DEPARTMENT OF INFORMATION TECHNOLOGY

July 2022 - June 2023

UNLOCKING MINDS

P.I.E.T.

IT DEPARTMENT'S

PROGRAM EDUCATIONAL OBJECTIVES

PEO 1: The graduates will have core competencies in IT fundamentals necessary to solve hardware, software and integrated engineering problems revlent to IT industries.

PEO 2: The graduates will be proficiently engaged in devlopment of IT products and services to cater to the industry needs or perform as innovators or entrepreneurs.

PEO 3: Graduates will successfully pursue higher education or carrer paths in research.

PEO 4: The graduates will the professionally function with social awareness, responsibility and ethical norms.

PROGRAM SPECIFIC OBJECTIVES

PSO 1: Design, develop and test software applications and project management solutions of real world problems.

PSO 2: Be competent in emerging areas of Information Technology.

IT DEPARTMENT'S

VISION

- To create globally competent professionals by imparting quality technical education, research aptitude and analytical skills to meet challenges in IT industry, thus contribute to the welfare of society.

MISSION

M1: To nurture students with knowledge and programming skills of different IT domains necessary for development and testing of quality software solutions.

M2: To provide an integrated, responsive and comprehensive academic ecosystem with enhanced teaching and learning to promote intellect and excellence in research.

M3: To mentor students with applied problem solving and critical thinking leading to innovative and sustainable solutions to societal problems.

M4: To collaborate and exchange expertise with industry, research organizations and academic institutions.

MESSAGE FROM THE DIRECTOR

Prof.(Dr.)Shakti Kumar (Director)

- B.Tech(CSE),
- M.Tech(CSE),
- Ph.D(CSE) in Cyber

On behalf of the faculty members, staff, and students of the Department of Information Technology of PIET, I welcome you all to the creative world of IT. I believe the IT discipline has been widely recognized as an essential source and technique for the advancements in all spheres of human Endeavour now and in future. In PIET all the students gets the opportunity to excel in their academic activities. This is the department where students publish papers in international journals, at the same time a student wishing to achieve some recognition in extra-curricular or co- curricular activities will also find the atmosphere helpful. Among the reasons why our graduates are such favorites of industry is the consistent hands-on experience-based approach of our curriculum, our excellent laboratories, the long-time connections between Department and the
industry. Whether you are a student, parent, prospective faculty member or a curious member of the public, I invite you to read our web pages and find a way to become part of the PIET family. We hope you will also have the opportunity to visit us in our state-of-the-art facilities.

Prof.(Dr.)Shakti kumar
(Director)

MESSAGE FROM THE HEAD OF DEPARTMENT

DR. MUKESH CHAWLA (HOD IT)

- B.Tech(CSE),
- M.Tech(CSE),
- Ph.D(CSE) in CyberSecurity

It gives me great pleasure to give my best wishes to "Unlocking Minds", an E-magazine from the Department of Information technology of PIET. A department magazine is an eloquent expression of the progress and outstanding achievements that a department has to its credit. The students and faculty members of the department are always proactive in taking initiatives in technical, cultural, and social events. I hope that this E-magazine will serve the purpose of reflecting all activities of the department and it will inspire others to do their best. My felicitation and congratulations to the editorial board for their meticulous work which is reflected in the pages of the magazine.

Dr. Mukesh Chawla
HOD (IT)

FACULTY ADVISORY BOARD

Ms. MITU SEHGAL

- B.Tech (IT)
- M.Tech (CSE)
- Ph.D Pursuing (CSE)

The magazine named as "Unlocking Minds" is a flagship magazine of IT department completely designed and edited by the students of IT. This provides a platform for the students to showcase their literary and writing skills for the articles. The students have put in tremendous efforts. The magazine strives to inform, inspire and educate a diverse leadership on developments of Information Technology field. I am proud to see that the students of our department have put in appreciable effort into creating this magazine and I am extremely proud to be part of this excellent team. I applaud the contributors for their stimulated thoughts and varied hues in articles contributed by them.

EDITORIAL TEAM

Faculty Editor

MS. MITU SEHGAL

Student Editors

Suresh kumar (Chief Editor)

Suraj (Designer)

Shrijal (Designer)

Nishant (Designer)

B.Tech.
Information Technology

The Department of Information Technology caters to the emerging requirements of the students who wish to script softwares that render a great assistance to simplify administrative and technical nature of human efforts and can accomplish the astonishing feats in the tech-savvy world. The real strength of the department is the team of active and devoted faculty members who are dedicated to educate and guide students with rapidly changing technological advances. Department imbibe industry wide modern and well operational laboratories with latest hardware and softwares, high speed internet connectivity.

The department has cultivated a vibrant environment conducive to rigorous training, which is exemplary for students to imbibe. Encouragement and guidance is offered to the students for participating in sports and various extra curricular activities to hone and strengthen their non-technical skills. Students are counseled by the faculty on one-to-one basis.

The Department is running two Programs i.e.

- Bachelor of Technology in Information Technology
- Bachelor of Technology (Honors)
  Major Degree: Information Technology
  Minor Specialization: Block Chain, IOT, AR/VR, AI & ML, AI & Data Science, Cyber Security

ARE YOU READY TO EXPLORE THE **CAREER OPPORTUNITIES** OF THE **FUTURE**?

The key features of the B.Tech (Honors) program are:

- The student can identify one area of minor specialization (mentioned above) along with the major specialization in Information Technology.
- In contrast to a traditional B.Tech program which is a 4 Year (8 Semester program) offering 160 course credits, the B.Tech (Honors) program is a 4 Year (8 Semester program) offering 180 course credits.
- The additional 20 Credits to be completed as part of the B.Tech (Honors) program is to be evenly spaced out between the 3rd and 8th semester.
- To successfully complete the B.Tech (Honors) program the student shall need to clear the examinations for the additional 20 Credits. The examinations shall be conducted as per the AICTE as well as University guidelines.

Inside Unlocking Minds

4th SEMESTER TOPPERS

1ST Akash (8.20 SGPA)

2nd Tiya (8.13 SGPA)

3nd Prateek (7.80 SGPA)

6th SEMESTER TOPPERS

1ST Md Shah Alam
(8.20 SGPA)

2nd Aarzoo
(8.57 SGPA)

3nd Nikita
(8.5 SGPA)

8th SEMESTER TOPPERS

1ST Shubham (79.4 %)

2nd Shreya (77.6 %)

3nd Aman (77.6 %)

TEAM IT

Dr. MUKESH KUMAR
Ph.D., M.Tech.,B.Tech.
(Professor & HOD)

Dr. NEERAJ GUPTA
Ph.D., M.Tech., B.Tech.,
(Professor)

Dr. NITISHA AGGARWAL
Ph.D., M.Tech, B.Tech.
(Assistant Professor)

Dr. RATTAN DEEP ANEJA
Ph.D., M.Tech, B.E.
(Assistant Professor)

Mr. SORABH GUPTA
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Ph.D.*, M.Tech, B.E.
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Ms. URVINDER KAUR
M.Tech, B.Tech
(Assistant Professor)

Ms. RASHMI MAKKAR
M.Tech, B.Tech
(Assistant Professor)

Mr. GAGAN DUA
M.Tech, B.Tech
(Assistant Professor)

TECHNO GEARHEADS CLUB

The Techno GearHeads club aims to promote creativity and to increase the technical know-how and productivity of all the students of IT Department. The Techno GearHeads Club is the ultimate one stop shop for all things under the sun. From Conducting Mock Interviews, Aptitude test series and from coding problems to solving mind boggling environmental issues, everything here is awesome!. This club envisages conducive platform to explore student's latent talents and also enables them to come out with their innovative ideas.

The students are encouraged to become the member of Techno GearHeads Club to help broaden their skills and horizons. This club helps students to explore and showcase their Hidden talents along with providing them an opportunity to brush up their persona. The management skills and spirit of organization is inculcated in students by providing them a platform for hosting their technical talents.

The club focuses on providing an opportunity to students to implement what they learn in their respective class rooms.

Activities under Techno GearHeads Club

- Conducting technical events such as Symposiums, Quizzes
- Aptitude, General knowledge & Reasoning Question practice papers for skill enhancement.
- Personality development activities like Extempore, Group Discussion, Presentation Skills, Resume Building Session are also conducted
- Organizing Guest Lectures
- Industry Visits to provide students an insight regarding internal working of companies.

Techno GearHeads

Information Technology Club

7 WAYS TECHNOLOGY IS IMPACTING MODERN EDUCATION

Technology in the classroom can be so much more and so much better than the stereotypical cell phone going off in the middle of class. Technology can actually be a major tool, both in terms of pedagogical resources and in terms of connecting with the younger generations. But how does this work? The top seven important concepts to understand when examining the use of technology for educational or instructional purposes include:

1) Active engagement with the learning material. Technology is interactive, and students learn by doing, researching, and receiving feedback. This helps students become passionate about what they are learning. For example, they may study geography using interactive software such as Google Maps or Google Earth, instead of looking at a picture.

2) Use of real-world issues. This model encourages the use of real-world problems in the classroom. By using the Internet, students can research real issues happening at that moment that are related to the classroom curriculum. This helps students understand that the lesson being taught refers to real problems and real people.

3) Simulation and modeling. Simulation software helps to bring to the classroom real activities that would be impossible to see without technology. By using specific simulation tools, students can see planetary movements, how a tornado develops, or how dinosaurs lived. Modeling software offers similar features. Instead of the static models used in previous decades, these tools allow students to see the dynamic characteristics of models.

4) Discussion and debate boards and forums. By using the Internet or software tools, students can create online groups, Web pages, and virtual communities that connect them in real time with students and teachers anywhere around the world. They can receive feedback from their teachers and share questions and concerns about their lessons. By listening to and reading about others' opinions and feedback, students refine their thinking, reaching higher levels of comprehension and deeper understanding. Online communities also present the opportunity for students to interact with others around the world.

5) Working groups. Technology-focused education doesn't involve a class of students learning by themselves, staring at a book. Working groups foster group activities, discussions, and debates, and they encourage the establishment of democratic group dynamics.

6) Coaching. Teachers play more of a coaching role these days. They aren't just instructors who deliver a lesson. Rather, they support and guide student activities as coaches do. They provide feedback and coaching to the class so that students receive the appropriate information and academic training. Teachers guide students in developing skills in problem solving, research, and decision-making.

7) Formative assessment. Teachers ensure that students are learning not only the concepts, but also how to use the technology resources they have. Technology-focused activities mostly require critical-thinking and problem-solving skills. Teachers work as facilitators, providing constant feedback, enabling students to achieve deeper levels of understanding.

Teaching is all about introducing students to a whole world of concepts that they didn't know about yet. Technology in the classroom is like a foray into modern invention – and you get to be the expedition leader. Rather than viewing digital devices and Internet spaces as a threat to your duties, view them as unexplored areas of growth for both you and the young minds trusting you to show them what's out there.

BY : SURESH KUMAR
(2821635) 2nd yr.

Quantum Computing

Quantum computing is a new age concept in which Quantum computers harness the unique behaviourof quantum physics
—such as superposition, entanglement and quantum interference—and apply it to computing.
This introduces new concepts to traditional programming methods.
Quantum computer are the machines built on the principles of quantum mechanics, that takes a new approach to processing information, thus making them super powerful.
Here the quantum in "quantum computing" refers to the quantum mechanics that the system uses to calculate outputs.
Let's use some physics in physics, a quantum is the smallest possible discrete unit of any physical property. It usually refers to properties of atomic or subatomic particles, such as electrons, neutrinos and photons.
Quantum computers use Qubits to process the information.A qubit is the basic unit of information in quantum computing. Qubits play a similar role in quantum computing as bits play in classical computing,
but they behave very differently. Classical bits are binary and can hold only a position of 0 or 1, but qubits can hold a superposition of all possible states.

As to How does quantum computing work?

A quantum computer has three primary parts:

- An area that houses the qubits
- A method for transferring signals to the qubits
- A classical computer to run a program and send instructions

For some methods of qubit storage, the unit that houses the qubits is kept at a temperature just above absolute zero to maximise their coherence and reduce interference.
Other types of qubit housing use a vacuum chamber to help minimise vibrations and stabilise the qubits.
Signals can be sent to the qubits using a variety of methods, including microwaves, laser and voltage.
There are many real life uses of quantum computing:

Quantum simulation

Quantum computers work exceptionally well for modelling other quantum systems because they use quantum phenomena in their computation. This means that they can handle the complexity and ambiguity of systems that would overload classical computers.
Examples of quantum systems that we can model include photosynthesis, superconductivity and complex molecular formations.

Cryptography

Classical cryptography—such as the Rivest–Shamir–Adleman (RSA) algorithm that is widely used to secure data transmission—relies on the intractability of problems such as integer factorisation or discrete logarithms.

Many of these problems can be solved more efficiently using quantum computers.

Optimisation

Optimisation is the process of finding the best solution to a problem given its desired outcome and constraints.

In science and industry, critical decisions are made based on factors such as cost, quality and production time—all of which can be optimised. By running quantum-inspired optimisation algorithms on classical computers, we can find solutions that were previously impossible. This helps us find better ways to manage complex systems such as traffic flows, airplane gate assignments, package deliveries and energy storage.

Quantum machine learning

Machine learning on classical computers is revolutionising the world of science and business. However, training machine learning models comes with a high computational cost and that has hindered the scope and development of the field.

To speed up progress in this area, we are exploring ways to devise and implement quantum software that enables faster machine learning.

Search

A quantum algorithm developed in 1996 dramatically sped up the solution to unstructured data searches, running the search in fewer steps than any classical algorithm could.

**One important point that we should keep in mind is that Quantum computers are not the replacement of Classical computers.

There are few problems that Quantum computer can solve with tremendous speed compared to a Classical computer. One of such problem is the factorization of a large number i.e.

if m=p*q, such that p and q are prime, then given the value of m, find the value of p and q.

Another type of problem is where classical computers are unable to give accurate output such as finding the bond length on chemical compounds such as Calcium monofluoride (CaF) and Sodium diatomic(Na2).

The potential of Quantum computer is tremendous and we can achieve a lot that was thought nearly impossible with classical computers.

We can synthesise new medicines, can develop new catalyst, accelerate the development of artificial intelligence and a lot more

By: Anubhav (2820528)

3rd year

LI-FI

Li- Fi

Wi-Fi runs our life. But no matter where we are in the world, we've probably experienced internet connectivity problems at one point or another. This can be solved by Li-Fi, Li-Fi is a type of wireless connection that can be up to 100 times faster than Wi-Fi. Imagine a world where we can connect to high-speed internet by just flicking on your light switch.

LI-Fi is wireless communication technology which utilizes light to transmit data and position between devices. The term was first introduced Harald Haas in 2011.

In simpler terms, Li-Fi is considered to be a light-based Wi-Fi that uses light instead of radio waves to transmit information. Li-Fi is a Visible Light Communications system transmitting wireless internet communications at very high speeds. The technology makes a LED light bulb emit pulses of light that are undetectable to the human eye and within those emitted pulses, data can travel to and from receivers. Then, the receivers collect information and interpret the transmitted data. Li-Fi technology only needs a light source with a chip to transmit an internet signal through light waves. Li-Fi transmission speeds can go over 100 Gbps, 14 times faster than WiGig, also known as the world's fastest Wi-Fi.

Li-Fi is up to 10 times cheaper than wi-fi, requires fewer components and uses less energy. It transmits its signal without interruptions, making communication more stable than with wi-fi. light does not pass through walls like radio waves do and it is more accessible.

By: Tiya Rajpal
(2820516)
3rd year

ARTIFICIAL INTELLIGENCE:

What is Artificial intelligence:

Artificial intelligence (AI) is the ability of a computer or a robot controlled by a computer to do tasks that are usually done by humans because they require human intelligence and discernment.
Although there are no AIs that can perform the wide variety of tasks an ordinary human can do, some AIs can match humans in specific tasks.

What is Intelligence:

All but the simplest human behaviour is ascribed to intelligence, while even the most complicated insect behaviour is never taken as an indication of intelligence.
Research in AI has focused chiefly on the following components of intelligence: learning,reasoning, problem solving, perception, and using language.

Learning:

There are a number of different forms of learning as applied to artificial intelligence. The simplest is learning by trial and error.
For example:
A simple computer program for solving mate-in-one chess problems might try moves at random until mate is found. The program might then store the solution with the position so that the next time the computer encountered the same position it would recall the solution.This simple memorizing of individual items and procedures—known as rote learning—is relatively easy to implement on a computer.

Reasoning:

To reason is to draw inferences appropriate to the situation. Inferences are classified as either deductive or inductive.
The most significant difference between these forms of reasoning is that in the deductive case the truth of the premises guarantees the truth of the conclusion, whereas in the inductive case the truth of the premise lends support to the conclusion without giving absolute assurance.

Problem-solving:

Problem-solving methods divide into special purpose and general purpose. A special-purpose method is tailor-made for a particular problem and often exploits very specific features of the situation in which the problem is embedded.In contrast, a general-purpose method is applicable to a wide variety of problems.

Perception:

In perception the environment is scanned by means of various sensory organs, real or artificial, and the scene is decomposed into separate objects in various spatial relationships. At present, artificial perception is sufficiently advanced to enable optical sensors to identify individuals, autonomous vehicles to drive at moderate speeds on the open road, and robots to roam through buildings collecting empty soda cans.
One of the earliest systems to integrate perception and action was FREDDY, a stationary robot with a moving television eye and a pincer hand, constructed at the University of Edinburgh, Scotland, during the period 1966–73 under the direction of Donald Michie.

Methods and goals in AI:

Symbolic vs. connectionist approaches

AI research follows two distinct, and to some extent competing, methods, the symbolic (or "top-down") approach, and the connectionist (or "bottom-up") approach. The top-down approach seeks to replicate intelligence by analyzing cognition independent of the biological structure of the brain, in terms of the processing of symbols—whence the symbolic label. The bottom-up approach, on the other hand, involves creating artificial neural networks in imitation of the brain's structure

By:-PRATEEK ROHATGI(2820512) 3rd yr.

Think of it as the internet brought to life, or at least rendered in 3D. Zuckerberg has described it as a "virtual environment" you can go inside of — instead of just looking at on a screen. Essentially, it's a world of endless, interconnected virtual communities where people can meet, work and play, using virtual reality headsets, augmented reality glasses, smartphone apps or other devices.

WHAT WILL I BE ABLE TO DO IN THE METAVERSE?

THINGS LIKE GO TO A VIRTUAL CONCERT, TAKE A TRIP ONLINE, AND BUY AND TRY ON DIGITAL CLOTHING.

THE METAVERSE ALSO COULD BE A GAME-CHANGER FOR THE WORK-FROM-HOME SHIFT AMID THE CORONAVIRUS PANDEMIC. INSTEAD OF SEEING CO-WORKERS ON A VIDEO CALL GRID, EMPLOYEES COULD SEE THEM VIRTUALLY.

FACEBOOK HAS LAUNCHED MEETING SOFTWARE FOR COMPANIES, CALLED HORIZON WORKROOMS, TO USE WITH ITS OCULUS VR HEADSETS, THOUGH EARLY REVIEWS HAVE NOT BEEN GREAT. THE HEADSETS COST $300 OR MORE, PUTTING THE METAVERSE'S MOST CUTTING-EDGE EXPERIENCES OUT OF REACH FOR MANY.

FOR THOSE WHO CAN AFFORD IT, USERS WOULD BE ABLE, THROUGH THEIR AVATARS, TO FLIT BETWEEN VIRTUAL WORLDS CREATED BY DIFFERENT COMPANIES.

"A LOT OF THE METAVERSE EXPERIENCE IS GOING TO BE AROUND BEING ABLE TO TELEPORT FROM ONE EXPERIENCE TO ANOTHER," ZUCKERBERG SAYS.

TECH COMPANIES STILL HAVE TO FIGURE OUT HOW TO CONNECT THEIR ONLINE PLATFORMS TO EACH OTHER. MAKING IT WORK WILL REQUIRE COMPETING TECHNOLOGY PLATFORMS TO AGREE ON A SET OF STANDARDS, SO THERE AREN'T "PEOPLE IN THE FACEBOOK METAVERSE AND OTHER PEOPLE IN THE MICROSOFT METAVERSE,"


DOES THE METAVERSE NEED AR/VR?

The idea of the metaverse is closely related to technologies such as artificial intelligence (AI), augmented reality (AR) and virtual reality (VR). Augmented reality technology allows you to embed virtual objects into the real physical world. VR involves the use of 3D computer modeling, one of the most interesting types of graphic designs, to immerse yourself in a 3D virtual environment. While the metaverse doesn't necessarily require you to wear a VR headset or other accessories, experts are confident that virtual reality technology will become an integral component of the new ecosystem.

For example, the Facebook metaverse is likely to be available through virtual reality headsets, smart glasses with augmented reality, and in limited ways in desktop and mobile applications.

The company has already announced work on a codenamed "Project Cambria" which will be a premium virtual and augmented reality headset. Meta said the device will support mixed reality and include new sensors that allow the virtual avatar to maintain eye contact and reflect human facial expressions. Improved technology will allow avatars to use the body language and better convey human emotions producing a feeling of real communication in virtual space.


THE FUTURE OF
THE
METAVERSE

The idea of the metaverse definitely looks exciting, but right now it's hard to tell what the future holds for it. Probably, the development of 5G and the growing interest in VR/AR technologies can really establish favorable conditions for creating something like this. But the creators of the metaverse will have to face a lot of challenges.

One of them is the interoperability of digital items that play a key role in the formation of the metaverse. When purchasing a digital item in the metaverse, you need to secure your rights for it and be able to use it throughout the virtual ecosystem, and not just in a separate game or on a separate platform. This also requires standardizing a currency which will allow the metaverse economy to develop.

Another requirement of the metaverse is real time data synchronization, which at scale can be very complex and costly. This is a new challenge for companies providing data synchronization services, since the metaverse will have to withstand large volumes of load and broadcast quality data while meeting the specific security needs of each user. Also, the threshold for entering the metaverse is raised by poor Internet connection in many regions and the high cost of hardware that allows you to unleash the full potential of this technology.

Cheryl

4th year

2819355

How to manage time and be productive?

"Sometimes later becomes never, so just do it."
We all would felt overwhelmed when we are bundled up with work which we missed to do a day before or a week before. We wouldn't have finished a work in time and procrastinated it. And on some day we might have had a situation to finish all those in the day. Now, how to avoid these kinds of situations. Let's see in this article.

Plan it

It is always easy to follow the things which have been written, so schedule your days by making a plan. Schedule tasks to do at a particular time. In that way you won't miss tasks to be done at time. You won't miss it to finish it before deadline.

Prioritize it

	Urgent	non-urgent
Important	Do it now	Schedule
Not Important	hire or ask someone else to do it Don't do it	Don't do it delete it from your schedule

Now this table referenced from Mento Learn, a creative education platform says it all clearly. Plan your tasks based on their priority. Know the importance and urgency of the tasks that has to be finished and act according to it.

Say No

Now this is an important way to avoid running out of time. At times you would have asked by your family members of friends to do a task for them. You would hesitate to say no even thoug you have other important tasks in hand because you think they might get offended. But here is the important thing. If you are asked by someone to do so, just think if can handle your things and finish them in time if their task is also added to your schedule. If you feel no say them no. if you have persons who don't understand the importance of your tasks, don't change your schedule, change your friends. A person, who cannot help you, cannot be your friend.

Know the deadlines

Every task has a deadline. As I earlier said, do the most important and urgent task first. Know your deadlines. Nothing would benefit you if you finish a task after a deadline, so be conscious of the deadlines and finish them in time.

Be imperfect

"Something is better than nothing"

Sometimes you would have procrastinsted things just because you can do that particular thing perfect in future. Now see, there is nothing called perfection. Just do the taks when you have time based on their priority. It is always better to do something imperfectly instead of doing nothing. It is worse to procrastinate something, because you might never get time to do it.

Enjoy.

Also have time to sit back and relax. Have time to enjoy. Never feel like you are running out of time. Do the tasks to be done for work in work time. Don't use your leisure time to finish those. I am not saying you should never use your leisure time to do things but you need rest too. You cannot be productive unless you have proper rest. Now rest does not mean only sleep. It means being relaxed for some time, doing things you like for some time. Do them without fail in your leisure time.

If you have proper scheduling and prioritizing, you will never run out for finishing tasks and you will have leaisure time to do the things you like. Always remember, it is better to do a task imperfectly instead of procrastinating it. Enjoy.

Aryan kumar
(2821642)
2nd year

The Girl on the Bus

He slowly picked up his phone from the side table. His eyes widened. He jumped out of bed. It was 9 in the morning, one hour later than his usual time. The alarm might have gone off, or he didn't set it up the last night. Aarnik, a college student, was living alone in a small apartment as paying guest. He rushed to complete his morning routine. He slid in his only cleaned clothes and ran towards a nearby bus stand. His usual bus was already left the bus stand half an hour ago. On inquiring, he got to know about another bus which was about to arrive in ten minutes. He waited.

When the bus arrived, he was the first one to board the bus. In the process, he lost his balance and fell on the floor. Everyone looked at him, some laughing, some throwing concerned looks. People around him picked him up. Though the bus had less crowd, but they were enough to make him feel embrassed. He cleaned himself up. He was cursing the person behind him and the day. Thinking of the face to which he woke up, he walked towards the middle of the bus. He disgusted remebering that it was his face, he looked at after waking up.

He took out his phone and earphones and put on some good music to lighten his mood. He stopped when he saw her.

She had a sculpted figure which was twine-thin. Her waist was tapered and she had a burnished complexion. A pair of arched eyebrows looked down on sweeping eyelashes. Her delicate ears framed a button nose. It was a pleasure to see her flowing, moon shadow-black hair. She had charm of the sun and calmness of the moon. He looked away before she could notice him looking at her. He wished that the girl had not seen him falling.

Diving into the thoughts of her, he couldn't realise that he came hundred meters ahead of his destination. He rushed to the driver to stop the bus. The driver was annoyed but he pressed the brake. Aarnik got down off the bus. He was not irritated now, this hundred meters didn't bother him. He was differently energetic. He walked to the college, humming a love song. He was in love, love at first sight.

Later that night the sleep had left his eyes. He walked to the window and stared at the moon. A reflection of her again took over her mind. He took a deep breath. This is disastrous, I can't loose my sleep over a girl who can anywhere and not going to meet me again - he thought. He decided to forget her and to go on with the life he already have. With the thought, he went to the bed again.

The sun was waking up in the sky, but he was already ready to leave. He got up even before the alarm goes off and today he was on time. When he reached the bus stand, the bus was yet to arrive. And in no time, the image of the girl flashed in front of his eyes. The bus had arrived the stand. Aarnik paused at the entrance of it, everyone started pushing him, he looked back and got off the bus. He missed the bus intetionally. Let's try the luck again- he said to himself.

An another bus was fifty minutes after. It was supposed to be the same bus with the girl. He waited for his moment. The bus arrived on time. He hopped on the bus in excitement to get the glimpse of the girl. He was astonished. She was there, sitting on the same seat.

One fine day, he woke up early from the sleepless night. The whole night, he spent his time practising what he had to talk to the girl. He dressed up nicely as if he was going on a date followed by brushing his teeth thrice. He reached the bus stand thirty minutes advance to the bus timing.
The bus arrived. Filled with anxiety, he boarded the bus. His eyes were set on the girl. Adding to his happines, the seat beside her was empty. He took the seat in no time before any one could even think.
His heart was racing, he took a deep breath. He wished himself a good luck and greeted the girl.

"Hey, good morning."
The girl looked back at him. He was smiling the brightest. Her face went white like if she had seen a ghost. Stress took over Aarnik, he thought he was going to get a slap. But it was something else. The girl was frightened.
"I am sorry, I didn't mean to scare you. I am getting up from here, don't worry."
"Wait.," Her voice was trembling.
Aarnik stayed seated.
"You were not supposed to able to see me. How can you?"

By- Shrijal (2821646)
2nd year

RIDDLES

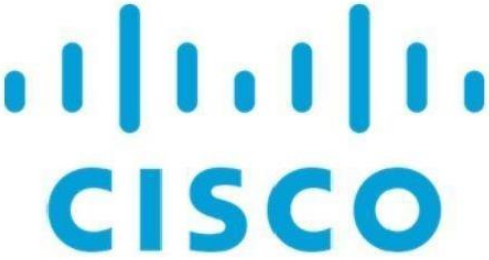
1. WE KILL, AND WE GIVE LIFE. WE ARE EITHER POISON OR FRUIT. YOU CHOOSE. WHAT ARE WE?
2. THE MORE YOU TAKE OUT OF IT, THE BIGGER IT BECOMES. WHAT IS IT?
3. I EXIST ONLY WHEN THERE IS LIGHT, BUT DIRECT LIGHT KILL ME. WHAT AM I?
4. EVERY EVENING I GET MY ASSIGNMENT, AND I ALWAYS FULFILL IT. BUT EVERY TIME I DO, I GET SCOLDED. WHAT AM I?
5. IT ONLY INCREASES AND NEVER DECREASES. WHAT IS IT?

ANSWERS :-

1. THE NUMBER OF TRIANGLES IN THE GIVEN FIGURE IS '24'
2. WORDS
3. A PIT
4. A SHADOW
5. AN ALARM
6. OUR AGE

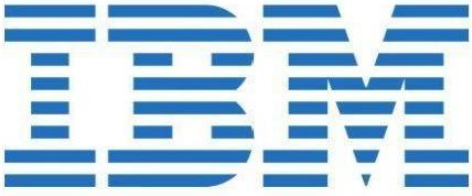
Mayank
2819361
4rd year

Logos & their Hidden Meanings



The lines represent the Golden Gate Bridge of San Francisco which was a source of inspiration for its founders as they drove down into the city to register the company.

The Ubuntu logo depicts an overhead shot of three people joined together, holding hands and looking up towards the sky. All in all, a rather clever and fitting logo/name combination, as the word Ubuntu means "Humanity".



The white lines passing through give the appearance of the 'equal to' sign in the lower right corner, representing equality.

Amazon is a powerhouse when it comes to online shopping, and their logo reflects that. The yellow arrow in their logo starts at the letter 'a' and ends at the letter 'z', implying that they sell everything from a to z. The arrow also represents a smile, with the arrowhead being a stylized dimple or smile line. The smile indicates the happiness people feel when they shop with Amazon.

SUN stands for Stanford University Network. The logo of this leading software manufacturer was created by professor Vaughan Pratt from Stanford University where the diamond icon actually says Sun in every direction.

By-PRATEEK (2820512) 3rd year

TECH CONNEXIONS

1. 

2. 

3. 

4. 

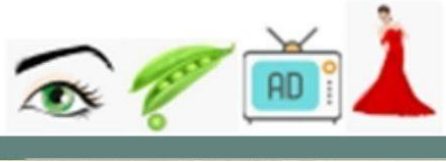
5. 

6. 

7. 

8. 

9. 

10. 

ANSWERS

1. BINARY SEARCH TREE

2. CRYPTOGRAPHY

3. NETWORKING

4. KEYBOARD SHORTCUT

5. POWERPOINT PRESENTATION

6. CONCEALED MEMORY

7. SERVER SIDE SCRIPTING

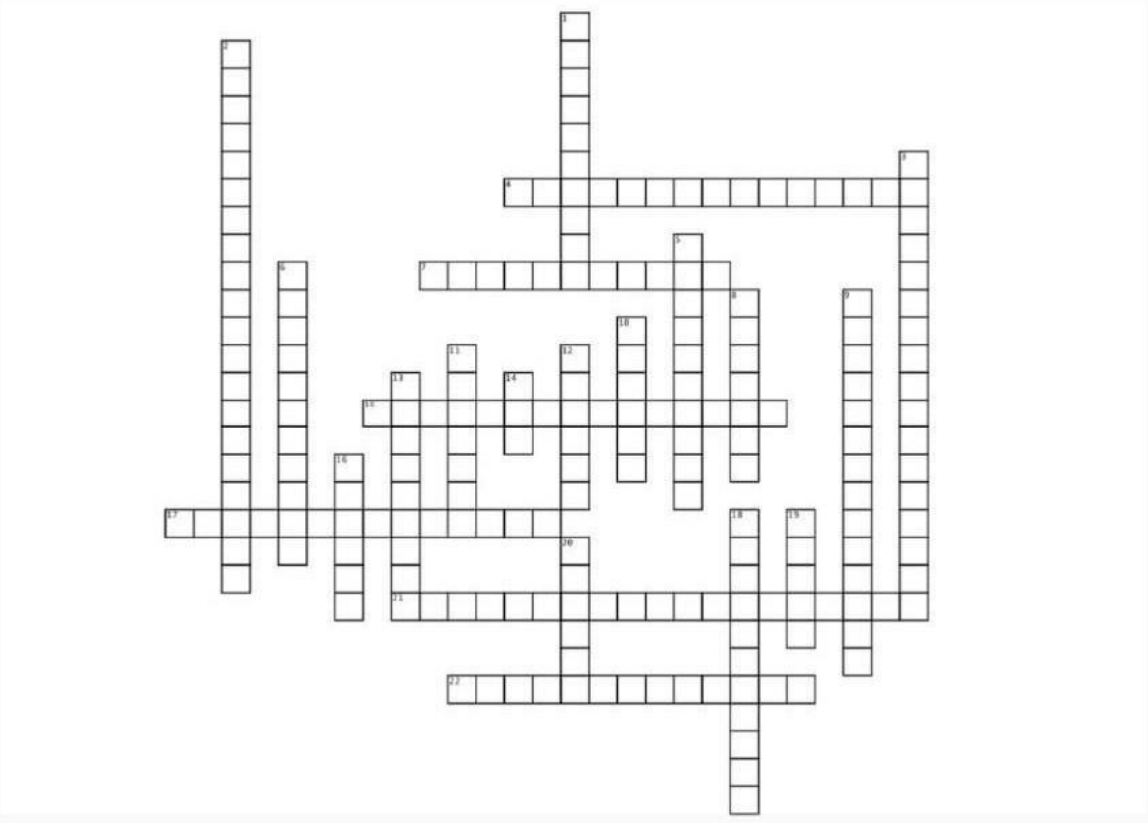
8. WORD DOCUMENT

9. FIBER OPTIC CABLE

10. IP ADDRESS

VISHAL TAYAGI
(2821635) 2nd year

Python Crossword



4. Represented all in zeros and ones

7. when your program has good syntax but there is a mistake in the order of the statements

15. Stores programs and data and retains its information even when the power is turned off.

17. An instruction that causes the Python interpreter to display a value on the screen

21. Perform statements one after another in the order they are encountered in the script.

22. An error in a program that makes it do something other than what the programmer intended

1. A program in a high-level language

2. Check for certain conditions and then execute or skip a sequence of statements

3. Perform some set of statements repeatedly, usually with some variation

5. A person who writes computer programs

6. A property of a program that can run on more than one kind of computer

8. Sequence of Python states that have been crafted to do something

9. The process of formulating a problem, finding a solution, and expressing the solution

message and pauses for the user to type some input to the program

11. A set of instructions that specifies a computation

12. Text editor to write instructions into a file

13. The meaning of a program

14. Personal Digital Assistant

16. Display the results of the program on a screen or store them in a file

18. Reads the source code of the program as written by programmers

19. Get data from the "outside world".

20. Programming Language

Nikhil yadav
(2821641)
2nd year

Jokes

• A young computer science student is on the phone with his father... His father says: "so how have your classes been going?" The son replies: "not bad. I did really well on my test on hexadecimal today! It was only worth fifteen points, but I'm still happy about it." "Oh yeah? What grade did you get?" "An F!"

•What's the object-oriented way to become wealthy? Inheritance.

• I changed my password to 'incorrect'. So whenever I forget what it is the computer says "Your password is incorrect". (Not advisable!).

• A programmer gets stopped at an airport and is asked, "Do you have anything to declare?" He answers, yes, three variables and a constant.

• Why didn't the integer and string fall in love? It was a type miss-match.

• Why do Java programmers tend to wear glasses? Because they can't C#.

• Why computers are like women

 No one but the Creator understands their internal logic.

 The native language they use to communicate with other computers is incomprehensible to everyone else.

 Even your smallest mistakes are stored in long-term memory for later retrieval.

 As soon as you make a commitment to one, you find yourself spending half your paycheck on accessories for it.

• What do computers do just before going to bed? Spread sheets

• Why was the computer scary? Because it had a terrorbyte.

• Learning Computer Science is great! Students learn bit by bit....and the revision is all byte-sized.

By: Suraj (2821640)
2nd year

वो दिन

राह देखी थी इस दिन की कब से!
आगे के सपने सजा रखे थे ना जाने कब से!!

बड़े उतावले थे यहाँ से जाने को!
जिन्दगी को अगला पड़ाव पाने को!!

पर ना जाने क्यों दिल में आज कुछ और आता है!
वक़्त को रोकने का जी चाहता है!!

जिन बातो को लेकर कभी रोते थे आज उन पर हँसी आती है!!

कहा करते थे, बड़ी मुश्किल से चार साल सह गए!
पर आज क्यों लगता है जिन्दगी के सबसे अच्छे पल पीछे रह गए!!

मेरी टांगे अब कौन खीचा करेगा!
सिर्फ मेरा सर खाने को कौन मेरे पीछे पड़ेगा!!

कौन रात भर जाग जाग कर मुझे सताएगा!
कौन मेरे रोज नए नए नाम बनाएगा!!

कौन फ़ैल होने पर दिलासा दिलाएगा!
कौन गलती से नंबर मिलाने पे गाली सुनाएगा!!

क्लास बंक करके चाय किसके साथ पियूँगा!
वो हसीन पल फिर कब मैं जियूँगा!!

मेरी शायरी से परेशान कौन होगा!
कभी मुझे किसी लड़की से बात करते हैरान कौन होगा!!

अटेंडेंस के लिए प्रोफेसर से कब रिक्वेस्ट कर पायेगे!
क्या ये सब हम फिर कर पायेगे!!

कौन मुझे मेरी काबिलियत पर भरोशा दिलाएगा!
और ज्यादा हवा में उडने पर जमीन पर लाएगा!!

मेरी ख़ुशी देखकर सच में खुश कौन होगा!
मेरे गम में मुझ से ज्यादा दुःखी कौन होगा!!

By: vikas (2819405)
4rd year

दिल जब घबराए तो

दिल जब घबराए तो खुद को एक किस्सा सुना देना,
जिन्दगी कितनी भी मुश्किल क्यों न हो, मुस्कुरा देना।

आसानी से सब कुछ हासिल हो तो उसकी कदर कहाँ,
ज़रूरी है कुछ पाने के लिए कुछ गवाँ देना।

ज़ाहिर है मुसिबतों में साथ कोई अपना नहीं रहता,
चुप रहना बेशक आँख से एक कतरा अश्क बहा देना।

शिकायतें सिर्फ दिल मैला करती हैं और कुछ नहीं,
आसान है गले मिल कर कभी सब कुछ भुला देना।

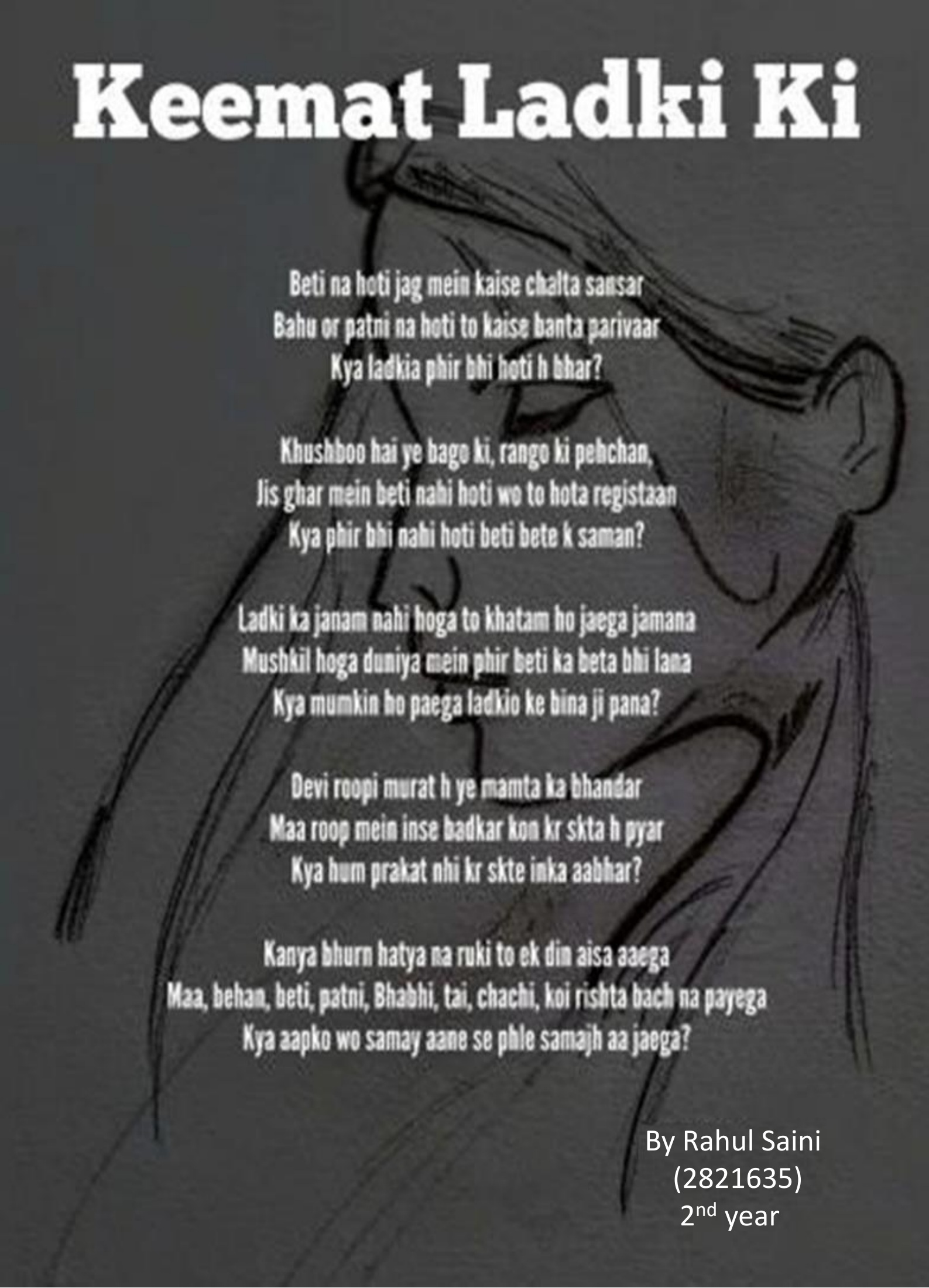
बीते हुए दौर की बातें याद कर क्या हांसिल प्यारे,
क्या ज़रूरी है कल की याद में अपने आज को सज़ा देना।

कुछ कमियां हम सब में है, ये जानते हैं हम,
बहुत बड़ी बात है, किसी के ऐब को बे वजह छुपा देना।

है दुनियां में सुखनवर और भी बहुत अच्छे ख्वाहिश,
काश कोई ऐसा लिखे के दिल से दिल, सबके मिला देना।

By:- Vikas Goyal
(2819405)-4rd year

Keemat Ladki Ki



Beti na hoti jag mein kaise chalta sansar
Bahu or patni na hoti to kaise banta parivaar
Kya ladkia phir bhi hoti h bhar?

Khushboo hai ye bago ki, rango ki pehchan,
Jis ghar mein beti nahi hoti wo to hota registaan
Kya phir bhi nahi hoti beti bete k saman?

Ladki ka janam nahi hoga to khatam ho jaega jamana
Mushkil hoga duniya mein phir beti ka beta bhi lana
Kya mumkin ho paega ladkio ke bina ji pana?

Devi roopi murat h ye mamta ka bhandar
Maa roop mein inse badkar kon kr skta h pyar
Kya hum prakat nhi kr skte inka aabhar?

Kanya bhurn hatya na ruki to ek din aisa aaega
Maa, behan, beti, patni, Bhabhi, tai, chachi, koi rishta bach na payega
Kya aapko wo samay aane se phle samajh aa jaega?

By Rahul Saini
(2821635)
2nd year

Redefine –
A power in your hand

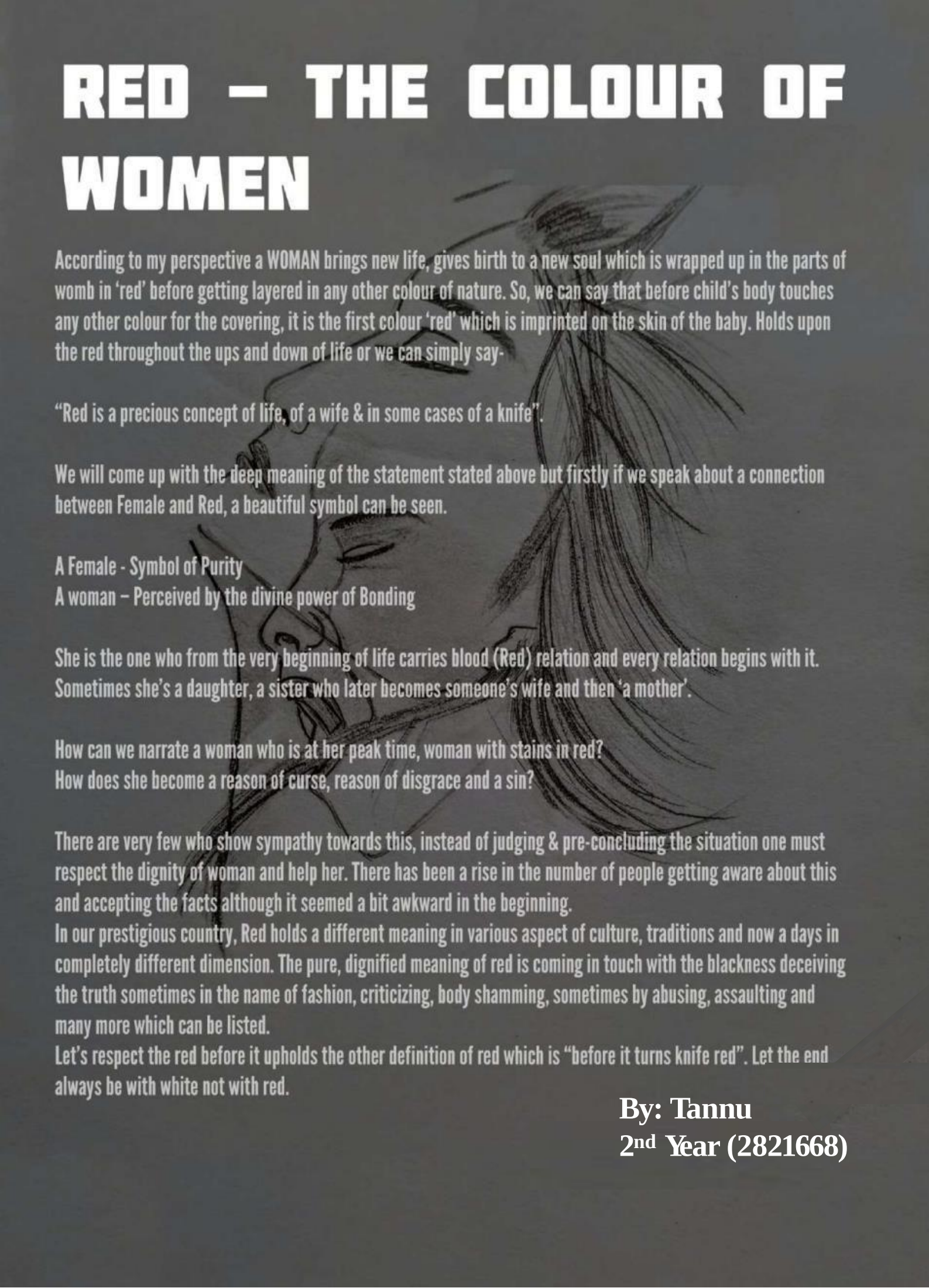
The world is not yours or mine
But you have power to redefine
This world consists of lots of crime
But you have power to redefine

This world provides lots of time
For love and cries
But you have power to redefine

This world never stops for nine
Or nine hundred ninety-nine
because this world is not yours or mine
but still you have power to redefine

By Shrijal
2nd Year (2821646)

RED – THE COLOUR OF WOMEN



According to my perspective a WOMAN brings new life, gives birth to a new soul which is wrapped up in the parts of womb in 'red' before getting layered in any other colour of nature. So, we can say that before child's body touches any other colour for the covering, it is the first colour 'red' which is imprinted on the skin of the baby. Holds upon the red throughout the ups and down of life or we can simply say-

"Red is a precious concept of life, of a wife & in some cases of a knife".

We will come up with the deep meaning of the statement stated above but firstly if we speak about a connection between Female and Red, a beautiful symbol can be seen.

A Female - Symbol of Purity
A woman – Perceived by the divine power of Bonding

She is the one who from the very beginning of life carries blood (Red) relation and every relation begins with it. Sometimes she's a daughter, a sister who later becomes someone's wife and then 'a mother'.

How can we narrate a woman who is at her peak time, woman with stains in red?
How does she become a reason of curse, reason of disgrace and a sin?

There are very few who show sympathy towards this, instead of judging & pre-concluding the situation one must respect the dignity of woman and help her. There has been a rise in the number of people getting aware about this and accepting the facts although it seemed a bit awkward in the beginning.
In our prestigious country, Red holds a different meaning in various aspect of culture, traditions and now a days in completely different dimension. The pure, dignified meaning of red is coming in touch with the blackness deceiving the truth sometimes in the name of fashion, criticizing, body shamming, sometimes by abusing, assaulting and many more which can be listed.
Let's respect the red before it upholds the other definition of red which is "before it turns knife red". Let the end always be with white not with red.

By: Tannu
2nd Year (2821668)

MINDSET : DOES IT MATTER?

Mindset plays a great role in each of our lives , whether we are a student, teacher , sports player, businessmen, doctor or even a chai wala.Mindset matters a lot in every individual's life. It changes the meaning of failure , meaning of effort , meaning of character , meaning of relationship.

There are two types of mindsets:

Fixed Mindset-

- They fail in something, they change the path.
- They are comfortable with who they are.
- They think intelligence is a fixed quantity and cannot be increased with time and guidance.
- They love to label themselves.
- Success to them is" Proving themselves smart and knowledgeable".
- They focus more on " Will I be accepted or rejected".
- Wants to be with someone who can "Put them on a pedestral., make them feel perfect and worship them".

Growth Mindset -

- Believes in perseverance and resilience.
- Doesn't believe in labelling themselves.
- Always hungry to learn something.
- Prioritize their tasks.
- Believes "Success is about Learning".
- Believes to be with someone who challenges them to be better.
- Believes in "Stretching beyond the possible".

So guys this was a short comparison on "How two different mindset works?". We all want to be successful, Right?. So let's get successful with Growth Mindset ,because" what you believe is what you achieve". I hope you all embrace this thought of mine .

By : Suraj
2nd Year (2821640)

UNLEASHING THE THERAPIES

In the world of hustle and bustle, people are at the stage of depression and are facing the absence of mind in their particular work fields. To avoid this, people are adopting various methods to minimize the stress level. In order to achieve this one must practice calmness.

Every individual has a different approach to maintain his/her calm. The method which they use to reach this level is called therapy. Therapy varies from person to person.
Even in the sub conscious mind people are craving for a therapy. But, when they are conscious enough they begin to hesitate.

So how are we going to find the perfect therapy? It is very simple. You have to keep a certain amount of time dedicated to yourself, find out the activity that pleases you the most and makes you feel alive. Once you find it, practice it regularly. You will eventually find the purpose of your life.
You can opt for any conventional or unconventional method of therapy. Choose what suits you the best. I have observed that most of the people listen to songs, talk with their friends. People also prefer gaming a ,visiting a holy place as a therapy
So you need to unleash the therapies. The benefits are worth the time.

People can suggest different therapies for you but It is something which is for you and you have to discover it. So, its you who has to "UNLEASH THE THERAPY" and live life to its BEST

By: Sachin Sharma
2nd Year (2821629)

Alumni messages

One of the most interesting stages in life that gives you an opportunity to explore is the „college phase." My experience at PIET has taught me one fundamental thing – life is unpredictable. It might be good, it might be bad, it might be weird, and it might not interest you, but expect anything to happen. . It is a perfect blend of joy and hardships. You meet different people, you interact with them, you learn about their cultures and grow as a person. -Upma Thakur (2010-14)

IIt would not be wrong if I say that PIET has actually provided me wings through which I am flying high in my career and professional life. Along with that exposure here is so good for any individual to grow on a faster pace. -Aashima Sahni (2015-19)

Write your own story with passion and determination. Success will find its way to you! -Nisha Devi (2011-15)

My Education from Piet has given me the confidence to master anything i want to accomplish in life.It gives students a chance to develop attitude and skills that give them courage, ability to work with others and a better understanding of himself and the entire world around them. -Kavita (2007-2011)

I am thankful to all the faculty members and management of the college for their continuous efforts and support. Apart from excellent academic experience, I also gained the benefits of being a part of cultural body. I cherish every moment spent at PIET. My graduation at PIET has been a very interesting and awesome journey.
-Shruti Gupta (2008-12)