

## **KNOWLEDGE UPDATE**

The following faculty members from the Department of Instrumentation & Control Engineering underwent an industrial training on "Calibration" at Roots Industries, Coimbatore:

- 1. Dr M Karthigai Pandian
- 2. Mr K Saravanakumar
- 3. Mr Dilip Kumar S
- 4. Mr J Dhanaselvam





A One day FDP on Data Structures and Algorithms was conducted by Ms. A. Geetha AP/IT-SKCT for IT and CSE faculty members regarding Enhancement of knowledge about the linear and non-linear data structures

Progress & Review of Research work of ME, Structural Engineering students





Preparatory work by the following faculty members for WIPRO Assessment, Milestone – 1:

- 1. Ms Madhumidha, AP / IT
- 2. Ms Sathyabhama, AP / CSE
- 3. Ms Nivedhitha, AP / CSE

Mentors:

- 1. Ms T Sangeetha, AP/IT
- 2. Mr Beschi Raja, AP / CSE

### **CONSULTANCY WORKS**



Permeability test of Concrete @ Structural Engineering Laboratory

## SIH REVIEW

SIH Hardware Edition- Review phase I was conducted. Each team presented their project ideas to be implemented for Round 2. Background domain, Design Methodology/Block Diagram, Expected Output and demo video was reviewed.





Department of Electrical & Electronics Engineering

Agenda:

Time table and work load for the AY 2019-20 ODD Semester.

Department of Science & Humanities

#### Agenda:

Performance of First year B.E. / B.Tech students in the Model examination and coaching class schedule



School of Management

Agenda:

Project Review for II MBA students

Department of Science & Humanities

Agenda:

Research Targets for AY 2019 - 2020

Dr V Manikandan, AP / S & H hosted the meeting

> Department of Electrical & Electronics Engineering

#### Agenda:

Project Review for students of II ME, Power Systems Engineering



## **AWARENESS** CORNER



# **ALL IS** WELL

Be Summer Ready: 7 Healthy Diet Tips For Summer

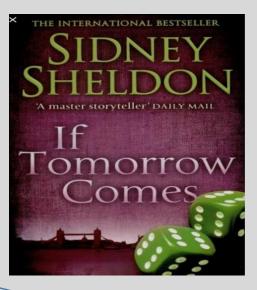
1. Grab seasonal fruits and vegetables

- 2. Keep yourself hydrated
- 3. Downsize your meal
- 4. Eat more cooling foods

5. Choose fresh juices over cold drinks

6. Binge on lighter snacks

7. Hygiene is the key to a healthy body



BOOK REVIEW fiction which simply does not let you put down your novel. The author Sidn Sheldon builds has written the book in such way that every page is thrilling. fiction which simply does not let you put down your novel. The author Sidney Every incident leaves you in amazement and disbelief. The protagonist, Tracy Whitney, as the author describes is a gorgeous woman with an absolute genius mind. The story in the beginning is set in Philadelphia and New Orleans and the goes on to London, Paris and Madrid. The story begins as Tracy's mother, Doris Whitney, phone calls her daughter as she wishes to hear her voice one last time as Doris goes on to kill herself. The reason for Doris Whitney's suicide was a mystery to everyone. However, further on in the story, Tracy discovers it. Tracy's urge to seek revenge is what sets up the story. The entire story is about how Tracy finds her way through the worst of situations. Her status as a prisoner wouldn't leave her. The most admirable thing about Tracy was that, she never gave up. Never lost hope. Her greatest power which never left her side was her ability to think. She invested a whole lot of thought and came up with the most brilliant of plans. One by one, she defeated all of them who duped her. Defeated them to such an extent, that they never rose back. Now, Tracy had to earn a living. The way she did that wasn't morally right or legal. However, she was a master at it. She would steal the most valuable and famous articles, and never left a trace. The story has a wonderful series of twists and turns which keep the book alive at every stage. Though written in the '80s, it's a book way ahead of its time. Sheldon connects the ending of the book to such a former part of it that it would leave you awestruck. The book is a masterpiece and is a must read if you want to take your mind through a terrific journey.

"If Tomorrow Comes" by Sidney Sheldon is a nerve-wracking piece of

SOURCE: http://kmit.in/emagazine/article/ tomorrow-comes-review/amp/

### **DID YOU KNOW ???**

- The very first Apple logo featured Sir Isaac Newton sitting underneath a tree, with an apple about to hit his head!
- ✓ The first ever VCR (Video Camera Recorder), which was made in 1956, was the size of a piano!
- ✓ If you were to have your picture taken by the very first camera, you'd need to sit still for 8 hours!
- ✓ In general, people tend to read as much as 10% slower from a screen than from paper!
- ✓ 86% of people try to plug their USB devices upside down!

Source : www.thefunfacts.com

#### What is the difference between cellular and satellite phones?

Both the cellular and satellite phones are mobile phones which provide similar functionality like voice calling, SMS and low bandwidth internet services. It is the type of signal transmission which differentiates both. Cellular phones transmit via land-based towers. Satellite phones, on the other hand, do not rely on towers. Instead, they transmit signals via satellites orbiting the earth. The signal from the satellite phones is transmitted directly to the nearest satellite which then sends the signal to the nearest gateway or land-based center, which then transmits the signal to the receiving phone. The fact that satellite phones do not rely on towers makes them useful in remote areas like the middle of the ocean, deep forest and in the mountain areas where cell phone towers are not available. Some satellite phones use satellite in geosynchronous orbit which are meant to remain in a fixed position in relation to earth. They sit at an altitude of 35,000 km from the earth and there is a noticeable delay while using the sat phones. Also, as their position is always constant in relation to the earth, their signals will be weak, generally 70 degrees north to 70 degrees south of the equator. Some satellite phones use LEO (low earth orbit) satellites which are orbiting the earth at very high speed and at lower altitude (around 600-1,500 km). Since these are not geostationary, at least one satellite will be available to every coverage area at all times to guarantee coverage.

Tomorrow's Question: If blood has iron content, why does it not get attracted by a magnet?

Source : The Hindu, 23rd JAN 2017

#### TIME TO PONDER

1. What's the name of the space between your thumb and other finger?

2. What is the white crescent shaped part of the nail called as?

- 3. What are called God's rays?
- 4. What is the smell after rain called as?
- 5. What is the state of finding it hard to get out of the bed
- in the morning called as?

Answers: 1. Purlicue 2. Lunule 3. Rays of sunlight coming from a certain point in the sky 4. Petrichor 5. Dysania

 Noun
 Verb

 A person,
 An action

 place, or
 An action

 thing
 Something you

 boy
 Can DO!

 jump
 delicious

Source : www.buzzfeed.com

#### An insight into latest Mobile processors

Three major smartphone SoC designers have now detailed their next-generation designs, which will power smartphones throughout 2019. Huawei was first with its Kirin 980, already powering the Huawei Mate 20 series. Samsung followed, announcing its Exynos 9820. Now Qualcomm's just announced the Snapdragon 855.

As usual, a selection of performance improvements is on offer in both the CPU and GPU department. There's also a continued focus on "AI" processing capabilities and faster 4G LTE connectivity, but no out-of-the-box 5G chip on the market just yet. If you're thinking about an expensive smartphone purchase next year, here's everything you need to know about the chipsets that will power them.

	Snapdragon 855	Exynos 9820	Kirin 980
CPU Core	Semi-custom ARM Cortex - Kryo 485	Fully-custom ARM Cortex	ARM Cortex
CPU Config	1x Cortex A76 @ 2.84GHz 3x Cortex-A76 @ 2.42GHz 4x Cortex-A55 @ 1.8GHz	2x 4th gen custom 2x Cortex-A75 4x Cortex-A55	2x Cortex-A76 @ 2.6GHz 2x Cortex-A76 @ 1.92GHz 4x Cortex-A55 @ 1.8GHz
GPU	Adreno 640	Mali-G76 MP12	Mali-G76 MP10
Al	Hexagon 690	NPU	Dual NPU
Memory	UFS 3.0	UFS 3.0	UFS 2.1
Process	7nm FinFET	8nm FinFET	7nm FinFET
Video capture	4K UHD, HDR @ 60fps	8K @ 30fps or 4K @ 150fps	4K @ 30fps
Video playback	8K UHD, 360 degree, up to 120fps, 10-bit, H.265 and VP9 video decoder	8K 30fps or 4K 150fps, 10-bit HEVC(H.265), H.264, VP9	4K @ 60fps
Modem	X24 LTE 2000 Mbps down 316 Mbps up	Cat 20 LTE modem 2000 Mbps down 316 Mbps up	Cat 21 LTE modem 1400 Mbps down 200 Mbps up

Source : www.androidauthority.com

#### **Google Maps Augmented Reality**

Google Maps has an experimental new feature on iPhone and android that shows you exactly where to walk when trying to get to a destination. This new version of Google Maps augments the GPS and compass with a precise orientation determined by the phone's camera. Just like how a human would orient themselves, the Google Maps AR camera would look at buildings and landmarks, and from the camera feed, determine exactly where you are and which direction you're facing. Over the years, Google has tried to make called "global localization" and it combines Visual Positioning Services with Street View and machine learning. You simply point your phone's cameras at your surroundings and machine learning identifies the landmarks based on Street View imagery to pinpoint your location. It can then accurately display information, such as directions, over the real world.

With AR mode there is no mistaking which direction you should walk. Big, bold arrows and text appear to float in your view. The bottom of the screen shows a live view of the map. Google is testing this with local guides right now and they hope to get feedback to improve it in the future. We have no idea when this will be ready for consumers, but we can't wait.



#### LATEST TRENDS IN ELECTRICAL ENGINEERING

- ✓ Ultra High Voltage DC Transmission Technology-Transmission efficiency is 98-99 %! But, designing circuit breakers and switch gears are extremely difficult which makes it one of the trending topics in Electrical Engineering
- Smart Grid and Micro Grid With smart grids the data we collect from energy meter readings manually can be increased to many folds. Also, the load demand and supply can be predetermined which almost eliminates the Grid failure!
- ✓ High Efficient Electrical Machines –Reducing the constant core loss in machines is a complex problem. Different metals and alloys are being researched to arrive at one with minimum core loss.
- ✓ Renewable and Clean Energy Energy harvested from the clean energy sources are still not sufficient accounting to only 34.4% of the total power production.
- ✓ Flexible Alternating Current Transmission systems They combine traditional power system components with modern power electronic elements to transmit electrical power .The research issues are with their Cost, complexity and reliability.

### Self driving Car

Google's self driving car is almost driver less(manual assist needs in some dangerous turns) with start and stop option and which uses chauffeur system. The LIDAR(combined SONAR and RADAR) technology with Google map works in a precision manner. It uses 64 typical laser beams to find the objects around the car (360 degree). Cost of this system is around US \$ 1 lakh. Accuracy, precision is more in this system which enables pre safe. Top speed is 40 kph.



WHAT HAPPENED ON THIS DAY???

### **APRIL** 15

1<sup>ST</sup> TELEPHONE INSTALLED: BOSTON-SOMERVILLE IN MASSACHUSETTS

Birth of Guru Nanak Birth of Leonardo da Vinci Death of Abraham Lincoln

**Iceberg Sinks "Titanic"** 





### HAPPY HOURS OF SKCT



Final Year Students of the Department of Instrumentation & Control Engineering, served food for the children at Bethel Home, Kovaipudur, as a part of their farewell celebrations

Mr Karthik Nagaraj, Student, II MBA, awarded as the "Best Employee of the Month" during his project tenure at Aditya Birla Fashion & Retail Limited.







Mr Elstein Rosario, Alumnus, Department of Civil Engineering has started his own firm "Johen Builders" at Mettur



MAIL US: digestfeedback@skct.edu.in VIEW US : https://www.facebook.com/skctofficial/ TWEET US : @skctdigest



Mr R M Gowtham Raj, Alumnus (2011 Batch), Department of Mechanical Engineering represented India in the Malaysian Car Race Event, "Sepang International Circuit"