specimen of partially bamboo reinforced gives similar and a little more tensile strength than the conventional beam.
- > The utilization of partially bamboo reinforced beam can be applied in smaller construction.
- The corrosion free construction is possible naturally by using bamboo as an alternate material.

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# DESIGN OF DOMESTIC WASTE WATER TREATMENT PLANT

#### A PROJECT REPORT

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INTERNAL EXAMINER

EXTERNAL EXAMINER

I

India is facing a water crisis and by 2025 it is estimated that India's population will be suffering from severe water scarcity. Although India occupies only 3.29 million km² geographical area which forms 2.4% of the world's land area, it supports over 15% of world's population with only 4% of the world's water resources. With increased population growth and development, there is a need to critically look at alternative approaches to ensure water availability. These alternative resources include rainwater and bulk of water used in household will emerge as grey water and contain some minerals, organic waste materials dissolved and suspended in it. When this is allowed to flow out this will join the sewage and bacteriologically contaminated, resulting in a sewage stream. It is possible to intercept this grey water, at the household level, treat it so that it can be recycled for garden washing and flushing purposes.

1/

### 4.0. CONCLUSION:

An attempt has been made in this project to plan and design a domestic waste water treatment system. The design adopt by Waste water treatment structure design. This project explains about the theory of construction by which the **DESIGN OF DOMESTIC WASTE WATER TREATMENT PLANT.** 

- In this project the drawings are drawn by AUTO CAD Software.
- · We can conclude that there is difference between the theoretical and work done.
- As the scope of understanding will be much more when theoretical work is done.
- As we get more knowledge in such a situation where we have great experience doing the theoretical work.
- Knowing the Environmental structure design we have designed the tanks depending upon the length breath ratio.
- In this project we have designed tanks as Grit chamber depending upon the Environmental structure design.

## EXPERIMENTAL INVESTIGATION ON TILES MADE FROM HEMPCRETE

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INTERNALEXAMINER

EXTERNALEXAMINER

ii

Hemperete is a natural building material that, in recent years, has known an increased popularity in a number of European countries. Hemperete-based construction materials are used in non-bearing walls, as finishing plasters and floor/roof insulators. In the present work, the environmental performances of a non-load-bearing wall made of hemperete blocks were assessed via LCA. The analysis encompassed the whole life cycle but the end of life, due to the lack of reliable data for this stage. The production phase of the raw materials was identified as the main source of environmental impacts, but the transport distance of raw materials, as well as the amount and composition of the binder mixture, can considerably affect the results. So now we made Tile by using hemp, strawbale, lime in the three different ratios and we made tests like compression test, flexural test and water absorption test.

### CHAPTER – 7 CONCLUSION

The following conclusions were drawn from the experimental investigation such as follows,

- > It has good flexural strength
- > Hempcrete made with replacement of granite with tiles can be used structural light weight concrete in mass concreting.
- The utilization of bio composite material is effectively used.
- ➤ The cost of the tile is comparatively less when we use the waste components like dried material of the plants and trees.
- It is also good heat resistance and shows a good strength
- > 25% of money saving while we using the waste bio composite material
- > This reduce carbon emission.
- Life time is increase as compared with conventional tile.
- > This tile can be used as wall tiles.
- > Hence this tile reduced temperature inside the house. It will reduce the usage of air conditioning.

### PLASTIC DIGESTER WITH VERMICOMPOST REACTOR FOR RESIDENTIAL SOLID WASTES

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INTERNAL EXAMINER

EXTERNAL EXAMINER

This project deals with the design of the plastic digester with vermicompost reactor for residential solid wastes like plastics and food wastes. We have taken "FUEL OIL" from plastic wastes which comes from residential buildings, that fuel oil can be used where and all its necessary. We have made a "CHAMBER" with some combinations of materials to absorb the toxic gases which is emitted from the plastic digester. Literally cancer causing agents like dioxins and the carcinogens and other toxic gases will be eliminated in this project. This is done in zero pollution by using ACC and under certain chemical procedures. In the vermicompost reactor we have processed the soil with residential food wastes to vermicompost soil in a fast manner using the red worms and other technical procedures. By using this digester and reactor, the residential solid wastes like food waste and plastic wastes can be easily reused. And also there will be no more water, land and air pollutions which forms because of plastic, food wastes and other wastes from the residential buildings will be drastically reduced and further attempting it to do in zero pollution.

Keywords — fuel oil, toxic gases, ACC, reuse of residential wastes, pollution reduction zero pollution.

### **CHAPTER 6**

### CONCLUSION

### 6.1 Conclusion

By this project all kind of residential wastes can be treated and disposed properly by the digester and reactor. And all kind of plastic projects releases the So2 and other gases outside while incinerating it. Hence this project will give the solution for plastics to use and dispose in zero pollution way and also to increase the fertility of soil using the vermicompost reactor.

The purpose of the project is satisfied. Fuel is obtained through pyrolysis of plastic and its values are determined. Plastics that are a major hazard to the environment can be treated to obtain the fuel. This reduces the adverse effects of waste plastics on earth. The fuel obtained can be utilized with diesel to power vehicles. Further treatment of the obtained fuel can also be done to obtain fuel with properties similar to that of gasoline.

It's found that for every plastic bag created, fuel used to run an automobile for a hundred and fifty meters have been put to use. Hence for fourteen bags, a miles worth of petroleum has been wasted. With the extended efforts shown in this field, it can be seen that instead of trying to recycle plastic, converting them into useable fuel might be a better

option. For it can help us create at least a fraction of the petroleum which was initially used to create plastics.

Hereby, this project will help to make fuel by the plastic wastes and also which will be done in zero pollution with the help of some chemical procedures. The fuel taken from plastics can be used for vehicles as well as in the power generators. This project helps to avoid dumping and burning of plastics in land. So far this will control pollution drastically, literally the pollutions like air, water and land, overall all environmental pollution because of plastics will be reduced to zero. By this, money can be earned by selling the digested plastic which will be in the form of mould.

In the vermicompost reactor the food wastes and edible wastes will be converted into the vermicompost soil in a fast manner. Comparatively, food and plastic wastes are generated in tons from residential areas. By this setup we can reduce more amount of waste generations.

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## EXPERIMENTAL INVESTIGATION ON CONCRETE BY PARTIAL REPLACEMENT OF SAND WITH BRICK DUST

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Concrete is the material which is mostly used for infrastructure development throughout the world. Fine aggregate is a prime material which is used for the preparation of mortar and concrete and also plays a major role in the mix design. Fine aggregates are weathered and worn out particles of rocks and are of various grades or sizes depending upon the amount of wearing. Now-a-days fine aggregate is not readily available and being transported from long distance. The non-availability or shortage of fine aggregate will affect the construction industry, hence there is a need to find the new alternative material to replace fine aggregate. The objective of our study is to investigate the suitability of usage of brick dust in concrete in place of fine aggregate. Brick dust originated from demolished masonry walls crushed in the laboratory and added in concrete as partial fine aggregate replacement. Five replacement levels 5%,10%, 15% and 20% were added and compared with the conventional concrete. The tests on concrete showed that the mechanical properties (compressive strength test) of concrete containing brick dust were well comparable to those of the conventional concrete.

Keywords: Compressive strength, Brick dust, Fine aggregate.

characteristics of a concrete. We have casted a total of 12 concrete blocks with different proportions including OPC. Size of the concrete block 150mm×150mm×150mm cube moulds are used for the tests. The concrete is poured in to mould and are tampered to avoid voids. After hours of duration test moulds are removed and the specimens are kept in water for curing. These specimens are tested under compressive testing machine after 7 days, 14 days and 28 days after casting.

### **CONCLUSIONS**

Based on the experimental study of investigating the use of brick debris in concrete, the following conclusions which are limited to the materials used in the study.

- This is an eco-friendly concrete as it subsides the stagnation of demolished brick waste by consuming it.
- As much as of the total cost of cement in conventional method can be saved by this procedure. Cost saving percentage increases with increase in richness of mix design.
- Concrete gains early strength and hence shuttering can be removed early thereby reducing the secondary overhead copy.
- The test results of compressive strength shows that the optimum replacement of fine aggregate is achieved at 20% replacement of fine aggregate by crushed brick debris compared to the respective conventional concrete strength.
- The possibility exists for the partial replacement of fine aggregate with brick debris.

Also other industrial and agro-waste materials can be appropriately utilized in civil construction works. Therefore, the economic viability of such applications along with the durability of these materials needs further examination. An important obvious advantage is that with recycling of stone, aggregate, bricks etc. quarrying and mining for stones, and will be reduced. Thus the earth surface can be further saved and ecological disturbances on account of this activity will be reduced. For example, raw material for bricks manufacturing is totally earth based. Reuse of bricks means lesser possibilities of removing fertile earth, soil grass cover and forestation. This will minimize environmental destruction in over all terms. With large volume of building works, and to meet its demand, it is observed that there can be large uncontrolled growth of brick kilns, contributing to environmental decay.

# STUDIES ON THE BEHAVIOUR OF ECO -BRICKS WITH PLASTIC & BAMBOO REINFORCEMENT IN BUILDING

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INTERNÄL EXAMINER

EXTERNAL EXAMINER

ii

Nowadays disposal of non-bio-degradable substances has become a major issue in urban areas. The dumping creates the environmental issues like soil infertility. In order to deal with this problem the plastic wastes are reuse and recycle as eco bricks and it is also known as PET bottle bricks. Eco bricks are a new building material normally which is made up of plastic bottles are filled with mud or soil and it is used for construction purpose. The eco brick blocks are tested in compressive strength, water absorption capacity, fire resistance, hardness and compared the results with the conventional brick blocks. Use of these bricks reduces the construction cost and CO2 emission as well as reduction of the land pollution. Nowadays civil engineering, many people are using Bamboo in place of steel for reinforcement. Bamboo is an excellent choice for reinforcement in concrete because of its higher strength as compared to steel by weight. Bamboo is stronger more than 6 times of steel reinforcement, on comparison. The residential building (G+2) was constructing in 420 sq.ft in site at srinivasanagar in trichy .eco brick constructing with bamboo reinforcements in building

### CHAPTER - 10 CONCLUSION

This technique of using waste PET bottles as bricks has become popular in low income communities around the world. In the current study, the bottle bricks were found to be stronger than conventional bricks and concrete cylinders. These Eco bricks are also Rs.5.50 cheaper than the conventional bricks. Considering the strength and the relatively low cost of construction, they can very successfully become the next construction material of choice for India. These houses would be a positive change in our urban fringe and slum areas landscape. The 420 sq.ft. cost of building is without plastering in Rs. 2 lakh.

# EFFECTIVE RECYCLING OF PLASTIC WASTE AND UTILIZATION IN THE MANUFACTURING OF PAVER BLOCKS

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Plastic is used in day today life. At present nearly 56 lakhs ton of plastic waste is produced in India per year. Plastics are generally non-degradable hence, they take centuries to decay. This is due to the intermolecular bonds that constitutes plastic, whose structure insure that the plastic neither corrode nor decompose. The use of waste plastics in concrete pavement block is a partial solution to the environmental and ecological challenges associated with the use of plastics. The aim of this project is to reduce environmental pollution by using waste plastic to produce pavement blocks. The plastic material is first shredded and then River sand, M sand and Fly ash were added in their respective ratios and the pavement blocks were casted. The paver block were tested for Compressive strength and Abrasion resistance. The obtained results were compared with the results of conventional cement concrete paver block. From the findings, it can be seen that plastic pavement blocks have a good strength and can therefore be used for specific requirements namely footpaths, parking areas etc. Hence the project is helpful in reducing plastic waste in a useful way and an effective way of disposal of plastic wastes with having adverse on the environment.

## CHAPTER 8 CONCLUSION

## The following conclusions were drawn from the experimental investigation such as follows;

- The utilization of waste plastic in production of paver block has productive way of disposal of plastic waste.
- Paver blocks made using plastic waste, quarry dust, coarse aggregate give better result.
- iii) The cost of paver block is reduced when compared to that of concrete paver block.
- iv) Paver block made using plastic waste along with flyash, M-sand have shown better result.
- v) It also shows good heat resistance and strength.
- vi) It can be used in Non-traffic and light traffic road.
- vii) It is computed to use the 20% Recycled plastic aggregate in concrete which does not affect the properties of concrete.
- viii) Using plastic in concrete mix reduces the weight of block by 15%.
  - ix) The cost of Plastic paver block is reduced when compare to that of concrete paver blocks.
  - x) Both physical and mechanical properties of plastic concrete pavement blocks were affected when plastic was used as a replacement for aggregate.
  - xi) Usage of various Waste material in the Manufacture of Paver blocks enables Utilization of Different type of waste and helps in achieving Eco Friendly Condition.
- xii) Compressive Strength of Paver Block is increased compared to the nominal Paver Block with used of waste material in optimum mix design.

# EXPERIMENTAL GROWTH OF PLANTS BY USING AQUAPONICS WITH IOT

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INTERNAL EXAMINER

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Current scenario of eatables and vegetation are subjected to the use of pesticides and fertilizers; that are targeted to achieve higher yields. Organic crop cultivators aim at decreasing the amount of pesticides consumption and to help protect the environment. But organic consumption can get very expensive in the perspective of people forming middle class and those working for daily wages. We see this proposal as an exposure to produce and market delicious, fresh produce organic gardening products through Aquaponics. Aquaponics is an agricultural method with great potential and could be the key to sustainable agriculture. It is a combination of aquaculture (rising fish and other aquatic animals) and hydroponics (rising plants without soil). Aquaponics uses a symbiotic blend in which plants are fed with the aquatic discharge or water and the vegetables clean the water that goes back to the fish. Microbes play an important role to the nutrition of the plants, as they gather in the spaces between the roots of the plants and converts the fish waste and solids into substance the plants can use to grow. To achieve the given objective the applications of Internet of Things are planned by using arduino microcontroller for automatic fish feeder and to detect the temperature changes in the fish growing water. The design of electronic devices are made water proof that has an air pump and submersible pump.

## CHAPTER 5 CONCLUSION

Global demand for food is growing as human and grazing animal populations increase, as more people are changing their diets to include more meat, and as more crops are used for biofuel production. On the other hand, it is getting more difficult to continuously increase annual agricultural yields as the downward pressure of soil erosion/degradation, aquifer depletion, and irrigation water supply complications due to melting glaciers begin to outpace technological advances in agricultural production. Many new problems have arisen as producers try to meet these challenging trends by squeezing ever more production from remaining agricultural lands. So to meet out these problems a low cost aquaponics system using Arduino microcontroller is successfully designed. Food security poses a very real and serious threat in the world today what makes aquaponics food production so attractive. In addition to this, the simplicity of an aquaponics system makes it accessible and user friendly so it has the potential to help families to produce their own organic food at home.

### AN ASSESSMENT OF HYDROPONIC FODDER PRODUCTION SYSTEM AND INTEGRATED **FARMING**

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ii

In India, livestock plays important role for the nutritional security particularly for the small and marginal farmers. Though, India represents as the highest livestock population and milk producing country, but only 5% of cropped land area is utilized for cultivating fodder and facing a deficit of 35.6% green fodder, 26% of dry fodder and 41% of concentrate feed ingredients. Rapid urbanization, climate change, water scarcity etc. are the momentum to search alternate system for green fodder production. Hydroponic is the best alternative which involves production of fodder without soil in a confined environment and harvested at 7-8days period of time. It is gaining importance as it is used to guarantee a constant production of high quantity of green forage round the year for livestock. Seed for hydroponic cultivation is the major input and shares 90% of the total cost of production as compared to conventional system. Since the hydroponics fodder is more palatable, digestible and nutritious, it improves immune status of the animals and augments productive and reproductive performance of the livestock. Supplementation of 5-10kg hydroponic fodders per cow per day increases milk production by 8-13%; and meat quality based on the digestibility of the nutrients. Farmers can adopt small- or large-scale hydroponic production following low cost devices and sustain green fodder supplements round the year for profitable livestock production. Livestock farmers are to be educated and aware through capacity building program for their keen interest towards importance of the hydroponic and green fodders for sustainable livestock production.

### CHAPTER-9

### CONCLUSION

- The hydroponic production of fodder is less competitive than traditional fodder production when compared on per kg dry matter basis.
- High initial investment on fully automated commercial hydroponic systems.
- High labor and energy costs in maintaining the desired environment system.
- Low cost hydroponic systems have been developed by utilizing locally available infrastructure where there is an acute shortage of fodder and water.
- Integrated Farming System (IFS) had a positive effect on the economic return maintaining the environmental sustainability than the Non-Integrated Farming System (NIFS).
- The enterprises which were integrated, played an important role and also were found to be very much region specific.
- Integration of more than three enterprises always improved the Benefit Cost (BC) ratio that is, gain per unit expenditure.

# AN EXPERIMENTAL STUDY ON PAPERCRETE BRICKS

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SEPTEMBER - 2020

### ANNA UNIVERSITY:: CHENNAI 600 025 BONAFIDE CERTIFICATE

Certified that this project report "AN EXPERIMENTAL STUDY ON

PAPERCRETE BRICKS" is the bonafide work of

A. AZARUDHEEN (812414163008)

L. SIRAJUDEEN (812416103324)

R. RAMKUMAR (812416103320)

K.VASANTH KUMAR (812416103054)

who carried out the project work under my supervision.

**SIGNATURE** 

Dr.R. SARAVANAN M.E.,

HEAD OF THE DEPARTMENT

OF CIVIL ENGINEERING MIET ENGINEERING

COLLEGE TRICHY - 600 007

**SIGNATURE** 

Dr.R. SARAVANAN M.E.,

HEAD OF THE DEPARTMENT OF

CIVIL ENGINEERING

MIET ENGINEERING

COLLEGE TRICHY - 600 007

INTERNAL EXAMINER

EXTERNAL EXAMINER

Papercrete is a mixture of paper and cement, made by shredding of old newspapers into water then it becomes paper pulp and adding Portland cement to it. It gains its inherent strength due to presence of hydrogen, bonds in microstructure of paper. This thick mix can then be poured into moulds and cast like concrete, to make it into any desired shape and size. Papercrete is a sustainable lightweight building material due to replaced the coarse aggregate by waste news paper. Utilization of concrete in the construction industry is increasing day by day. The increasing demand for concrete in the future is the major issue, for which an alternate option is to find out at a reduced or no additional cost and to reduce the environmental impact due to increase of cement industries that are important ingredient to economic development.

Experimental investigation was carried out to analyse optimization of mix for papercrete bricks depending upon the water absorption, compressive strength and unit weight. Papercrete bricks were prepared out of waste paper, and quarry dust with partial replacement of cement by another industrial by-product Fly Ash in varying proportions. Papercrete was recommended to be an effective and sustainable material for the production of lightweight and fire-resistant hollow or solid material to be used to make partition walls and infill walls, especially for high-rise buildings.

iv

### CONCLUSION

- This is a type of recycling process of waste papers.
- As the result of replacing of waste paper for mortar may attain the higher load at the load bearing capacity is high and sufficient to the light weight concrete material.
- The result of water absorption is high but it is used as an infill wall it does not create huge impact or damage to the wall.
- For the following application we are proposed to use our material for non-load bearing infill walls, fall ceiling works and etc..,
- From the optimization of the mix, the percentage of water absorption of flyash based papercrete brick was minimized without loss of strength.
- The percentage of paper above 50 % of the total mass of the papercrete was maintained.
- Papercrete homes can be built, with all the conveniences, for twenty to thirty percent less than conventional housing.

# STUDY AND INVESTIGATION AN PERMEABLE CONCRETE

#### A PROJECT REPORT

#### Submitted by

ASHIK AHMED N (812416103006)

DINESH KUMAR A (812416103011)

IJAS AHAMED M (812416103017)

THASLIM KAUSER S (812416103052)

in partial fulfillment for the award of the degree

of

#### **BACHELOR OF ENGINEERING**

IN

#### **CIVIL ENGINEERING**

MIET ENGINEERING COLLEGE, TIRUCHIRAPPALLI

ANNA UNIVERSITY: CHENNAI 600 025

SEPTEMBER 2020

#### **ANNA UNIVERSITY: CHENNAI 600 025**

#### **BONAFIDE CERTIFICATE**

Certified that this project report "STUDY AND INVESTIGATION AN PERMEABLE CONCRETE" is the bonafide work of ASHIK AHMED N, DINESH KUMAR A, IJAS AHAMED M and THASLIM KAUSER S who carried out the project work under my supervision.

SIGNATURE

Dr. R. Saravanan M.E., Ph.D.,

PROFESSOR AND HEAD

Department of Civil Engineering

MIET Engineering College

Tiruchirappalli 620007

SIGNATURE

Mr. B. SEKAR M.E.,

**SUPERVISOR** 

Assistant Professor

Department of Civil Engineering

MIET Engineering College

Tiruchirappalli 620007

Submitted for viva-voce examination held on .22/.27/2020

INTERNAL EXAMINER

EXTERNAL EXAMINER

ii

#### ABSTRACT

Rice Husk Ash is one of the most active research areas that encompass a number of disciplines including civil engineering and construction materials. Rice Husk Ash (RHA) is an agricultural waste product which is produced in large quantities globally every year and due to the difficulty involved in its disposal, can RHA becoming an environmental hazard in rice producing countries. India alone produces around 120 million tons of rice paddy per year, giving around 24 million tons of rice husk per year and 6 million tons of rice husk ash per year. As the rice husk ash is piling up every day, there is a pressure on rice industries to find a solution for its disposal. It is most essential to develop eco-friendly concrete from RHA. RHA can be used in concrete to improve its strength and other durability factors. So we can use RHA as a partial replacement of cement in pervious concrete. In this research study the (OPC) cement has been replaced by RHA accordingly in the range of 10% and 20% by weight of cement for 0.30, 0.35, and 0.40 water/cement ratio. The compressive strength test and flexural strength test was carried out for 7, 14 and 28 days to measure the compressive strength and flexural strength of concrete. So the aim of the investigation is to study the behaviour of pervious concrete while replacing the RHA with different proportions in concrete. Test results have reflected, the compressive strength achieved up to 10% replacement of cement with RHA will be optimum without effecting properties of fresh and hardened concrete. Plastic is used in day today life. At present nearly 56 lakhs ton of plastic waste is produced in India per year.

## CHAPTER 7 CONCLUSION

Based on experimental investigations concerning the compressive strength and flexural strength of concrete, the following observations are made:

- W/C ratio is increase respectively compressive strength and flexural strength of pervious concrete is increase.
- The Compressive Strength of Pervious Concrete is increases up to 10% replacement of Cement with RHA beyond than it is starting to decrease.
- The Flexural Strength of Pervious Concrete is increases up to 10% replacement of Cement with RHA beyond than it is starting to decrease.
- It is the possible alternative solution of safe disposal of RHA.

# EXPERIMENTAL STUDIES ON STRENGTH OF CONCRETE BY PARTIAL REPLACEMENT OF MARBLE POWDER WITH THE FINE AGGREGATE

#### A PROJECT REPORT

#### Submitted by

USMAN KANI M (812416103053)

SAMEERUDEEN B (812416103044)

SALEEM A (812416103043)

ARAVIND S (812416103302)

in partial fulfillment for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

CIVIL ENGINEERING

MIET ENGINEERING COLLEGE, TIRUCHIRAPPALLI

ANNA UNIVERSITY: CHENNAI 600 025

**SEPTEMBER 2020** 

#### ANNA UNIVERSITY: CHENNAI 600 025

#### **BONAFIDE CERTIFICATE**

Certified that this project report "EXPERIMENTAL STUDIES ON STRENGTH OF CONCRETE BY PARTIAL REPLACEMENT OF MARBLE POWDER WITH FINE AGGREGATE" is the bonafide work of USMAN KANI M, SAMEERUDEEN B, SALEEM A and ARAVIND S who carried out the project work under my supervision.

SIGNATURE

Dr. R. Saravanan M.E., Ph.D.,

PROFESSOR AND HEAD

Department of Civil Engineering MIET Engineering College

Tiruchirappalli 620007

R.Ams

**SIGNATURE** 

Mr. R. Arun Kumar M.E.,

**SUPERVISOR** 

**Assistant Professor** 

Department of Civil Engineering

MIET Engineering College

Tiruchirappalli 620007

Submitted for viva-voce examination held on ... 2/109/2020

INTERNAL EXAMINER

EXTERNAL EXAMINER

ii

#### **ABSTRACT**

Marble has been commonly used as a building materials since the ancient times, consequently, marble waste as a by-produce is a very important materials which requires adequate environment disposal effort. In addition, recycling waste without proper management can result in environmental problem greater than the waste itself. Marble dust is a waste product formed during the producing of marble. A large quality of powder is generated during the cutting process. The result is that about 25% of the original marble mess is lost in the form of dust. Leaving these waste material to the environment directly can causes environmental problem such as increases the soil alkalinity, affect the plants, affect the human body etc. marble powder can be used as an admixture in concrete, so that strength of concrete can be increased. It is a solid waste material generated from the marble processing and can be used either as a filter material in fine aggregate while preparing concrete.

#### CHAPTER - 7

#### CONCLUSION

The following conclusions are derived based on the conducted experiments

- 1. Workability was increased by using small amount of marble powder ratio as a replacement of sand and leads to increase the compaction and the strength of concrete.
- The increasing of marble powder ratio as a replacement of sand over the optimum dosage leads to the segregation of aggregate and bleeding of cement and aggregates lead to decrease the resistance of concrete.
- 3. Increasing the marble powder ratio replacement of sand led to the increasing as the compressive strength by about (11%) for the marble powder replacement ratios (10%) compared to the control mix.
- Increasing the marble powder ratios higher than 15% decreased the compressive strength of concrete mixes.
- 5. Increasing split tensile strength of the concrete by using marble powder ratios (5%, 10% and 15%) compared to the control mix.
- 6. The addition of marble powder reduces workability. However, in some cases improved workability were also reported.
- 7. Marble powder inclusion increases compressive strength significantly (5% and 10% and 15%) and increase in compressive strength depends upon replacement level.
- 8. Addition of marble powder improves bond strength of concrete.

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### Requisition for the Approval of Industrial Visit

#### M.I.E.T ENGINEERING COLLEGE

#### DEPARTMENT OF CIVIL ENGINEERING

#### IV Year

Industrial Visit Date	Company Name	Year	No.of Students	No.of Faculty
03-09-2019	DP World, India Gate Terminal Pvt Ltd- Cochin	IVYear Civil Engg Dept	Boys = 54 Girls= 06 Total = 60	03 (Gents = 02 Ladies = 01)
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Industrial visit co-ordinator/civil

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HOD/TPO

CHAIRMAN 31

28.08.2018

From

Gyasudeen N (E1171062)

Class representative/ IV year Civil

MIET Engineering college

Trichy-07.

To

The chairman

MIET Educational Institutions

Trichy-07

Through the principal,

Respected madam,

Sub: Requesting permission for Industrial visit – reg.

As a part of our curriculum, we are IV year students of civil Engineering would like to go for an industrial visit to, **DP World, India Gate Terminal Pvt Ltd, Ernakulam, Cochin** on 03/9/2019 (Wednesday). So kindly request you to permit us for the same.

Thanking you,

Yours obediently,

N. Gyas udeers

(Gyasudeen N)

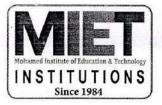
一种王,里

Industrial visit co-ordinator/civil

B FENADATOR 1191

HOD/TPO

PRINCIPAL



### M.I.E.T. ENGINEERING COLLEGE

(Approved by AICTE New Delhi and Affiliated to Anna University, Chennai) TRICHY-PUDUKKOTTAI ROAD, TIRUCHIRAPPALLI - 620 007.

Ph: 0431 - 2660 303 | Fax: 2660 264 & 2660 550

Email: principalengg@miet.edu, contact@miet.edu & mietenggoffice@gmail.com www.miet.edu

Dr. X. SUSAN CHRISTINA, M.E., Ph.D.,

Principal

Date:

21.08.2019

To

Mr. Purna Chander HR Manager, DP world (P) Ltd, Cochin, Kerala.

#### TO WHOM SOEVER IT MAY CONCERN

This is to certify that the attached list of names are bonafide students of this institution studying in Final Year of Civil Engineering. The total strength of 55 students along with 3 Faculty Members are willing to undergo industrial visit in your organization on 31st August 2019. So, I hereby request to approve our requisition and therefore enable our students to make this industrial visit as a pragmatic experience.

Encl: Students Name List

PRINCIPAL MIET ENGINEERING COLLEGE MINDUR, TIRUCHIRAPALLI - 620 007



HOD CIVIL <civil.hod@miet.edu>

#### Industrial Visit on 03.09.2019

jacqueline D'costa - SSC <Jacqueline.Dcosta@dpworld.com> To: "civil.hod@miet.edu" <civil.hod@miet.edu>, "elangovan.r@miet.edu" <elangovan.r@miet.edu> Cc: purnachander ankaiyan - IGTPL <purnachander.ankaiyan@dpworld.com>, Mithun Sudhakaran - IGTPL <Mithun.Sudhakaran@dpworld.com>

Wed, Aug 28, 2019 at 11:19 AM

Dear Mr. Shahul / Mr. Elangovan,

Greetings from India Gateway Terminal!!!

Reference to our telecom, we are pleased to inform you that your request for Industrial visit is approved and it is scheduled on 3<sup>rd</sup> September 2019 ( 10.30 Am ).

As discussed, Please note that the students need to carry a government ID card ( Aadhar card ) for gate entry. Please note that you need to come in your own vehicle and the vehicle will be allowed inside for which you need to take gate entry pass, kindly send me the list of students, their ID details, the vehicle details (Vehicle number) and the driver details (Drivers name, drivers driving license details ) well in advance to make necessary arrangements.

Also, send us your request in your college letter head ( Soft copy ).

Kindly note that we only accept payment through account transfer. Hence, kindly transfer the amount, The bank details are as

The deposit should be via Bank Transfer. NO Cash deposits please. Kindly do not deposit cash. Only bank transfer.

Regards

Jacqueline D'Costa

Senior Officer - Human Capital

DP WORL

T: +0484 4156116

E: jacqueline.dcosta@dpworld.com

M.I.E.T. ENGINEERING COLLEGE GUNDUR, TIRUCHIRAPPALLI-620 007

DP World - Cochin

India Gateway Terminal Pvt Ltd,

Administration Building, ICTT

#### Company Profile and Learning Experience

#### DP World - Cochin

#### India Gateway Terminal Pvt Ltd.

The kochi International container Transshipment Terminal(ICTT) locally known as the Vallarpadam Terminal, is the first transshipment terminal in India and the first container terminal to operate in cochin, kerala. Being Constucted in three phases of the terminal was commissioned on 11 Feb 2011. This can handle cargo up to one million TEUs(twenty – foot equivalent units) per annum. On completion of the third phase, the terminal will be able to handle 5.5 millon Twenty – foot equivalent units of cargo per annum. The terminal is operated by the Dubai Ports world, which will operate it for 30 years after which the control will come back to the cochin port Trust. On 11 Feb 2011 the terminal was inaugurated by Manmohan singh, the Prime Minister of India.

In 2005, We won the concession to built and operate India's first transshipment facility, the Rajiv Gandhi Container Terminal at the port of cochin, which is primary hub of kerela state. we also invested USD 243 million in the development of India Gateway Terminal Pvt Ltd(IGTPL), a green field development that span over one square kilometer acting as a gateway to the vast industrial and agricultural market of the south and west.

# MIET ENGINEERING COLLEGE DEPARTMENT OF CIVIL ENGINEERING STUDENT NAMELIST

# MIET ENGINEERING COLLEGE DEPARTMENT OF CIVIL ENGINEERING STUDENT NAMELIST

		TODENT NAMELIST		3	I ODENT NAIVIELIST
S.No	Roll No	Name	S.No	Roll No	Name
1	E1161001	Abdul Rahim. M	/ 31	E1161048	Surendhiran, S
2	E1161002	Abinaya. N	/32	E1161049	Syed Mohamed. M
/3	E1161005	Arvind. N	/ 33	E1161050	Thamizuddin. T
4	E1161006	Ashik Ahamed. N X	34	E1161051	Thariq Ahmed. S
		Azarudheen. A	35	E1161052	Thaslim Kauser. S
6	E1161011	Dinesh Kumar. A	/ 36	E1161053	Usman Kani. M
17	E1161012	Fais Ahamed. S	37	E1161054	Vasanth Kumar, K
8	E1161014	Gunaseelan. S	/ 38	E2171056	Abdullah. K
9	E1161017	Ijas Ahamed. M	/ 39	E2171057	Aravind, S
1000000		Kavitha. G	40	E2171058	Arivunithi. J
11	E1161020	Lingeshwaran. M	41	E2171059	Azarudeen
		Mohamed Ansar. M.K	42	E2171062	Gyasudeen. N
		Mohamed Faizal. M	/43	E2171064	Kavin. S
		Mohamed Ali. S	/ 44	E2171065	Kirupa Shankar, T.G 🤝
15	E1161030	Mohamed Sajith. A	45	E2171066	Loganathan, D -7
		Mohamed Thanweer. S	/ 46	E2171068	Mohamed Imran. S ~
		Mohamed Yaseer. A.R	47	E2171070	Mohamed Wasim. A ∽
		Mohamed Yunus. A 🖍	/48	E2171067	Maheswari. T
		Mohammed Aadil Makhdoom/	49	E2171071	Nandhini. N
		Mohammed Abbas. K ~	50	E2171072	Navaneetha Krishnan. D-7
21	E1161037	Mohammed Ifiyas.I 🗸	51	E2171073	Praveen Kumar. P
		Naresh Kannan. G	52	E2171074	Ramkumar. R , X
		Navaneetha Krishnan. B		E2171075	Shahul Hamced. M
		Parthiban, S	r 54	E2171076	Shajahan. M
		Ramjan Ali. J	<b>/</b> 55	E2171077	Sheik Sabeer. S
		Sahul Hameed, M 🗡	/56	E2171078	Sirajudeen. L
	E1161043		r 57	E2171080	Sulthan sahi
		Sameerudeen. B	58	E2171081	Vinodha. J X
		Shameer Ahamed. M	/ 59	E2171082	Vivek. S
/30	E1161046	Sivaranjan. P	60	E3181083	Kaosalya.K

一年.3

Industrialvisit coordinator

Anglation HOD/Civil

VALLARPADAM, COCHANTRY PERMITTE

JAM

DATE

Signature of Sexurity

62) Ashila 62) Ashila 63) Phanik 64) Hanun 65) Trunan

#### **Department of Civil Engineering**

#### IV Year /Date of Visit03-09-2019

#### Faculty, Students Gender List

Civil

Boys Students: 54

Girls Students: 06

Total: 60

Faculty List
Male Faculty: 02

Female Faculty: 01

Total: 03

一起.9

INDUSTRIAL VISIT CO-ORDINATOR

HOD

GUNDUR, TIRUCHIRAPPALLI-620 007

#### MIET ENGINEERING COLLEGE DEPARTMENT OF CIVIL ENGINEERING IV YEAR

#### MALE STUDENT NAMELIST

S.No	Roll No	Name	Faculty Incharge
1	E1161001	Abdul Rahim. M	Belin Jude.A
	E1161005	Arvind, N	Belin Jude.A
3	E1161006	Ashik Ahamed. N	Belin Jude.A
4	E1161008	Azarudheen, A	Belin Jude.A
	E1161011	Dinesh Kumar, A	Belin Jude.A
6	E1161012	Fais Ahamed, S	Belin Jude.A
	E1161014	Gunaseelan, S	Belin Jude.A
	E1161017	Ijas Ahamed, M	Belin Jude.A
	E1161020	Lingeshwaran. M	Belin Jude.A
	E1161023	Mohamed Ansar, M.K	Belin Jude.A
	E1161025	Mohamed Faizal. M	Belin Jude.A
	E1161027	Mohamed Ali. S	Belin Jude.A
	E1161030	Mohamed Sajith. A	Belin Jude.A
	E1161031	Mohamed Thanweer, S	Belin Jude.A
	E1161033	Mohamed Yaseer, A.R	Belin Jude.A
	E1161034	Mohammed Younus	Belin Jude.A
	E1161035	Mohammed Aadil Makhdoom.	Belin Jude.A
	E1161036	Mohammed Abbas. K	Belin Jude.A
	E1161037	Mohammed Iliyas,I	Belin Jude.A
	E1161038	Naresh Kannan. G	Belin Jude.A
	E1161039	Navaneetha Krishnan, B	Belin Jude.A
	E1161040	Parthiban, S	Belin Jude.A
	E1161041	Ramjan Ali. J	Belin Jude.A
	E1161042	Sahul Hameed, M	Belin Jude.A
-	E1161043	Saleem. A	Belin Jude.A
	E1161044	Sameerudeen, B	Belin Jude.A
	E1161045	Shameer Ahamed, M	Belin Jude.A
-	E1161046	Sivaranjan, P	Santhosh kumar.E
	E1161048	Surendhiran, S	Santhosh kumar.E
	E1161049	Syed Mohamed, M	Santhosh kumar.E
	E1161050	Thamizuddin, T	Santhosh kumar.E
	E1161051	Thariq Ahmed. S	Santhosh kumar.E
	E1161052	Thaslim Kauser, S	Santhosh kumar.E
	E1161053	Usman Kani, M	Santhosh kumar.E
	E1161054	Vasanth Kumar, K	Santhosh kumar.E
	E2171056	Abdullah, K	
	E2171057	Aravind, S	Santhosh kumar.E
	E2171057	Ariyunithi, J	Santhosh kumar.E
	E2171059	Azarudeen	Santhosh kumar.E Santhosh kumar.E
	E2171062	Gyasudeen, N	
	E2171064	Kavin, S	Santhosh kumar.E
	E2171064	Kirupa Shankar, T.G	Santhosh kumar.E
_	E2171066		Santhosh kumar.E
	E2171068	Loganathan, D	Santhosh kumar.E
	E2171008	Mohamed Imran. S Mohamed Wasim. A	Santhosh kumar.E
-	E2171070	Navaneetha Krishnan. D	Santhosh kumar.E
	E2171072		Santhosh kumar.E
	E2171073	Praveen Kumar, P	Santhosh kumar.E
	E2171074 E2171075	Ramkumar, R Shahul Hamaad, M	Santhosh kumar.E
		Shahul Hameed, M	Santhosh kumar.E
	E2171076	Shajahan. M	Santhosh kumar.E
	E2171077	Sheik Sabeer, S	Santhosh kumar.E
	E2171078	Sirajudeen. L	Santhosh kumar.E
	E2171080	Sulthan sahi	Santhosh kumar.E
22000	E2171082	Vivek. S	Santhosh kumar.E

HOD/Civil

#### MIET ENGINEERING COLLEGE **DEPARTMENT OF CIVIL ENGINEERING IV YEAR**

#### **FEMALE STUDENT NAMELIST**

S.No	Roll No	Name	Faculty Incharge
1	E1161002	Abinaya. N	Anitha
2	E1161018	Kavitha. G	Anitha
3	E2171067	Maheswari. T	Anitha
4	E2171071	Nandhini. N	Anitha
5	E2171081	Vinodha. J	Anitha
6	E3161083	Kaosalya	Anitha

P. Th-

Industrial visit coordiantor

HOD/Civil

#### M.I.E.T ENGINEERING COLLEGE

#### **DEPARTMENT OF CIVIL ENGINEERING**

#### PROGRAMME SCHEDULE (Industrial Visit)

#### 03.09.2019(Wednesday)

TIME	ACTIVITIES
12.05am(03.09.2019)	Departure from M.I.E.T campus
08.00am	breakfast
10.00 am	Visit company
01.00pm	Lunch
02.30 pm	Visit company
04.30 pm	Departure from site
05.30 pm	Tea & Snacks
11.30 pm	Return to M.I.E.T

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INDUSTRIAL VISIT CO-ORDINATOR

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M.... ENGINE OLLEGE
GUNDUR, TIRUCHIRAPPALLI-620 007.

### **M.I.E.T ENGINEERING COLLEGE DEPARTMENT OF CIVIL ENGINEERING**

The following faculty members are accompanying with the students of III year Civil Engineering for industrial visit on 03.09.2019

Faculty Name	Mobile Number	Signature
Mr.A.Belin Jude	9944113460	0811. Dung
Mr.E.Santhosh kumar	9791883443	ET-
Ms. Anitha	8825002288	M. & M'

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INDUSTRIAL VISIT CO-ORDINATOR

HOD

#### MIET ENGINEERING COLLEGE DEPARTMENT OF CIVIL ENGINEERING STUDENT NAMELIST

STUDENT	VILLINGNESS	FORM
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S.No	Roll No	Name	Willingness
	E1161001	Abdul Rahim. M	Willing
19403.54	E1161002	Abinaya. N	Willing
2000	E1161003	Ahamed Rashith. M.A	Not Willing
4	E1161005	Arvind. N	Willing
5	E1161006	Ashik Ahamed. N	Willing
6	E1161007	Askar Ali. A	Not Willing
7	E1161008	Azarudheen. A	Willing
8	E1161009	Baalaji. M	Not Willing
9	E1161011	Dinesh Kumar. A	Willing
10	E1161012	Fais Ahamed, S	Willing
11	E1161013	Fazil Rahman. M	Not Willing
12	E1161014	Gunaseelan. S	Willing
13	E1161017	Ijas Ahamed. M	Willing
14	E1161018	Kavitha. G	Willing
15	E1161020	Lingeshwaran. M	Willing
16	E1161023	Mohamed Ansar. M.K	Willing
17	E1161024	Mohamed Ashik. A	Not Willing
18	E1161025	Mohamed Faizal. M	Willing
19	E1161026	Mohamed Harun, S	Not Willing
20	E1161027	Mohamed Ali. S	Willing
21	E1161028	Mohamed Riyaz. M	Not Willing
22	E1161029	Mohamed Imran. M	Not Willing
23	E1161030	Mohamed Sajith. A	Willing
24	E1161031	Mohamed Thanweer, S	Willing
25	E1161032	Mohamed Thariq, H	Not Willing
26	E1161033	Mohamed Yaseer, A.R	Willing
27	E1161034	Mohamed Yunus. A	Willing
28	E1161035	Mohammed Aadil Makhdoom, H	Willing
29	E1161036	Mohammed Abbas. K	Willing
30	E1161037	Mohammed Iliyas. I	Willing
31	E1161038	Naresh Kannan. G	Willing
32	E1161039	Navaneetha Krishnan. B	Willing
33	E1161040	Parthiban. S	Willing
34	E1161041	Ramjan Ali. J	Willing
35	E1161042	Sahul Hameed. M	Willing
36	E1161043	Saleem. A	Willing
37	E1161044	Sameerudeen. B	Willing
38	E1161045	Shameer Ahamed, M	Willing
39	E1161046	Sivaranjan. P	Willing
40	E1161048	Surendhiran, S	Willing
41	E1161049	Syed Mohamed. M	Willing
42	E1161050	Thamizuddin. T	Willing
43	E1161051	Thariq Ahmed. S	Willing
44	E1161052	Thaslim Kauser. S	Willing
15	E1161053	Usman Kani. M	Willing

46 E1161054	Vasanth Kumar. K	Willing
47 E1161055	Yasin. M	Not Willing
48 E2171056	Abdullah. K	Willing
49 E2171057	Aravind. S	Willing
50 E2171058	Arivunithi. J	Willing
51 E2171059	Azarudeen. U	Willing
52 E2171061	Balamurugan. S	Not Willing
53 E2171062	Gyasudeen. N	Willing
54 E2171063	Josebathkingston. J	Not Willing
55 E2171064	Kavin. S	Willing
56 E2171065	Kirupa Shankar. T.G	Willing
57 E2171066	Loganathan. D	Willing
58 E2171068	Mohamed Imran. S	Willing
59 E2171070	Mohamed Wasim. A	Willing
60 E2171060	Azgar Shariff. M	Not Willing
61 E2171067	Maheswari. T	Willing
62 E2171071	Nandhini. N	Willing
63 E2171072	Navaneetha Krishnan. D	Willing
64 E2171073	Praveen Kumar. P	Willing
65 E2171074	Ramkumar. R	Willing
66 E2171075	Shahul Hameed. M	Willing
67 E2171076	Shajahan. M	Willing
68 E2171077	Sheik Sabeer. S	Willing
69 E2171078	Sirajudeen. L	Willing
70 E2171079	Sri Gowtham. H.D	Not Willing
71 E2171080	Sulthan Sahi. A	Willing
72 E2171081	Vinodha. J	Willing
73 E2171082	Vivek. S	Willing
74	Kaosalya.K	Willing

一样。

Industrial visit Coordinator

HODICINII

### M.I.E.T ENGINEERING COLLEGE

### **Department of Civil Engineering**

#### IV Year

Total strength = 60Total No of Hostel girls = 1

S.No	ERP NO	NAME	
1	E2171067	T.Maheswari	

Hostel warden

HOD/civil



### M.I.E.T. Engineering College <u>Tiruchirappalli-620007</u>

## REPORT ON ONE DAY INDUSTRIAL VISIT

Name of the Industry

: DP World

Place of Visit

: Kochi International container

Transshipment Terminal (ICTT)

Date of Visit

03.09.2019

01	Company (s) Visited	kochi Interna Term	ntional container Transshipme inal(ICTT) – DP World
02	Number of Students	Boys	54
		Girls	6
03	Faculty Coordinators	Male	2
	**	Female	1
04	Date & Time of Industrial Visit	03.09.2019	Time: (02.09.19) 11 P.N to (04.09.2019)3 A.M
05	Approval Date	31.08.2019	
)6	Objective of the Visit	acout the various	ive of this Visit is to know parts of harbour, operations he role of Civil engineering.
	Company Profile	first transshipmen first container terr kerala. Being Cor the terminal was	International container Terminal(ICTT) locally Ilarpadam Terminal, is the t terminal in India and the minal to operate in cochin, estucted in three phases of commissioned on 11 Feb handle cargo up to one
		per annum. On con the terminal will be Twenty – foot equ annum. The termi Dubai Ports world, 30 years after which back to the cochin 2011 the terminal	thandle cargo up to one many — foot equivalent units) appletion of the third phase, which are able to handle 5.5 millon ivalent units of cargo per anal is operated by the which will operate it for the control will come port Trust. On 11 Feb was inaugurated by the Prime Minister of

		A.	
	*	TIME	ACTIVITIES
		02.00am	Departure from M.I.E.T
		(28.09.2019)	campus
		08.00am	breakfast
		10.00 am	Reaching Doddabetta
		10.30 am	Visiting Tea Factory
08	Programme Schedule	01.00pm	Lunch
	(As executed)	02.30 pm	Discuss about the process of tea manufacturing
		04.30 pm	Departure from Factory
		05.30 pm	Tea & Snacks
		11.00 pm	Return to M.I.E.T
09	Brief about the Students Observation	plucked and broug turned into small g visit is very useful	ght to the factory until how it grains are made. This Industr for us.
10		In this Industrial v knowledge about, in a centralized unthrough the various	the to the factory until how it grains are made. This Industration for us.  In the practical is the practical factor of the tea is manufactured it by sending the green leaves dividers and by using CTC
	Students Observation	In this Industrial v knowledge about, in a centralized unthrough the various	understood how the leaf that to the factory until how in grains are made. This Industr for us.  isit students learn the practic how the tea is manufactured it by sending the green leave s dividers and by using CTC the final stage of process.

(Attach additional Sheets, if required)

Signature of the Coordinator

HoD / Signature

M.I.E.T. ENGINEERING COLLEGE GUNDUR, TIRUCHIRAPPALLI-620 007.

97

13.09.2019

From

M.M.Mohamed Riswan (E1171026)

Class representative/ III year Civil

MIET Engineering college

Trichy-07.

To

The chairman

MIET Educational Institutions

Trichy-07

Through the principal,

Respected madam,

Sub: Requesting permission for Industrial visit - reg.

As a part of our curriculum, we are III year students of civil Engineering would like to go for an industrial visit to Dodabeta Tea factory, Ooty on 28/9/2019 (Saturday). So kindly request you to permit us for the same.

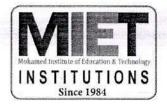
Thanking you,

Yours obediently,

M. Mithamed Righan. (M.M.Mohamed Riswan)

PRINCIPAL

Industrial visit co-ordinator/civil



#### M.I.E.T. ENGINEERING COLLEGE

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennal)
TRICHY-PUDUKKOTTAI ROAD, TIRUCHIRAPPALLI - 620 007.

Ph: 0431 - 2660 303 | Fax: 2660 264 & 2660 550

Email: principalengg@miet.edu, contact@miet.edu & mietenggoffice@gmail.com www.miet.edu

Dr. X. SUSAN CHRISTINA, M.E., Ph.D., Principal

Date:

30.08.2019

To

HR Manager, Dodabetta Tea Factory, Ooty – 643 002

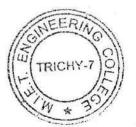
#### TO WHOM SOEVER IT MAY CONCERN

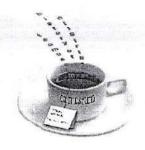
This is to certify that the attached list of names are bonafide students of this institution studying in **Third Year** of **Civil Engineering**. The total strength of 42 students along with 3 Faculty Members are willing to undergo industrial visit in your organization on 28<sup>th</sup> September 2019. So, I hereby request to approve our requisition and therefore enable our students to make this industrial visit as a pragmatic experience.

PRINCIPAL

Encl: Students Name List

PRINCIPAL
MIET ENGINEERING COLLEGE
SUNDUR, TIRUCHIRAPALLI - 620 007





A speciality tea centre managed by the Doddabetta Tea Factory
tea history | factory tour | souvenirs | tea spot

10.09.2019

To
The Principal
MIET Engineering College
Trichy

Sir,

We are in receipt of your letter regarding an Industrial visit by your students to our Tea Factory. We wish to inform you that your students may visit our factory on 28.09.19. Between 10 am to 4 pm and necessary arrangements will be made to explain the entire process of Tea Manufacture to them.

In our 10<sup>th</sup> year, as a special gesture, we extend FREE ENTRY to the Tea Factory for students of schools & colleges on production of confirmation letter. Teachers accompanying the students are also provided free entry. For further enquiry please contact our Tour-in-charge on tel no. 0423-2231679 or drop an Email to <a href="mailto:tmuseumdtf@rediffmail.com">tmuseumdtf@rediffmail.com</a> regarding your Industrial Visit. A certificate of participation can be availed on completion of the tour. In the meantime, please view a video of The Tea Museum and The Tea Factory on this link <a href="https://youtu.be/AazGhgne0kc">https://youtu.be/AazGhgne0kc</a>.

Thanking You

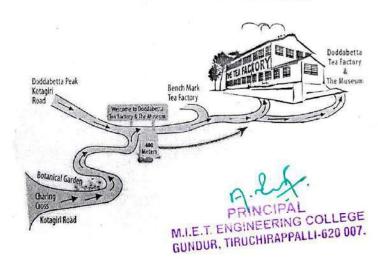
Yours Sincerely

For DODDABETTA TEA FACTORY

Managing Partner

N.K. Krishnamorthy

#### DIRECTIONS TO THE FACTORY



#### Company Profile and Learning Experience

#### Dodabeta Tea Factory- Ooty

At tea factory, they have made the arrangement for visitors to see the process of manufacturing of Tea. Factory staff is very co-operative. They are responding each and every questions of visitors about the manufacturing. They have shown each and every step in the manufacturing of Tea. At the end they are distributing a free cup of tea to every visitor. They have made the arrangement for purchasing the variety of Teas also i...e green tea, masala tea etc. I can say this is very good marketing technique. Whatever it is, people comes to know how the tea is manufactured, which they are daily drinking. Behind the tea factory, there are shop for the purchasing of hand made chocolates, where chocolate lovers can purchase. In this tea factory how to treat waste material from tea and treatment method have been seen practically and disposing of waste is important factor.

P.H.

& Jonging Hop/civil

GUNDUR, TIRUCHIRAPPALLI-620 007.

#### MIET ENGINEERING COLLEGE DEPARTMENT OF CIVIL ENGINEERING STUDENT NAMELIST

S.No	Roll No	Name	
1	E1171001	Abdhullah. S	
2	E1171004	Afsal Ahmed. A	
3	E1171005	Ajith Kumar. K	
4	E1171007	Ameer Basha. M	
5	E1171008	Aravind. A	
6	E1171009	Azarudeen. S	
7	E1171010	Basheer. M	
8	E1171011	Darwish Ahamed. M	
9	E1171012	Dhivakaran. S	
10	E1171013	Divakaran. G	
11	E1171014	Faisal Khan. M	
12	E1171015	Haamithullah. Y.S	
13	E1171016	Isak Ahamed J	
14	E1171017	Izas Ahamed. H	
15	E1171018	Jayaprakash. G	
16	E1171019	Kishore J. J	
17	E1171020	Mahadevan. N	
18	E1171021	Mohamed Anas. J	
19	E1171023	Mohamed Ashik. J	
20	E1171026	Mohamed Riswan M. M	
21	E1171027	Mohamed Riyas M. M	

Industrial visit coordinator

# MIET ENGINEERING COLLEGE DEPARTMENT OF CIVIL ENGINEERING STUDENT NAMELIST

S.No Roll No		Name		
22	E1171030	Mohamed Suhail. H		
23	E1171033	Nethaji. M		
24	E1171034	Nihal S. S		
25	E1171035	Prince Natheem M R. M		
26	E1171036	Riyas Ahamed. M		
- 27	E1171037	Santhosh. P		
28	E1171038	Saravanan. A		
29	E1171040	Sheik Mohamed Yoosuf. M.H		
30	E1171042	Sri Kannan. S		
31	E1171045	Venkatesh. C		
32	E1171046	Yakoob Farthani. M		
33	E2181047	Abdul Rahman. J		
34	E2181048	Ahamed Tharik, K		
35	E2181049	Arjun Raj.R. R		
36	E2181051	Ayyanar. M		
37	E2181052	Jegan. T		
38	E2181053	Lakshman. S		
39	E2181054	Manikandan. B		
40	E2181057	Ramanathan. M		
41	E3161061	Sivasubramani. M		

& Bangagalla

#### **Department of Civil Engineering**

#### III Year /Date of Visit28-09-2019

#### Faculty, Students Gender List

<u>Civil</u>

Boys Students: 41

Total: 41

Faculty List
Male Faculty: 02

Total: 03

INDUSTRIAL VISIT CO-ORDINATOR

#### MIET ENGINEERING COLLEGE DEPARTMENT OF CIVIL ENGINEERING III YEAR

#### MALE STUDENT NAMELIST

S.No	Roll No	Name	Faculty Incharge
1	E1171001	Abdhullah. S	T.K.Vimal Balaji
2	E1171004	Afsal Ahmed. A	T.K.Vimal Balaji
3	E1171005	Ajith Kumar. K	T.K.Vimal Balaji
4	E1171007	Ameer Basha. M	T.K.Vimal Balaji
5	E1171008	Aravind. A	T.K.Vimal Balaji
6	E1171009	Azarudeen. S	T.K.Vimal Balaji
7	E1171010	Basheer. M	T.K.Vimal Balaji
8 -	E1171011	Darwish Ahamed. M	T.K.Vimal Balaji
9	E1171012	Dhivakaran. S	T.K.Vimal Balaji
10	E1171013	Divakaran. G	T.K.Vimal Balaji
11	E1171014	Faisal Khan. M	T.K.Vimal Balaji
12	E1171015	Haamithullah. Y.S	T.K.Vimal Balaji
13	E1171016	Isak Ahamed J	T.K.Vimal Balaji
14	E1171017	Izas Ahamed. H	T.K.Vimal Balaji
15	E1171018	Jayaprakash. G	T.K.Vimal Balaji
16	E1171019	Kishore J. J	T.K.Vimal Balaji
17	E1171020	Mahadevan. N	T.K.Vimal Balaji
18	E1171021	Mohamed Anas. J	T.K.Vimal Balaji
19	E1171023	Mohamed Ashik. J	T.K.Vimal Balaji
20	E1171026	Mohamed Riswan M. M	T.K.Vimal Balaji
21	E1171027	Mohamed Riyas M. M	T.K.Vimal Balaji
22	E1171030	Mohamed Suhail. H	B.Sekar
23	E1171033	Nethaji. M	B.Sekar
24	E1171034	Nihal S. S	B.Sekar
25	E1171035	Prince Natheem M R. M	B.Sekar
26	E1171036	Riyas Ahamed. M	B.Sekar
27	E1171037	Santhosh. P	B.Sekar
28	E1171038	Saravanan. A	B.Sekar
29	E1171040	Sheik Mohamed Yoosuf. M.H	B.Sekar
30	E1171042	Sri Kannan. S	B.Sekar
31	E1171045	Venkatesh. C	B.Sekar
32	E1171046	Yakoob Farthani. M	B.Sekar
33	E2181047	Abdul Rahman. J	B.Sekar
34	E2181048	Ahamed Tharik. K	B.Sekar
35	E2181049	Arjun Raj.R. R	B.Sekar
36	E2181051	Ayyanar. M	B.Sekar
37	E2181052	Jegan. T	B.Sekar
38	E2181053	Lakshman. S	B.Sekar
39	E2181054	Manikandan. B	B.Sekar
40	E2181057	Ramanathan. M	B.Sekar
41	E3161061	Sivasubramani. M	B.Sekar

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Industrial visit coordiantor

HOD/Civil

DRINGIPAL

#### 4

#### M.I.E.T ENGINEERING COLLEGE

#### **DEPARTMENT OF CIVIL ENGINEERING**

#### PROGRAMME SCHEDULE (Industrial Visit)

#### 28.09.2019 (Saturday)

TIME	ACTIVITIES	
02.00am(28.09.2019)	Departure from M.I.E.T campus	
08.00am	breakfast	
10.00 am	Reaching Industry	
10.30 am	Visiting Site	
01.00pm	Lunch	
02.30 pm	Discuss about the Treatment of waste & disposing system	
04.30 pm	Departure from industry	
05.30 pm	Tea & Snacks	
11.00 pm	Return to M.I.E.T	

P. FA

INDUSTRIAL VISIT CO-ORDINATOR

& Shareglally

# M.I.E.T ENGINEERING COLLEGE DEPARTMENT OF CIVIL ENGINEERING

The following faculty members are accompanying with the students of III year Civil Engineering for industrial visit on 28.09.2019

Faculty Name	Mobile Number	Signature
Mr.T.K.Vimal Balaji	9944550716	a. W. Sie
Mr.B.Sekar	9944866910	Com

P. FA-

INDUSTRIAL VISIT CO-ORDINATOR

O Swaldland

GUNDUR, TIRUCHIRAPPALLI-620 007.

1

# MIET ENGINEERING COLLEGE DEPARTMENT OF CIVIL ENGINEERING STUDENT NAMELIST

#### STUDENT WILLINGNESS FORM

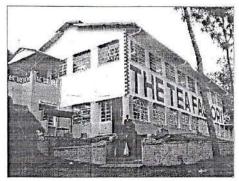
S.No	Roll No	Name	Willingness
1	E1171001	Abdhullah. S	Willing
2	E1171004	Afsal Ahmed. A	Willing
3	E1171005	Ajith Kumar. K	Willing
4	E1171007	Ameer Basha. M	Willing
5	E1171008	Aravind. A	Willing
6	E1171009	Azarudeen. S	Willing
7	E1171010	Basheer. M	Willing
8	E1171011	Darwish Ahamed. M	Willing
9	E1171012	Dhivakaran. S	Willing
10	E1171013	Divakaran. G	Willing
11	E1171014	Faisal Khan. M	Willing
12	E1171015	Haamithullah. Y.S	Willing
13	E1171016	Isak Ahamed J	Willing
14	E1171017	Izas Ahamed. H	Willing
15	E1171018	Jayaprakash. G	Willing
16	E1171019	Kishore J. J	Willing
17	E1171020	Mahadevan. N	Willing
18	E1171021	Mohamed Anas. J	Willing
19	E1171023	Mohamed Ashik. J	Willing
20	E1171026	Mohamed Riswan M. M	Willing
21	E1171027	Mohamed Riyas M. M	Willing
22	E1171030	Mohamed Suhail. H	Willing
23	E1171033	Nethaji. M	Willing
24	E1171034	Nihal S. S	Willing
25	E1171035	Prince Natheem M R. M	Willing
26		Riyas Ahamed. M	Willing
27	Paragraphic Company of the Paragraphic Company o	Santhosh. P	Willing
28	E1171038	Saravanan. A	Willing
29	E1171040	Sheik Mohamed Yoosuf. M.H	Willing
30		Shobana. S	Not Willing
31	E1171042	Sri Kannan. S	Willing
32	E1171045	Venkatesh. C	Willing
33	E1171046	Yakoob Farthani. M	Willing
34	E2181047	Abdul Rahman. J	Willing
35	E2181048	Ahamed Tharik. K	Willing
36	E2181049	Arjun Raj.R. R	Willing
		Ayyanar. M	Willing
38	E2181052	Jegan. T	Willing
39	E2181053	Lakshman. S	Willing
40	E2181054	Manikandan. B	Willing
41	E2181056	Movin Jerome. SA	Not Willing
42	E2181057	Ramanathan. M	Willing
43	E2181059	Srithar. S	Not Willing
44	E2181060	Vinoth Kingsly. M	Not Willing
45	E3161061	Sivasubramani. M	Willing

P.H.

**IV** Coordinator

PRINCIPAL PRINCIPAL

# poddabetta Tea Factory



### INDUSTRIAL VISIT CERTIFICATE

This is to certify that students of MITT Fraincoring College Department of Civil Fraincoring on 28/09/19 visited The Doddabetta Tea Factory and the Tea Museum on.

They were given first hand information of the entire tea history and processing. They participated in a guided factory tour in which the history of tea and the different stages of tea processing like withering, crushing, cutting / tearing / curling (CTC), shaping, fermentation, drying, cleaning and grading was explained to them. The students evinced keen interest in knowing all aspects about tea manufacture.

Place: Udhagamandalam

Date : 28/09/19



Authorised Signatory
PRINCIPAL
M.LE.T. ENGINEERING COLLEG

Adm. Office: 16-B, Nankem Hospital Premises, Coonoor - 643 101, The Nilgiris. Phone: (0423) 2231679 Mobile: 94430 30520 / 94434 18000 www.teamuseum-india.com e-mail: tmuseumdtf@rediffmail.com



#### M.I.E.T. Engineering College <u>Tiruchirappalli-620007</u>

#### REPORT ON ONE DAY INDUSTRIAL VISIT

Name of the Industry

: DODDABETTA TEA FACTORY

Place of Visit

: DODDABETTA-OOTY

Date of Visit

28.09.2019

PRINCIPAL
PRINCIPAL
M.I.E.T ENGINEERING COLLEGE
GUNDUR, TIRUCHIRAPPALLI-620 007.

	Report on One D	Day Industrial	Visit
01	Company (s) Visited	DODDABETTA	TEA FACTORY-OOTY
02 Number	Number of Students	Boys	41
		Girls	=
03	Faculty Coordinators	Måle	2
		Female	_
04	Date & Time of Industrial Visit	28/ 09 /2019	Time: 10 A.M to 4 P.M
05	Approval Date	10.09.2019	
06	Objective of the Visit		ive of this Visit is to lear manufacturing process of to
07	Company Profile & Learning Experience	2005, and is N.K.Krishnamo Tea Board. Fac of 1 acre in C many blue hill largest hill st	s founded in the year well managed by Morthy, former Member of tory sprawls over an are Doty in the midst of the Sof the Nilgiris, secondation, bounded by te
76		We have seen r brought into the rolling, drying an	n altitude of 1839 meters ight from when the leaf factory for withering, to the shifting stages until the poured into jute bags for the stages of the sta
			PRINCIPAL T ENGINEERING COLLEGI

to the vast industrial and agricultural market of the south and west.

08	Programme Schedule (As executed)	12:00am-Departure from M.I.E.T campus 08:00am- Breakfast 10:00am - Reaching site 10:30am - Visiting Site (PORT) 01:00pm - Lunch 02:30pm - Visiting site 04:30pm - Departure from site 05:30pm - Tea & snacks 11:30am - Return to M.I.E.T
09	Brief about the Students Observation	<ol> <li>Students observe the transshipment process</li> <li>They are learned what are the structures are available in port and know the working principles.</li> <li>Points to be taken care for quality control.</li> <li>Safety precaution in port.</li> </ol>
10	Conclusion	By this port visit Students learn more practical knowledge in their field.  Definitely it will be helpful for their career
11	Attachments (Scanned Photos of the Industrial Visit)	

(Attach additional Sheets, if required)

Signature of the Coordinator

HoD / Signature

Principat

M.I.E.T. ENGINEERING COLLEGE GUNDUR, TIRUCHURAPPALLI-620 007.



(Approved by AICTE, New Delhi, Affiliated to Anna University, Chauge of CSE, EEE & MECH Programs Accredited by NBA, New Factority - PUDUKKOTTAL ROAD, TRUCHBAPPALLI - 620 GO Email: principalengg@mlet.edu, contact@miet.edu

Website: - www.mlet.edu

\$10 0 1 - 28813 363

#### Permission Requisition Form for Undergoing an In plant Training / Internship

	Date: 1.6/09/2019			
1.	Name of the Student	MamakasRahaman		
2.	Semester / Year			
3.	Mobile Number (Student)	. 8978617113		
4.	Mobile Number (Father)	:		
5.	Name of the Company	. 5D CAD Center.		
6.	Address of the Company	50 CADD Centes		
		······································		
7.	Duration of Training	: 20/9/19 to 22/9/19		
8.	Training was Known Through	. Collage		
9.	Others (if any) Furnish the details:			
202	9a. Name of the Person	<b></b>		
	9b. Designation / Company Name			
	9c. Mobile Number	<b>:</b>		
	Declaration	9-31 <b>4</b>		
1.		quiring knowledge for development of		
2.	rules & regulation norms.	9,		
3.	- I to now the fact to the company i	f any.		

S. hurd

HoD/ Civil PRINCIPAL Principal
M.I.E.T. ENGINEERING COLLEGE
GUNDUR, TIRUCHIRAPPALLI-620 007



(Approved by AICTE, New Delhi, Affiliated to Anna University, Chemical)
UG - CSE, EEE & MECH Programs Accredited by NBA, New Delha
TRICHY - PUDUKKOTTAL ROAD, TIRUCHIRAPPALLI - 620 007.
Email: principalengg@miet.edu, contact@miet.edu
Website: - www.miet.edu

Ph 14 11 - 2660 303

#### Permission Requisition Form for Undergoing an In plant Training / Internship

	Date:	
1,	Name of the Student	Abdul Rahim M
2.	Semester / Year	. VII X 20 Nyear
3.	Mobile Number (Student)	97.866.023.3.4
4.	Mobile Number (Father)	. 9788190028
5.	Name of the Company	
6.	Address of the Company	. 5D. CADO Center.
		. Inchy-
7.	Duration of Training	. 50.09.2019 to 22.09.2019
8.	Training was Known Through	: COLLEGIE
9.	Others (if any) Furnish the details: 9a. Name of the Person	<b>1</b>
	9b. Designation / Company Name	i
	9c. Mobile Number	1
1.	Declaration I have to go for In plant / Internship for acq	quiring knowledge for development of
2.	my career. I obey our college / Company (Where to go rules & regulation norms.	for In plant / Internship Training)
3.	I am ready to pay the fees to the company if So kindly be permitting me for the training.	

2. Suryf Class Advisor

HoD/ Civil PRINCIPAL Principal
M.I.E.T. ENGINEERING COLLEGE
GUNDUR, TIRUCHIRAPPALLI-620 007.



UG - CSE, EEE & MECH Programs Accredited by NBA, New Dall. TRICHY - PUDUKKOTTAL ROAD TIRLE HERAPPALLI - 620 00 Email: principalengg@miet edu contacu@miet nilu Website: - nww.miet oda

## Permission Requisition Form for Undergoing an In plant Training / Internship

Date: 14.9.19..... G GINA SELLIAL 1. Name of the Student W & VIIV Semester / Year . 4842916959 3. Mobile Number (Student) 9524843022 4. Mobile Number (Father) . JD CAD Center. 5. Name of the Company 5D CAD conter · TRICHY -6. Address of the Company . 20:09.19 - 22.09.19 7. Duration of Training : Collage 8. Training was Known Through 9. Others (if any) Furnish the details: 9a. Name of the Person 9b. Designation / Company Name 9c. Mobile Number Declaration 1. I have to go for In plant / Internship for acquiring knowledge for development of

my career.

2. I obey our college / Company (Where to go for In plant / Internship Training) rules & regulation norms.

3. I am ready to pay the fees to the company if any. So kindly be permitting me for the training.

M.I.E.T. ENGINEERING COLLEGE GUNDUR, TIRUCHIRAPPALLI-620 007



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Ph: 434 - 2660 303

## Permission Requisition Form for Undergoing an In plant Training / Internship

Date:16./.9/.20.19		
1.	Name of the Student	Kausalya k
2.	Semester / Year	. TV /VIT
3.	Mobile Number (Student)	7598172267
4.	Mobile Number (Father)	!
5.	Name of the Company	5D Cadd
6.	Address of the Company	: Sod cadd center Trichy
7.	Duration of Training (	. 20.09.19 to 22.09.19
8.	Training was Known Through	. College
9.	Others (if any) Furnish the details: 9a. Name of the Person	·
	9b. Designation / Company Name	1
	9c. Mobile Number	1
	Declaration	
1.	I have to go for In plant / Internship for acq my career.	uiring knowledge for development of
2.	I obey our college / Company (Where to go	for In plant / Intornation
	rules & regulation norms.	Plant / Internship Training)
3.	I am ready to pay the fees to the company if So kindly be permitting me for the training	any.

Civil PRINCIPAL Principal M.I.E.T. ENGINEERING GUNDURFTIRUCHHAPPALLI-bzo-oo/

115



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UG - CSE, EEE & MECH Programs Accredited by NBA, New Delbi
IRICHY - PUDUKKOTTAL ROAD, TIRUCHIRAPPALLI - 620 607
Email: principalengg@miet.edu, contact@miet.edu
Website: - www.miet.edu

Ph 1:31 - 2660 303

## Permission Requisition Form for Undergoing an In plant Training / Internship

Date: 16.09.2019

1.	Name of the Student	MOHAMED MALZAL
2.	Semester / Year	yth sem X 4 year
3.	Mobile Number (Student)	9786574419
4.	Mobile Number (Father)	:
5.	Name of the Company	
6.	Address of the Company	. 50 CADA CENTER
		TRUBY
7.	Duration of Training	2019/19 - 22/9/19
8.	Training was Known Through	: collage
9.	Others (if any) Furnish the details: 9a. Name of the Person	<b>:</b>
	9b. Designation / Company Name	······
	9c. Mobile Number	······································
	Declaration	
	I have to go for In plant / Internship for accomy career.	
2.	I obey our college / Company (Where to go rules & regulation norms.	for In plant / Internship Training)
3.	I am ready to pay the fees to the company if any. So kindly be permitting me for the training.	

Plass Advisor

PRINCIPAL HoD/ CIVILE.T. ENGINEERING COLLEGE 1 CUNDUR, TIRUCHIRAPPALLI-620 007.



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Email: principalengg@miet.edu, contact@miet.edu
Website: - www.miet.edu

Ph: 451 - 2660 303

#### Permission Requisition Form for Undergoing an In plant Training / Internship

Date: 15/9/2019. S. Nohamed Mli 1. Name of the Student M th Som K Rysar 2. Semester / Year 9944429599 3. Mobile Number (Student) 4. Mobile Number (Father) 5D CADD 5. Name of the Company . SD CADD. 6. Address of the Company 20.09.2019-22.09.201 7. Duration of Training . Lollege 8. Training was Known Through 9. Others (if any) Furnish the details: 9a. Name of the Person 9b. Designation / Company Name 9c. Mobile Number 1. I have to go for In plant / Internship for acquiring knowledge for development of Declaration my career. 2. I obey our college / Company (Where to go for In plant / Internship Training) rules & regulation norms. 3. I am ready to pay the fees to the company if any. So kindly be permitting me for the training.

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Email: principalengg@miet.edu, contact@miet.edu
Website: - www.miet.edu

ph 15.1 - 2660 303

## Permission Requisition Form for Undergoing an In plant Training / Internship

Date: 1.6:09..2019

1.	Name of the Student	Lingeshwaran M.	
2.	Semester / Year	VI IX	
3.	Mobile Number (Student)	8760670773	
4.	Mobile Number (Father)	7339547870	
5.	Name of the Company	SD Cadd	
6.	Address of the Company	. Sd gadd Center	
		Tricky	
7.	Duration of Training	Zo/09/2019 to 22/09/2019	
8.	Training was Known Through	: College	
9.	Others (if any) Furnish the details: 9a. Name of the Person	······································	
	9b. Designation / Company Name	1	
	9c. Mobile Number	<b>:</b>	
2.	<ol> <li>Declaration</li> <li>I have to go for In plant / Internship for acquiring knowledge for development of my career.</li> <li>I obey our college / Company (Where to go for In plant / Internship Training) rules &amp; regulation norms.</li> <li>I am ready to pay the fees to the company if any. So kindly be permitting me for the training.</li> </ol>		

M.I.E.T. ENGINEERING COLLEGE GUNDUR, TIRUCHIRAPPALLI-620 082



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TRICHY - PUDUKKOTTAL ROAD, TIRUCHIRAPPALLI - 620 007
Email: principalengg@miet.edu, contact@miet.edu
Website: - www.miet.edu

Ph: 6431 - 2660 303

#### Permission Requisition Form for Undergoing an In plant Training / Internship

Date: 16.09.2019.

1.	Name of the Student	Kavi'tha G	
2.	Semester / Year	· VII (IV	
3.	Mobile Number (Student)	8940400621	
4.	Mobile Number (Father)	8740400631	
5.	Name of the Company	. 5D cadd	
6.	Address of the Company	. SD Godd Center	
		Trichy	
7.	Duration of Training	: 20.09.2019 to 22.09.2019	
8.	Training was Known Through	:Callage	
9.	Others (if any) Furnish the details: 9a. Name of the Person	<b>!</b>	
	9b. Designation / Company Name	1	
	9c. Mobile Number	1	
	Declaration I have to go for In plant / Internship for acmy career.		
	. I obey our college / Company (Where to go for In plant / Internship Training) rules & regulation norms.		
3.	I am ready to pay the fees to the company So kindly be permitting me for the trainin	if any.	
		Japan	

Lass Advisor

HoD/ Civil

PRINCIPAL Principal

M.I.E.T. ENGINEERING COLLEGE GUNDUR, TIRUCHIRAPPALLI-620 007,



(Approved by AICTE, New Delhi, Affiliated to Anna University, Che ST)

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TRICHY - PUDUKKOTTAL ROAD, TIRUCHIRAPPALLI - 670 007

Email: principalengg@miet.edu, contact@miet.edu

Website: - www.miet.edu

Ph- 1271 - 2660 303

#### Permission Requisition Form for Undergoing an In plant Training / Internship

Date: 16.09.2019.

Date: A.S. S.A. A.		
1.	Name of the Student	G. NARESH KANNAN
2.	Semester / Year	· M all
3.	Mobile Number (Student)	.9965343623
4.	Mobile Number (Father)	L
5.	Name of the Company	. 5D CAD Center
6.	Address of the Company	SD CAD Contor
		:
7.	Duration of Training	:20/9/19 1022/9/19
8.	Training was Known Through	: Ollege
9.	Others (if any) Furnish the details: 9a. Name of the Person	I
	9b. Designation / Company Name	I
	9c. Mobile Number	£
Declaration  1. I have to go for In plant / Internship for acquiring knowledge for development of my career.  2. I obey our college / Company (Where to go for In plant / Internship Training)		
3	rules & regulation norms.  I am ready to pay the fees to the company i So kindly be permitting me for the training	f any.
	Lass Advisor HoD/ Civi	Derreur Principal

M.I.E.T. ENGINEERING COLLEGE GUNDUR, TIRUCHIRAPPALLI-620 007.



(Approved by AICTE, New Delhi, Affiliated to Anna University, Ch. UG - CSE, EEE & MECH Programs Accredited by NBA, New Deth TRICHY - PUDUKKOTTAI ROAD, TIRUCHIRAPPALLI - 620 001 Email: principalengg@miet.edu, contact@miet.edu

Website: - www.miet.edu

ph = 11 - 2660 303

## Permission Requisition Form for Undergoing an In plant Training / Internship

Date: 16-09.2019 . Shamper Ahamed . M 1. Name of the Student VII IR 2. Semester / Year 9443954082 3. Mobile Number (Student) 9756765029 4. Mobile Number (Father) . 5D Cadd, 5. Name of the Company so cadd contem, 6. Address of the Company Tricky . 20/9/19 to 22/9/19 7. Duration of Training . COLLEGE Training was Known Through 9. Others (if any) Furnish the details: 9a. Name of the Person 9b. Designation / Company Name 9c. Mobile Number Declaration 1. I have to go for In plant / Internship for acquiring knowledge for development of 2. I obey our college / Company (Where to go for In plant / Internship Training) rules & regulation norms. 3. I am ready to pay the fees to the company if any. So kindly be permitting me for the training.

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Email: principalengg@miet.edu, contact@miet.edu
Website: - www.miet.edu

Ph. 431 - 2660 303

## Permission Requisition Form for Undergoing an In plant Training / Internship

Date: 19.09.2019 Mohamad Ansan M.K 1. Name of the Student 2. Semester / Year 9944030662 3. Mobile Number (Student) . 97336197047 4. Mobile Number (Father) 5D codel 5. Name of the Company 50 CODD Conter 6. Address of the Company 2019/2019-22/9/19 7. Duration of Training 8. Training was Known Through 9. Others (if any) Furnish the details: 9a. Name of the Person 9b. Designation / Company Name 9c. Mobile Number Declaration 1. I have to go for In plant / Internship for acquiring knowledge for development of

2. I obey our college / Company (Where to go for In plant / Internship Training) rules & regulation norms.

3. I am ready to pay the fees to the company if any. So kindly be permitting me for the training.

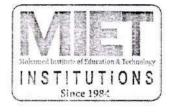
Class Advisor

HoD/ Civil

PRINCE

rincipal

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Email: principalengg@miet.edu.contect@miet.edu

Website:- www.miet.edu

Ph: 9431 - 2660 303

Date 18-09-2019

Dr. X. SUSAN CHRISTINA, M.E., Ph.D.,

Principal

To

Managing Director,

5D CADD Center.

Trichy,

Sir.

Sub: Requesting permission for internship for our students-Reg.

The following students are studying final year B.E Civil Engineering in our MIET Engineering College.

SI.NO	Year/Branch	Name of the students
1.	IV/Civil	KAOSALYA. K
2.	IV/Civil	KAVITHA. G
3.	IV/Civil	SHAMEER AHAMED. M
4.	IV/Civil	ABDUL RAHIM, M
5.	IV/Civil	MOHAMED ANSAR. M.K
6.	IV/Civil	MOHAMED FAIZAL. M
7.	IV/Civil	MOHAMED ALI. S
8.	IV/Civil	LINGESHWARAN M
9.	IV/Civil	GUNASEELAN. S
10.	IV/Civil	FAZIL RAHMAN. M
11.	IV/Civil	NARESH KANNAN. G

The above students are interested to undergo the internship in your esteemed organization. We request you to permit them to undergo the internship.

Thanking you,

TRICHT.

PRINCIPAL
M.I.E.T. ENGINEERING COLLEGE
GUNDUR, TIRUCHIRAPPALLI-620 007.

PRINCIPAL
PRINCIPAL
MIET ENGINEERING COLLEGE
GUNDUR, TIRUCHIRAPAL: 1 - 620 007



This is to Certify that

Ar/Ms KAOSALYA K

#### OF CIVIL DEPARTMENT HAS UNDERGONE

※ Intensive Training In Site Visits 

※ Training For Material Selecting

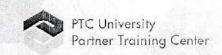
**\*** Construction Management

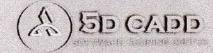
at 5D CADD Software Training Center, Trichy - 620001

Held on ... 20 109 12019 To ... 22 109 12019.









This is to Certify that

Mr/Ms SHAMEER AHAMED M

#### OF CIVIL DEPARTMENT HAS UNDERGONE

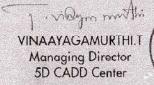
**\*** Intensive Training In Site Visits

**\*** Training For Material Selecting

\* Construction Management

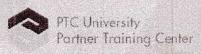
at 5D CADD Software Training Center, Trichy - 620001

Held on ... 20/09/2019 ... To ... 22/09/2019 ...











This is to Certify that

Ar/Ms KAVITHA GI

#### OF CIVIL DEPARTMENT HAS UNDERGONE

※ Intensive Training In Site Visits

\* Training For Material Selecting

**\*** Construction Management

at 5D CADD Software Training Center, Trichy - 620001

Held on 20/09/2019 To 22/09/2019

VINAAYAGAMURTHI.T

Managing Director

5D CADD Center

PRINCIPAL PTC University
PRINCIPAL Partner Training Center
BUNDUR, TIRUCHIRAPALI 1 - 620 007



This is to Certify that

Mr/As ABDUL RAHIM M

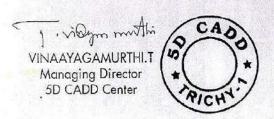
#### OF CIVIL DEPARTMENT HAS UNDERGONE

★ Intensive Training In Site Visits 
★ Training For Material Selecting

**\*** Construction Management

at 5D CADD Software Training Center, Trichy - 620001

Held on 20109 2019 To 22 109 12019







This is to Certify that

Mr/Ms MOHAMED ANSAR MK

OF CIVIL DEPARTMENT HAS UNDERGONE

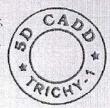
# Intensive Training In Site Visits
# Training For Material Selecting

# Construction Management

at 5D CADD Software Training Center, Trichy - 620001

Held on ... 20/09/2019 ... To ... 22/09/2019 ...











This is to Certify that

Mr/Ms MOHAMED FAIZAL M

OF CIVIL DEPARTMENT HAS UNDERGONE

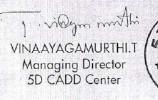
\* Intensive Training In Site Visits

# Training For Material Selecting

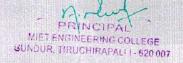
**\*** Construction Management

at 5D CADD Software Training Center, Trichy - 620001

Held on 20/09/2019 To 22/09/2019











This is to Certify that

Mr/Ms MOHAMED ALL S

OF CIVIL DEPARTMENT HAS UNDERGONE

**\*** Construction Management

at 5D CADD Software Training Center, Trichy - 620001

Held on 20/09/2019 To 22/09/2019







This is to Certify that

Mr/Ms LINGESHWARAN M

OF CIVIL DEPARTMENT HAS UNDERGONE

\*\* Intensive Training In Site Visits
\*\* Training For Material Selecting

**\*** Construction Management

at 5D CADD Software Training Center, Trichy - 620001

Held on 20/09/2019 To 22/09/2019







This is to Certify that

r/Ms GUNASEELAN S

OF CIVIL DEPARTMENT HAS UNDERGONE

※ Training For Material Selecting \* Intensive Training In Site Visits

\* Construction Management

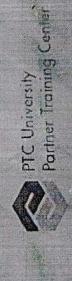
at 5D CADD Software Training Center, Trichy - 620001

Held on 20/09/2019 To 22/09/2019.

VINAAYACAMURTHI.T (\*\*CAD)\*

Managing Director

SD CADD Center







This is to Certify that

Mr/Ms NARESH KANNAN G

OF CIVIL DEPARTMENT HAS UNDERGONE

※ Intensive Training In Site Visits ※ Training For Material Selecting

※ Construction Management

at 5D CADD Software Training Center, Trichy - 620001

Held on .. 20/09/2019 ..... To ..... 22./09/2019







