

“TECHNICAL KRITHI”

e-Newsletter
JANUARY 2022

Youth day celebration

As part of Youth day celebration, on behalf of student council the whole SNIT family took pledge in the presence of Principal, Vice- Principal and all SNIT staff on 12th January. At the same time all students in their respective classes joined the pledge.

As part of Youth Day Celebration Department of Mechanical Automobile Engineering organized a bike rally from Adoor to the SNIT campus which was flagged off by Joint RTO Ajith Kumar. An awareness class was also lead by him on the topic “Traffic Awareness”. College also conducted an essay writing competition on the topic “*Kalalayengalile Akrama Rashtriyam*”, and Ashwin S (S3 Mechanical Automobile) secured the first prize. Also ‘SNIT YOUTH ICON’ 2022 contest was held at central courtyard of the college and whole students and staffs became a part of the programme and Ashiq Abdulla (S5 CE) was selected as the Youth Icon 2022.

“Great things are done by a series of small things brought together.”

– Vincent Van Gogh



REPUBLIC DAY

SNIT, Adoor celebrated 73rd Republic Day by hoisting the flag at college campus.

Republic Day is celebrated on 26th January every year to mark the day on which our constitution came into effect in 1950. After this day our country truly became democratic and independent. The fundamental law of the country, the Constitution, was enacted out of the diligence and hard work of great men like Mahatma Gandhi and the numerous other freedom fighters who fought and sacrificed their lives for the independence of our country.

“With faith in our hearts and independence in our thoughts, let's salute the Nation. Happy Republic Day”





STUDENTS CORNER...

TRANSLUCENT CONCRETE

Concrete is the most widely used building material in the world. However, researchers and manufacturers have been working together to produce different types of concrete to improve the overall quality and the economic value of construction. As a result, translucent concrete has gained popularity in many industries across the world. As an energy saving and eco-friendly building material, Light Transmitting or translucent concrete is now increasingly used in fine architecture and cladding for interiors. Translucent concrete is based on the concept of ‘Nano Optics,’ where optical fibers act as slits to transmit light from one side of the surface to another. These optical fibers are spread evenly through the concrete and are visible on both sides of the block. While patterns form on one side of the surface, they appear as shadowy outlines through the concrete.

The concept of translucent concrete dates back to the early 1900s, when major advancements in the field of polymer-based optical fibers led to its development. Although the idea of light transmitting concrete had been in existence for years, the actual concept of translucent concrete was introduced by Hungarian architect, Aron Losonczi in 2001. As the pioneer of translucent concrete, Losonczi was able to successfully produce the first transparent concrete block within two years of pitching the idea.

MUHSINA H

S7 CE

This new material was called LiTraCon (short for Light Transmitting Concrete), and soon became popular in countries including Italy, Germany, and even China.

Translucent concrete is made by combining two major materials; fine concrete (with cement and aggregates like sand) and optical fibers. These optical fibers replace other concrete aggregates, and conduct light from artificial and natural sources even at an angle of incidence of more than 60 degrees. There are three different layers in the optical fibers – the buffer coating, cladding, and the core, and light is transmitted through the core. The process of manufacturing translucent concrete is similar to that of traditional concrete; the only difference lies in the introduction of 4% - 5% optical fibers, based on volume, into the mixture. Specifically, the process includes adding a layer of fibers to the mold alternatively, on top of small layers of concrete at intervals of 2mm to 5mm. The thinner and smaller the layer is, the more light it allows to pass through.

DO YOU KNOW

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Building Classification (NBC)

Group A: Residential buildings

Group B: Educational buildings

Group C: Institutional buildings

Group D: Assembly buildings

Group E: Business buildings

Group F: Mercantile buildings

Group G: Industrial buildings

Group H: Storage buildings

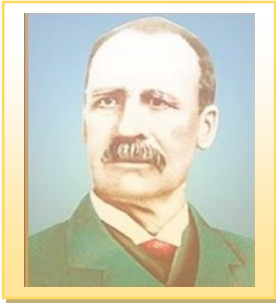
Group I: Hazardous buildings

A-Series Paper Sizes

Paper Size	Width x Height (mm)
A0	841mm X 1189mm
A1	594mm X 841mm
A2	420mm X 594mm
A3	297mm X 420mm
A4	210mm X 297mm
A5	148mm X 210mm



HAPPY BIRTHDAY



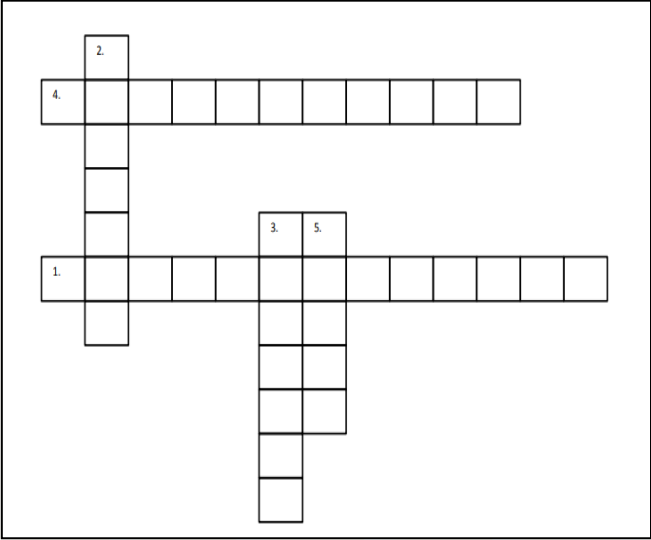
JOHN PENNYCUICK
(1841-1911)

Colonel John Pennycuick CSI (15 January 1841 – 9 March 1911) was a British Army engineer and civil servant who served as a member of the Madras Legislative Council when parts of the Indian subcontinent were under Colonial rule of the British East India Company. Pennycuick was born on 15 January 1841 at Pune, a younger son of Brigadier-General John Pennycuick and his wife Sarah. Pennycuick entered the East India Company Military College at Addiscombe, Surrey, in 1857, and was commissioned as a lieutenant in the Madras Engineer Group in December 1858. He became a Second Captain on 15 October 1870; and a major on 8 December 1876. On 10 October 1895 the Queen nominated him a Companion of the Order of the Star of India. He served in the Public Works Department till January 1896. During his six years of service in the PWD, Pennycuick served as Chief Engineer in the construction of the Mullaperiyar Dam and was awarded a medal for his participation in Abyssinian

Expedition of 1867–68. Pennycuick used lime and surkhi paste for construction, taking into consideration the gravitational force: this allows the dam to withstand tremors and remain strong. Pennycuick was nominated to the Madras Legislative Council in November 1893. He was the last president of the Royal Indian Engineering College at Coopers Hill. He also held the position of President of the Sanitary Board and was a faculty in the University of Madras. He received a Telford medal from the Institution of Civil Engineers. The Australian government sought his advice for avoiding damage from flooding of the Brisbane river in 1899. Pennycuick died in Camberley, Surrey, on 9 March 1911.

REENU RAJAN
M3, SECM

LET'S FIND OUT



- HORIZONTAL:**
- 1) Most common cause of acidity in water
 - 4) Type of valve provided on the suction pipe in a tube well

- VERTICAL:**
- 2) Gas from sludge digestion tank is mainly composed of _____
 - 3) Device which are installed for drawing water for drawing water from the sources
 - 5) Activated carbon is used for removing _____

Danyang–Kunshan Grand Bridge



Characteristics	
Total length	164.8 kilometres (102.4 mi)
Width	79 metres (260 feet) (Avg.)
Height	30 metres (100 feet) (Avg.)
No. of spans	2000
Designer	China Road and Bridge Corporation (CRBC)

The Kunshan Grand Bridge is the longest bridge in the world. The bridge is located on the rail line between Shanghai and Nanjing in Jiangsu province. It is in the Yangtze River Delta where the geography is characterised by lowland rice paddies, canals, rivers, and lakes. The bridge runs roughly parallel to the Yangtze River, about 8 to 80 km south of the river. It passes through the northern edges of population centers (from west to east) beginning in Danyang, Changzhou, Wuxi, Suzhou, and ending in Kunshan. There is a 9-kilometre long section over open water across Yangcheng Lake in Suzhou. It was completed in 2010 and opened in 2011. Employing 10,000 people, construction took four years and cost about \$8.5 billion.

IMPORTANT DAYS

Army Day 2022



JANUARY 15 INDIAN ARMY DAY

The Indian Army was officially established on 1 April 1895. India got its first Army Chief in 1949. On 15 January 1949, Field Marshal K. M. Cariappa took over the first Commander-in-Chief of the Indian Army from General Francis Butcher, the last British Commander-in-Chief of India. This year, India is celebrating **74th Army Day** on 15 January.

The Monumental National Flag, which is the world's largest National Flag made of Khadi fabric, is flagged off on the grand public display along the India – Pakistan Border in Jaisalmer to celebrate the Army Day



JANUARY 24 NATIONAL GIRL CHILD DAY

It is observed on 24 January to spread awareness about the inequalities faced by girls in Indian society, also to promote awareness about the rights of the girl child and the importance of female education, health, and nutrition. The day is in line with various campaigns and programmes of the Indian government including Beti Bachao Beti Padhao, and Save the Girl Child. On National Girl Child Day, as we celebrate accomplishments of our daughters, we pledge to bridge the gender divide to build an inclusive & equal society.

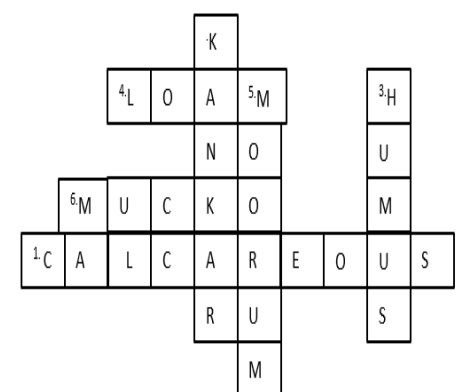
Educate, Encourage, Empower!

Answers

Last month Sudoku

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

Cross Words



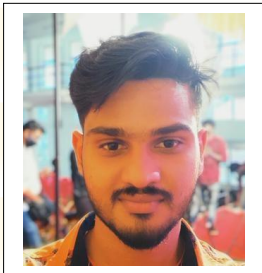
LET'S CHECK IT OUT

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

HAPPY BIRTHDAY



Mr. Jinu Darsh M S
Assistant Professor
Dept. of Civil Engineering
22nd January



Akhil Kumar
S3, 27th January



Ananthu Santhosh
S5, 10th. January



Sreethu Parvathy
S5, 1st January



Ashima Shaji
S5, 17th January



Gregory Cheriyan
S5, 7th January



Gowri A S
S7, Jan 3



Shilpa Sivaraj
S7, Jan 9



Akhila Kumari. P
S7, Jan 22



Ansu P Saji, M3
5th january

Ajmal (S1)
28th january

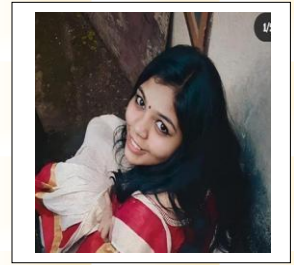




Muhammad Ameen (S3)
2nd January



Ananthika Sivakumar
S3, 10th January



Revathy P Das
S3, 22nd January

ALUMNI CORNER



Dinu Chandran
B. TECH CIVIL (2012-2016
BATCH)
SNIT ADOOR

4.5 Years of Experience

- Project Engineer / Partner
- Al Maidan Al Fedhi Contracting
Sharjah, UAE

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dinuchandran94@gmail.com

ACHIEVEMENTS





M
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Releasing our
Newsletter every
month

ARTICLES
TECHNICAL WRITINGS
TECHNICAL ACTIVITIES
PAPER PUBLICATIONS
CONFERENCE ATTENDED
CROSSWORDS
QUOTES
ACHIEVEMENTS
ANNOUNCEMENTS



SEND ENTRIES TO
ceptatechnicalkrithi@gmail.com

Entries invited from students *before*
25th of every month

Comments related to this newsletter
can also be sent to the mail id
provided

Mail Id:

ceptatechnicalkrithi@gmail.com

THANK YOU