SREE NARAYANA INSTITUTE OF TECHNOLOGY, ADOOR

DEPARTMENT OF CIVIL ENGINEERING

CEPTA

NEWSLETTER

"TECHNICAL KRITHI"

e-Newsletter
AUGUST 2021

INDEPENDENCE DAY CELEBRATION

"Remembering our past is extremely important. But we also have to think about building our future. Let's do everything to keep our freedom and carry it through the years. Happy Independence Day!"

SNIT Adoor celebrated Independence remembering and honour our freedom fighters endured countless sufferings to give Indians their freedom.

India celebrated its 75th Independence Day on August 15, 2021, with the usual pride to mark its freedom from British rule. The Indian Independence movement began during World War I and was led by Mohandas Karamchand Gandhi. On August 15, 1947, India got its freedom, ending an almost 200-year British rule. It celebrates the date in 1947 when the Indian Independence Act came into effect, which established India and Pakistan as separate countries, no longer under British imperialist rule. India got its freedom from the centuries-old Colonial rule. The fight to gain our Independence was long, difficult and cost many brave lives. This year, the theme of I-Day is '**Nation First, Always First**' to honour the sacrifices made by our freedom fighters and the glorious path laid down for generations by them.

"As engineers, we were going to be in a position to change the world – not just study it."
—Henry Petroski

ONAM CELEBRATION

Onam is the most popular festival celebrated by the people of Kerala and is celebrated each year in August and September, and is also a major harvest festival. Onam marks the first month of the Malayalam calendar known as Chingam. Onam signifies **the annual homecoming of King Mahabali from Patala Loka**, where he was sent by Lord Vishnu's Vamana avatar. Popular belief is that King Mahabali, the most benevolent Raja of Kerala visits his kingdom to see his subjects happy and prosperous on the occasion of the auspicious harvest festival. SNIT also celebrated Onam in the college by conducting different cultural programmes.

STUDENTS CORNER

Sruthi S

S2 Civil

GREEN BUILDING

Green building (also known as green construction or sustainable building) refers to both a structure and the application of processes that are environmentally responsible and resource-efficient throughout a building's life-cycle: from planning to design, construction, operation, maintenance, renovation, and demolition. This requires close cooperation of the contractor, the architects, the engineers, and the client at all project stages. The Green Building practice expands and complements the classical building design concerns of economy, utility, durability, and comfort. In doing so, the three dimensions of sustainability, i.e., planet, people and profit across the entire supply chain need to be considered.

Although new technologies are constantly being developed to complement current practices in creating greener structures, the common objective of green buildings is to reduce the overall impact of the built environment on human health and the natural environment by:

•Efficiently using energy, water, and other resources.

•Protecting occupant health and improving employee productivity (see healthy building).

•Reducing waste, pollution and environmental degradation.

GOALS

The concept of sustainable development can be traced to the energy (especially fossil oil) crisis and environmental pollution concerns of the 1960s and 1970s. Green building brings together a vast array of practices, techniques, and skills to reduce emphasizes taking advantage of renewable resources, e.g., using sunlight through passive solar, active solar, and photovoltaic equipment..

Many other techniques are used, such as using low-impact building materials or using packed gravel or permeable concrete instead of conventional concrete or asphalt to enhance and ultimately eliminate the impacts of buildings on the environment and human health. It often emphasizes taking advantage of renewable resources, e.g., using sunlight through passive solar, active solar, and photovoltaic equipment, and using plants and trees through green roofs, rain gardens, and reduction of rainwater run-off. Many other techniques are used, such as using low-impact building materials or using packed gravel or permeable concrete instead of conventional concrete or asphalt to enhance replenishment of groundwater.

While the practices or technologies employed in green building are constantly evolving and may differ from region to region, fundamental principles persist from which the method is derived: siting and structure design efficiency, energy efficiency, water efficiency, materials efficiency, indoor environmental quality enhancement, operations and maintenance optimization and waste and toxics reduction. The essence of green building is an optimization of one or more of these principles. Also, with the proper synergistic design, individual green building technologies may work together to produce a greater cumulative effect.

DO YOU KNOW ??

Cube samples required for different quantity of concrete

6 - 15 m3 ---2 No's

16 – 30 m3 ---3 No's

31 – 50 m3 ---4 No's

Above 50 m3 -- 4+1No's of addition of each 50 m3

Grades of concrete and its mix

M5 – 1:5:10

M7.5 – 1:4:8

M10 – 1:3:6

M15 – 1:2:4

M20 – 1:1.5:3

M25 – 1:1:2

HAPPY BIRTHDAY

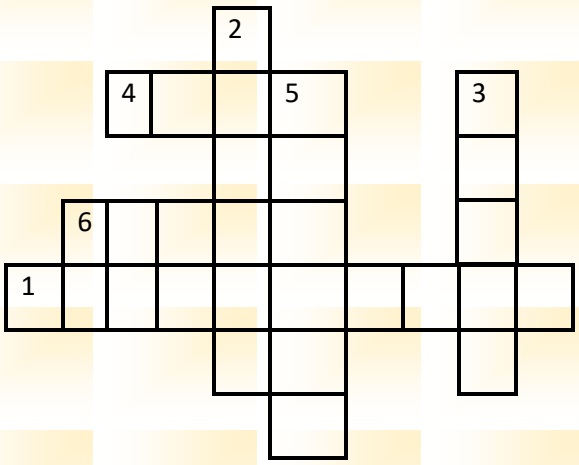
THOMAS TELFORD (AUGUST 9, 1757)

Thomas Telford was a Scottish civil engineer, architect and road, bridge and canal builder. After establishing himself as a engineer of road and canal projects in Shropshire, he designed numerous infrastructure projects in his native Scotland, as well as harbours and tunnels. Such was his reputation as a prolific designer of highways and related bridges, he was dubbed The Colossus of Roads, and reflecting his command of all types of civil engineering in the early 19th century, he was elected as the first President of the Institution of Civil Engineers, a post he held for 14 years until his death.

His major projects are Caledonian canal, Ellesmere canal, Menai suspension bridge etc. He was initiated into freemasonry in antiquity lodge No 26 in 1770. This lodge no longer exists. He was a founder of phoenix lodge No 257. Telford designed a room with in the in the George inn for the lodge. In 1786 he became an affiliate member of Salopian Lodge, No 262 (Shrewsbury, England). In 2011 he was one of seven inaugural in ductees to the Scottish Engineering Hall of frame. Telford's autobiography, titled "THE LIFE OF THOMAS TELFORD", Civil Engineer, written by himself and was published in 1838. During his prodigious life, Thomas Telford was credited with building over 1000 miles of roadway, 1000 bridges, 40 harbours and piers and numerous canals. He was died in 2 December 1834 (aged 77).

Sidhara Santhosh
S2, Civil

LET'S FIND OUT



HORIZONTAL:

1) ….. soil contains large quantity of calcium carbonate.
4) A mixture of sand, silt and clay
6) A mixture of fine soil particles and highly decomposed organic matter

VERTICAL:

2) Impure form of limestone
3) Dark brown, organic amorphous earth of topsoil
5) Word means powdered rock

PANAMA CANAL

BETCY BINU

S2 CE

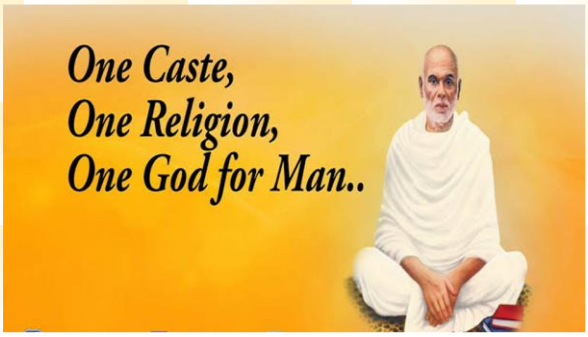
HISTORY	
Original owner	**Société internationale du Canal**
Principal engineer	**John Findley Wallace (1904–1905), John Frank Stevens (1905–1907), George Washington Goethals (1907–1914)**
Construction began	**May 4, 1904; 117 years ago**
Date completed	**August 15, 1914; 107 years ago**
Date extended	**June 26, 2016; 5 years ago**
GEOGRAPHY	
Start point	**Atlantic Ocean**
End point	**Pacific Ocean**
Connects to	**Pacific Ocean from Atlantic Ocean and vice versa**

In 1513, Spanish explorer Vasco Nunez de Balboa became the first European to discover that the Isthmus of Panama was just a slim land bridge separating the Atlantic and Pacific oceans.

The Panama Canal is an artificial 82 km waterway in Panama that connects the Atlantic Ocean with the Pacific Ocean. The canal cuts across the Isthmus of Panama and is a conduit for maritime trade. One of the largest and most difficult engineering projects ever undertaken, the Panama Canal shortcut greatly reduces the time for ships to travel between the Atlantic and Pacific oceans, enabling them to avoid the lengthy, hazardous Cape Horn route around the southernmost tip of South America via the Drake Passage or Strait of Magellan and the even less popular route through the Arctic Archipelago and the Bering Strait. More than 25,000 workers died during the canal's construction. More than 25,000 workers died during the canal's construction.

In the years after the canal opened, tensions increased between America and Panama over control of the canal and the surrounding Canal Zone. Control of the canal was transferred peacefully to Panama in December 1999, and the Panamanians have been responsible for it ever since. In 2007, work began on a $5.25 billion expansion project that enabled the canal to handle post-Panamax ships; that is, those exceeding the dimensions of so-called Panamax vessels, built to fit through the canal, whose locks are 110 feet wide and 1,000 feet long. The expanded canal, which was completed in 2016, can handle cargo vessels carrying 14,000 20-foot containers, nearly three times the amount previously accommodated. The American Society of Civil Engineers has ranked the Panama Canal one of the seven wonders of the modern world.

IMPORTANT DAYS



23rd August

Sri Narayana Jayanthi

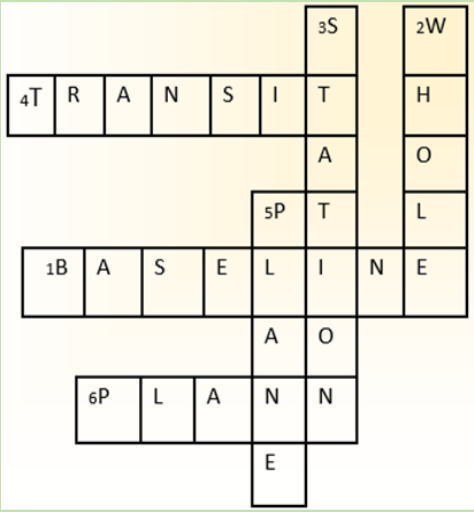
Sri Narayana Jayanthi is a state festival of Kerala. It is celebrated on Chathayam day during the Onam season in Chingam month of Malayalam calendar. It marks the birthday of Narayana Guru, a saint and a social reformer of India who fought against the caste system of Hindu religion. In a society broken into fragments by casteism and economic inequality, he emphasised the motto of 'one caste, one religion and one god.' Communal harmony processions, conferences, floral tributes, community prayers, feeding for the poor and community feasts marks Jayanthi celebrations.

Answers

Last month Sudoku

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

Cross Words



CONGRATULATIONS

INDEPENDENCE DAY QUIZ COMPETITION WINNER

LET'S CHECK IT OUT

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

TOPPERS

CONGRATULATIONS

FAREWELL

MTECH 2019-2021 BATCH

BTECH 2017-2021 BATCH

PUBLICATIONS

- Sneha J, "Study on the effect of Axle overloading on the road and proposal of new design using waste materials", International Research Journal of Engineering and Technology, June 2021.
- Devika Dev S, "Study on the effect of Axle overloading on the road and proposal of new design using waste materials", International Research Journal of Engineering and Technology, June 2021.
- Gokulraj R, "Analysis of composite plates with cut-out openings", International Research Journal of Engineering and Technology, July 2021.
- Nithin Nandakumar, "Ground water quality assessment of a contaminated site in kerala", International Research Journal of Engineering and Technology, July 2021.
- Athulya J, "Ground water quality assessment of a contaminated site in kerala", International Research Journal of Engineering and Technology, July 2021.
- Arya Presannan, "Ground water quality assessment of a contaminated site in kerala", International Research Journal of Engineering and Technology, July 2021
- Anju S, "Ground water quality assessment of a contaminated site in kerala", International Research Journal of Engineering and Technology, July 2021.
- Athira Surendran, "Study on the effect of Axle overloading on the road and proposal of new design using waste materials", International Research Journal of Engineering and Technology, June 2021.
- Subina S, "Analysis of composite plates with cut-out openings", International Research Journal of Engineering and Technology, July 2021.
- Pranav S Prasad, "Study on the effect of Axle overloading on the road and proposal of new design using waste materials", International Research Journal of Engineering and Technology, June 2021.
- Anakha G Sathyan, Parvathy Krishnan J, Nikhil Biju, Ashmi M, Reshmy M Raju, Sethulekshmi Jayakumar, "Achenkovil river quality monitoring and remediation usng GIS", International Journal of Advances in Engineering and Management.
- Arya Satyan, Amjisha S, Pritha Raj, Nishad N, Anju Thulasi, "Dynamic analysis of tile waste and bamboo reinforced concrete structure", International Journal of Advances in Engineering and Management.
- Devika Raveendran, Karishma Kathiresh, Roshin Stephan, Adarsh Kumar, Rajalekshmi P, Gopika A S, "Soil stabilization using human hair fibre", International Journal of Advances in Engineering and Management.

FACULTY ACHIEVEMENTS

- Riyana M S, HOD of the Department of Civil Engineering, attended International workshop on “Mendeley and Zotero: Reference Tool”, organized by Manuscriptpedia, Kanyakumari, through online pedagogy.

- Lekshmi Priya R, Assistant Professor, Department of Civil Engineering, attended online faculty development program on “Infrastructure projects: opportunities and challenges”, organized by Younus College Of Engineering And Technology, Kollam, Kerala.

- Riyana M S, HOD of the Department of Civil Engineering, attended AICTE Training And Learning (ATAL) Academy Online Advanced FDP on “Framework for online assesment”, at National Institute Of Technical Teachers Training & Research.

HAPPY BIRTHDAY

Abhiram Vinod (S2)

3rd August

Mahima Mohan (S2)

8thAugust

Gokul S (S2)

18th August

Akshaya G (S4)

26th August

Shyma Shareef (S4)

8th August

Sruthy Baburaj (S4)

7th August

Haneetha Haneef (M2)

15th August

Muhsina.H (S6)

4th August

Seethalekshmi. S (S6)

18th August

Thara . S . Ravi (S6)

22nd August

CONFERENCE ATTENDED

SREE BUDDHA COLLEGE OF ENGINEERING
PATTOOR P.O., ALAPPUZHA, KERALA
DEPARTMENT OF CIVIL ENGINEERING

National Conference on
Sustainable Practices in Civil Engineering (SPICE'21)

This is to certify that **Ms. Preena Praveen** of **SREE NARAYANA INSTITUTE OF TECHNOLOGY, ADOOR** has participated in the two day National Conference on "Sustainable Practices in Civil Engineering (SPICE'21)" organised by the Sree Buddha College of Engineering, Pattoor, Alappuzha, Kerala from 10th to 11th June, 2021 through Google Meet platform and presented a research paper titled.....
"Hysteresis behaviour of modified buckling restrained braces using cyclic analysis in abaqus"

authored by **Ms. Preena Praveen and Ms. Chaithra S**

Dr. Gouri Antherjenam
HoD (CE) & Convenor SPICE'21

Dr. K. Krishnakumar
Principal

SREE BUDDHA COLLEGE OF ENGINEERING
PATTOOR P.O., ALAPPUZHA, KERALA
DEPARTMENT OF CIVIL ENGINEERING

National Conference on
Sustainable Practices in Civil Engineering (SPICE'21)

This is to certify that **Ms. Sajina K** of **SREE NARAYANA INSTITUTE OF TECHNOLOGY, ADOOR** has participated in the two day National Conference on "Sustainable Practices in Civil Engineering (SPICE'21)" organised by the Sree Buddha College of Engineering, Pattoor, Alappuzha, Kerala from 10th to 11th June, 2021 through Google Meet platform and presented a research paper titled.....
"ASSESSING THE DAMAGE MECHANISM IN REINFORCED CONCRETE BEAMS UNDER LOW VELOCITY IMPACT LOADING"

authored by **Ms. Sajina K and Ms. Reshma C.**

Dr. Gouri Antherjenam
HoD (CE) & Convenor SPICE'21

Dr. K. Krishnakumar
Principal

CERTIFICATE
OF PARTICIPATION

Ministry of Culture

THIS CERTIFICATE IS AWARDED TO

DEPARTMENT OF CIVIL ENGINEERING, SNIT Adoor

FOR SUCCESSFUL PARTICIPATION IN RASHTRAGAAN,
AN INITIATIVE BY THE MINISTRY OF CULTURE TO MARK AZADI KA AMRIT MAHOTSAV.

YOUR VIDEO WILL BE COMPILED WITH THOSE OF OTHER PARTICIPANTS AND RELEASED ON 15TH AUGUST 2021,
TO SET A RECORD OF THE MAXIMUM NUMBER OF INDIANS SINGING THE NATIONAL ANTHEM TOGETHER

JAI HIND

All students of Department of Civil Engineering, SNIT participated in RASHTRAGAN.

An initiative by the Ministry of Culture to mark AZADI KA AMRIT MAHOTSAV

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

ADMISSION STARTED…