

VISION

Developing motivated, skilled and highly competent Civil Engineers to excel in Education, Research, Entrepreneurship and Technological services, so that the department as well as the Institute will be recognized high in a global scenario.

MISSION

To empower the students with broad and in-depth knowledge in Civil Engineering fundamentals and their applications in practical as well as professional fields to meet socio-economic challenges.

To educate the students in the latest technologies in Civil Engineering, imbibe in them human values, self-confidence, team work and independent thinking in solving diverse problems in the related field so that they can serve the society.

To achieve international recognition by developing professional Civil Engineers, offering continuing education and interacting with industries by emphasizing research and development.

From the HOD's Desk: -



I am glad that a departmental magazine "K-onstructz" has been published for all. I must appreciate all the students and the faculty members who worked tirelessly and within a tight time frame to achieve this.

This magazine will serve as a platform for all the students of CE department to hone their skills in literacy, poetry, innovation and research ideas. The staff will contribute to make it more interesting in terms of emerging technologies and lateral developments.

I am sure it will be everyone's delight.

Prof. (Dr.) Tapas Sadhu

Head, Department of Civil Engineering

Special Message from Esteemed Faculty

> Prof. (Dr.) Sarmila Sahoo (Departmental Coordinator)



"I highly appreciate this initiative by our students for the first time. Our E-magazine K-ONSTRUCTZ publishes the research, development and ideas of technological advancement and encourages the creative side of our students. I do hope that they will continue with this.

> Prof. Saurav Kar



"Certainly, I would say this is one of the greatest initiatives taken by our department. I whole heartedly thank the total team of students and all the faculty members of our department......"

> Prof. Prithwish Saha



"Wishing all the members and students directly or indirectly associated with K-ONSTRUCTZ a grand success. Hope K-onstructz will create a revolutionary footprint towards the upgradation of Civil Engineering department of HIT-K"

➤ Prof. Puja Basu Chaudhuri



"I would appreciate the initiative taken by our Civil Engineering Department and especially which cannot be fulfilled without help of our beloved students. Thank you the team for your enormous effort. Hope we can publish many more e-magazines in future with help of you all. Best wishes..."

> Prof. Chandrima Bhadra



"I would highly acknowledge the students for this great initiative of publishing the departmental E magazine, K-ONSTRUCTZ. Also I would like to appreciate the innovative write-ups, poems, paintings and photos contributed by the students. Best wishes to all of you."

> Prof. Bedshruti Sen



"A great initiative from the students. This magazine would certainly enhance our technical knowledge and cover the aspects of recent development in civil Engineering. All the best for your future endeavour"

EDITOR'S MESSAGE

Welcome to K-ONSTRUCTZ 2021, HIT-K family!

Our Civil Department is full of folks whose talents might be obscure, but are far from mundane. Engineers we might as well be, but our skills are not restricted to any particular domain either. The coming pages are filled with the knowledge, imagination and craft of our friends discovering art, as well as engineering.

We know, it has been more than a year since we have found ourselves back in the college campus, but we assure you its spirit is still as high as ever! We hope to see you guys soon back in the classes (and not to mention, *the canteen*) with a whole lot of *masti* and *padhayi*.

For the time being, we would like to congratulate every one of you who have contributed to this magazine. You are the pride of our department, and you need to keep evolving.

So, readers, buckle up. Enjoy the ride.

Who knows what inspiration you might find within these pages!

Stay safe, stay happy.

See you SOON;)

-Editor's Team



SIDDHARTHA CHATTERJEE (3RD YEAR)



ARJYA<mark>HI</mark> BHATTACHARYA (3RD YEAR)



WASIM AMIN HAQUE (3RD YEAR)



AADISH AAYUSH (3RD YEAR)



SRISHTI SAHA (3RD YEAR)

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APPLICATION OF ARTIFICIAL INTELLIGENCE IN CIVIL ENGINEERING

-MANJISTHA MITRA (2ND YEAR)

Artificial Intelligence (AI) is a revolutionary invention in the modern world of technology. It is the simulation of human intelligence by machines, especially by computer systems. It has numerous applications in various fields of civil engineering such as in geotechnical engineering, bridge engineering, road engineering etc. AI works on the principle of imitating and executing functions of the human brain logically and intelligently. Let us see some examples of AI that have impacted civil engineering to a huge extent.

AI in Structural Engineering

Detection of surface cracks is an important task in monitoring the structural health of

concrete structures. Development of cracks reduces load bearing surface area causing failure of the structure. The manual process of crack detection is not only time consuming but also, difficult to perform in case of high-rise buildings and bridges.

Field Machine Learning and Deep Learning provides an easy solution to this problem. It is used to detect the cracks and damages in large



structures by identifying its location using sensory (audio) or image data. This can ease the process of detecting cracks and prevent major man-made disasters.

AI can also help to monitor real time structural health of buildings and also give warning when and where repair is required.

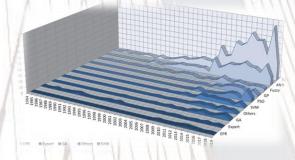
AI in Geotechnical Engineering

ML can be effectively used in geotechnical engineering applications to develop robust predictive models for soil and foundation engineering parameters.

Uncertainty about these parameters is a part of nature. These parameters are not directly

measured from laboratory and in situ tests. These are developed from empirical or numerical correlations that are developed from soil data.

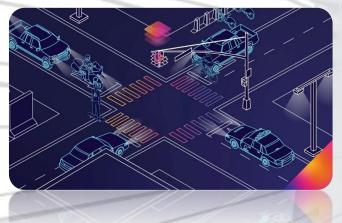
Moisture content can be estimated, maximum dry density can be predicted and further classification of soil can be done with the help of AI. It also helps in analysing settlement of foundation and slope stability.



AI in Transportation Engineering

AI helps in predicting the estimated time of travelling between two places. It helps to make traffic more efficient and ease traffic congestion. It can increase passenger safety and reduce

accidents.



The usage of AI reduces project duration of road construction and contributes towards a sustainable environment. It can reduce toxic gases emission and provide occupational safety to the workers.

The UAE ministry has already started exploring the possibilities of using AI to reduce project durations by 54%, along with reducing fuel consumption by huge amounts. AI can be a game changer for

this domain in the near future.

Conclusion

By using AI technology, efficiency of projects can be increased, project time can be reduced and the safety of workers can be ensured as well. AI has huge potential to transform civil engineering. We need to harness this potential so that we can pave the way for a sustainable future.

SUBMERGED FLOATING TUNNEL (SFT)

-ANKIT RAKSHIT (2ND YEAR)

Introduction

Tunnels in water are by no means new in civil engineering. Since about 1900, more than 100 immersed tunnels have been constructed. Bridges are the most common structures used for

crossing water bodies. In some cases, immersed tunnels also used which run beneath the sea or river bed. But when the bed is too rocky, too deep or too undulating submerged floating tunnels are used. The Submerged Floating Tunnel concept was first conceived at the beginning of the century, but no actual project was



Submerged Floating Tunnel

undertaken until recently. As the needs of

society for regional growth and the protection of the environment have assumed increased importance, in this wider context the submerged floating tunnel offers new opportunities. The submerged floating tunnel is an innovative concept for crossing waterways, utilizing the law of buoyancy to support the structure at a moderate and convenient depth The Submerged floating Tunnel is a tube-like structure made of Steel and Concrete utilizing the law of buoyancy It supported on columns or held in place by tethers attached to the sea floor or by pontoons floating on the surface. The Submerged floating tunnel utilizes lakes and waterways to carry traffic under water and on to the other side, where it can be conveniently linked to the rural network or to the underground infrastructure of modern cities.

Reason for choosing a Floating Tunnel

Floating tunnel is the totally new concept and never used before even for very small length. It

can be observed that the depth of bed varies from place to place on a great extent. The maximum depth is up to 8 km. also at certain sections. The average depth is 3.3 km. The two alternatives are available for constructions are bridge



Comparison between Tunnels

above water level or tunnel below ground level. Since the depth is up to 8 km it is impossible to construct concrete columns of such height for a bridge. And also, the pressure below 8km from sea surface is nearly about 500 times than atmospheric pressure so one cannot survive in such a high-pressure zone. So, the immersed tunnels also cannot be used. Therefore, floating

tunnel is finalised which is at a depth 30m from the sea level, where there is no problem of high pressure. This is sufficient for any big ship to pass over it without any obstruction.

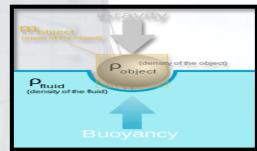
Basic Principle of SFT

SFT is a buoyant structure which moves in water. The relation between buoyancy and selfweight is very important, since it controls the static behaviour of the tunnel and to some

extent, also the response to dynamic forces. Minimum internal dimension often results in a near optimum design. There are two ways in which SFT can be floated. That is positive and negative buoyancy.

Positive buoyancy: In this the SFT is fixed in position by anchoring either. by means of tension legs to the bottom or by means of pontoons on the

surface. Here SFT is mainly 30 metres below the water surface.



Negative buoyancy: Here the foundations would be piers or columns to the sea or lake. This method is limited to 100 meters water depth. SFT is subjected to all environmental actions typical in the water environment: wave. Current, vibration of water level, earthquake, corrosion, ice and marine growth. It should be designed to with stand all actions, operational and accidental loads, with enough strength and stiffness. Transverse stiffness is provided by bottom anchoring.

Construction

The concept of submerged floating tunnels is based on well-known technology applied to floating bridges and offshore structures, but the construction is mostly similar to that of immersed tunnels: One way is to build the tube in sections in a dry dock; then float these to the construction site and sink them into place, while sealed; and, when the sections are fixed to each other, the seals are broken. Another possibility is to build the sections unsealed, and after welding them together, pump the water out. The ballast used is calculated so that the structure has approximate hydrostatic equilibrium (that is, the tunnel is roughly the same overall density as water), whereas immersed tube tunnels are ballasted more to weight them down to the sea bed. This, of course, means that a submerged floating tunnel must be anchored to the ground or to the water surface to keep it in place (which of these depends on which side of the equilibrium point the tunnel is).



Design Principle and process of SFT Tube

SFT tube provides space for traffic and buoyancy for carrying different dead and live loads. The design of SFT tube relates to oneself safety and applicability. The design load, buoyancy to weight ratio, flow resistance performance, durable performance and other factors are considered comprehensively during the tube design process. By alternatives comparison from technique, economy and environmental protection, the optimal plan should extremely utilize the space to satisfy the traffic headroom and meet the demand of ventilation and escape according to the requirements of safety applicability, reliable quality, economical rationality and advanced technology.

The principles of tube design are as follows:

- The buoyancy to weight ratio is less than 1.0, related researches show that the ratio should be between 0.5 and 0.8.
- Tube should meet the demand of strength, stiffness and stability during construction and operation stages.
- The variation of surface curvature should be gentle to resist the hydrodynamic. Meet the standard for classification of seismic protection of buildings.

Structural Component of SFT

Submerged floating tunnel consists of many structural components. These components should provide strength and stiffness against the various forces acting under the water surface.

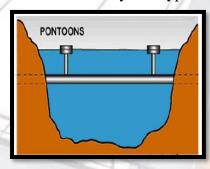
The three basic structural components are:

- Tube
- Anchoring
- Shore connections

<u>Tube</u>: It should accommodate the traffic lanes and the equipment. External shape can be circular, elliptical or polygonal. It may be constructed of steel or concrete. Corrosion protection is the main issue. Tube is composed of elements of length varying from one hundred meters to half a kilometre.

Anchoring

There are basically four types of anchoring:



SFT with pontoons: It is independent of water depth, the system is sensitive to wind, waves, currents and possible ships collision. Design should be such that if one pontoon is lost, then also the

structure will survive

SFT supported on

columns: It is an "underwater

bridge" with foundations on the bottom, in principle the columns are in compression but they may also be a tension type alternative. Water

depth will play an important role in this case and a few hundred meters depth is considered a

COLUMN SUPPORT

limit at the present time. However, much deeper foundations are at present under investigation.

SFT with tethers to the bottom: It is based on tethers being in tension in all future situations, no slack in these tethers may be accepted in any future load cases. The present

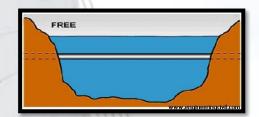


practical depths for this type of crossing may be several hundred meters, whether the tethers are vertical or a combination of vertical and inclined.

SFT unanchored: It is interesting as it has no

anchoring at all except at landfalls

and is then independent of depth. There is obviously a limit to the length but only further development will answer this. Perhaps an alternative for light traffic should be designed, possibly a 100 or 200 meter long.



Proposed Projects

In recent years, as the development of offshore engineering makes available appropriate

technology for actual SFT construction, interest in SFT has been growing, especially in Norway, Italy and Japan and a number of projects have been developed, up to quite an advanced state.

Probably the most advanced project is, presently that of the Hogsfjord crossing, carried out by the Norwegian



Proposed SFT in Norway

Public Road Administration. The crossing is 1400 metres long, with 150 metres maximum water depth. The tunnel will be placed about 25 metres below the water surface and will be circular in shape with 9.5 m inner diameter, in order to accommodate a two-lane road.



Conclusion - The submerged floating tunnel will set up new trends in transportation engineering and which shows with the advances in technology that will reduce the time required for travelling. And make the transportation more effective by hiding the traffic under water by which the beauty of landscape is maintained and valuable land is available for other purposes. Benefits can be obtained with

Top View of Proposed SFT in Norway respect to less energy consumption, air pollution and reduced poise emission.

pollution and reduced noise emission. For wide and deep crossings, the submerged floating tunnel may be the only feasible fix link, replacing present day ferries and providing local communities with new opportunities for improved communication and regional development.

SHOTCRETE

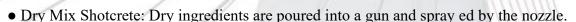
-SAYANTAN DAS (2ND YEAR)

- Shotcrete is a type of refined concrete drizzled by gas hose-pipe at high pressure & samp; velocity. Its strength gathers by steel rods, steel mesh or fibres.
- It is used in tunnels, retaining walls, underground walls, swimming pools & Damp; drainage systems. Slope protection, and in some areas where prosaic concreting cannot be done, that place shotcrete is done.
- In any type of surface, it can be sprayed (vertical or overhead). This method requires less formwork, and it is very economical and cheap process (it needs only a small industry to get manufactured).

Shotcrete Ingredients:

- Cement
- Sand(natural/crushed)
- Coarse Material (below 10mm)
- Water
- Admixture
- Fly ash

Shotcrete types:



• Wet Mix Shotcrete: Here, ready mix concrete is used for spraying.

Properties of Shotcrete:

- Cement content is very high; that's why it enhances the sturdiness of the surface.
- High-velocity jet bashing on the surface is the consolidation process of shotcrete.
- Shotcrete specimen is sawed from 1-meter square and 75 mm dense test panel by gunning of plywood.

Application of Shotcrete:

• It is used in different places like bridges, tunnels, canal, reservoir, swimming pool, prestressed

tanks, etc.

- It's very effective for slope stability, underground excavation.
- It is used as a protective material for pilling, oil tanks, coal bunkers, steel building frame etc.
- It's also used for high-temperature applications, like the refractory lining of kilns, chimneys, furnaces, etc.



Advantages of using Shotcrete:

- Comparing to concrete, it's a cost-effective process.
- This is ideal for irregular surface and easy for cleaning.
- It distributes the stress properly so that it has a good load-carrying capacity.
- Corrosion resisting power of shotcrete is excellent.

Disadvantages of using Shotcrete:

- Cement gets separated from the surface due to rainwater and becomes slouching or breaking.
- It requires expert and skilled labourers with detailed geotechnical information.

Conclusion:

Shotcrete is the possible alternative to substructure repair and superstructure repair. It is very efficient for its different surface (vertical & property) usable property.



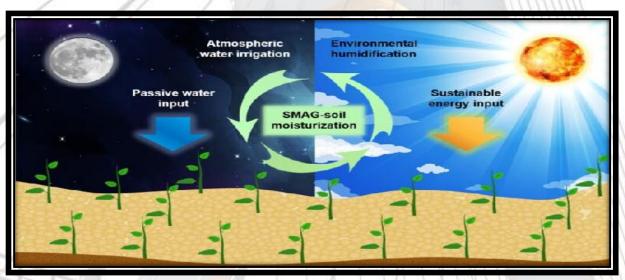
SELF-WATERING SOIL REVOLUTIONISING FARMING

-ROUSHAN KUMAR (2ND YEAR)

A new type of soil created by engineers at The University of Texas at Austin can pull water from the air and distribute it to plants, potentially expanding the map of farmable land around the globe to previously inhospitable places and reducing water use in agriculture at a time of growing droughts

As published in ACS Materials Letters, the team's atmospheric water irrigation system uses super-moisture-absorbent gels to capture water from the air. When the soil is heated to a certain temperature, the gels release the water, making it available to plants. When the soil distributes water, some of it goes back into the air, increasing humidity and making it easier to continue the harvesting cycle. Each gram of soil can extract approximately 3-4 grams of water. Depending on the crops, approximately 0.1 to 1 kilogram of the soil can provide enough water to irrigate about a square meter of farmland

The team ran experiments on the roof of the Cockrell School's Engineering Teaching Centre building at UT Austin to test the soil. They found that the hydro gel soil was able to retain water better than sandy soils found in dry areas, and it needed far less water to grow plants. During a four-week experiment, the team found that its soil retained approximately 40% of the water quantity it started with. In contrast, the sandy soil had only 20% of its water left after just one week. In another experiment, the team planted radishes in both types of soil. The radishes in the hydro gel soil all survived a 14-day period without any irrigation beyond an initial round to make sure the plants took hold. Radishes in the sandy soil were irrigated several times during the first four days of the experiment. None of the radishes in the sandy soil survived more than two days after the initial irrigation period



The water-harvesting soil is the first big application of technology that has been working on for more than two years. Last year, the team developed the capability to use gel-polymer hybrid materials that work like "super sponges," extracting large amounts of water from the ambient air, cleaning it and quickly releasing it using solar energy.

FAILURE A BOON TO SUCCESS

-SANDEEP BHATTACHARYA (2ND YEAR)

Failure is just a part of human experience, instead individuals react to it in different ways. Some try to criticize themselves for the failure and in-turn find themselves in a more failed situation. How we respond to it really affects our physiological health and our overall well-being.

Failure is often treated a taboo in our Indian culture. People might mock us for the failure but accepting it in a positive way and seeing failure as a part of a learning process creates perseverance and resilience. Instead of just blindly following our societies negative views towards failure, we must try to recheck it with the views of successful individuals who have received the success from past failure experiences. Learn to go against the stigma with failure it will pay off exponentially. People fear failure because it's intimately related to discomfort. If someone fails, he has to bounce back with an effort much higher than it was channelized previously. So, efforts will be more, concentration needs to be up-to the mark for achieving success after failure. We fear to do so, that's why in-turn we fear to be failed. Success is not final, failure is not destructive, it is the courage to fight back that counts for future life. Failure is simply the event to begin again, this time more intelligently. The time you will fail people around will boo upon you at the instance you bring on success the same individuals will be glad to see you have pulled off your work. Rishabh Pant when was going through a tough time he was constantly criticized for his failure. He did not guit he worked hard and played eye catching knocks and won the game for India within a span of time he became a promising and successful individual. Even in Science inventions and discoveries do not happen overnight. Repeated attempts and incessant sleepless nights make them successful. If they would have become depressed by their first failure we would be still in the blacked world, not enjoying the facilities Science has provided human beings. The World is fighting with the COVID-19 pandemic, vaccinations are being provided to make us safe and bring us back to the normal situation. Scientists who invented the vaccine if they were heart broken by their first attempt's failure and ceased the noble work, we would have to be happy with the so called "new normal" situation and our lives would have come to a cease also. Our icons whom we follow in our daily life each of them must have failed once or the other time but these inevitable failures have helped these unique individuals become unique in their future life. To achieve greatness, one must have the courage to make an effort. George Edward Woodberry once told "Defeat is not the worst of failures. Not to have tried is the true failure". Afterall the sweetest victories are those which are strenuous to achieve.

One of the main set-back is we don't have the courage to accept our mistakes. Accept them and hit back harder, there is a whole world waiting for you. All we can do is try, try and try again. Don't be a quitter, be an achiever and motivate others to be achieve greatness in life. Our motto should be "stronger, higher and further".

HELPING HANDS

-BHASWATI MANDAL (1ST YEAR)

In the year 2021, when the second wave of covid had hit India during the month of April, there was a gradual increase of covid cases. The number of cases kept on increasing from thousands to lakhs on daily basis. Everyday more than two lakh people were being affected and thousands of people were dying. West Bengal faced the same condition. Many people were dying and more than 4000 people were affected every day. During this time a small group of people came forward to help the covid patients. They were named as the "Red Volunteers".

They were within the age group 18-27, the young generation. There was a scarcity of oxygen cylinders due to which huge number of people were dying. They arranged oxygen cylinders for the covid patients and delivered it to their houses. They also arranged the

required medicines, beds for emergency, and blood for the covid patients. Not only these volunteers but also few groups were also formed in different colleges by the college students who helped the covid patients by giving information about the availability of hospital beds,



ICU beds, blood, contact number of the person who were providing oxygen cylinders. They also arranged emergency doctors' number for the patients and the basic medicines for them. They did all these things with the help of social media like WhatsApp, Facebook, Instagram etc. They circulated all the required information by the help of these platforms and few of them also built mobile apps for the same.



Many delivered free food to the needy people who lost their job due to lockdown. Some group of people started home delivery service especially for the covid patients at minimal price. They used to deliver the food at the doorstep of affected people. After about two months, the covid cases started gradually decreasing and it started massively decreasing from June. Now in India the number of covid cases has come down to nearly 40,000 on daily basis. If we take necessary precautions

and follow the guidelines as prescribed by the government, we can definitely overcome the awaited third wave.

VIRTUAL REALITY

- ROUSHAN KUMAR (2ND YEAR)

"Virtual Reality" the basic concept behind this term is illusion. The term" Virtual Reality" was first coined in 1987 by Jaron Lanier who had set up a company which pioneered research in it. Virtual Reality (VR) is nothing but a completely immersive computer replicated environment that gives the user the feeling of an entirely different environment instead of the one they are actually in. It gives the user a sense of reality. It is just an illusion with the help of very advanced technology. This synthetic environment created with the aid of Virtual Reality gives the user a feeling of being there thus allowing the user to interact accordingly. Thus, due to this possible ease of interaction one can visualize, improvise and develop any new idea or concept as they actually desire. Virtual Reality is a leap into the 3-dimensional world Hence it cannot be termed as only 3-dimensional computer graphics but an extension to it using more advanced hardware's and software's. The most common way in which virtual reality is known to the world is media, entertainment and gaming, but its applications are spread to countless fields. Today Virtual Reality has ripened enough to prove its vitality in engineering, medical, psychological, entertainment, architectural, education and many more such domains. Virtual Reality has reached the training grounds of the soldiers to the cockpits of the pilots. In defence; it has been adopted by all the sectors for training soldiers for dangerous situations like war, where they are taught to react to real life situations in simulated environment. That's the way how virtual simulation allows them to enter in such a situation virtually without any risk to their life. Healthcare is another important field where VR is extensively used. Virtual Robotic Surgery is a way in which a robot performs the surgery which is controlled by a human surgeon. This mainly reduces complications and the time of operation. Likewise, VR is also useful in treatment of phobias and for the people suffering from psychological diseases.



CIVIL WONDERS

- FARDEEN HOSSAIN KHAN (1ST YEAR)

1. Lotte World Tower, South Korea

Lotte World Tower is a 555.7-metre (1,823 ft), 123-story skyscraper located in Sincheondong, Songpa District, Seoul, South Korea. It opened to the public on April 3, 2017, and is currently the tallest building in South Korea and the fifth tallest in the world.

On March 17th, 2016, before the final phase of external construction, the Diagrid lantern-shaped roof structure was completed. The roof structure was constructed with steel counterparts that are each 12 meters and weigh 20 tons.

The counterparts were made up of bent metal panels that are 6 cm thick. The structure itself is

120 meters high, and covers floors 107-123.



Approximately 3,000 tons of steel parts, a high-precision 64t tower crane and GPS alignment systems, as well as highly skilled welding technicians were used in the construction of the roof. The roof structure is engineered to withstand its weight without reinforcing pillars, endure earthquakes up to a magnitude of 9 under the Richter magnitude scale and winds up to 80 m/s.

2. The Storseisundet Bridge

The Storseisundet Bridge is the longest of the eight bridges that make up the

Atlanterhavsveien ("The Atlantic Road"), the

road connection from the mainland Romsdal peninsula to the island of Averøya in Møre og Romsdal county, Norway.

Storseisundet Bridge is a cantilever bridge that is 260 metres (850 ft) long and with a maximum clearance to the sea of 23 metres (75 ft). It was opened on 7 July 1989, and it was a toll road until June 1999. Over the six years that it took to construct, workers struggled with the region's wild weather and were interrupted by twelve hurricanes.

3. Gate Tower Building, Japan



Gate Tower Building is a 16-floor office building in Fukushima-ku, Osaka, Japan. It is notable for the highway offramp at Umeda Exit that passes through the building. The building has a double core construction, with a circular cross section. The Umeda Exit of the Ikeda Route of the Hanshin Expressway system (when exiting the highway from the direction of Ikeda) passes between the fifth through seventh floors of this building. The highway is the tenant of those floors. The elevator passes through the floors without stopping, floor 4 being followed by floor 8. The floors through which the highway passes consist of elevators, stairways and machinery. The highway does not make contact with the

building. It passes through as a bridge, held up by supports next to the building. The highway is surrounded by a structure to protect the building from noise and vibration. The roof has a helipad.

4. Sart Canal Bridge, Belgium

This bridge, 498 m long and 46 m wide, carries the Canal du Centre over the Thiriau du Sart

valley at Houdeng-Aimeries and over a major road intersection (N55 and N535) at the entrance to La Louvière. It is a post-tensioned concrete bridge. The cross-section has 2 inclined sidewalls that support the fish-belly transverse girders 4.50 apart, carrying the bottom plate and the loading of 4.20 m of water. Longitudinal and transverse posttensioning provides bidirectional compression of the concrete in contact with the wet section. The bridge is supported on circular piles every 36 m that bear the very large loads on poor quality ground. Special arrangements were needed to manage the anticipated settlement. The deck has a total weight of



65,000 tons and was progressively launched into place (world record). Beginning of works: 1998 Completion: 2002

5. Bandra-Worli Sea Link, Mumbai

BWSL was designed as the first cable-stayed bridge to be constructed in open seas in India. Due to the underlying geology, the pylons have a complex geometry and the main span over

the Bandra channel is one of the longest spans of concrete deck attempted. Balancing these engineering complexities with the aesthetics of the bridge presented significant challenges for the project.

The superstructure of the viaducts were the heaviest precast segments to be built in India.

They were built using a span-by-span method using overhead gantry through a series of vertical and

horizontal curves.

The 20,000 tonne Bandra-end span of the bridge deck is supported by stay cables within a very close tolerance of deviations in plan and elevation.

The Bandra–Worli Sea Link was the first infrastructure project in Mumbai to use seismic arresters. These will enable it to withstand earthquakes measuring up to 7.0 on the Richter scale.

ADVERTISEMENT

-BHASWATI MANDAL (1ST YEAR)

Advertising is a form of paid communication with consumers. Business use advertising to help create and spread their brand name. This helps selling of their products to the public at large. Repetition of the advertisement makes the brand a familiar name to the people. In this 21st century advertisement is the best way to promote a company in both offline and online ways such as through Television, Magazine, Newspaper and through social media such as

Facebook, LinkedIn, Instagram etc. Small brands, jewellery shops promote their name through hoardings where they use models who represent their company. Famous brands have celebrity endorsement to promote their brand. They also have a brand ambassador who promote their brand in the form of advertisement. They represent the



brand in Television, Newspaper or hoardings. Actors also promote their film in the form of advertisement in Newspaper and Television. Companies or brands bid on Ad space on a Pay per Click (CPC) or per thousand views basis (CPM). Pay depends on a number of factors, but companies pay more to bid on competitive keywords. Television advertising is priced on a Cost Per Thousand (CPM) basis, which is the cost for your ad to be seen by 1000 people.

The company appoints an Advertising Agency to advertise the said products in Newspaper, Magazine, Journals Cinema Slides, Radio, public Hoardings. The Agency is responsible for preparing all the material for advertising, publicity including art work, photography, documentary films etc. This Agency is only responsible for advertising the products in India and other countries in the world. When the company manufactures any new product and



launches the same product in market, the Agency shall undertake special advertisement campaign for the new product.

Business Advertisement campaign is a form where small business is being promoted in the form of Ad. The more your business name pop's up in people daily news feed like Facebook in the form of interesting article the

more familiar is your company with people. 6 ways for supercharging Business Advertising are Refine your target audience, create high quality ads, use multiple flatforms, interact with your audience, analyse and research, be consistent and persistent. The brand ad should be simple yet attractive so that it could reach a huge number of people.

"From Kolkata, With LOVE"

-RITAM ROYCHOWDHURY (3RD YEAR)

I want to say a few words to all the travel junkies out there, you may have travelled a lot, seen cities ranging from 'Paris' to 'Tokyo', from 'Berlin' to 'Milan' but 'Kolkata' earlier Known as 'Calcutta' has a soul of its own. If you see crowded small-time tea shops instead of jampacked CCDs you are in Kolkata. If you feel the buzzing love for football in the rain-scented air you are in Kolkata. If you see youngsters bunking classes and indulging themselves with 'adda' near the Ganges you are in Kolkata. If you see Marxist intellectuals stubbornly practising their faith you are in Kolkata. If you feel the warm tight hug of a mother once you cross the Howrah bridge you have arrived to Kolkata. I have been living, dwelling, dreaming, succeeding, failing in this amazing city for quite some time now. Kolkata has witnessed my toddlers age, childhood, teenage and now adult-life. Poetically speaking I always thought that as I grew older this city disobeying laws of nature grew younger. This city has taught me, nurtured me, loved me a great deal in its strange, warm, idiosyncratic ways. This city accompanied me when a young-me was taken to see 'The Calcuttan Prince' play in the Eden Gardens. This City bears witness when the local tea shops change their decor to become conference halls for debate regarding politics, sports, cinema, music and sometimes family melodrama. This city gently smiles as it witnesses senior citizens ditching their boring clumsy bedrooms and spoiling themselves with as little treats as 'singaras' and 'rosogollas'. A non-Bengali friend while visiting 'Cal' for the first-time during Puja exclaimed in awe that us generally laid-back 'Bangalis' go insane during that time of the year. Yes, indeed. Pujo is very special to us. This is the time when each and every family member from different parts of the globe bid adieu to their stressful work lives and participate in the greatest Celebration of pandal hopping, fast-food eating, monotony breaking arrival of the 'Devi'. Many of my friends residing in different parts of the country ask me what is so special about my city anyway? In my reply I always say the way the huge, 'ghastly', colonial buildings like Hastings House or Victoria Memorial stand tall even today giving visual echoes of a time long gone, the way this city changes its shades of beauty from Spring to Autumn, the way a 115-year-old Jewish Bakery makes the most sumptuous cakes during "the most wonderful time of the year" makes it extremely difficult for me to not love it incessantly. Kolkata is just as layered and complex as my love for it is. All the memories and teachings this City had and has to offer pages are not sufficient enough to write them down. My dear friend Kolkata, you excite me, love me, cherish me like nobody else ever has. You never fail to astonish me. Indifferent from all the corporate chaos you truly are the queen of cities my love. You have added life to my days and not days to my life. Please stay this way and never change and I Hope that I will be a part of you as you have always been a part of me.

MEDICAL VACATION TO THE CAPITAL

-BRISHTI BOSE (2ND YEAR)

Quite often we come across people posting airport selfies with captions like "Off to Hyderabad for Check-up" or posts with people laid on the hospital beds, hence the caption describing happening incident (read accident). For the time being let me just bring them all under one umbrella and name them "Medical vacations". Now coming back to that, way back in 2011 when I was a kid, I too was once off for one such medical vacation to New Delhi. The visit wasn't regarding me, but my grandfather. However, being a 10-year-old kid, it was a full-fledged 2 days outing. My grandparents, my mother and I landed at the Chhatrapati Shivaji International Terminus, just to get conned by the taxi driver and remind ourselves about the typical Delhi characteristics. It was about 8:30 am when we reached our hotel thus

deciding to freshen up, have breakfast and leave for the hospital by 10 am. Keeping our punctuality in mind, we reached by 10:45. The memory is still crystal clear because who can forget those mosquito net like buildings? Well further mockery can create trouble since I'm speaking about



nothing but The All-India Institute of Medical Science (AlIMS) New Delhi. Referred to as the one the best medical centres, i could see the huge structures, people with white coats in extreme haste and people of various strata, walking in and out of the gate. In our typical mindsets, a hospital is usually considered as the doom of diseases. Don't know the level of truth behind it, but how could a 10-year-old get into a debate with her family members? So maa lead my grandparents to the doctor's room and thereafter, waited with me outside. As looked everywhere, i could see women in denim shorts or burkha or sarees with the pallu covering their faces. Well, as a kid, diversity didn't hit me back then. But what actually did, was an interesting situation. Considering the hot weather of Delhi, my maa made me sit on a small pink chair quite under the shade. There were other children sitting on the colourful chairs too and a few young ladies working on some booth and smiling at us. After some time, one of those ladies asked me to pull my chair and sit by the booth. Not paying much heed to it, I pulled my chair and sat beside a girl of about my age. Soon we got tangled into a conversation full of stories and laughter when suddenly, those ladies handed USA form. The first bold line of it read, "All Nation Cancer Organisation". Well, i was surely taken aback when my new friend said, "Fill it up. Do you need a pen? Then I'll finish quickly and give

mine" My maa was right there. She took the form from me and handed it back to the girls saying that they were mistaken. I had to leave the seat because it was meant only for the 'patients'. Today people are losing their near and dear ones. Honestly even if I cannot relate to them, I know exactly how it feels to lose somebody, maybe somebody whom I don't even know, and it isn't just since the pandemic began but, it's almost been a decade now.



Is Money "EVERYTHING"?

-RAHUL SINGHA ROY (2ND YEAR)

Can you imagine a fish without water, can you imagine a tree without leaves? You may have but you can hardly find a man who is not running after money. Money plays a big role in our life but certainly it can't be bigger than our life, joy, relationships etc.

There is enough cause of what I am saying. Nowadays every single person is running after it just to fulfil their material desire like buying big cars, expensive phones, big house etc. Yes, of course we need money to survive, to enjoy our life according to our dream, to ensure our future. But the question stands weather the sole purpose of life is to make money?

I think it shouldn't be, but staying happy should be the priority. We need money in our lives as much as we need petrol in car. If we only bother about filling petrol in car then we can't drive it properly, it will work same as in our life. We can't buy happiness with money. We may be very rich but without mental happiness we are actually very poor. Nowadays society judge people in terms of bank balance, properties he or she have. And for this reason, we are just running behind the money forgetting our inner happiness. If we wish to be a happy person, we should understand that making money is not the only purpose of the life rather we should spend our life happily. This happiness will come from our sole not from buying any expensive things. Another interesting thing is, this kind of happiness will never fade with time. There are a few people who do not have huge wealth but are actually happy from inside. I think we should learn from them. Because at the end of the day every single individual wants to be a happy person.



FRIEND'S REUNION

-BHASWATI MANDAL (1ST YEAR)

After 10 years these 4 best friends of RN school, Manali Himachal Pradesh were meeting for a reunion. Poorva who just completed her IPS degree had a good sense of humor. Rishi who was not that good in studies but was very good at cooking was a chef at a 5-star hotel Mumbai who always liked adventure and travelling. Sanya who was the topper of the school now was a successful neurologist who was the most silent member of the group. And lastly Neel who was now working in an it company in Delhi but always wanted to be a singer and was a great fan of Sonu Nigam. They recently came back to their town after many months. This time all 4 were all in their home town Manali in Himachal. rishi was the person who initiated the plan of reunion to the famous trekking place hamta pass. All were very excited for the trip more excited to meet each other after long 10 years. So, the day was Sunday 25 February 2018 a perfect winter morning for their trip. Rishi came with his car and picked up all his friends one by one. Poorva who had short hair and was a tom boy now had long hairs. Rishi had long beards and highlighted hair with a tattoo in his wrist. Sanya had broad framed specs now had lens in her eyes with beautiful kajal. Neel is still the most immature guy of his group who dressed in a very simple manner with blue check shirt and black jeans. They shared their childhood memories and listened to beautiful music while enjoying the cool wind outside. It will take them 1 day to reach hamta pass so they booked a hotel in their midway for the night stay. It was sharp 7 pm when they crossed the waranga bridge and now they had to take a bypass road. but as the road was under construction, they had to take the way of forests path. All were enjoying the trip but it was Poorva who seemed quiet and stressed. Poorva had an imaginary power of seeing the things that will happen in the future in her dreams. And all her dreams would come true later. Nobody knew this except her mother. 2 days ago, this trip she saw a dream where she saw this exact scene of taking this way of forest path and they would find a dead body there. But she didn't tell it to anybody because nobody would believe her and she would be a person of joke to everybody. In about 1: 30 minutes the car reached the middle of the forest and the car had a breakdown. Rishi tried to repair it couldn't do so and no mechanic was also available there. So, they had to spend the night at the forest only. all were scared a little bit but rishi always encouraged them that nothing will happen and all will be safe. Poorva knew what was going to happen but she kept quiet. Sanya noticed that Poorva was

not behaving well her eyebrows were raised and her lips were dry her eyes seemed to be frightened and her hands were shivering and she was taking very small steps. So, she asked her what happened to her but Poorva couldn't tell the truth and told that she was not feeling well. As they were going deeper into the forest rishi fell in the ground by slipping over something, he took his mobile light to see what was that to a shock he noticed a cut out hand of a woman, rishi in his curiosity removed the soil there and founded out the whole body of the woman which was cut into small pieces. All were frightened and they ran away from that place to a safer place and decided to depend the night under a big tree, all were discussing about what to do next and decided to go to the police next morning, soon they slept after whole day of journey. It was 2:30 am when Poorva screamed loudly and all her friends woke up, she in a shock told that she knew who was the murderer of that dead body. All were in a

shock by listening to her then she talked about her power of seeing what will happen in near future. No one believed her that time. but she again screamed out and told that she saw Neel in front of the dead body and whispering that "I have taken my revenge at last". All her friends were both shocked and angry because Neel was their best friend. but to a shock Neel was not present there with them at that point of time. poorva told that she has only chance of proving her right was to go in the same place where they found the dead body. Poorva started walking fast towards it and all her friends followed her. when they reached the place, they were all shocked as they saw Neel whispering the same words that was told by poorva. Rishi shouted out at Neel "what are you doing here, Neel". Neel turned back and was shocked to see his friends there. he soon came to rishi held his hands and told "rishi she killed my mother". All were asking who was she then Neel said that she was his step mom and his mother's own sister who married his father after her mom's death. Neel said that he was only 5 years old when she trapped her mother by taking her to a hill and thrown her from that hill in front of his eyes, he was too small to understand what happened but he saw everything that happened. After his mother's death, police investigated the case but as Neel's mother's death body couldn't be found so there was no proof and the case was soon closed. But Neel remembered everything who was his mother's killer. soon his step mom married his father she did all this to take the property of Neel's father who was a famous businessman. After their marriage she tortured Neel both physically and mentally, she used to beat him on his back with steel rod. Those marks were still in his back which he could never forget. She never allowed him to

sing and follow his passion. Soon after his father's death she never allowed Neel to enter his father's house and all the property belonging to his father now was in her name. Neel never forgot what she did to him he was waiting for this day to come when he would get the opportunity to kill his step mom. That day she was alone in the house Neel managed duplicate keys and kidnapped her and brought her to the forests and killed her and then cut her body parts brutally and had hidden them here. After telling this tear came out from his eyes. He told rishi he never wanted to kill anyone as he had never harmed anyone in the past not even in a fight. But he had to do third for his mother's justice. Rishi noticed that Neel was carrying a knife in his hands which they had brought for cutting of fruits. Soon Neel said that he had achieved everything in this life and now he has no wish to live. Now he wants to go to his mom and listen the beautiful songs that she used to sing in his childhood days. And within 1 sec he himself put that knife inside his stomach and killed himself right there in front of his friends.

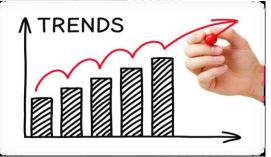
Effect of Stock Market on Youngsters

-NIHARIKA NIDHI (2ND YEAR)

For many youngsters it seems easier to put off any investing decisions until their financial situations becomes at least theoretically more stable. An investor age influences the amount of risk they can withstand young people with years of earning ahead of them can afford to take more risk in the investment activities. While individual reaching retirement year may gravitate towards low risk- or risk-free investment.

Young Investor also have the flexibility and time to study investing and learn from their success and failure. Since investing has a fairly lengthy learning curve, young adult are at an advantage because they have years to study the market and refine their investing strategies as with the increase risk that can be absorbed by young investor so too they can overcome investing mistake because they have the time needed to recover. After the stock market got online it became more easier for the young generation, they can able to study, research, apply online investing tools and techniques. Online trading platform provides countless opportunity for both fundamental and technical analysis. Technology including online opportunities, social media, apps and all contributes to young investor knowledge base experience

confidence and expertise. The other primary benefit that the internet had on investing is the effect it has on lowering fees for the investors. In particulars the young investor has seen a drastic decline in the commission rates they have to pay to trade securities. These days it's very common to an online broker to offer at vary rate to make a common stock trade. Prior to the wide availability



discount broker, full-service broker was able to extract their control over the market and charge what now seems like exorbitant commission rates. The Young Investors participation in Indian Stock Market is Rising says a SBI Report, pointing out that 44.7 lacs Young Investor account has been added during the 2 months of this fiscal year. The number of Individual Investor has increased by whooping 142lacs in the financial year 2021, with 122.5lacs new account CDSL and 19.5lacs in NSDL, the report says also the shares of individual investors in total turnover on stock exchange has risen to 45% from 39% in march 2020 as shown by NSE Data

With the onset of pandemic and subsequent lockdown household financial showed a significant jump in Q1 FY21 and a sharp modulation in Q2 says in SBI Report. However, the data shows that currency in circulation again increased in Q3 and Q4 FY21 with incremental amount of 80,501 crore and 95,181 crores respectively compared to 17,225 crores in Q1. Overall, for the Youngster after the stock market got online had a profound effect on how the investor obtain financial information equally important, it has lowered cost significant for most of the financial market participant. There has been the significant increase in the market capitalization in the stock market across the world in the last one year. However, in India it has been higher than the other major countries. The market capitalization of the BSE Sensex has increased by 1.8 times its value in one year ago. Russia had 1.6 times increased followed by Brazil, China, France and South Africa.

বিড়াজাল

-PUSPENDU GHOSH (3RD YEAR)

কলেজের শেষ দিন। বাকিদের ন্যায় রিফকুল আর ইন্দ্রানী র মনও ভারাক্রান্ত... বরং একটু বেশিই যেনো ।হবে নাই বা কেনো সেই দ্বিতীয় বর্ষ থেকে তাদের যে বন্ধুত্ব .. আজ থেকে যে সেই বন্ধুত্বের ধারাবাহিকতায় একটা ছেদ পড়বে এটা সত্যিই যেনো মেনে নেওয়া যাচ্ছে না। কিন্তু শুধুই কি বন্ধুত্ব ??? না ,ধীরে ধীরে এই মিষ্টি বন্ধুত্ব একটি কুড়ির ফুল হয়ে প্রস্ফুটিত হওয়ার আশা র ন্যায় কথন যে প্রগাঢ় ভালোবাসায় রূপান্তরিত হয়ে গিয়েছিল তা যেনো তারা উপলব্ধিই করতে পারেনি।। আজ কলেজ জীবনের শেষ প্রহরে উপনীত হয়ে উভয়ের হৃদ্যে একই অনুভূতি অনুভূত হলেও তা যেনো মুথে স শব্দে উচ্চারণ করায় কোনো এক অদৃশ্য নিষেধাজ্ঞা জারি রয়েছে।।।

(কেটে গেছে আটবছর)

"আঃ!!!! দাদা সিগারেট টা ফেলুন না !!! দেখছেন তো কোলে বাদ্যা রয়েছে".. ভদ্রলোকটির কখায় সিগারেট ফেলে ঘাড় ঘোরাতেই হতবাক রফিকুল..."একি ইন্দ্রানী না!!!??।" মাখার ঘোমটা টা টানতে গিয়ে ইন্দ্রানী র ও চোখে চোখ পড়ে গেলো তার সাখে...(দুজেনেই হতবাক)...। পরিচিত হলেও আজ অপরিচিতর ভান করাটাই শ্রেয় বলে মনে করে রফিকুল । উভয়ের এই নিস্তব্দতা যেনো কম্পার্টমেন্টের কোলাহল কে ছাপিয়ে চলে যায়....রফিকুল দেখে আগের খেকে আরো সুন্দরী হয়েছে তার ইন্দ্রানী; বেশ ও বদলেছে ;গায়ে লাল শাড়ী; মাখায় ঘোমটা ; কপালে লাল টিপ আর সিখি টা রাঙানো সিদুরে(যেনো চোখ সরানই যাচ্ছে না!!!)

""" কেমন আছো তুমি? নতুন মানুষটি কেমন?? সে কি আমার মতই তোমাকে ভালোবাসে না আরো বেশি??আমার মতনই কি তোমাকে হাসায় না আমার চাইতে ও বেশি??"" ইত্যাদি আরো কত কিছু চোথের চাহনিতে জিজ্ঞেস করে ফেললো রিফকুল ইন্দ্রানী কে.... ওিদক থেকে চোথের ইশারায় উত্তর এলো "" ভালো নেই ;; মেনেও নিইনি তবে মানিয়ে নিয়েছি"।।।।
ধর্মীয় বেড়াজালে র বাঁধনে আটকে পড়ে এভাবে কত সহস্র পবিত্র ভালোবাসার সমীকরণ মেলে না ... সমীকরণে **ধ্বনক** থেকে যায় শুধুই ধর্মীয় গোড়ামীর চোথরাঙানি।।

NARENDRA MODI STADIUM

-ANGSHUMAN KAR (3RD YEAR)

The Narendra Modi Stadium, commonly known as the Motera Stadium, is a cricket stadium situated inside the Sardar Patel Sports Enclave¹ in Ahmedabad, Gujarat, India. As of 2021, it is the largest cricket stadium in the world and the largest stadium in the world, with a seating capacity of 132,000 spectators. It is owned by the Gujarat Cricket Association and is a venue for Test, ODI, and T20I cricket matches.

The stadium was constructed in 1983 and was first renovated in 2006. It became the regular venue for international matches in the city. In 2015, the stadium was closed and demolished before being completely rebuilt by February 2020, with an estimated cost of ₹800 crore (US\$110 million).

Apart from cricket, the stadium has hosted several programs arranged by the Government of Gujarat. It has hosted matches during the 1987, 1996, and 2011 Cricket World Cups. The pitch used to favour bowlers previously but has recently hosted competitive games. As of 2020, the stadium has hosted 12 Tests, 23 ODIs, and 1 T20I match.

On 24 February 2021, the stadium was renamed as the Narendra Modi Stadium in honour of the current prime minister of India, Narendra Modi who is also a Gujarat native and a former chief minister. It hosted its first ever pink ball Test match on 24 February 2021 between India and England.

Work

L&T took over the construction work of the stadium in December 2016. On 16 January 2017, the Gujarat Cricket Association oversaw the project, which formally began on the same day. The stadium was planned to be finished in 2 years and the reconstruction project was estimated to cost around ₹ 7 billion. Finishing touches were given to the stadium in February 2020 and it hosted an England-India day-night test match in 2021.

Mumbai-based Commercial Kitchen Consultants "Span Asia" were hired to work with Populous and L&T on all the F&B Related areas such as the Concession Counters, Main Stadium Kitchens, Player Kitchens, VIP/VVIP Boxes, Corporate Boxes, Press & Media Boxes, Pantries, GCA Club and Related areas.

Stadium design and facilities

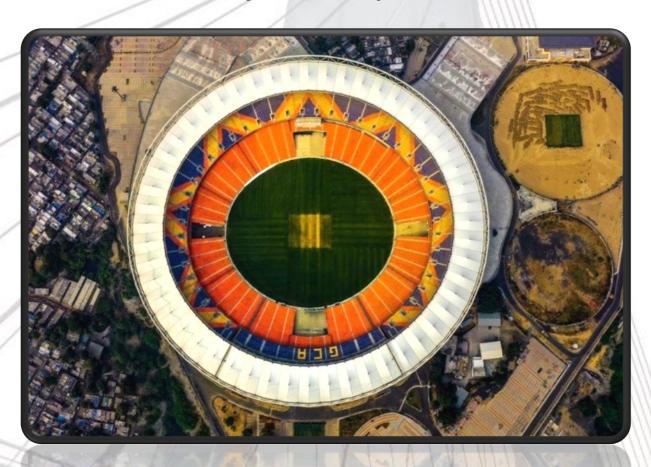
The redesigned stadium occupies 63 acres of land, with three entry points compared to one in the old stadium, with a metro line at one of the entry points. It contains 76 corporate boxes that can hold 25 persons each, a 55-room clubhouse, an Olympic sized swimming pool, and four dressing rooms. A unique feature of the stadium is the LED lights on the roof instead of the usual floodlights at cricket grounds. The LED lights are installed on an anti-bacterial, fireproof canopy with PTFE membrane that covers 30 out of 55 metres width of sitting area. The roof was done by the company Walter P Moore and was specifically designed to be lightweight and separate from the seating bowls in order to make it fairly earthquake

resistant. The structure eliminates the need for pillars and gives spectators an unobstructed view of the entire field from any place in the Stadium.

Outside of the main ground, the stadium is able to accommodate several other features, including an Olympic-sized swimming pool, an indoor cricket academy, badminton and tennis courts, a squash arena, a table tennis area, a 3D projector theatre, and a clubhouse with three practice grounds and 50 rooms. The parking lot can accommodate 3,000 cars and 10,000 two-wheelers. Sardar Patel Stadium also has a huge ramp designed to facilitate the movement of around 60,000 people simultaneously. The stadium has been designed such that patrons fill the lower levels of the ground for smaller events to maintain the crowd atmosphere when not at capacity.

It has also been planned that the stadium will be connected to the metro station by a skywalk to decrease road congestion. The skywalk is planned to be completed after September 2020, and is a part of the Motera Metro Station project rather than the stadium's.

The total area of the stadium is equivalent to 32 Olympic-size football fields put together. It is currently the only cricket stadium in the world to have four dressing rooms for the players, which makes it possible to play back-to-back games in the same day. It is also the only stadium in the world with 11 centre pitches on the main ground.



FASTCOMET REVIEW

-SRIPARNA ROY (2ND YEAR)

FastComet was established in 2013 in San Francisco. They have around 50,000 active clients worldwide where 20,000+ cloud nodes, and a team of 70+ employees. Their servers are widely spread in 11 major cities like Chicago, London, Amsterdam, Singapore, Mumbai, and Tokyo.

FastComet serves a variety of hosting solid shared hosting, VPS, dedicated servers, WordPress hosting, a graphical website builder, WooCommerce, Magento, and more. Include a lot of features like SSD-only storage, a free CDN, Let's Encrypt SSL, SpamExperts spam filtering, malware scanning, free daily backups, cPanel site management, Softaculous for easy installation of WordPress and live chat support. The company also provides guaranteed resources, including at least two available CPU cores and 2GB.

Their SSD hosting claims site loading speed 300% faster than the competition. It gives a 45-days of money-back guarantee which is great. Also claims fast server speeds, outstanding features, near 100% uptime, security, affordable plans, round-the-clock support, and many other benefits. To find out their speed and performance, reliability, customer support, features, and price, we did test out their services in the past months on our site.

PROS OF USING FASTCOMET

FastComet Hosting has many perks so one can get an idea about what benefits you are getting after purchasing that.

Strong Uptime - Uptime is an important point that plays a vital role in web hosting. Uptime happens when a website is live for the whole time, resulting in a good ranking of the website on Google. If a website is not live for few secs or delayed for few secs that means a huge downtime. This causes a major loss of traffic which can affect your website. Thus, consistent uptime is important for the growth of a website. FastComet claims 100% uptime.

We have monitored our sites and we see a great average uptime of 99.95% with less than four hours of downtime over 12 months. There we find out three poor months where the uptime is below the average.

Average Speed - Speed plays another important role in web hosting. A good website is said when it managed to upload a page in 2-3s. This automatically increases the ranking of the website in Google. Currently, Google announced that the ranking of the website will decrease more when 32% of traffic tends to leave because of 6s of loading time. This page loading speed causes a great impression on your business. They taking 557ms for loading our website which is an average loading time.

Plans and Pricing - FastComet is popular for serving a wide range of hosting plans starting with their cheap solid plan Shared Hosting then comes Cloud VPS, Dedicated CPU Servers, WordPress Hosting, a graphical website builder, WooCommerce, Magento, and much more.

| Shared Hosting | 7 | | | | | | |
|---------------------|---------------------|---------------------|---------------------|--|--|--|--|
| FastCloud | FastCloud Plus | FastCloud Extra | - | | | | |
| •3.48/mo | • 5.2 8/mo | • 6.98 /mo | | | | | |
| Cloud VPS Hosting | | | | | | | |
| Cloud 1 | Cloud 2 | Cloud 3 | Cloud 4 | | | | |
| • 50.95 /mo | • 59.4 5/mo | • 76.4 5/mo | • 118.95 /mo | | | | |
| Dedicated Hosting | | | | | | | |
| DS 1 | DS 2 | DS 3 | DS 4 | | | | |
| • 118.15 /mo | • 143.65 /mo | • 194.65 /mo | \$296.55 /mo | | | | |

Features of FastComet

- 1.Longer Money-Back Guarantee In FastComet service, you will get 45 days which is comparatively more than other web hosting providers. That means you will get full a whole 45 days to test their service. For this, FastComet gets a big thump up. Furthermore, you can cancel it at zero cost. This thing is hardly seen in the web hosting industry.
- 2.Free Backup Some issues that might happen one of them is by mistake of erasing records and that's the reason behind using backup. FastComet offers free daily backup plans which are never seen in cheap plans. They safely store the off-site for up to a full 30 days. Even that they'll restore the old version of your site within just a single click if needed.
- 3.Free CDN Their plan also includes a free Cloud content distance network even present in basic plans. So, your website will be able to leverage benefits like Cloudflare's Points of Presence with priority routing, this usually costs larger organizations over \$6,000 per month. This benefit allows your website to take the advantage of premium markets like Australia and India along with that your website is prioritized over all-over traffic globally.
- 4.Free site and Domain Transfer If you already have a site on the interwebs, FastComet will help you to transfer your site from your previous service to their service free of cost.

FastComet has its team of experts on the site for you. So, you don't have to worry about anything. And rest of the steps are done in less than an hour, with zero additional fees or higher plans needed. Moreover, you'll get up to three site migrations for free. Also, you can transfer your existing domain name for free.

5.Fast, Personal Support - Customer Support is necessary while choosing the right web hosting provider. FastComet claims that they have resolved 83% of the issue in less than 15 minutes based on 10,000 support requests. They offer 24/7 support via phone, chat, ticket, and email.

We have tested out their live chat option. We asked some technical questions and impressively they have answered our question in less than a minute. They provide a

knowledge-based section for users who want to fix things on their own. They always try to make good communication with customers.

Multiple Data Center Location - FastComet has around 50,000 active clients worldwide where 20,000+ cloud nodes, and a team of 70+ employees. Their servers are widely spread in 11 major cities like Chicago, London, Amsterdam, Singapore, Mumbai, and Tokyo. Multiple Data Center provides good quality of steady performance and speed around the world otherwise due to lack of data centers may affect their service.

CONS OF USING FASTCOMET

Now in our FastComet review coming to the cons of using FastComet where you must need to know to stay alert.

High Renewal Price - FastComet basic plan is very reasonable starts at \$3.95/month. You can also use the 30-day money-back guarantee to get a refund if you are not satisfied with their services. However, after using their starting plan duration, you can expect a level up in the rates. Such as if you purchase their basic plan \$3.95/month in the initial days but in the next period, the renewal price starts at \$9.95 per month. In this case, it is three times more expensive than the first.

No free Domain Name - Most of the hosts include a free Domain Name for the first year. Unfortunately, FastComet doesn't offer free Domain Names. By registering a domain name with the FastComet at first year, it would cost \$9.95 and after that \$10.95.

CONCLUSION

Yes, FastComet fast server speeds, outstanding features, near 100% uptime, security, affordable plans, round-the-clock support, and many other benefits make FastComet one of the best web hosting for beginners and also for the people who are looking to start creating their website. It gives a 45-days of money-back guarantee which is great as normally most of the company give 30-days money back guarantee.

Although with that it holds few disadvantages like high renewal price and no free domain name. These few things you have to keep in mind before going to purchase it. Overall, it has many perks which lead to the growth of a website.



ARTICLE 21: Right to LIFE and Euthanasia

-SUVRANIL ROY (2ND YEAR)

At first, let us look at the statement of Article 21. "Protection of life and personal liberty - No person shall be deprived of his life or personal liberty except according to procedure established by law". The Indian constitution is the world's lengthiest written constitution with 395 articles and 8 schedules as of origin. India has not seen such a genius like Dr. B. R. Ambedkar and this is the brainchild of him and many other virtuosos like B.N Rao, Jawaharlal Nehru, C. Rajagopalachari, Rajendra Prasad, Vallabhbhai Patel, K M Munshi, Abul Kalam Azad, Shyama Prasad Mukherjee etc., who debated, discussed in the constitution assembly and finally gave ourselves this constitution. Now a question here may arise that a simple piece of document that was made nearly 75 years ago, how it is still relevant today? From time to time, the constitution had been amended by our parliament and that's why it adjusted itself with the flow of time and generation & that's why we say "It's not merely a legal document, It is a social document written in legal language, it is a living breathing document". Indian constitution has 22 parts and 12 schedule. Among this, the part 3 of the constitution is most essential and crucial part as this deals with Fundamental Rights. These rights are guaranteed under the law of the land (C.O.I), which are enforceable against the State by the citizens through court. A.12 give definition of the State. It states "In this Part, unless the context otherwise requires, "the State" includes the Government and Parliament of India and the Government and the Legislature of each of the States and all local or other, authorities within the territory of India or under the control of the Government of India". In part 3, we have article 21 which is one of the most important article. Dr. Ambedkar called it as a "BED ROCK of Indian constitution'. Now think of an patient, 35, admitted in hospital who is in coma due to an accident. Is he living? In medical science, Yes, he is because he has pulse, his heart beats. But in moral? No, he is completely bed ridden, he can't move at his own will, this is not "LIFE" as mentioned in A.21. This may called as "Living", not "Life". In Maneka Gandhi (Petitioners) V Union of India (Respondents) (1978) case, she was ordered arbitrarily to surrender her passport at Regional Passport Office (New Delhi). Our Hon'ble Supreme court gave a landmark verdict in that case interpreting A.21 in a much broader way that "Life is not merely living, it is living with choice and dignity". So, If a man comes to my house and want to eat pork, but I am continuously insulting him for that reason, I am violating his A.21. It's his choice. Or I want to visit Switzerland but govt. ordered to surrender my passport, they are also violating my A.21. I am watching an extreme hostile video on my personal phone, I can see that because I have right to privacy and that is also coming under A.21. Now, we can imagine how big the A.21 is. The word "LIFE" is not merely a small word, it means living with choice and dignity. For this reason sometimes the article is also called as a "Blanket Article" or "Umbrella Article". Our "Right to Education" (A.21a) also comes under this because education also gives us choice and dignity. That's why genius Dr. Ambedkar said this as a "BED ROCK of Indian constitution'. The story starts long ago. There is a hospital named King Edward Memorial hospital popularly known as KEM hospital in Parel, Mumbai. There was a nurse named Aruna Shanbaug. An unfortunate miserable incident happened with her. On the night of 27 November 1973, the then 25-year-old Shanbaug was sexually assaulted and brutally raped by Sohanlal Bhartha Walmiki, a sweeper on contract at the Hospital. Sohanlal attacked her while she was

changing clothes in the hospital basement. He choked her with a dog chain and sodomized her. This cut off oxygen to her brain, resulting in a brain stem contusion, cervical cord injury, and cortical blindness. She was discovered at 7:45 am the following morning by a cleaner. She was in coma since then. All the nurses, joining new at the hospital, took care of her as their own family member. Following the attack, nurses in Mumbai went on strike demanding improved conditions for Shanbaug and better working conditions for themselves. In the 1980s, the Municipal Corporation of Greater Mumbai (BMC) made two attempts to move Shanbaug outside the KEM Hospital to free the bed she had been occupying for seven years. KEM nurses launched a protest, and the BMC abandoned the plan. Sohanlal was freed after serving a seven-year-sentence for robbery and attempted murder but Aruna never got out of coma until her death in 2015. On 2009, Bombay high court admitted a PIL filed by activistjournalist Pinki Virani, who was a very good friend of Aruna. She said "My Lord, please allow EUTHANASIA". Euthanasia means mercy killing or allowing death of oneself on their own will. So, court asked, "Why do you want euthanasia for her?" She argued "My Lord, Hon'ble Supreme Court ruled in 1978 that life is not merely living, it is living with choice and dignity, Now the time has come that Aruna does not have a choice in life and she can't live with her dignity. So please let her go". Bomby HC denied that proposal and the matter reached at Supreme Court. On 17 December 2010, the Supreme Court (SC), while admitting the plea to end the life made by activist-journalist Pinki Virani, sought a report on Shanbaug's medical condition from the hospital in Mumbai and the government of Maharashtra. On 24 January 2011, a three-member medical panel was established under the Supreme Court's directive. After examining Shanbaug, the panel concluded that she met "most of the criteria of being in a permanent vegetative state. Now the question on the law was "Can the word LIFE or A.21 also include Right to Die also?" If you consider the matter, in 1973, she was around 25 and in 2010, she was around 62. She literally will not have any opportunity to live again with LIFE, so it will be better to let her go. SC starts looking back. There was P.Rathinam vs Union Of India on 26 April, 1994. In this case, SC first faced that "Whether Right To Life Include Right To Die". Now let us look at some laws. S.309, Indian Penal Code (IPC) says that attempt to suicide is criminal offence. That means if you attempt suicide and misshapenly survive that, you shall go to jail. It seems very awkward in first instance but if we think deeply, we correctly has an answer of that. If you go outside riding your bike without helmet, police fines you but ever you think of why police get fined you? You are an adult, if any accident happens with you, there will be a risk of your own life, your own skull, not of the policemen. So why they cuts the challan? Here lies the beautiful concept. In India, everyone is a precious part of the state and the state is bounded to protect everyone. You are a wealth of state and for that reason, they will take care of your body. If X murder Y, and there is no one to fight a case against X, then will justice not be delivered ever to Y? Yes, it will be because the state will fight the case against X for Y. You can't end your life as you want. For that reason S309, IPC holds suicide as a criminal offence. Disposing the case P. Rathinam v Union of India, Division Bench of the Supreme Court of India declared Section 309 IPC as unconstitutional and declared it ultra vires or null and void in 1994. So, after that case Right to die also included in Right to live that is A.21 means you can end your life, as you want. That was really a wow moment but the real drama starts here. There were two person named Gian Kaur and her husband. A case was going on them. Gian Kaur vs. State of Punjab, 1996. Both were accused under S.306 of IPC that is "Abetment to suicide". She and her husband tortured their daughter-in-law and abetted her to commit suicide. So, according to law this is

a punishable offence. Gian kaur said in parliament, "My Lord, You are punishing both of us unreasonably or rather pointlessly". SC said, "Unreasonably? Both of you have done abetment to suicide and you are saying that law punishes you pointlessly?" She argued, "My Lord, 2 years ago in P. Rathinam v Union of India case 1994, you gave verdict that suicide is no longer a criminal offence. You ripped off the law S.309 IPC, and included right to die in A.21 that is right to life. So, as right to life is a fundamental right, right to die also falls under same category and it is constitutionally valid. My daughter-in-law also have the same right. She wanted to use that. She no longer wanted to live. She also had a right to die. So, I helped her in complying her fundamental right. What offence did I made? It was her constitutional right and I just helped her doing that. Is helping to obey or enjoy fundamental right an offence?" Just wait a bit and think, she was absolutely correct and also legally valid in her argument. SC understand it had done a blunder in P. Rathinam case and the whole verdict and interpretation was wrong. So, SC overruled that case and restored old laws. Euthanasia or right to die was objected under A.21 and suicide became an offence again. 14 years later, when SC was again standing in front of that same challenge in Aruna Shanbug case, they followed all old verdicts on Euthanasia and gave a landmark judgement that allowed Passive Euthanasia. On January 24, 2011, the apex court set up a medical committee, which examined Aruna and concluded that she met most of the criteria of being in a permanently vegetative state. The threedoctor panel also reported that the patient was not brain dead and responded to some situations on her own. The top court thus turned down Pinki Virani's plea on March 7, 2011, but it allowed "Passive euthanasia" of withdrawing life support to patients who are in permanently vegetative state (PVS). It also distinguished between active and passive euthanasia. The Passive euthanasia is when death is brought about by an omission, broadly by withdrawing of medical treatment and life support systems in terminally ill patients who can't express their consent. The Living Will which is termed as "advance medical directive," it is a direction issued by an individual that "he or she shall or shall not be given medical treatment in future when or he she becomes terminally ill." SC verdict allows every citizen to write a Living Will or advanced directive for his/her end-of-life care. It is a concept associated with passive euthanasia. In a Living Will, one can outline whether or not they want their life to be artificially prolonged in the event of a devastating illness or injury. By rejecting outright the use of active euthanasia to end life through administration of lethal substances, the apex court thereby laid down stringent guidelines under which passive euthanasia or living will would be legally allowed via a high court-monitored mechanism. The legality of passive euthanasia in India was short-lived. It was observed that Aruna Ramchandra Shanbaug Vs. Union of India was decided based on an incorrect interpretation of the constitution bench's judgment in Gian Kaur vs State of Punjab. This led to the case being referred to a larger constitutional bench for review and final judgment. The government has no problem with passive euthanasia as devised under the Aruna Shanbaug verdict, but it has opposed Living Will in principle. The Centre, through its draft "Management of patients with terminal illness-withdrawal of medical life support Bill', tabled in Parliament in 2016, had proposed that patients with terminal illnesses with no chance of revival be allowed passive euthanasia. But it had opposed the concept of Living Will or advanced directive. The Bill, however, has not moved forward since then. The Indian Constitution recognises the right to life with dignity but not the right to die. This further complicates the debate regarding the legality of such a wish by bringing in morality and ethics of such an act. With mercy killing, the law needs to consider ethics, which has left the medical fraternity divided.

উত্তরের ব্যঞ্জন

~ সৌপর্ণ দাঁ

আঘাত পেয়েও ভাবছো তুমি খুব "ভালো আছো" ?? তাহলে যেন তুমি অন্ধ হয়েছো ;

চোখের জল বেরোতে গিয়েও "এক্সিট ডোরে" আটকে গেছো ?? তাহলে যেন তুমি নিজেকে হারিয়েছো ;

সমীকরণ চিনতে পেরেও পারছ না একসসেপ্ট করতে ?? তাহলে যেন তুমি বেস্ট মানুষটাকে পেয়ে গেছো,

বিশ্বাস হারিয়ে "একাকিত্ব"-কে "মনোরম" বলে মনে হচ্ছে ?? তাহলে যেন তুমি নতুন আলোর পথ খুঁজতে হেঁটে চলেছ ;

মেঘলা দিনের সূর্যের আলোয় স্নান করার ইচ্ছে প্রকাশ করছো ?? তাহলে যেন তুমি স্নিপ্ধ হাওয়ার মতই সারা আকাশ জুড়ে দৌড়াচ্ছ ,

গোল পৃথিবীর বুকে ও হারিয়ে যাওয়া মানুষকে খুঁজে চলেছ ?? তাহলে যেন তুমি তার সবটা জুড়ে তাকেই আগলে রেখেছ ,



অন্ধকারে বারবার সামনে পথটা গুলিয়ে ফেলছ ?? তাহলে যেন তুমি আলোকে নিজের হাতে করেই নিয়ে চলেছ;

কবিতা লিখতে গিয়ে ছন্দ মিলছে না বলে ঘাবড়ে যাচছ ?? তাহলে যেন তুমি উপন্যাসের নতুন লাইনগুলো আবার কলমের গোড়ায় সাজাচছ,

চায়ের কাপে চুমুক দিয়ে সিগারেটের প্যাকেটটা আবার খুঁজছো ?? তাহলে জেনো তুমি ধোঁয়াশা ভরা পৃথিবীতে আবার নতুনত্বের সন্ধান করছো,

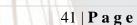
> অনেক নামে পরিচিত হতে হতে নিজেকে হারিয়ে ফেলছো ?? তাহলে যেন তুমি প্রকৃত এক কাল্পনিক পরিচয় আবার পেতে চলেছ;

"এলোমেলো" হতে হতে জীবনের থেকে অনেকটা দূরে পালাতে চাইছ ?? তাহলে যেন তুমি হাতছানি দেওয়ার স্বর আবার শুনতে যাচ্ছ,

সময়ের ব্যবধান বুঝতে বুঝতে তার অনিয়মটাকে অভ্যাস করে ফেলেছো ?? তাহলে যেন তুমি আবার নিজেকে নতুন করে চিনতে চলেছ;

"সাদাকালো" বুঝতে গিয়ে আবার স্মৃতির রিল নিয়ে থেমে গেছো ?? তাহলে যেন তুমি ঝরা পাতার মতো আবার একবার অতীতের পথে হেঁটে চলেছ ;

> যাচ্ছ ছুটে অনেক দূরে যাচ্ছ তুমি কোথায় ?? জীবন আবার দাঁড়াবে সে তোমার পুরনো ব্যথায়...





উত্তর খোঁজে প্রশ্নরা



~ সৌপর্ণ দাঁ

যখন মানুষের আর কিছুই হারানোর বাকি থাকে না তখন নতুন করে আর কি কিছু হারিয়ে যায়?

অন্ধকার পথের মাঝেও যে অদৃশ্য পথিক বারংবার তোমার সামনের পথটা আলোকসজ্জায় রাঙ্গিয়ে তুলতে পারে তাকে কি "বন্ধু" বলা যায় ?

হঠাৎই ব্যর্থতার ভয়ে যখন সাফল্যের আঙিনায় পৌছাতে পারিনা তখন আদৌ কি সেই আক্ষেপগুলোকে আগলে নিয়ে পরবর্তী যুদ্ধ জয় করা যায় ?

কাল্পনিকতার ইতিহাস যখন এলোমেলো বিভিন্ন ভরসা ও বিশ্বাসের অন্ধকারে হারায় তখন সেই ধ্বংসস্তুপের মধ্যে থেকে নতুনত্বের ছোঁয়া পেয়ে কি ঘুরে দাঁড়ানো যায় ?

মিষ্টি চিঠির ডাকে ঘুম ভাঙলে যখন বাস্তবতা ও স্বপ্নের মাঝে দোটানায় পড়ে যাও তখন চোখের সামনে ভেসে বেড়ানো গল্পগুলো কি একটু হলেও সত্যি মনে হয় ?

শহরগুলো বহুদিনের অশান্তির মাপকাঠি পেরিয়ে যখন ঠিকানা পাল্টায় তখন সুর ও ছন্দে ভেসে বেড়ানো স্মৃতিগুলো কি সময়ের জলে নিজেদেরকে ভিজিয়ে ফেলতে চায় ?

লক্ষ্যহীন হয়েও "Aimless"-এর তকমায় চিহ্নিত না হওয়ার জন্য মিথ্যে লক্ষ্যের আশায় কি স্বপ্ন বাঁধার ইচ্ছে হয় ?

আপসা নয়নে যখন শেষ হাতের স্পর্শ হারিয়ে ফে<mark>লো</mark> তখন কি সময়ের নিয়মে খাতার উপন্যাসটা আরেকএকটু বেশি পরিণত হতে চায় ?

"ভালো থাকা" ও "সাথে থাকা" এই দুটোর পা<mark>র্থ</mark>ক্য বুঝেও যখন কেউ জিজ্ঞেস করে "কেমন আছি ?" তখন "Fermentation"-এর রাস্তা ধরে আবা<mark>রও</mark> কি জ্বলে ওঠা যায় ?

কুয়াশাছন্ন ফাঁকা এক গলির মাঝ দিয়ে <mark>হাট</mark>তে থাকা বিষন্ন নাম না জানা পথিক যখন তার ক্লান্তির কারণ খুঁজতে যায় তখন কি শীতের শূ<mark>ন্যতা</mark> তার ব্যর্থ সৃষ্টির হিসেব নিয়েও প্রশ্ন ওঠায় ?

তীব্র সমালোচনার পাল্লায় পড়ে যখ<mark>ন এ</mark>লোমেলো নরম সুর কানে কানে এসে বলে "হাল ছেড়ো না বন্ধু" তখন ঘুমের আড়ালেও কি <mark>নিজে</mark>র জেদ বজায় রেখে পরিণত হওয়ার লড়াই করা যায় ?

"জীবনের সাফল্য" বড়্ড বেশী ক্ষণিকের শুধুমাত্র আপ্যায়নের সুযোগ পাওয়া যায় তা দীর্ঘস্থায়ী হওয়া হয়তো সম্ভবই নয়....

Alive, am 1?

SANKHADEEP RANG (1ST YEAR)

Leaning forward, I stared at those words
through the glowing, oblong face of Technology.
Voices of wisdom flowed to my ears,
The "All knowing entity" smeared"The truths of all happenings' onto my mind.
What is it, you say?
Nothing much, only a day as such
my classes going 'Online';
I keep my phone in my hand
the classes go on as long it can,
Leaving nothing but a numb sensation ofNothingness, stuck inside the luminous wall.
Eyes that forgot to blink,
Hands busy creating scribblings





from the voice dripping into my ears through the
'Rope of Hearing', which I wear;

I'm confined in a stalemate,

Oblivious to the ever-changing world.

Is this what being alive feels?

Alive, am I?

I lift my head up, from a small screen
to a broad horizon covered in green;

A soft scene of life, carried by a
Blunt knife of careless gust,

Relaxed my stiff pupils first,

And then loosened my curled up toes
rejuvenating my tensed pose;

Whispered to me, my sudden realization
"I am Alive".

RAIN

SHUBHAM KUMAR (2ND YEAR)

I just love this rain,
Cold breeze just touches my pain.
It gives calmness to my mind,
As mind is free like a shrine.
These drops when touches the skin,
The feeling is awesome and hard to explain.
I just love this rain



বিদাম প্রেম

আর্কদীপ দাস

বিদায় প্রেম আমি ভেবেছিলাম তুমি ধরা দেবে: গানের কথার সাথে হাত মিলিয়ে, আজ পথ আলাদা, আলাদা মনের রেষ; কখন যে ঘুমিয়ে পডেছিলাম, তাই স্বপ্ন ভেঙে গেল! ভালো আছ তুমি আরও ভালো থেকো; মন খারাপের পাতায় আমার নাম লিখো. কখনও মনে হলে কথা বলে নিও! তবে আমি বিদায় নিলাম : অনেক হল। একাকী জীবন ঠিক মানিয়ে নিতে পারব. বিদায় প্রেম, বিদায় নিতে হবে: সহজ করে বললে আমি তো কোনও দিন কেউ নই তোমার, শেষের দিকে শুরুর খবর : মন

খারাপের ভোর।।







সায়ন্তন দত্ত



কখনো গভীর সমুদ্রের বুকে
একটা নৌকোর কথা ভেবেছো?
হাওয়া তার পাল ছিঁড়ে ফেলেছে।
ঢেউয়ের শক্তি ভেদ করেছে
তার কোমল শরীর।
দিশাহারা এক খড়কুটোর মত
সে ভেসে চলেছে
দিগন্ত হীন এক মৃত্যু সলিলে।
ভেবে নাও...
সেই নাও কেই আকড়ে মৃতপ্রায় এক
নাবিক..

ঠিক সেই মুহূর্তে ...
যেন পশ্চিমের আকাশ
আবার সেজে উঠল শেষবারের মত।
যখন শিল্পীর শ্রেষ্ঠ ক্যানভাসএ
আবার রঙের ছোঁয়া।
মৃত্যুদূতের মত মেঘের আঁধার
যখন কেটে গেলো..

তুমি এলে ...

সমস্ত কালোমেঘ ধুয়ে...
কোন গোপন পথের সন্ধান পেয়ে।
যেনো পৃথিবী স্বপ্নের এক ডালা সাজিয়ে..
মিশ্বসন্ধ্যা যেনো সাঁঝবাতি জ্বালিয়ে...
রুপোলি চাঁদ হয়ে
আকাশ সাজাচ্ছ তারাদের আলোয়।
কালপুরুষ শিকার সেরে বাড়ির পথে,
মোহাচ্ছন্ন মাদকতা সিক্ত আমি
ঠিক যেনো তোমারি সাথে।

আচ্ছা এ কি স্বপ্ন ??

তুমি যে আমার বড্ড কাছে। তোমার উষ্ণ নিশ্বাস অনুভূত হচ্ছে আমার বুকে। তোমার হৃদয়ের স্পন্দনে না জানি কত জাদু আছে। সুরভি ফুলও হার মানে তোমার সৌরভের কাছে। সমস্ত অভিমানী মেঘ যেনো ঝড়ে পড়ে বৃষ্টি হয়ে। শহরের উষ্ণতম দিনও খুঁজে পায় ম্বিপ্ধতা।

মনে করো

আবার ঝড় উঠছে।
তার দাপটে এলোমেলো হয়ে পড়ছে
আমাদের মন মনন।
চেতনাকে জয় করছে
আমাদেরই অবচেতন।

ফের দেখলাম তোমাকে

যেনো দু হাতের আড়ালে রক্ষা করছ অসহায় দীপশিখাকে। যেনো ভয়াবহ আঁধারের মাঝে জ্যালিয়ে রেখেছ প্রাণের দীপ্তি।

স্থপ ... ??

কবিতা কুড়িয়ে নিয়ে দিগন্তের দিকে হেঁটে যাচ্ছি। মগ্ন হয়ে পড়ছি তোমার ভাবনায়। বিশ্বাস-অবিশ্বাস – দুঃখ-সুখ ভুলে যখন দাঁডিয়ে জীবনের সীমানায়।

তখন... ফের দেখলাম তোমাকে...

হাত ছানি দিয়ে ডেকে শুধালাম ,
"কে তুমি রহস্যময়ী ? "
উত্তর এলো,
"আমি প্রেম, আমিই সত্ত্বা
আমি বিশ্বাস , আমিই স্বপ্ন..
আমি তোমার ...
আমি তোমার আমার স্বপ্ন..."







সৌবর্ণ আদক

সেদিন সন্ধেবেলায় বাড়ি ফেরার পথে, হঠাৎ দেখা তোমার সাথে স্টেশনে।

আচ্ছা!

দেখাগুলো কেন স্টেশনেই হয়

বলতে পারো?

অত ভিড়ের মাঝে হঠাৎ করে

কেমন যেনো দুটো চেনা চোখ দেখে থমকে গেলাম।

শুধু চেনা নয় , বড়্ড চেনা , ভীষণ চেনা।

জানো,

খুব জিজ্ঞেস করতে ইচ্ছে করলো,

"কেমন আছো তুমি ?"

কিন্তু পারিনি গো।

তোমার আর আমার বর্তমান দূরত্ব

মাত্র কয়েক হাত হলেও

মানসিক দূরত্ব এক আলোকবর্ষের।

বাহ্! আমার পছন্দের নীল শার্টিটা এখনও পরো?

আর এই গন্ধটা, এটা তো আমার সেই প্রিয় গন্ধ।

তোমার মুখে চোখে ,

বড্ড ক্লান্তির ছাপ।

অফিসে খুব চাপ বুঝি?

আচ্ছা, নতুন কাউকে পেয়েছো ?

সে তোমায় খুব আগলে রাখে বলো?

আমার মত বায়না করে ?

আমার মত বৃষ্টি কে ভালোবাসে ?

আমার মত গায়ে রোদ মাখে?

আমার মত সোঁদা মাটির গন্ধে সে পাগল হয়?

নাকি সে বড্ড আধুনিক?

অবশ্য আমি তো

ব্যাকডেটেড, সৃষ্টিছাড়া,

তুমিই বলেছিলে.....

আমি না হয় রয়ে গেলাম আমার মত।

তুমি এগিয়ে যাও

আধুনিকতার স্রোতে।

খুব ভালো আছো ... বলো ?

অবশ্য ভালো থাকবে বলেই তো

দূরে গেলে...

তোমায় অনেক চিঠি লিখেছিলাম.. জানো ?

কিন্তু পাঠাতে সাহস হয়নি।

কার্নিশের এক কোণে

সবার চোখের আড়ালে রাখা আছে।

আর কিছুক্ষণ পরেই

তোমার ট্রেন আসবে।

বরাবরের মত

আজও তুমি দূরে চলে যাবে।

আচ্ছা, আমার প্রিয় গান গুলো শোনো এখনও

সত্যি করে বলতো

বৃষ্টি পড়লে আমার কথা মনে পড়ে না?



অবশ্য তুমি তো সত্যি বলতেই জানো না।

একটু দাঁড়াবে ?
এক্ষুনি বোধহয় বৃষ্টি নামবে।
আকাশ টা কেমন থমথমে
যেনো একরাশ অভিমান বুকে নিয়ে
কালো মেঘের ভেলা ভাসিয়ে বেড়াচ্ছে ...

অবশেষে তোমার ট্রেনটাও এসে গেলো। ট্রেনের গতিবেগের সাথে সাথে মনটাও কেমন উতলা হয়ে উঠলো। আজ আবারও একছুটে তোমার বুকে মাথা রেখে বলতে ইচ্ছে করলো

তোর অপেক্ষায়

অর্ঘ্য প্রতিহার

খোলা জানালা বৃষ্টির ছাঁট আসে যায়, টুপ টাপ টিপ জলের ফোঁটা কথা কয়, গুর গুর করে মেঘের আওয়াজ বলে যায়, আজও আছি আমি তোর অপেক্ষায়।

ঝড়ো ঝড়ো হাওয়া মাটির গন্ধ আসে <mark>যা</mark>য়, কাগজের নৌকো আপন খেয়ালে চলেযায়, একাকী মন নীল দিগন্তে চায়, আজও আছি আমি তোর অপেক্ষায়।



PHOTOGRAPHY SECTION



ARGHYA PRATIHAR 2^{ND} YEAR



AYAN MAJUMDER 2ND YEAR



SOUMYA KANTI GHOSH 2ND YEAR





RIMPA CHAIL 1ST YEAR



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SOHAM DALAL 2^{ND} YEAR





ROUSHAN KUMAR 2ND YEAR





AKASH SARKAR 2ND YEAR







BISWAJIT SARKAR 2^{ND} YEAR







RITISH RANJAN 2ND YEAR







PALLAVI DEY 2ND YEAR







RAHUL SINGHA ROY 2ND YEAR







SAYANTAN DAS 2ND YEAR





ACHINTYA SHIB 2ND YEAR







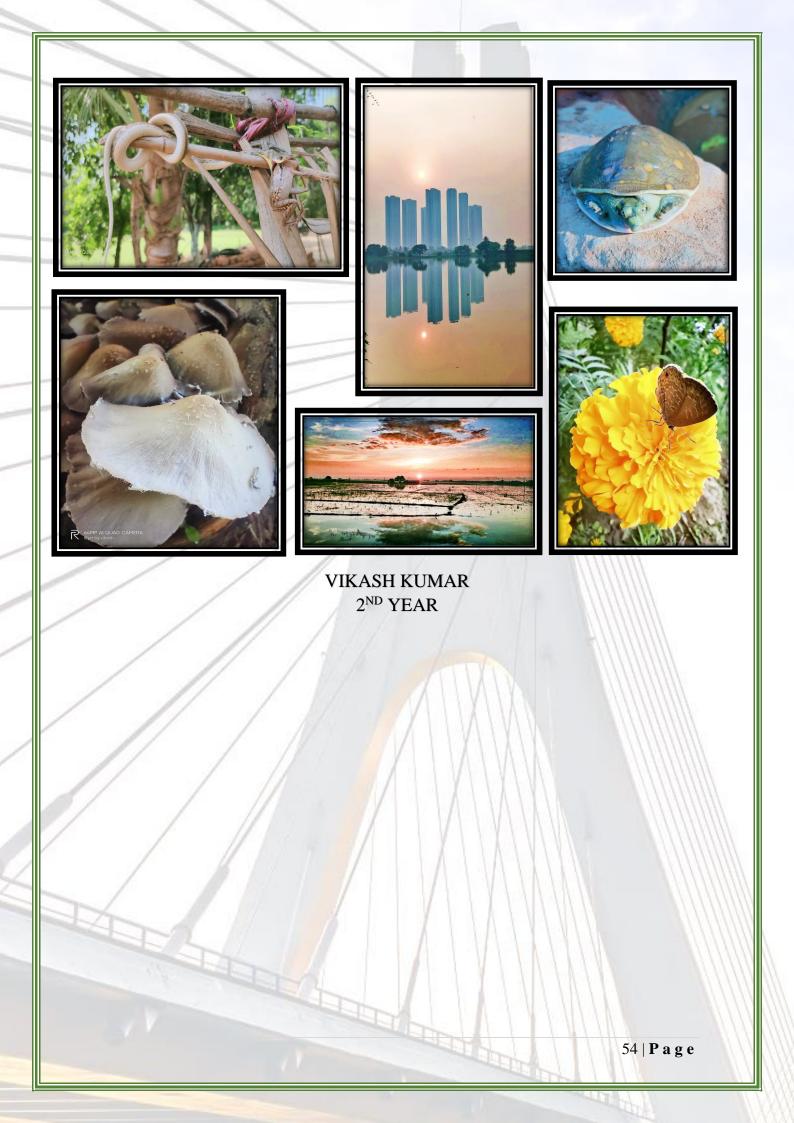








RIMPI SAHA 2ND YEAR



SUDOKU

| | | | 6 | 1 | | | | |
|----|---|---|---|---|---|---|----|---|
| 4 | | | | | 2 | | 1 | 6 |
| | 6 | 7 | | - | 9 | 8 | | |
| | | 9 | 2 | | / | 4 | | |
| | 4 | | | 1 | | 1 | 5 | |
| | | 2 | | | 4 | 1 | | |
| | / | 6 | 1 | 1 | / | 2 | 9 | |
| 7/ | 5 | | 9 | | | | | 4 |
| | | | | 3 | 6 | | M. | |

| I t | 8 £ | <i>L</i> 9 7 | 9 8 <i>L</i> | 3 7 | 5 6 I | † I 9 | ζ ς ε | 6 <i>L</i> 8 |
|--------|--------|--------------|--------------------|--------|-------------|-------------|-------------|--------------------|
| 6 7 | 9 S | I S | † [| 8 | ε | 8 | L | <i>S</i> |
| 8 | L | ħ | ς | 9 | 7 | 6 | I | 3 |
| ε | 7 | 8 | 6 | ς | t | L | 9 | Ţ |
| 9 | I | ς | 7 | L | 8 | 3 | 6 | Þ |
| L | Þ | 6 | ε | I | 9 | S | 8 | 7 |

-: NOLLITOS

X-SUDOKU

-SRISHTI SAHA

| 9 | | | 4 | 1 | 2 | | 8 | |
|---|---|---|---|---|---|---|---|---|
| 4 | | 2 | | 8 | 5 | | | |
| 5 | | | 6 | | | 7 | | 2 |
| | 9 | | 8 | | | | | 4 |
| | 2 | | | 5 | | | 1 | |
| 8 | | | | | 6 | | 3 | |
| 1 | | 8 | | | 3 | | | 6 |
| | | | 5 | 6 | | 3 | | 1 |
| | 6 | | 1 | 9 | 4 | | | 7 |

N.B. – Rules same as Normal Sudoku. But the twist is you have fill in the integers from 1-9 in the diagonals as well.

| L | S | 8 | Þ | 6 | τ | 3 | 9 | 7 | |
|---|---------------|---|---|---|---|---|---|---|--|
| τ | 7 | ε | 8 | 9 | S | 6 | t | L | |
| 9 | 6 | Þ | 3 | L | 7 | 8 | S | τ | |
| S | ε | 7 | 9 | Þ | 6 | L | τ | 8 | |
| 8 | τ | 6 | L | S | ε | Þ | 7 | 9 | |
| Þ | L | 9 | τ | 7 | 8 | S | 6 | 3 | |
| 7 | b | L | 6 | 3 | 9 | τ | 8 | S | |
| 6 | 9 | τ | S | 8 | L | 7 | 3 | Þ | |
| 3 | 8 | S | 7 | τ | Þ | 9 | L | 6 | |
| | 1 1 1 1 1 D W | | | | | | | | |

SOLUTION :-

PLACEMENT DETAILS FOR CIVIL ENGINEERING STUDENTS ACADEMIC BATCH- 2017-2021



RISHABH RAJ GUPTA

PLACED IN COGNIZANT
(IT/SOFTWARE)

SOUVIK SEN

PLACED IN PRISM JOHNSON
LIMITED

(CORE CIVIL ENGINEERING)





SOURAY SAHA

PLACED IN TCS AND DXC TECHNOLOGIES
(IT/SOFTWARE)

SOUMAK KUNDU

PLACED IN GODREJ AND BOYCE (CORE CIVIL ENGINEERING)





KESHAV KUMAR

PLACED IN COGNIZANT
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ARUNAVA GHOSH

PLACED IN TCS DIGITAL AND DXC
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ABHIRUP ROY

PLACED IN K12 TECHNO SERVICES
PVT. LTD.
(IT/SOFTWARE)





DEBJIT PODDER

PLACED IN BYJU'S (EDUCATION BASED)



ARGHADEEP BANERJEE

BUSINESS DEVELOPMENT TRAINEE AT BYJU'S - THE LEARNING APP.

AFTER COMPLETION OF 6-SWEEK TRAINING JOB ROLE WILL BE BUSINESS DEVELOPMENT ASSOCIATE.

& MANY MORE SUCCESSFUL STUDENTS BEING PLACED IN CORE CIVIL ENGINEERING AND IT/SOFTWARE COMPANIES



