SREE NARAYANA INSTITUTE OF TECHNOLOGY, ADOOR

DEPARTMENT OF CIVIL ENGINEERING

CEPTA

NEWSLETTER

"TECHNICAL KRITHI"

e-Newsletter
NOVEMBER 2021

CEPTA ASSOCIATION 2021-2022 INAUGURAL CEREMONY

The inaugural ceremony of CEPTA association 2021-'22 by Department of Civil Engineering SNIT commenced with lighting the lamp by a group of dignitaries- Sri. Abin Ambadiyil, Managing Director of SNIT, Principal Dr. Shaji Mohan, Vice-Principal Prof. Dr. M D Sreekumar, Academic Chairman Dr. Keshavamohan, Academic Coordinator Dr. Radhakrishnan and they shared their valuable thoughts and wishes for the CEPTA Association on 26th November 2021. The report presentation was done by Ms. Riyana M S, Head of the Department of CE. Award ceremony and official launch of magazine "CEPTA KRITHI" was also done on the occassion.

Former office bearers handed over the responsibility to new office bearers. Theme of the year 2021-2022 CEPTA is "SUSTAINABLE INNOVATION". CEPTA Coordinator Ms. Lekshmi Priya R wished for the success and motivated everyone to actively participate in CEPTA activities.

"There are no straight lines or sharp corners in nature. Therefore, buildings must have no straight lines or sharp corners"

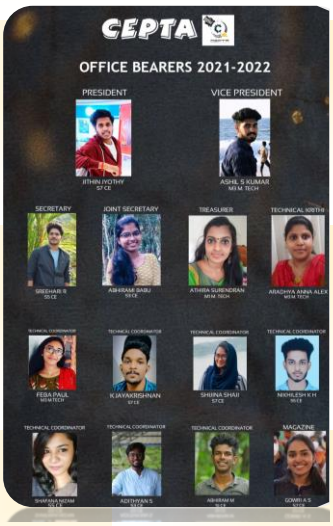
CEPTA OFFICE BEARERS 2021-2022

CEPTA Association Department of Civil Engineering office bearers of 2021-2022 are: President Jithin Jyothi (S7 CE), Vice President Ashil S Kumar (M3 SECM), Secretary Sreehari R (S5 CE), Joint Secretary Abhirami Babu (S3 CE), Treasurer Athira Surendran (M1 SECM), Technical Krithi Newsletter Student Coordinator Aradhya Anna Alex (M3 SECM), Magazine Student Coordinator Gowri A S (S7 CE).

Technical Coordinators are: Feba Paul (M3 SECM), K Jayaprakashan (S7 CE), Shijina Shaji (S7 CE), Nikhilesh K H (S5 CE), Shafana Nizam (S5 CE), Adithyan S (S3 CE), Abhiram M (S3 CE).

CEPTA Staff Coordinator Ms. Lekshmi Priya R, Activity Coordinator Mr Amal Anand.

CONGRATULATIONS ALL...



STUDENTS CORNER…

Ammu Vijayan
S7 CE

GROUND PENETRATING RADAR

Ground-penetrating radar (also known as GPR, Georadar or ground probing radar) is a geophysical method that uses radar pulses to image the subsurface. GPR can detect both metallic and non-metallic objects and also used for finding and detecting buried object. GPR has been used in various fields such as archaeology, hydrology, environmental site characterization, glaciology, land mine/unexploded ordinance detection. GPR is a Non-destructive testing (NDT) method because this technique evaluate the properties of a material, component or system without causing any damage to it.

Main components of GPR are transmitter, antenna, receiver, signal processor, display components. Ground Penetrating Radar works by emitting a pulse into the ground and recording the echoes that result from subsurface objects. The receiver detects the Ground returning signals and records variations within them. The GPR system has software like GPR-SLICE, gprMax that translates these signals into images of the objects in the subsurface.

Two primary GPR types depending upon on the depth of application are Ground-Coupled GPR and Air-Coupled GPR. In Ground-coupled GPR antennas are in contact (i.e h=0) also they get more energy in to the ground and get more energy out of it, which results in clearer data.

In air-coupled GPR antennas present above the ground (i.e h>0) also they produce difficult data. Even though antennas are not in contact with the ground data collected at higher speed.

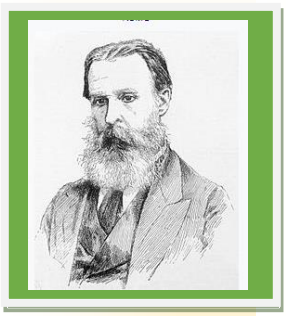
GPR has various applications, in archaeology archaeologist uses GPR to find buried object. In Military GPR use as a tool for detecting unexploded items and also for detecting and mapping underground tunnels. In civil engineering field GPR used in locating defects and voids in concrete structures, and in determining embedded reinforcement. GPR is also used for underground water detection, utility location and forensic investigation.

DO YOU KNOW ??

Drinking water Standards IS 10500 : 2012

Parameters	Permissible Limit
pH	6.5-8.5
TDS (mg/l)	500
Hardness (as CaCO3) (mg/l)	200
Alkalinity (as CaCO3) (mg/l)	200
Nitrate (mg/l)	45
Sulfate (mg/l)	200
Fluoride (mg/l)	1
Chloride (mg/l)	250
Turbidity (NTU)	5
Arsenic (mg/l)	0.01
Copper (mg/l)	0.05
Cadmium (mg/l)	0.003
Chromium (mg/l)	0.05
Lead (mg/l)	0.01
Iron (mg/l)	0.3
Zinc (mg/l)	5
Fecal Coliform (cfu)	0
E. Coli (cfu)	0

HAPPY BIRTHDAY



JOHN COODE

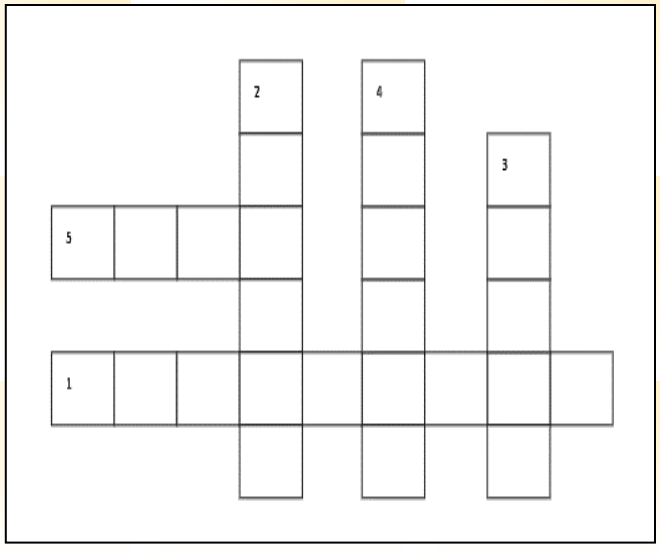
(1816 – 1892)

Sir John Coode was English civil engineer, known for harbour works born on 11 November 1816 at Bodmin. He was educated at Bodmin Grammar School and after leaving school entered his father's office. In 1844, he set up in business for himself in Westminster as a consulting engineer, and remained there till 1847. In that year he was appointed resident engineer in charge of the great works at Portland harbour, which had been designed by Rendel. On the death of the latter in 1856, Coode was appointed engineer-in-chief, and retained that post until the completion of the work in 1872. This harbour provided the largest area of deep water of any artificial harbour in Great Britain, and was a work of the utmost national importance. Coode contributed a very valuable paper to the Institution of Civil Engineers in 1852 on the 'Chesil Bank', and his presidential address to the civil engineers was delivered in 1889.

Coode was probably the most distinguished harbour engineer of the nineteenth century. He was elected a member of the Institution of Civil Engineers in 1849, served for many years on the council, and was president from May 1889 to May 1891. He was also an active member of the Royal Colonial Institute, and sat on its council from 1881 till his death. Coode died at Brighton on 2 March 1892.

REENU RAJAN
M2, SECM

LET'S FIND OUT



HORIZONTAL:

1) Fascia is another name of ___

5) A __ plate is a horizontal timber member placed along the top of a wall to support the ends of joists, rafters etc. and distribute the load

VERTICAL:

2) This is where two pitched roof faces connect and project inward. They are always at a lower slope than the adjoining roof planes

3) Horizontal line at the top of the roof

4) Usually made of wood and they are nailed to the rafters to give supports for the roof covering material

RISHNA K RAMAN
M2 SECM

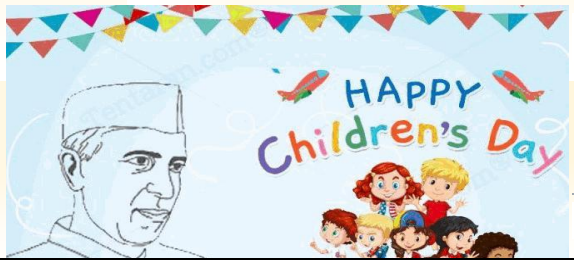
THE CHANNEL TUNNEL

Location	English Channel
Status	Active
Character	Passenger trains, freight trains, vehicle shuttle trains
Line length	50.46 km (31.35 mi)
No. of tracks	2 single track tunnels 1 service tunnel
Track gauge	1,435 mm (4 ft 8+½ in) standard gauge
Electrified	25 kV AC overhead lines, 5.87 m
Operating speed	160 km/h (100 mph) (track safety restrictions) 200 km/h (120 mph) (possible by track geometry, not yet allowed)

The Channel Tunnel is a 50.46-kilometre railway tunnel that connects Folkestone with Coquelles beneath the English Channel at the Strait of Dover. It is the only fixed link between the island of Great Britain and the European mainland. At its lowest point, it is 75 metres (250 ft) deep below the sea bed and 115 metres (380 ft) below sea level. At 37.9 kilometres, the tunnel has the longest underwater section of any tunnel in the world, and is the third longest railway tunnel in the world. The speed limit for trains through the tunnel is 160 kilometres per hour (100 mph). The Channel Tunnel is owned and operated by the company Getlink, formerly "Groupe Eurotunnel".

The tunnel carries high-speed Eurostar passenger trains, the Eurotunnel Shuttle for road vehicles and international freight trains. The tunnel connects end-to-end with the high-speed railway lines of the LGV Nord in France and High Speed 1 in England. In 2017, through rail services carried 10.3 million passengers and 1.22 million tonnes of freight, and the Shuttle carried 10.4 million passengers, 2.6 million cars, 51,000 coaches, and 1.6 million lorries (equivalent to 21.3 million tonnes of freight). This compares with 11.7 million passengers, 2.6 million lorries and 2.2 million cars by sea through the Port of Dover.

IMPORTANT DAYS



NOVEMBER 14

CHILDREN'S DAY

Children's Day is celebrated across India to increase awareness about the rights, education, and welfare of children. It is celebrated on 14th November every year on the birthday of the First Prime Minister of India, Pandit Jawaharlal Nehru. Known as 'Chacha Nehru' among children, Nehru advocated for children to have all-rounded education that would build a better society in the future. The theme for this year's World Children's Day is to help children to recover from interruptions and learning losses experienced through the pandemic in the last two years.

"Every child comes with the message that God is not yet discouraged of man." – Rabindranath Tagore

NOVEMBER 26

Constitution Day

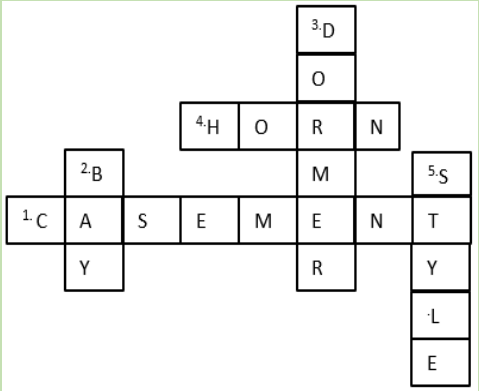
Constitution Day also known as 'Samvidhan Divas', is celebrated in our country on 26th November every year to commemorate the adoption of the Constitution of India. On 26th November 1949, the Constituent Assembly of India adopted the Constitution of India, which came into effect from 26th January 1950. Dr Bhimrao Ramji Ambedkar, who became the first law minister of India in the Congress-led Centre, was appointed as the chairman of the constitution drafting committee in 1947 and was given the responsibility of writing the country's new constitution.

Answers

Last month Sudoku

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

Cross Words



LET'S CHECK IT OUT

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

AWARD CEREMONY

TEACHERS

APPRECIATION AWARD

BEST ADVISOR AWARD

STUDENTS

BEST PROJECT AWARD B-TECH

BEST PROJECT AWARD M-TECH

BEST DESIGN PROJECT AWARD B-TECH



M-TECH TOPPERS



B-TECH TOPPERS

MAGAZINE LAUNCH

2020-2021

MAGAZINE COORDINATORS 2020-'21

JITHIN JYOTHY

DEVIKA VAMADEVAN

HAPPY BIRTHDAY

Adhil U, S3

16th November

Saafin V P, S5

1st November

Ashik Abdulla U, S5

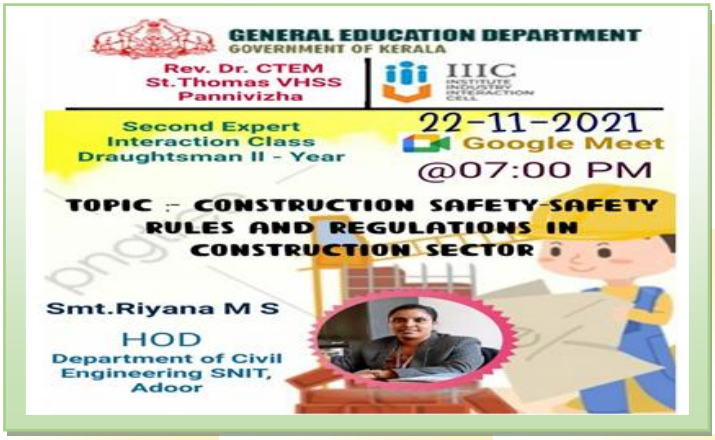
10th November

Kavyasree S, S7

November

ALUMNI MEET

SPEAKER



TRAVELOGUE

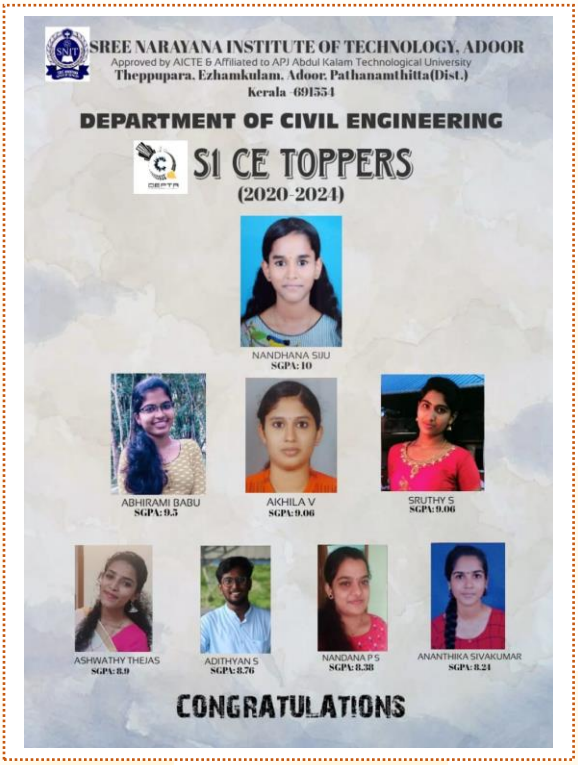
Sruthi S

S3, CIVIL

DEPARTMENT OF CIVIL ENGINEERING, Sree Narayana Institute of Technology, Adoor organized a three day industrial visit for Third Semester Civil Students from 27 Nov to 29 Nov 2021 to Banasura Sagar Dam, Wayanad and Water Treatment Plant, Wonderla, Kochi. Along with we went to Meenamutty waterfalls- Wayanad, Cholamala Waterfalls-Wayanad, Kurwa Dweep - Wayanad and Mittayi Theruvu- Calicut to make every day of our IV an enjoyable one. Though we have seen many buildings being constructed but to observe something as a Civil Engineer was a different experience. We observed things and asked questions to the workers, relevant person present there and our teachers. For making our first experience a memorable and delightful one, we had a great support from our faculty members HoD of civil department Ms. Riyana MS, Assistant professor Ms. Anju Thulasi, Assistant professor Ms. Reshmy M Raju and Assistant professor Mr. Jinudarsh M. S.

Hence, we returned back to college at 12am 29 Nov 2021 after successfully completing our industrial visit safely with taking care of all Covid Protocols throughout the IV.

CONGRATULATIONS



ALUMNI CORNER

SINESH BABU

B. TECH CIVIL (2011-2015 BATCH)
SNIT ADOOR

1ST CEPTA PRESIDENT

6 Years of Experience

- Oil & gas Aramco- Project Engineer
- Riyadh Metro- Site Engineer
- Gold Mining-Project Engineer
- Kuwait oil company -Site Engineer
- Currently started new business- Building Contracting Company, Office @ Pathanamthitta & Karunagapally-Kollam

FAMILY
Wife-Meenu Suresh
BTECH CS (CET rank holder)
Working @TVM Technopark

ACHIEVEMENTS

CONGRATULATIONS

TEAM CEPTA

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