

April 2021

CIVILHOLIC

Department Of Civil Engineering
Dr. B C Roy Engineering College
Durgapur



VOLUME -1

ISSUE- 1

Editor's Message



Dear Readers,

It gives us immense pleasure to announce the opening of our E-magazine “*CIVILOHOLIC*” of the Department of Civil Engineering of Dr. B. C. Roy Engineering College, Durgapur. Covid-19 has changed the regular lifestyle of every individual worldwide and closed us indoors. To reduce the boredom, we thought of bringing out the creativity in the form of this magazine that would be very interesting. We are proud and hopeful that the magazine would surely unfold the most innovative ideas of the students and the faculty members of our organization.

The magazine is to be viewed as a launch pad for the student's creative urges to blossom naturally. As the saying goes, mind like parachute works best when opened. This humble initiative is to set the bored and budding minds free allowing them to roam freely in the realm of imagination and experience. The enthusiastic work of our young writers and experienced faculty members are undoubtedly sufficient to hold the interest and admiration of the readers. We believe that success depends on the power to observe, perceive and explore. The magazine comprises contents related to technical aspects of Civil Engineering as well as poems, photography etc. We are sure that the hard work, positive attitude, continued relentless efforts and inventive ideas exhibited by our students to bring excellence to this treasure of trove would surely stir the mind of the readers.

The herculean task of editing this magazine would not have been possible without the sincere support of Prof. Koyndrik Bhattacharjee & Prof. Anupam Biswas. It is a fine thing to have the ability but the ability to discover ability in others is the true test. I am thankful to all my colleagues who dipped in the turbulent water of the magazine and sailed it to the shore of publication. I am thankful to our Head of the Department Dr. Sanjay Sengupta, to give me the opportunity to be the editor of this magazine. Also I am thankful to Dr. P. Pal Roy (Director), Mrs. R. Mitra (Registrar), Dr. N. Pathak (Dean Students' Welfare) and Dr. C. Chatteraj (Dean Academics) for their continuous support. I heartily wish all the readers my best wishes and hope this magazine will enjoy your critical acclaim and prove itself best.

Subhashis Chowdhury

Asst. Professor, CE

BCREC

Editorial Board

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FINITE ELEMENT METHOD – A BRIEF OVERVIEW

Sabyasachi Chandra
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Dr. B. C. Roy Engineering College, Durgapur

Finite element method (FEM) is now an important and indispensable part of engineering analysis and design. The growth of FEM is closely linked with the developments in computer technology as it requires lots of calculations. Although it is difficult to pinpoint an exact date of invention, the finite element method was originated from the need to solve complex elasticity and structural analysis problems in civil and aeronautical engineering. FEM got its real impetus in the 1960s and 1970s from the developments in engineering community, such as J. H. Argyris and co-workers at the University of Stuttgart, R. W. Clough and co-workers at UC Berkeley, O. C. Zienkiewicz and co-workers E. Hinton, Bruce Irons and others at Swansea University, P. G. Ciarlet at the University of Paris and R. Gallagher and co-workers at Cornell University. R. W. Clough coined the term “finite elements” in an article in 1960. Though the method was developed as a numerical method for stress analysis, but now it has been extended as a general solution method to complex engineering and physical science problems. Now-a-days finite element method is widely used in the analysis of solids and structures, heat transfer, fluid flow, electromagnetic and in virtually every field of engineering analysis. A basic understanding of the method and working familiarity with it will be beneficial for any undergraduate engineering students and particularly civil engineering students.

At the fundamental level, FEM is a computational technique to obtain approximate solutions of a boundary value problem. A boundary value problem is a mathematical problem in which one or more dependent variables must satisfy a differential equation everywhere within a given domain of the independent variables and satisfy some specific conditions on the boundary of the domain. Boundary value problems are also called field problems. The field variables are the dependent variables of interest governed by the differential equation. The boundary conditions are the specified values of the field variables (or related variables such as derivatives) on the boundaries of the field or domain of interest. The finite element formulation of the boundary value problem transforms the differential equation into a system of algebraic equations. Then finite element software assembles those algebraic equations in matrix form and computes the unknown values of the field variables. The computed values are then used by back substitution to compute additional, derived variables, such as reaction forces, element stresses and heat flow. Studying or analyzing a problem with FEM is often referred to a finite element analysis (FEA).

For solving a problem, FEM subdivides a large structure or system into smaller and simpler parts that are called finite elements. This is implemented with a particular space discretization in two or three dimensions depending on the problem by the construction of a mesh of the structure. For example, the geometry depicted in Figure 1 could represent the finite element model for the plane stress analysis of a thin plate with a central hole subjected to edge loading in the plane. In this case, the finite element solution may be used to examine stress concentration effects in the vicinity of the hole. The area has been ‘meshed’ with two dimensional finite elements with constant thickness in the z direction. The

mesh of elements is irregular with different shapes (triangles and quadrilaterals) and sizes. Around the geometric discontinuity of the hole, the elements are of smaller in size. This not only improves the geometric accuracy in the vicinity of the discontinuity but also improves solution accuracy. In general FEM uses a fine mesh with smaller size elements near the geometric discontinuity of the problem domain to better represent the geometry of the structure. It also uses a fine mesh around the problem domain where better solution accuracy is required.

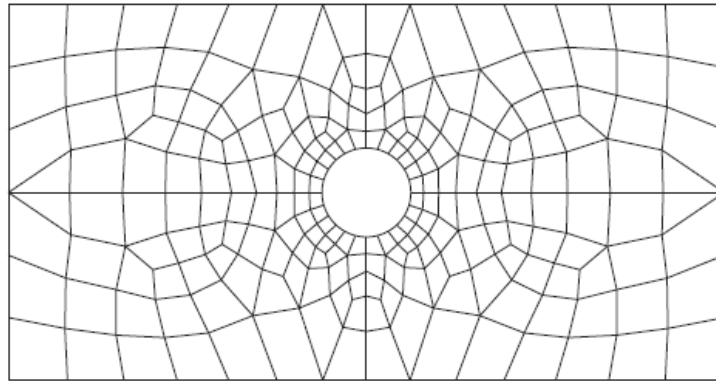


Figure 1. A finite element mesh over a rectangular region having a central hole

The subdivision of the whole domain into smaller and simpler elements has several advantages such as:

- Accurate representation of complex geometry
- Inclusion of dissimilar material properties
- Easy representation of the total solution
- Capturing the local effects.

A node is a specific point in the finite element at which the value of the field variable is explicitly calculated. Exterior nodes are located on the element boundaries and may be used to connect an element to the adjacent elements. Nodes that do not lie on element boundaries are called interior nodes. The success behind FEM as a powerful numerical technique for solving boundary value problem is that the values of the field variables are approximated inside the element by shape or interpolation functions which are often polynomial functions of the independent variables that satisfy certain specific conditions at the nodes. The shape or interpolation functions are predetermined, known functions of the independent variables which locally approximate the complex variation of the field variables governed by the differential equations within each finite element.

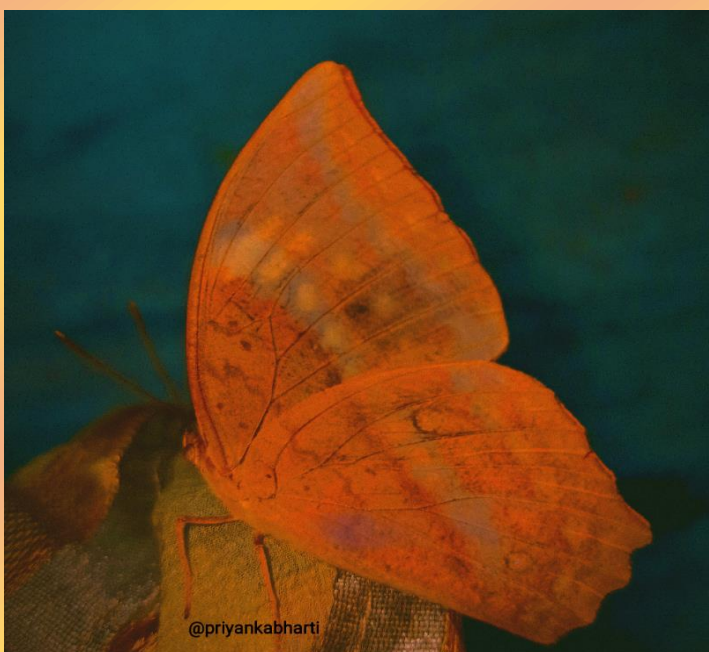
FEM has significantly improved the standard of analysis and design process in many engineering applications. The benefits of FEM include increased accuracy, enhanced design and better insight into critical design parameters, a faster and less expansive design cycle, virtual prototyping, fewer hardware prototypes, increased productivity and increased revenue. Many universities and software companies have spent several man hours to develop general purpose finite element analysis packages. Some of the general purpose FEA packages available in the market are – ANSYS, ADINA, NASTRAN, OpenFOAM, ABAQUS, COMSOL Multi-physics, LS-DYNA.



Light can only drive out darkness...



The greatest artist and web-designer ever is a spider indeed...



With brave wings she flies and become the change...

By: Priyanka Bharti

Roll No.: 12001318068

Department of Civil Engineering,

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RAINFALL PREDICTION

Subhashis Chowdhury
Assistant Professor
Department of Civil Engineering

Rainfall is one of the major severe phenomena within a climate system. It has a direct influence on water resource management, agriculture, and ecosystems. The heavy rainfall mostly contributes to landslides, mudslides, floods, and other natural disasters. The rainfall-induced disasters in each year lead to serious damage and losses of both life and infrastructure. Therefore it is of great need to predict rainfall before its occurrence for effective use of water resources, crop productivity and pre-planning of water structures. The application of science and technology to predict the amount of rainfall over a region is known as **rainfall prediction**. The prediction helps people to take preventive measures and moreover the prediction should be accurate. There are two types of prediction short term rainfall prediction and long term rainfall. Prediction mostly short term prediction can gives us the accurate result. The main challenge is to build a model for long term rainfall prediction. Heavy precipitation prediction could be a major drawback for earth science department because it is closely associated with the economy and lifetime of human. It's a cause for natural disasters like flood and drought that square measure encountered by individuals across the world each year.

How is rainfall predicted?

Meteorologists use satellites to observe cloud patterns around the world, and radar is used to measure precipitation. All of this data is then plugged into super computers, which use numerical forecast equations to create forecast models of the atmosphere. A seven-day forecast can accurately predict the weather about 80 percent of the time and a five-day forecast can accurately predict the weather approximately 90 percent of the time. However, a 10-day or longer forecast is only right about half the time.

Use of radar in predicting weather

The word "radar" stands for radio detection and ranging. Imagine an airplane flying at night through thick fog. The pilots can't see where they're going, but they can communicate with air traffic controllers on the ground that uses radar to help them. Pilots themselves don't generally use radar as a "flight instrument" (something that helps them fly or navigate), but they do use it for tracking the weather.

The Doppler radar used in weather forecasting measures the direction and speed, or velocity, of objects such as drops of precipitation. This is called the Doppler Effect and is used to determine whether movement in the atmosphere is horizontally toward or away from the radar, which aides

in weather forecasting. Doppler radar is capable of probing the atmosphere with high temporal (<10 min) and spatial resolution (<1.0 km), thereby providing a detailed description of the airflow structures inside a meso or convective-scale weather system. During the past a few decades, numerous methods have been developed for the purpose of improving weather forecast accuracy by assimilating radar data into a numerical model.

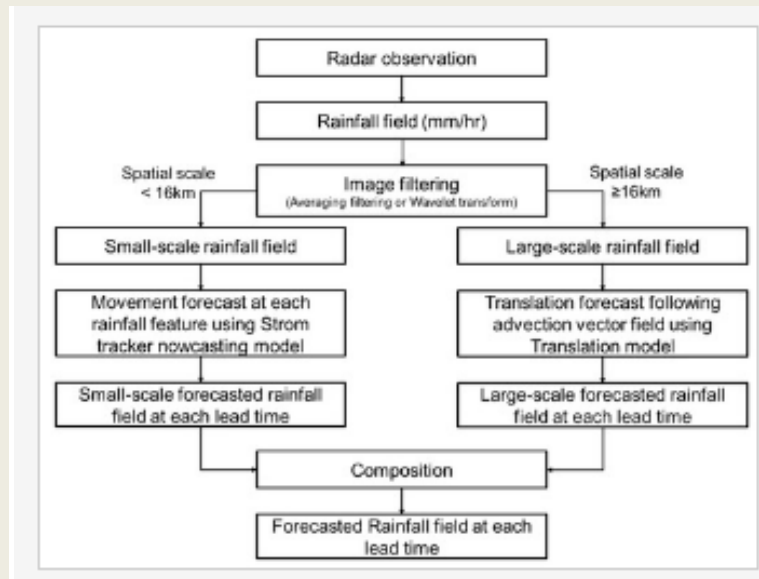
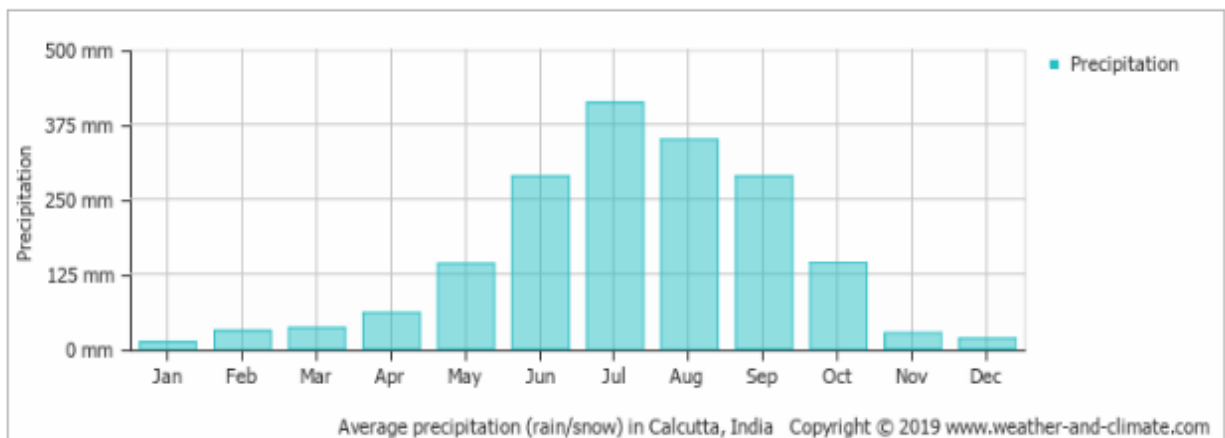


Fig 1: Flowchart



* Data from nearest weather station: [Calcutta, India](#) (12 KM).

Fig 2: Average precipitation throughout 2019 in Kolkata

N.B.:

- Fig.1 represents the flow chart for predicting rainfall using weather radar data.
- Fig. 2 represents a sample of average precipitation throughout year 2019 in Kolkata.

ENGINEERING WORK PHOTOGRAPHY: STREET, ROAD, PYRAMID



"Life will not be a pyramid with the apex sustained by the bottom, but an oceanic circle whose center will be the individual..." Mahatma Gandhi

By: Sudhanshu Kumar

Roll No.: 12001318050

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STREET AT NIGHT PHOTOGRAPHY



Love for Dhanbad...the city of coal and chaos

By: Anuj

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VEHICULAR NOISE IMPACT ON HUMAN ENVIRONMENT

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“Keep the noise down, or the noise will keep you down.”—Author Anonymous.

What Was the Need?

Any Noise can be demarcated as just “unwanted sound” or a sound with which we cannot realistically put up. The delineation of noise as unwanted sound indicates that it has an adverse effect on human beings and their environment, including natural wildlife and ecological systems. While prime source of noise from the vehicle, is the nuisance caused by the accumulation of sound of vehicles of a traffic stream into traffic noise. Such vehicular traffic noise has a supremacy over all other adverse impacts of traffic, as it affects the behavioural, psychological and physiological stress of peoples exposed to it. Even, due to the lack of proper traffic system and driver discipline, high traffic volumes and congestion, drivers use horns frequently throughout their commute. To help improve the major concern for people residing in urban areas it is necessary to identify various traffic problems in advance. Analysing the traffic noise parameter scan help to adopt preventive and mitigation measures for improving the transportation system.

As per the ministry of Environment and Forest, GOI, noise standard levels (ambient noise levels experienced due to vehicle at running stage) recommended (day time) for automobiles are 75 dB in industrial areas, 65 dB in commercial areas, 55 dB in residential areas and 50 dB in silence zones.

What Was Our Goal?

The objectives of this study were to quantify the levels of noise profile/pollution in selected site and to compare the results with standards for noise specification which can human environment.

What Did We Do?

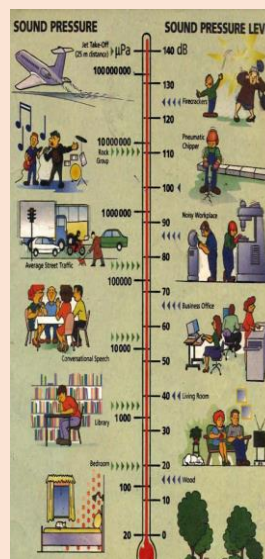
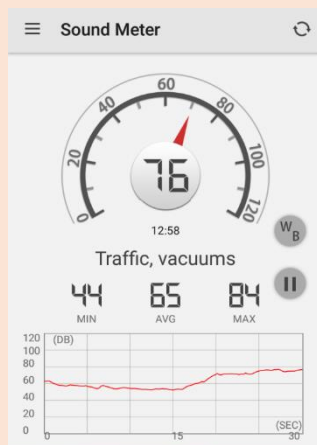
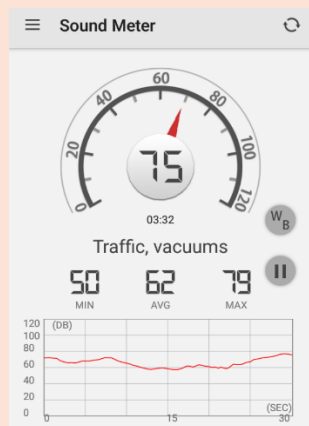
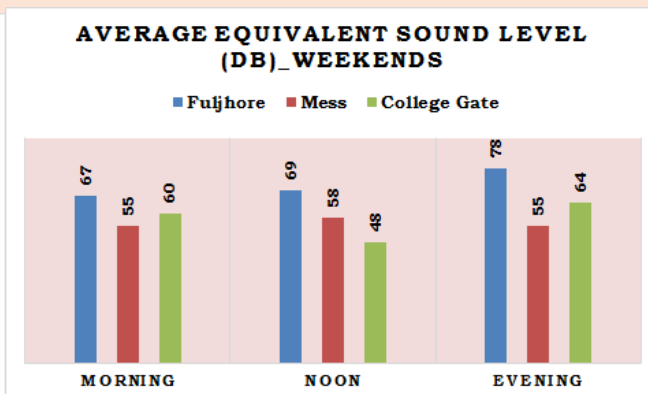
To assess the nature of the noise profile, a single lane patch where continuous flow of vehicles occurs, without any obstructions like traffic signal lights, was selected as study area. Three different locations were selected for 1.5 Km from Fuljhore more to Dr. B. C. Roy Engineering College, Durgapur stretch. At each site noise data samples were collected with 15 min breakup time frame. 60-minute measurements at the selected sites were repeated for 3 times during the day (morning, noon, evening) in order to account for statistical temporal variations in traffic flow characteristics. Factors considered when selecting routes were the availability of bus services, inclusion of some of the road links, vehicle composition and activities in nearby area.

What Did We Observe?

Areas near the intersections are having more noise level, mainly because of congestion and vehicle horn. From this study, it was observed that noise pollution is more than 65dB for 50% of the total work-based journey. Due to lack of proper traffic system and driver

discipline, high decibel noise is created while making a trip. Even, due to congestion and lack of enforcement, drivers use horn for major part of their trip; this usually leads to high noise levels (above 85dB). Intersection area is prone to noise level more than 70 dB noise level in most of the peak hour traffic because of heavy traffic and noise due to vehicle horns. Near Fuljhore More and Dr. B. C. Roy College gate, the measured sound pressure level is higher in some cases and even nearly close to the permissible limit (85 dB), so special provision should be taken for attenuation of noise. The noise level during evening time was more than morning and noon. This is because of high volume of traffic is experienced in the evening.

Multiple regression models need to be developed and validated by performing t-test that determines statistically significant difference between sound pressure level during study hours.



Acknowledgement: *The traffic data collection has been accomplished by the 2017 final year students (Barnali, Arathe, Neha, Premlata, Amrita, Bivabari, Ipsita and Kumari Ankita).



Managing WORK LOADS.....

By : **AMRIT SINGH**

Roll Number: **2019001**

1st Year Civil Engineering Student of Dr. B. C. Roy Engineering College, Durgapur

MANGROVE FOREST- OUR ETERNAL FRIENDS

Md. Hamjala Alam
Assistant Professor
Department of Civil Engineering

Mangroves are woody plants that inhabit the intertidal zones of tropical and subtropical coasts all around the world. They are highly recognizable from their visible root systems which can give them the strange impression of being planted upside-down. This unique appearance is the result of adaptations developed to survive in harsh environments, including high temperatures, high salinity and intense UV exposure. The most noticeable feature, the aerial roots known as pneumatophores, helps the plant cope with growing in oxygen-deprived sediments, and also physically stabilize these soft sediments. Mangroves are able to accumulate and excrete salt in their roots and leaves in order to exist in marine environments. They are also viviparous, meaning that their seeds begin germinating before they fall from the parent tree, which increases the chance of successful rooting in tidal environments. Mangroves are the essentially evergreen forest and their unique ability to survive in the harsh habitats makes them what we know as an "Ecosystem Engineer".

➤ **What is special about mangrove forest?**

Mangroves are salt-tolerant trees, also called halophytes, and are adapted to life in harsh coastal conditions. They contain a complex salt filtration system and complex root system to cope with salt water immersion and wave action. They are adapted to the low oxygen conditions of waterlogged mud.

➤ **How do mangrove ecosystems work?**

As primary producers like land plants or sea-dwelling phytoplankton, mangroves are photosynthetic organisms that can convert sunlight into energy. This in turn is used to transform carbon from carbon dioxide gas produced from burning fossil fuels, into organic carbon that feeds the plants themselves and the entire ecosystem they exist in. Positioned between the open water and shorelines, mangroves provide habitats for many species including oysters, phytoplankton, sponges, crabs and other organisms. Because of their ability to fix carbon dioxide into organic carbon and because of their ability to form complex root systems, they can support dozens of different species. The relationship is symbiotic, with mangroves depending upon the organisms they support to support them in return. For example, mangroves cannot survive without microbes living around their roots just like we cannot survive without microbes in our gut that help us digest food. One of the main things microbes provide for mangroves is nitrogen, a required element to make DNA and proteins. For example, some microbes are symbiotic with mangroves and are able to convert nitrogen gas into ammonia, the main constituent of agricultural fertilizers. This ammonia then allows mangroves to grow just like they do with trees. Other types of microbes in the mangrove

ecosystem include sulphate-reducing bacteria that thrive in the oxygen-deprived environment, and organisms that produce methane. No organism on earth lives in isolation and all these microbes, the mangrove and other higher organisms like algae and crabs are interacting with each other. It is these interactions that truly form a healthy ecosystem.

➤ **How do mangroves benefit humans?**

Because of their ability to sequester carbon, one of the major benefits of mangroves is their ability to reduce harmful greenhouse gases which cause climate change. They basically convert this greenhouse gas into organic carbon that is either released into the surrounding sediments or is used to build their complex root structures. This is useful because the more carbon dioxide we put into our atmosphere, the more we suffer from climate change consequences. Mangroves also protect coastal areas from erosion by creating a buffer zone, filtering and pacifying tidal flows, and can even reduce the damage and loss of life caused by tsunamis. For the land with increasing sea level rise, mangroves are essential because they will play an important role in protecting our shorelines from erosion. A number of commercially important fish and shrimp species use mangroves as habitats. And, historically, mangroves also provided fodder for livestock and served as an important building material in ancient times. On the top of all of these benefits, they are part of the heritage of our country, be it the Pichavaram mangroves in Tamil Nadu, the Bhitarkanika mangroves Forest of Odisha or the mangrove forests of the Andaman and Nicobar Islands and thus have to be protected.



Image Source: Internet

NATURE AT ITS BEST PHOTOGRAPHY



WATCHING A HONEY BEE SUCKING FLOWER NECTAR IS SO PLEASING...

By: Ankit Kumar

Roll Numner:12001318091

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IMAGE COMPRESSION

Image compression is a type of data compression applied to digital images without degrading the quality of the image to an unacceptable level.

There are two kinds of image compression methods -

1. Lossless compression
2. Lossy compression

We can use the K-Means Clustering technique for image compression. Clustering is one of a cluster analysis technique that allows grouping of data into groups called clusters. Each cluster in the k-means clustering algorithm is represented by its centroid point.

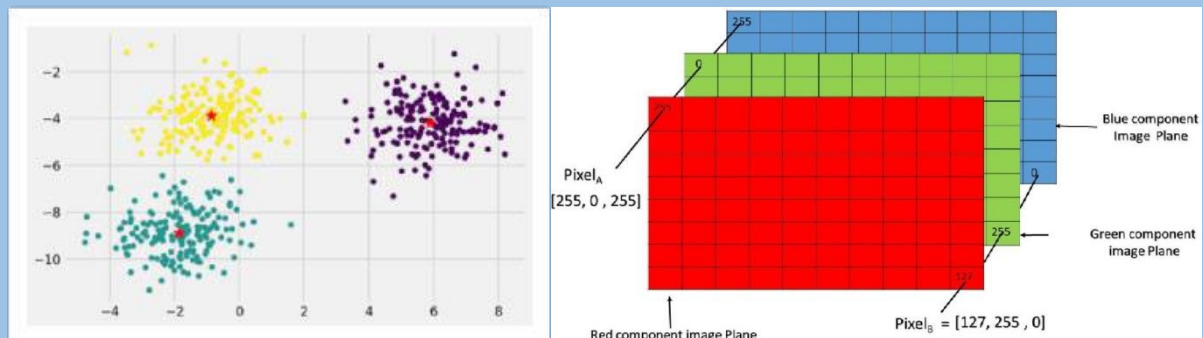


Fig: Plot of the 3-means clustering

In a colored image, each pixel is of size 3 bytes, where each color can have intensity values from 0 to 255. Following combinatorics, the total number of colors which can be represented is $256 \times 256 \times 256$. Practically, we can visualize only a few colors in an image very less than the above number. By making this reduction, it is possible to represent (compress) the photo in an efficient way. So the k-Means Clustering algorithm takes advantage of the visual perception of the human eye and uses few colors to represent the image.

Basically, for Gray scale image each pixel is represented by 8 bits. In image compression we just convert 8-bit representation to 3-bit representation by assigning like $[0-31=0, 32-63=1, 64-95=2, 96-127=3, 128-159=4, 160-191=5, 192-223=6, 224-255=7]$ and for color image. The K-means algorithm works same as Gray scale image.



$K = 256; K = 2$

Source: <https://towardsdatascience.com/image-compression-using-k-means-clustering- aa0c91bb0eeb>

By: Subhadeep Sadhukhan

Roll No.: 12001318057

Department of Civil Engineering (3rd Year)

By : *PRADDUSNA CHAKRABORTY*

Roll Number : **12001317057** (Final Year)

CE Department, Dr. B.C. Roy Engineering College, Durgapur



CREATIVITY at its very BEST.....

कोरोना योद्धाओं को समर्पित!



By

Shubham Sharma

12001318056

3rd Year, CE Dept., BCREC

पल कुछ ऐसा आया है
सारा देश एक हो आया है।

कारण पूछो थो बस इतना
कि जिंदगी पर मौत का साया है ॥

दिल थोड़ा घबरा रहा
धड़कन भी बढ़ जाती है ॥

किसीने सच ही कहा है
मौत बिना बुलाए आती है ॥

बहुत सी जग जीती है
इसको भी जीत लेजाएंगे।

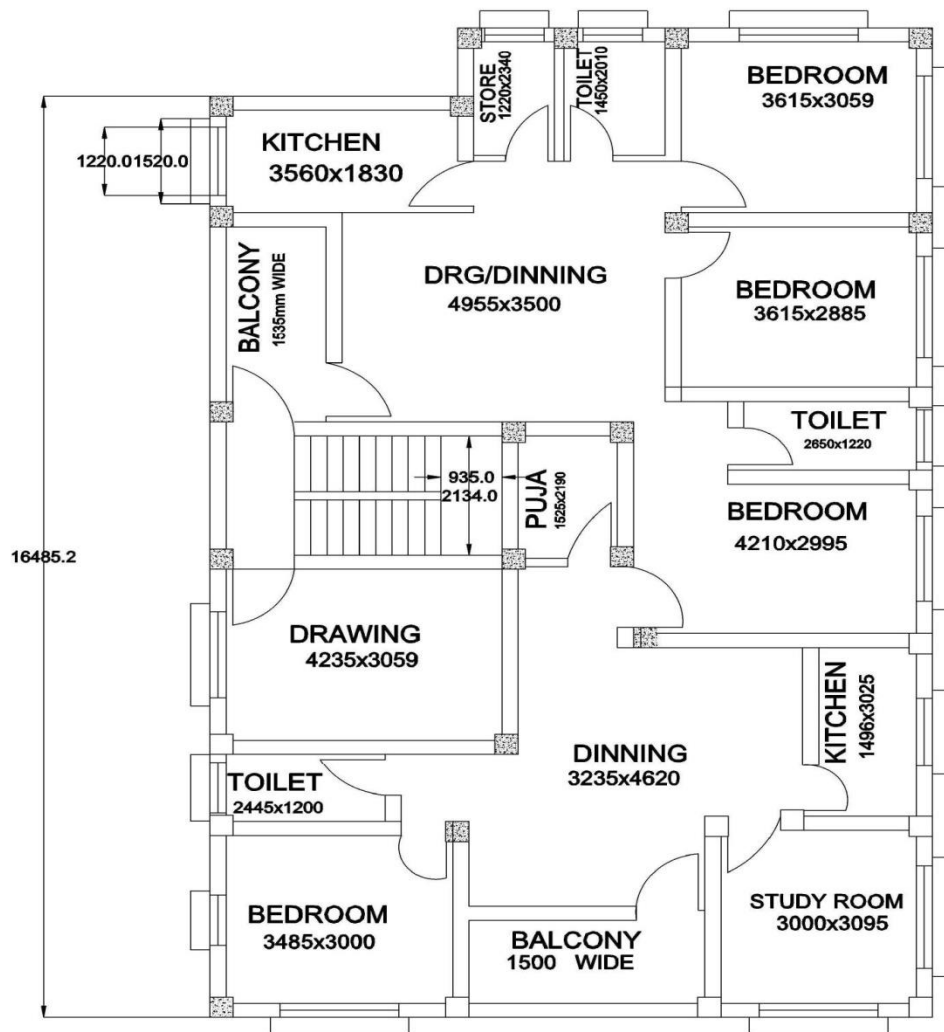
हिम्मत से जो डटे रहे
तो कोरोना को भी हराएंगे ॥

युद्ध घमासान है
देश पे संकट आया है ॥

कारण पूछो तो बस इतना
कि जिंदगी पर मौतका साया है ॥

--- शुभमशर्मा

Planning THE PLAN



NAME: RAVI KUMAR
ROLL NO. 12001318064
DEPT. :CIVIL 2Y
SEM. :5TH

DEAR STUDENTS, I MISS YOU

Prof. SOUMYADIP DAS, CE Dept, BCREC

The BCREC campus is not having any students for the last nine months. I have used this time to train myself in the college playground. After exhausting workouts, mostly I have rested on the basketball court and looked at the beautiful sky. I could easily feel



the joy of the birds, returning to their home (nest) at the end of the day. Alongside me, my ever-so-loyal friends- dogs were always present to give me the company.

People inside the campus were afraid of the pandemic situation.

Yet, they were feeling very safe in this place. The campus used to get cleaned every day. All the necessary things e.g. electricity, water, cleanliness, and other maintenance works were going on very nicely. Thanks to the BCREC management for all these things. However, I felt that something is missing. Every day, I realized that this campus is feeling lonely. My realization was simple- this campus is not habituated with this kind of loneliness. Just beside my apartment, the hostels are situated and there were no people in the hostel. I feel that the hostels are missing the students also. The dynamics of the campus was missing. The overall atmosphere of the campus is missing the students.

For most of the time during the lockdown, I have stayed inside the college campus. I have visited most of the buildings in the day time. They appeared to me like unknown places. The classroom teaching, fun in the corridor, the movement of bikes in the college campus, and most importantly the players in the field- these are



the soul of the campus. One of my colleagues during this period told me that the entire ground was mine. To be honest, whenever I put my feet on the ground, I use to feel every sound that is generally created by the students. Starting from bouncing the basketball and smashing of volleyball, the main attraction of the BCREC playground (Netaji Subhas Krirangan) are football and karate.

In the ground, whenever I have entered during this time, I could easily feel that a back-pass is coming to me from the midfield and I'm adjusting my position to find my teammate; I could feel the cross coming in from the right-wing (North side) which I have to deal with as I can't always trust my keeper to come out of his line and grab the ball; I could sense the probable long-ranger is coming towards my goal which I have to block and so on. The noise created by the players and the people who are involved in karate makes the atmosphere of the evening delightful under the lights. Whenever I am trying to shoot in the goal, the echoes of the ball hitting the post uses to make it a mysterious place. I wish the entire campus to return to normal conditions as soon as possible.

Last year during the months of winter, I along with few of my students used to spend some time with our yoga teacher in the Nazrul Mancha. To our delight, my colleagues have returned to the campus. Nowadays, we are taking online classes from empty classrooms. This thing is very painful for me and I believe that my colleagues would agree to this. Laboratory classes are no more the same. In between the class, when students generally ask the teachers to go out for a water break, the funny things they do during the class, their chorus at the end of the class- I am missing all this stuff. In the evening, I and my colleagues use to play badminton in front of the Boys' Hostel. We always feel that this is our temporary place, which we have to leave when the students will return. This place is meant for the students. They are the soul of the campus. Students are the soul of this campus; currently, the soul is missing.

বন্ধুত্ব

চেনাবন্ধুগুলো,আজ দূরেদূরে,
কেমন করে তোদেরখুঁজেপাবো,
সেইপুরনো আড্ডা,সেই পুরনো
কোলাহল।

সব স্মৃতিহয়ে জীবনে বয়েগেলো,
তাকেমনকরে আবারখুঁজেপাবো,
কেউএটাভাবেনি,কেউএটা ভেবে
দেখেনি।

॥সুরজিত॥

Surojit Kumar Jena

Roll No. - 12001319004

3rd Year, Civil Engineering Dept.

What a "Piece of Art" !!!!



Name : SUPRITAM MUKHERJEE

Roll Number : 12001319066

3rd Year, Civil Engineering Student

Dr. B. C. Roy Engineering College, Durgapur

The Subconscious Soldier

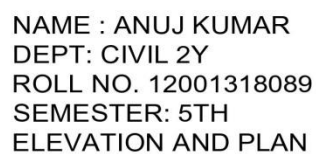
By- Anupam Kumar Biswas

Asst. Prof. CE Dept., BCREC

“Yes!! We are the guardians of our beloved motherland,
We have fought till the last breath we can;
Drenched in blood, wounded, flesh torn apart,
But didn't let the enemies to cross the glory vanguard;
Death is inevitable, put everything at stake,
My blood-brother shared bullets, with a smile on their face;
Adios! Fellow countrymen, so long! National leaders,
Take care of my children; take care of my loved ones;
Foemen can take my life, even part of my corpse,
But they can't conquer over my patriotism, which is my forte;
Our fight is not for the medals, or highest military decoration,
The valor is for the oath we took, to defend our nation;
Look around private! Can you feel the 'Hell on Earth'?
How our paradise has been cursed by the war chaos and bloodbath;
The time has come to pay the debts of our generous motherland,
Fight back in fit and starts to castigate the enemies, a lesson with atonement;
Let us show the rivals, why we choose to stand and fight,
After all! It's the glorious victory for which wandering pulse stay abide;”

- Bellicose civilians felt your sacrifice, the degree of your pain,
Blood of vengeance, which rushes through every youth's vein;
- Epicurean and dandy generation need to wake- up from delusive dreams,
Ignorance and timid attitude is stigma, which will lead to national desolation,
utopian scheme;
- Martyrs are the genuine heroes, the sincerest son of our motherland,
Let us not bury their sacrifice into deep dark corner of disregard,
- Resolved to be great by deed, legacy to be followed by generations;



[illegible]

SPIRITUALISM Vs RELIGIONISM



SIDDHARTHA GHARUI

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The first question arrives to us that “what is Religion & Spirituality?” Are both of them same? No of course not. Can they comparable? Never, because there is a huge difference between a pond & an ocean. Spiritualism is that deep ocean.

Now an another question is that, what is religion? In Sanskrit, it is ‘Dharm’. Now ‘Dharm’ means which we put on. The most funny thing is though all of us are human being & that’s why the ‘Dharm’ should be same. Such as all of us have the legs, two hands, two eyes etc. (Physically) & a powerful brain rather than any other living being on the Earth; but dramatically we divide ourself in Hinduism, Islamism, Christianity, Sikhism, Buddhism, Jainism and many other. But just think when a child born, is the Supreme being mark on his/her body that this particular is Hindu, Islam or other? It is we foolish human beings. The Supreme being only created Human like Lion, Cow, Tiger, Bird, Fish etc. As the followers of different religions follows different customs, sometimes it leads to conflict among them & leads to communal riots.

Now come to the Spiritualism. In it there is no such narrow boundary. It’s aim is to leads our mind to a upper level from pretty

eternal things & to introduce ourself with the reality i.e. the answer of the question “Who am I?”. In a single sentence you can say that all religions are the different alleys, which ultimately submerge in to a highway named spiritualism.



In Islamism & Christianity there is a concept of one Supreme being ‘Allah’ & ‘God’. In Sikhism the prayer starts with “Ek Omkar Ek Satnam ...”. Here also the concept of one is granted. Buddhism, Jainism also accepts the one Supreme authority. Only in case of Hinduism there are many sub-divisions like Shivaism, Vaishnavism, Shaktism, Soura, Ganpatya etc. But in actually all are same. The ‘Bromha’ is formless & one only. Those who can not worship the formless one, are advised to worship any of the form. The devotee at the higher level loose the different between the forms and finds that all are same & a form of that formless one.

Even the devotee cannot separate himself from that 'Bromha'.

Now, again come to religion. Sometimes some customs of the religion gave a negative effect to the society, still we follow that. Very few of us have a dare to question that. Of course it may be right custom in earlier 16s; but in the 21st century the social system has a trend of modernisation, so a lot of customs in every religion may be worthless. But interestingly the all religious book give a hidden message to us, that to find yourself & be a real human. Now a days 99.5% people of all the religions follows only the external thing written in the holy books. They avoid the internal truth beyond it.

In Hinduism there is also a negative point, caste system. In caste system a son of Brahmin will always a brahmin & a son of a dalit will always a dalit. But the holy Veda's itself opposing it. It says that the caste system must be on the basis of work division & not on the basis of the birth. As by birth all are Shudras. And no one is Brahmin, though he wears a sacred thread on his left shoulder. As brahmin means 'Who knows the Bromha (the Supreme being)'. In our country, India every one is equal to rule before law. So in my views there should not be different laws such as Muslim Personal Law or Hindu Marriage Act etc. One Nation One Law, i.e. Uniform Civil Code can only replace these laws.

In spiritualism it gives you a permission to judge every thing in the light of logic & truth. It is very kind in nature. That's why you may notice that some of so called

religious heads always deliver poisonous statements towards the other religions; but the real aesthetics of all the religions never do that so. As they know the truth. They know it very well that the 'Allah', 'Bromha', 'Waheguru'. 'God' are not different in nature, just different names of one.

I just tried to give a rough idea on the difference between Spiritualism & Religionism. There is too large difference to describe in the limited words. My advice to all of you that every religion were introduced by some holy & noble men with a good motive. They have the same brain like you, so before follow any customs always ask to your soul about that. Your soul is the great encyclopaedia itself and always right, which has all the answers. You just have to go to her & ask. The decision of the soul will be always right & truth.

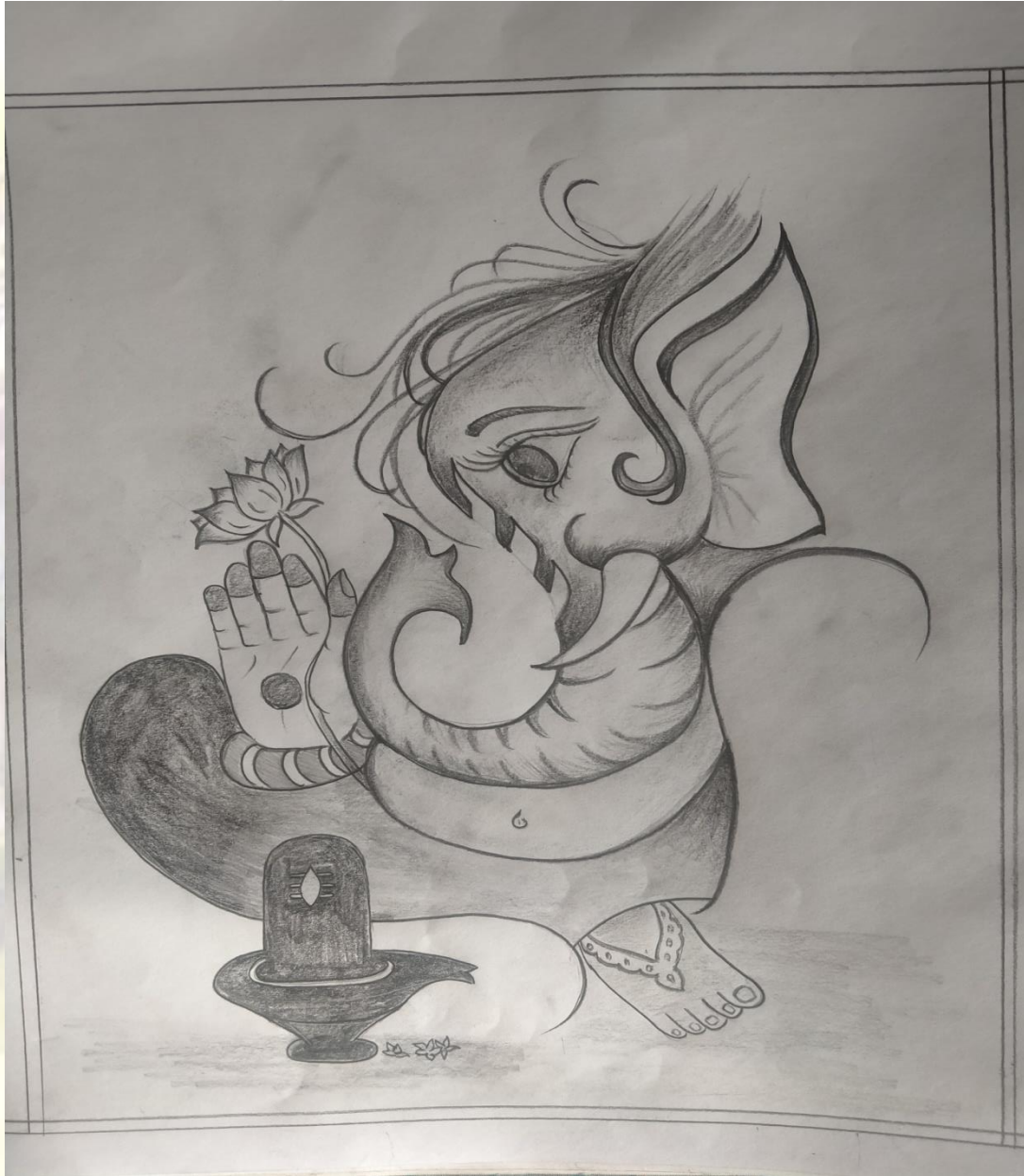
[Note: The intention of this writing is just to deliver some concepts. There is no such intention to hurt any person or religion.]

***A page from my diary, 2020 dated 10.11.2020 attached to file no. 12/1/2018-ES Vol II.

SIDDHARTHA GHARUI

Dt: 27.12.2020

BLESS US !!!!!



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1919151, 2nd Year

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IMPORTANCE OF DISCIPLINE IN COLLEGE

Prof. SOUMYADIP DAS, CE Dept, BCREC

Well, it may sound like a boring class to you my dear students. At the same time, I feel damn sure about the fact that you will surely realize my words after a few years. Guys, my happiest phase in life were my engineering college days (in Masters). During my graduation, I used to be in a different world. So, I will tell you the story from my friends' perspective.

I have seen my friends during the college days where they enjoyed every moment. I really miss my college life and my friends a lot. Every person was his own unique and every day, a new adventure has to come into the picture. I wish if I could be a student throughout my whole life that would be better. Our college was situated in a remote place, almost 4 km away from the main town. The weather conditions were not favorable as the highest and lowest temperatures during the summer and winter were near to the extreme. They didn't complain much about the infrastructure as the teachers were very friendly and technically strong. They had immense respect for the teachers. But, that is not the key factor of this article. They say, "*All work no play makes Jack a dull boy.*" Taking away fun from learning can become a hurdle in the mental and professional growth of any student. Thus, maintaining the perfect balance between studies and leisure activities becomes a mandate. My friends while scrutinizing the colleges made sure that it offered ample opportunities that helped them take a break from studies and showcase their non-academic skills as well. From being host to various edutainment events to music concerts and cultural events, we had the right balance between studies and entertainment. After all, overall development is what makes students excel in academics as well.

To summarize college life in short words which will all explain its enjoyment fully; it is defined as midnight coffee, late-night walks, long chats, bunking classes, nicknames, treats, crushes on pals, bike of friends, breaking the college rules, passing chits in class, writing on desks, fight with teachers, getting kicked out of the class, passing comments at every teacher, studying in the last time, having a competition with friends as to who will leave the exam hall first, struggle for marks, supplement

forms, a plea for placements, birthday bumps, playing pranks, ragging, sightseeing, following the latest trends, empty pockets, hogging on canteen food and not paying the bill in time, silly politics and finally, tears for love. Despite the learning pressure and demand of improvement, an engineer is able to relish the happiest moments of life.

Now, I will take you to a different world where, you will understand the importance of college life more in terms of your long-term goals- discipline. Discipline can't be defined by respecting the teachers or just by being punctual. Discipline can be considered as the potential of students to do a thing or finish their task in a fixed time. The meaning of discipline is to keeping control so that students can attain their objectives. Discipline in students life attract all the right things, and because of this, students gain success in each field of their life. During my first year in my college, I had the opportunity to attend the drawing classes of Mr. ChittaSahana who is my colleague here in BCREC. In those classes, I used to complete the drawing task given in the class in the class itself. My motivation wasn't only to get good marks. This is one of the reasons why I am still loved by him.

When the students stay disciplined, they also encourage other students of their class to be disciplined as well. The other students only follow the students with discipline when they see any positive impact on the grades as well as other fields of their life. When the students stay in discipline it becomes easier for them to stay in control of their studies and other important things. When the students do not stay in the discipline they become careless and left their assignments and work for the last moment. This is the major reason for stress in a student's life, so to overcome this, the student must stay in the discipline. Good discipline generates a positive attitude in students which is the most essential thing that students need in their life. Discipline also creates confidence and eagerness in students. Because of these things, students become active in each field of their life. There are many disciplined habits by which the students stay active such as exercise regularly, having good food, and sleep on time. If students follow the discipline in a better way than they can manage their time significantly. Good discipline helps students to do all the assignments on time instead of wasting it. If the students are not disciplined they waste all the precious time doing unnecessary things. Set the proper time table and do things according to that time

table. When your stay in college will end, you must think about it. Your status will be-graduate with tons of responsibilities. If you stay disciplined, your chances to fulfill those responsibilities will be higher. Your parents, family, friends have a lot of expectations from you. Don't just waste your time daydreaming. Living your life at your will can only be possible if you learn the discipline for the life.

So have you lived this way?

So guys, do not waste this time. Time waits for no one.

E - Magazine

CIVILOHOLIC

Technical Articles, Literatures, Poetry, Drawings and Photography are invited for upcoming publication.

Guidelines for submission to the magazine:

1. *Topic of Article:* Technical or Literature
2. *Language:* English, Hindi and Bengali
3. *Word limit:* 2000
4. Articles are to be sent as *Microsoft Word document*.
5. *For Photography and Drawings* send photos only in jpg/jpeg/png format.
6. Provide particulars: NAME, Roll no/Registration No., Year, Branch/ Department, and Contact Number.
7. Students of DR. B. C. Roy Engineering College can send their creations.
8. Send your softcopies using this form:

<https://docs.google.com/forms/d/1ZTec2KQJtiyS734b2BdZyCPg-vCTcPZeBx65Vmp-YY/edit?gxids=7628>

9. You can send suggestions if any at:

subhashis.chowdhury@bcrec.ac.in

THANK YOU!!!